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Note du Président du Conseil de sécurité

Au paragraphe 2 de sa résolution 2627 (2022), le Conseil de sécurité a demandé au Groupe d'experts créé en application de la résolution 1874 (2009) de lui présenter un rapport final contenant ses conclusions et recommandations. Le Président communique donc ci-après le rapport émanant du Groupe d'experts (voir annexe).

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Merci de recycler

Annexe

Lettre datée du 3 mars 2023, adressée au Président du Conseil de sécurité par le Groupe d'experts créé en application de la résolution 1874 (2009)

Le Groupe d'experts créé en application de la résolution 1874 (2009) du Conseil de sécurité a l'honneur de communiquer ci-joint, conformément au paragraphe 2 de la résolution 2627 (2022) du Conseil, le rapport final sur ses travaux.

Le rapport ci-joint a été adressé le 3 février 2023 au Comité du Conseil de sécurité créé par la résolution 1718 (2006), qui l'a examiné le 22 février 2022.

Le Groupe d'experts vous serait reconnaissant de bien vouloir porter le texte de la présente lettre et du rapport à l'attention des membres du Conseil de sécurité et de le publier comme document du Conseil.

Le Groupe d'experts créé en application
de la résolution 1874 (2009) du Conseil de sécurité

Pièce jointe

Lettre datée du 3 février 2023, adressée à la Présidente du Comité du Conseil de sécurité créé par la résolution 1718 (2006) par le Groupe d'experts créé en application de la résolution 1874 (2009)

Le Groupe d'experts créé en application de la résolution 1874 (2009) du Conseil de sécurité a l'honneur de communiquer ci-joint, conformément au paragraphe 2 de la résolution 2627 (2022), le rapport final sur ses travaux.

Le Groupe d'experts vous serait reconnaissant de bien vouloir porter le texte de la présente lettre et du rapport à l'attention des membres du Comité du Conseil de sécurité créé par la résolution 1718 (2006).

Le Groupe d'experts créé en application
de la résolution 1874 (2009) du Conseil de sécurité

Résumé

Dans un contexte de tensions croissantes dans la péninsule coréenne, la production de matières fissiles nucléaires a continué dans les installations nucléaires de la République populaire démocratique de Corée pendant la période considérée, mais aucun essai nucléaire n'a été signalé. En 2022, la République populaire démocratique de Corée a procédé au tir d'au moins 73 missiles balistiques et missiles associant des technologies balistiques et de guidage, dont huit missiles balistiques intercontinentaux (MBI) ; 42 de ces tirs, dont un essai complet d'un type dit nouveau de MBI, ont été effectués au cours des quatre derniers mois de l'année, ainsi que la mise à l'essai d'un nouveau moteur de MBI à propergol solide. La République populaire démocratique de Corée qualifie à présent ouvertement de « balistiques » un grand nombre des essais de missiles auxquels elle procède, en violation flagrante du régime de sanctions de l'ONU. Une nouvelle loi met l'accent sur la capacité nucléaire tactique, et sur une nouvelle doctrine relative à l'emploi en premier ainsi que sur le « caractère irréversible » du statut nucléaire du pays. Le Groupe d'experts a continué d'enquêter sur le transfert immatériel de technologies impliquant la République populaire démocratique de Corée.

La République populaire démocratique de Corée a annoncé avoir vaincu la maladie à coronavirus (COVID-19) en août 2022. Les frontières du pays sont demeurées fermées pour l'essentiel, même si les services de fret ferroviaire ont repris par intermittence. Les échanges commerciaux se sont multipliés au deuxième semestre de 2022 mais n'ont toujours pas atteint les niveaux enregistrés avant la pandémie.

Des produits pétroliers raffinés ont continué d'être fournis de manière illicite dans la zone économique exclusive de la République populaire démocratique de Corée au moyen de transbordements entre des pétroliers « de livraison directe » et des pétroliers du pays. Dans la section du présent rapport consacrée aux questions maritimes, l'accent est mis sur l'accélération considérable de l'acquisition de navires (essentiellement des navires de charge) par le pays en 2022 et sur le mode opératoire de ceux qui facilitent ces acquisitions. Les importations illicites de cargaisons de navire à navire dans les eaux territoriales de la République populaire démocratique de Corée se sont poursuivies. Les exportations interdites de charbon de navire à navire par République populaire démocratique de Corée ont continué.

Les cyberactivités attribuées aux acteurs du Bureau général de reconnaissance se sont poursuivies ; en 2022, la valeur des cryptoactifs volés par des acteurs de la République populaire démocratique de Corée a atteint un record. Le pays a employé des cybertechniques de plus en plus complexes afin de s'ouvrir l'accès à des réseaux numériques du secteur de la cyberfinance et de voler des informations qui pourraient être utiles, en particulier à ses programmes d'armement.

Le Groupe d'experts a enquêté sur l'exportation constatée de matériel de communication militaire de la République populaire démocratique de Corée et a commencé à enquêter sur des cas signalés d'exportation de munitions.

La situation humanitaire dans le pays a continué de se détériorer et les sanctions de l'ONU ont eu des conséquences non voulues, même s'il demeure impossible de dissocier leur rôle relatif de nombreux autres facteurs. Un nombre limité de livraisons d'aide humanitaire et un dispositif temporaire et spécial de transfert de fonds a été mis en place pour les activités humanitaires des Nations Unies en République populaire démocratique de Corée. Le Groupe d'experts a mené de nouveau son enquête auprès des organisations humanitaires ayant mené des activités dans le pays.

Le Groupe d'experts a demandé aux États Membres des précisions sur la façon dont ils appliquaient les sanctions de l'ONU, mais seule une analyse préliminaire peut être réalisée compte tenu des réponses reçues jusque-là. Il est reconnaissant aux États Membres qui participent de manière constructive à ses activités.

Table des matières

		Page
I.	Introduction	7
II.	Activités liées au programme nucléaire et au programme de missiles balistiques	7
III.	Sanctions sectorielles et maritimes	29
IV.	Embargos, entités et personnes désignées et travailleurs à l'étranger	64
V.	Financement	78
VI.	Effets humanitaires involontaires des sanctions	82
VII.	Rapports nationaux de mise en œuvre	85
VIII.	Recommandations	86

Annexes*

* Les annexes sont distribuées uniquement dans la langue de l'original et n'ont pas été revues par les services d'édition.

I. Introduction

1. Au paragraphe 2 de la résolution 2627 (2022), le Conseil de sécurité a demandé au Groupe d'experts créé en application de la résolution 1874 (2009) de remettre au Comité du Conseil de sécurité créé par la résolution 1718 (2006) un rapport final contenant ses conclusions et recommandations. Le présent rapport porte sur la période allant du 28 juillet 2022 au 27 janvier 2023.

II. Activités liées au programme nucléaire et au programme de missiles balistiques

Programme nucléaire

2. La République populaire démocratique de Corée a poursuivi les activités relatives à la production de matières fissiles nucléaires et des activités de rénovation et de construction sont en cours sur le site de Yongbyon. Le Groupe d'experts a observé des activités ininterrompues sur le site d'essais nucléaires de Punggye-ri, mais aucun essai nucléaire n'a été signalé.

Nouvelle doctrine sur les forces nucléaires

3. Le 8 septembre 2022, la loi relative à la politique de la République populaire démocratique de Corée concernant les forces nucléaires a été adoptée. Y sont présentées les conditions d'emploi des armes nucléaires, la composition des forces nucléaires du pays et le système de commandement et de contrôle de ces forces, et réaffirmé l'objectif suivant : « renforcer et améliorer les forces nucléaires sur les plans qualitatif et quantitatif » (voir annexe 1). Fin décembre 2022, Kim Jong-un a souligné qu'il « import[ait] et [qu'il était] nécessaire de produire en masse des armes nucléaires tactiques » et a préconisé « une augmentation exponentielle de l'arsenal nucléaire du pays » en 2023 (voir annexe 22).

4. En avril 2022, lors d'un défilé militaire, Kim Jong-un avait déclaré que « les forces nucléaires (...) devraient être renforcées en termes de qualité et d'échelle, afin qu'elles puissent disposer de capacités de combat nucléaire dans toutes les situations de guerre, en fonction des objectifs et des missions des différentes opérations et par divers moyens » (voir annexe 18).

5. L'accroissement continu du stock de matières fissiles nucléaires de la République populaire démocratique de Corée, la réouverture du site d'essais nucléaires, l'adoption de nouvelles politiques nucléaires et une série de tirs de missiles lors de simulations d'opérations de guerre nucléaire, notamment d'emploi d'armes nucléaires tactiques (voir par. 24), sont autant de signes que le programme d'armement nucléaire du pays s'est fortement accéléré. Cela correspond aux objectifs stratégiques définis en janvier 2021, qui mettaient l'accent sur la mise au point « d'armes nucléaires tactiques qui seraient utilisées de diverses manières en fonction des besoins opérationnels et des cibles »[1].

Site d'essais de Punggye-ri

6. Le Groupe d'experts a précédemment signalé la réouverture du Tunnel 3 et la construction de bâtiments annexes dans le site d'essais nucléaires. L'imagerie satellite a montré que la construction de bâtiments annexes continuait dans la zone administrative principale et que les voies d'accès au Tunnel 4 et au centre de

[1] S/2022/668, par. 3 et annexe 2.

commandement étaient renforcées. Plusieurs membres du personnel étaient visibles dans un espace extérieur de la zone administrative début janvier 2023[2].

7. Aucun changement majeur n'a été observé près du Tunnel 3 depuis le précédent rapport du Groupe d'experts, ni aucune nouvelle activité d'excavation à l'entrée du Tunnel 4, qui a été démoli en mai 2018 (voir annexe 2).

Site de Yongbyon

Réacteur à eau légère

8. Selon un État membre, une possible mise à l'essai du système d'eau de refroidissement a été détectée en juillet 2022. Le Directeur général de l'Agence internationale de l'énergie atomique a signalé, le 7 septembre et le 16 novembre 2022, que l'Agence avait relevé des indices selon lesquels le système d'eau de refroidissement aurait pu être mis à l'essai en juillet, fin septembre et début octobre 2022. Le Groupe d'experts a observé des traces d'effluents cadrant avec ces observations près du fleuve Kuryong pendant les mêmes périodes[3]. En outre, des travaux d'excavation et des modifications des berges ont été observés fin septembre et fin octobre, respectivement. La construction d'un nouveau bâtiment a été constatée dans la zone située dans le secteur situé à l'ouest du réacteur à eau légère depuis août. Les travaux extérieurs sur trois bâtiments annexes, qui avaient commencé en 2021, semblaient être terminés en novembre (voir annexe 3)[4].

Centrale nucléaire expérimentale de Yongbyon (5 MWe)

9. L'imagerie satellite indique que le réacteur de 5 MWe a continué d'opérer. Un rejet continu d'eau de refroidissement provenant du réacteur a été observé et de la vapeur pouvant provenir du bâtiment dans lesquels se trouvent la turbine et le générateur était visible fin décembre 2022. Plusieurs véhicules, dont de longs camions et vraisemblablement une citerne de dioxyde de carbone, ont été régulièrement observés autour du réacteur (voir annexe 4).

Réacteur de 50 MWe

10. Aucun retrait considérable de matériaux du réacteur de 50 MWe n'a été observé. Fin décembre 2022, l'imagerie a montré des mouvements de véhicules près du bâtiment partiellement démantelé de stockage de combustible irradié[5]. À la mi-octobre, le Groupe d'experts a observé la construction d'un nouveau bâtiment, dont l'usage demeure flou, à proximité de l'endroit où des travaux d'excavation avaient été réalisés en avril et en mai (voir annexe 5)[6].

Laboratoire radiochimique

11. Entre mai et octobre 2022, le Groupe d'experts a continué d'observer de la fumée s'échappant de la cheminée de la centrale thermique. Les émissions étant intermittentes, il semblerait qu'elles soient liées à un traitement des déchets ou à des activités de maintenance. Des mouvements de véhicules autour du bâtiment[7] dans

[2] Un groupe de réflexion a signalé la présence de membres du personnel dans la même zone fin avril 2022. Voir https://beyondparallel.csis.org/punggye-ri-update-construction-and-volleyball.

[3] Un expert extérieur a dit au Groupe d'experts que les effluents pouvaient également être dus aux rejets d'eau provenant des bâtiments annexes, qui ont été construits au sud du réacteur à eau légère.

[4] S/2022/132, par. 3 et annexe 3 ; S/2022/668, par. 7 et annexe 4.

[5] S/2022/132, par. 5 et annexe 5 ; S/2022/668, par. 9 et annexe 6.

[6] S/2022/668, par. 9 et annexe 6.

[7] Les véhicules pouvaient avoir servi à accomplir plusieurs tâches telles que celles relatives au traitement de déchets, aux activités de maintenance et à la livraison de matériaux à l'atelier.

lequel se trouve le combustible irradié ont été observés tout au long de la période considérée[8]. Des amas de matériaux non identifiés étaient visibles près du bâtiment entre septembre et novembre[9]. De nouveaux travaux de construction ont commencé à l'extérieur du périmètre de la zone du laboratoire. Des groupes de réflexion[10] ont signalé de nouvelles activités d'excavation sur un site, situé au sud-est du laboratoire radiochimique, où des déchets nucléaires seraient stockés, ce qui a été corroboré par le Groupe d'experts (voir annexe 6).

Usine de fabrication de barres de combustible nucléaire de Yongbyon

12. Des panaches de fumée ont parfois été observés dans le bâtiment de production de dioxyde d'uranium entre juillet et novembre 2022, indiquant probablement une production constante de matières fissiles nucléaires[11]. Le démantèlement partiel ou la rénovation du bâtiment de production de tétrafluorure d'uranium ont été observés depuis juillet. Une grue était installée entre juin et juillet au sud du bâtiment. Le démantèlement de la structure du mur et de la toiture du bâtiment a commencé en juillet et en août, respectivement, et le toit du bâtiment a été recouvert en décembre (voir annexe 7).

Mine d'uranium et usine de concentration de Pyongsan

13. La mine d'uranium et l'usine sont restées opérationnelles pendant la période considérée. Le Groupe d'experts a observé un entassement légèrement plus grand de résidus dans l'une des mines. Les déchets solides dans le bassin de réception de résidus situé au sud de l'usine de concentration ont continué de se multiplier. Des activités régulières de wagons ont été constatées à l'usine (voir annexe 8).

Autres sites

14. Le Groupe d'experts surveille les activités menées à proximité de Kangson[12], une installation clandestine qui serait utilisée pour l'enrichissement de l'uranium, et a observé les mouvements constants de plusieurs types de camions à côté du bâtiment principal (voir annexe 9).

15. La zone de Yongdoktong participerait au programme de militarisation nucléaire de la République populaire démocratique de Corée, notamment sur le plan du stockage d'armes nucléaires. Le Groupe d'experts a observé une légère activité près de l'entrée des tunnels et des mouvements constants de véhicules près des bâtiments contigus à l'entrée. Il a également corroboré l'observation externe d'un autre site[13] possible de stockage d'explosifs dans le secteur nord (voir annexe 10).

Transfert immatériel de technologie et activités des universités de la République populaire démocratique de Corée

16. Le Groupe d'experts a continué d'enquêter sur le transfert immatériel de technologie impliquant la République populaire démocratique de Corée dans les

[8] S/2022/668, par. 10 et annexe 7.
[9] Les matériaux étaient de forme différente de ceux observés en 2016 et en 2019. Voir www.38north.org/2016/05/yongbyon053116 and www.38north.org/2019/10/yongbyon100419.
[10] Voir https://beyondparallel.csis.org/yongbyon-update-new-activity-at-building-500-and-rising-waters et www.38north.org/2022/07/north-koreas-yongbyon-nuclear-center-plutonium-production-continues-despite-heavy-rains.
[11] S/2022/668, par. 11 et annexe 8.
[12] S/2022/668, par. 13 et annexe 10.
[13] S/2022/132, par. 12 et annexe 11 ; S/2022/668, par. 13 et annexe 11.

domaines d'activité particuliers visés au paragraphe 11 de la résolution 2321 (2016) du Conseil de sécurité.

17. Une enquête sur les liens entre l'Université de science et de technologie de Pyongyang et des universités étrangères[14] a montré qu'un chercheur de la République populaire démocratique de Corée avait obtenu un doctorat dans une université en Suède et que cette personne avait ensuite été employée par un autre institut de recherche en Suède. L'institut en question a informé le Groupe d'experts que la personne avait été employée en qualité de technicien de laboratoire en avril 2020 et par la suite, depuis août 2021, comme chercheur postdoctoral, et qu'elle percevait actuellement un salaire mensuel de 34 000 couronnes suédoises (3 281 dollars). Il s'agit d'une violation des dispositions relatives aux travailleurs à l'étranger énoncées au paragraphe 8 de la résolution 2397 (2017) du Conseil de sécurité. Les enquêtes se poursuivent (voir annexe 11).

18. Il ressort des réponses données par des instituts au Royaume-Uni de Grande-Bretagne et d'Irlande du Nord et au Brésil concernant les échanges universitaires entre ces instituts et l'Université de science et de technologie de Pyongyang et des universités étrangères qu'aucune violation des mesures de sanction relatives au transfert immatériel de technologie n'aurait été commise (voir annexe 12).

19. Selon des informations diffusées par des médias allemands[15], depuis 2017, neuf articles universitaires ont été cosignés par des universitaires de la République populaire démocratique de Corée et des universitaires de l'Institut Max Born Institute d'optique non linéaire et de spectroscopie à impulsions courtes en Allemagne. Deux scientifiques de la République populaire démocratique de Corée, Im Song-Jin[16], de l'université Kim Il Sung, et Kim Kwang-Hyo[17], de l'Académie d'État des sciences, ont étudié à l'Institut entre 2008 et 2012 et ont coopéré depuis avec des chercheurs de l'Institut. Les autres personnes originaires de la République populaire démocratique de Corée ayant cosigné les publications étaient également de l'université Kim Il Sung (voir annexe 13).

20. La possibilité que les travaux de recherche réalisés par ces scientifiques de la République populaire démocratique de Corée soient utilisés en vue de la mise au point d'armes de destruction massive et d'une application militaire est mise en doute. Un État Membre a estimé que les neuf études conjointes « devraient en principe être des théories fondamentales pouvant être appliquées aux capteurs optiques de pointe, à la communication optique, à la communication intersatellites, à la surveillance et à la reconnaissance, ainsi qu'aux systèmes de communication militaire à usage spécifique », qui « relèvent de la recherche technologique fondamentale relative aux biens à double usage soumis à un contrôle en vertu de l'Arrangement de Wassenaar » (voir annexe 14). L'Institut Max Born a répondu que « rien dans les résultats de ces travaux de recherche ne p[ouvai]t être considéré comme pouvant avoir un double usage » et déclaré qu'il « ne particip[ait] à aucune étude en rapport avec le domaine militaire et ne collabor[ait] pas avec des organismes de recherche menant des travaux à des fins militaires » (voir annexe 15).

Missiles balistiques

[14] S/2022/668, par. 15 et annexe 12.

[15] Voir www.dw.com/en/despite-un-sanctions-german-research-institute-worked-with-north-korean-scientists/a-63890089.

[16] Identifiant universel du chercheur : 0000-0001-6277-7200.

[17] Identifiant universel du chercheur : 0000-0003-2909-6686.

21. Le programme de missiles balistiques a continué de s'accélérer de manière spectaculaire[18]. Pendant la période considérée, la République populaire démocratique de Corée a tenté de démontrer la fiabilité, la complémentarité et l'état de préparation opérationnelle de ses vecteurs d'armes nucléaires aux niveaux stratégique et tactique. Une campagne de communication officielle claire a accompagné la multiplication des essais de toutes sortes de missiles et de nouveaux moteurs, ainsi que l'amélioration constante des infrastructures liées au programme de missiles balistiques et au programme nucléaire.

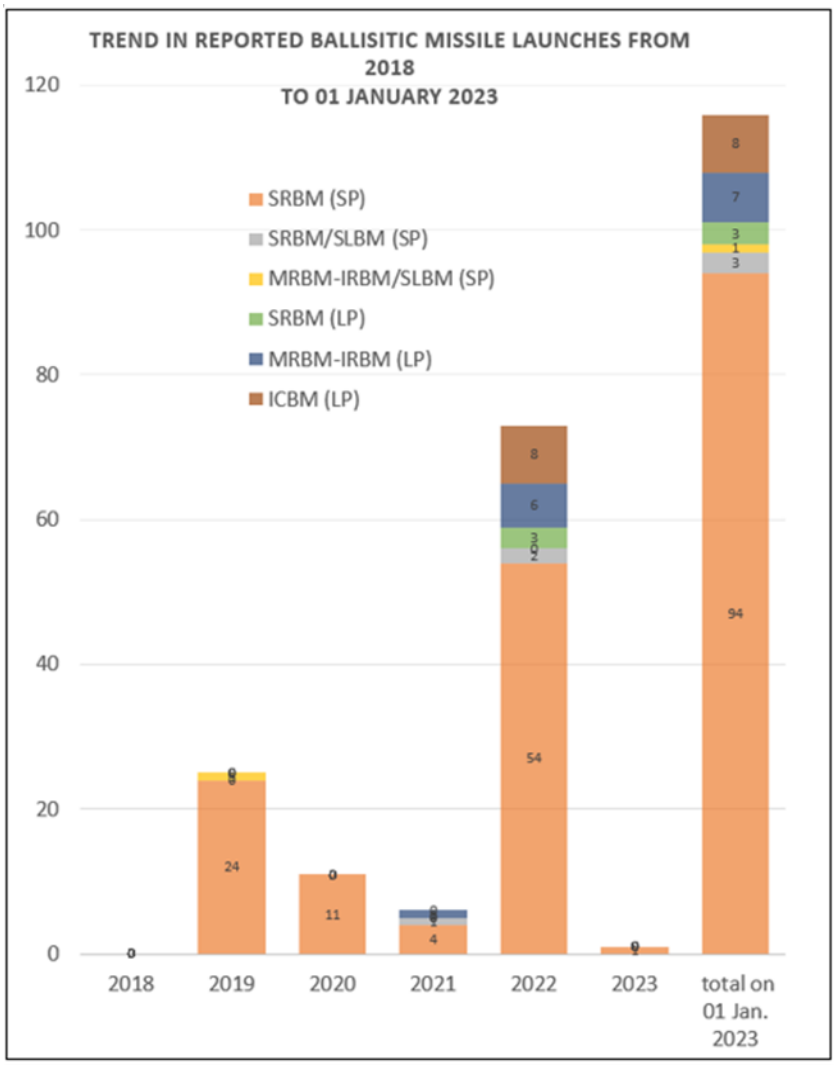
22. Entre septembre 2022 et le 1er janvier 2023, la République populaire démocratique de Corée a procédé à au moins 24 tirs d'essai de missiles balistiques ou de missiles associant des technologies balistiques et de guidage. Quelque 35 à 45 missiles balistiques à courte portée (SRBM en anglais) à propulseur à poudre et au moins huit missiles balistiques à propulseur à liquide [trois SRBM, trois missiles balistiques à moyenne portée (MRBM en anglais)/missiles balistiques à portée intermédiaire (IRBM en anglais) et deux missiles balistiques intercontinentaux (MBI, ICBM en anglais) ont été lancés (voir fig. I, tableau 1 et annexes 16A, 16B et 25)[19].

[18] Le rapport précédent portant sur une période allant jusqu'au 27 juillet 2022 (voir S/2022/668, par. 17).

[19] Deux experts estiment que, faute de données probantes suffisantes, la nature et la technologie ayant servi aux projectiles lancés par République populaire démocratique de Corée mentionnés dans ce paragraphe ne peuvent être établis.

Figure I

Tirs de missiles balistiques ou associant des technologies balistiques et de guidage, du 5 mai 2019 au 1er janvier 2023



	2018	2019	2020	2021	Jan.to Aug. 2022	Sep. to 31 Dec. 2022	2022	2023	total on 01 Jan. 2023
Number of solid propellant (SP) BMs, comprising:	**0**	**25**	**11**	**5**	**22**	**34**	**56**	**1**	**98**
SRBM (SP)	0	24	11	4	21	33	54	1	94
SRBM/SLBM (SP)	0	0	0	1	1	1	2	0	3
MRBM-IRBM/SLBM (SP)	0	1	0	0	0	0	0	0	1
Number of liquid propellant (LP) BMs, comprising:	**0**	**0**	**0**	**1**	**9**	**8**	**17**	**0**	**18**
SRBM (LP)	0	0	0	0	0	3	3	0	3
MRBM-IRBM (LP)	0	0	0	1	3	3	6	0	7
ICBM (LP)	0	0	0	0	6	2	8	0	8
Total number of BMs	**0**	**25**	**11**	**6**	**31**	**42**	**73**	**1**	**116**

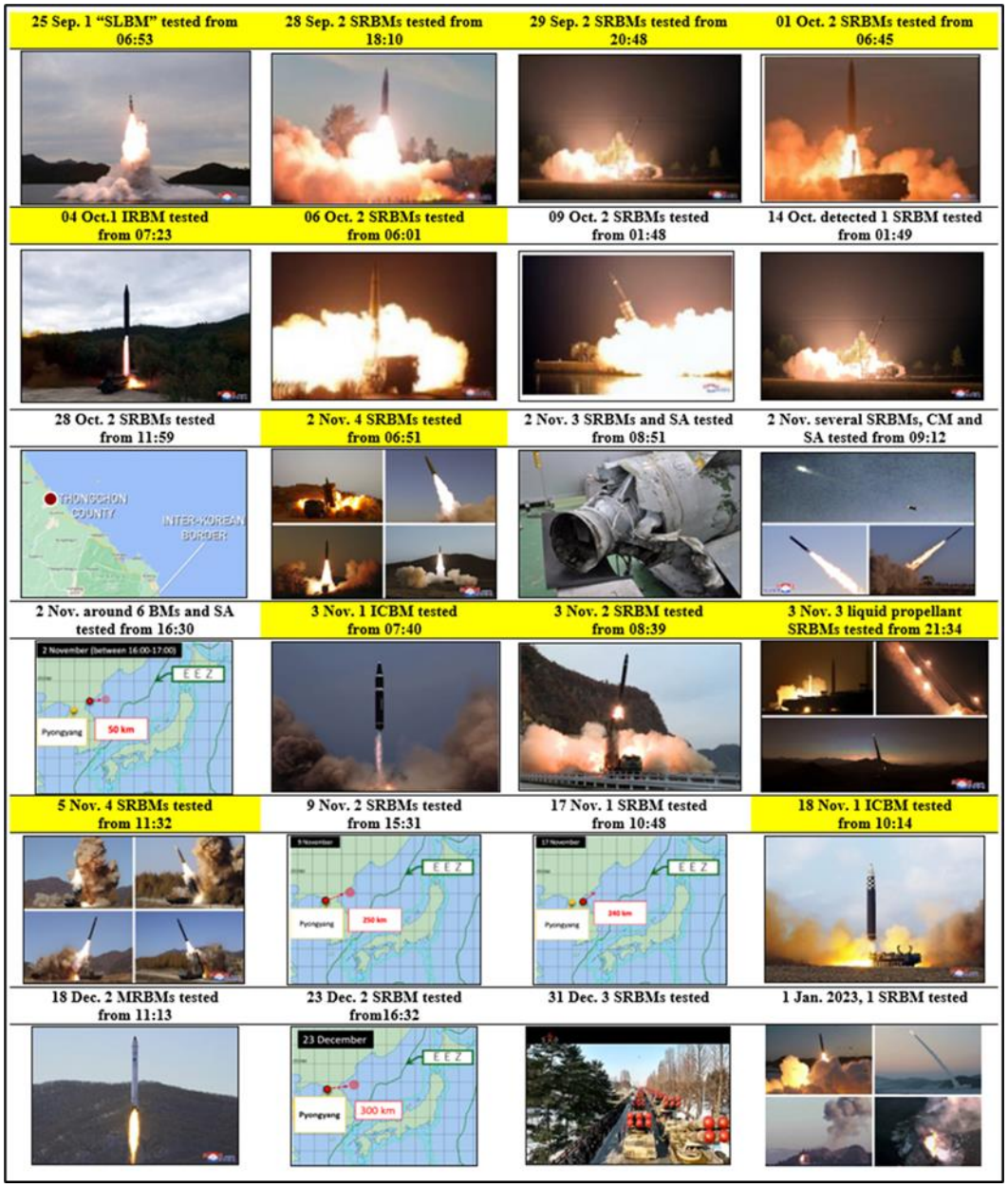
Source : le Groupe d'experts.

23. Les grandes tendances précédemment constatées[20] en ce qui concerne le programme de missiles balistiques ont été confirmées et se sont renforcées, notamment l'amélioration du commandement et du contrôle des forces stratégiques, l'optimisation de l'état de préparation opérationnelle des systèmes de missiles à propulseur liquide ou à poudre, dont la diversité, la mobilité et la résilience sont plus grandes, et l'amélioration constante de l'efficacité des propulseurs à liquide ou à poudre des missiles balistiques intercontinentaux (voir fig. II, tableau 1, par. 26 et 27 et annexes 24 et 25).

[20] S/2022/668, par. 20.

Figure II

Plus de 43 missiles balistiques ont été lancés entre le 25 septembre et le 1er janvier 2023 à partir de 24 sites de lancement[21]. Au moins 12 des déclarations de la République populaire démocratique de Corée faisaient expressément référence à la technologie balistique (surlignées)


25 Sep. 1 "SLBM" tested from 06:53
28 Sep. 2 SRBMs tested from 18:10
29 Sep. 2 SRBMs tested from 20:48
01 Oct. 2 SRBMs tested from 06:45
04 Oct.1 IRBM tested from 07:23
06 Oct. 2 SRBMs tested from 06:01
09 Oct. 2 SRBMs tested from 01:48
14 Oct. detected 1 SRBM tested from 01:49
28 Oct. 2 SRBMs tested from 11:59
2 Nov. 4 SRBMs tested from 06:51
2 Nov. 3 SRBMs and SA tested from 08:51
2 Nov. several SRBMs, CM and SA tested from 09:12
HWASONG-15 ICBM
HWASONG-17 ICBM
HWASONG-12 IRBM
HWASONG-14 ICBM

24. La capacité de mener une frappe nucléaire soudaine contre n'importe quelle cible régionale ou intercontinentale évoquée dans la nouvelle loi relative à la politique de la République populaire démocratique de Corée concernant les forces nucléaires[23] et de plus en plus dans les déclarations publiques depuis 2021[24] cadre avec la production, la mise à l'essai et le déploiement observés des vecteurs tactiques et stratégiques du pays (voir fig. III et V et annexe 24).

Figure III
Timbres spécialement imprimés par la poste de la République populaire démocratique de Corée[25]

Source : un État Membre.

25. L'État-major général de l'Armée populaire coréenne a expliqué dans une déclaration, le 7 novembre 2022, qu'il avait mené son opération militaire du 2 au 5 novembre à la suite des exercices militaires menés conjointement par les États-Unis d'Amérique et la République de Corée. Cependant, l'opération a également été une occasion de mettre à l'essai et de renforcer le programme de missiles balistiques et le

[22] Il a été montré que la République populaire démocratique de Corée modifiait ou falsifiait des images photographiques, vraisemblablement à des fins de propagande. Les sources des images sont disponibles aux adresses suivantes : https://kcnawatch.org ; https://kcnawatch.org/kctv-archive/63b19095d845f, https://kcnawatch.org/newstream/1672574939-729238062/kim-jong-un-makes-speech-in-reply-at-ceremony-of-donating-600mm-super-large-multiple-launch-rocket-systems et https://kcnawatch.org/#gallery-249.

[23] « En érigeant en loi la politique relative aux forces nucléaires de la nation, notre État a fait savoir au monde entier que nos bombes atomiques ne pourront jamais être limitées à la seule mission de dissuasion visant à prévenir une guerre et qu'en cas de situation inéluctable, la frappe nucléaire préventive devra impérativement être lancée, et pourra l'être, dans le cadre d'une action militaire concrète », *Rodong Sinmun,* 25 décembre 2022, disponible (en anglais) à l'adresse suivante : https://kcnawatch.org/newstream/1671955810-811895774/military-miracles-which-demonstrated-to-whole-world-national-prestige-and-honor-of-juche-korea.

[24] Voir annexes 17, 18 et 20 à 22.

[25] Traduction du texte figurant sur le timbre situé en haut de l'image : « le nouveau type de missile balistique à portée intermédiaire sol-sol atteint les eaux ciblées dans le Pacifique à 4 500 kilomètres au large du Japon, le 4 octobre » (voir annexe 24B).

programme nucléaire, comme le démontre la demande formulée par l'Académie des sciences de la défense nationale (Academy of National Defense Science) (KPe.021), entité désignée, tendant à ce que l'Armée populaire coréenne procède à un important tir d'essai de missiles balistiques[26].

26. Trois faits ont mis en lumière les nouvelles capacités du programme de missiles balistiques intercontinentaux. Le tir d'essai, le 18 novembre, d'un « nouveau type de missile balistique intercontinental Hwasong-17 » a été présenté comme le point d'orgue du programme de missiles balistiques de la République populaire démocratique de Corée dans le cadre d'une campagne de communication officielle péremptoire. La présence de la fille de Kim Jong-un aux côtés de son père lors du tir d'essai et aux manifestations solennelles organisées par la suite semblent donner du poids au message que fait passer le pays concernant le caractère essentiel et irréversible de son programme de missiles balistiques intercontinentaux et de son programme nucléaire (voir annexe 24E)[27].

27. Les deuxième et troisième faits concernaient le programme de mise au point des moteurs des missiles balistiques intercontinentaux et des missiles balistiques à portée intermédiaire. Du 27 au 30 août 2022, des traces d'herbe incendiée ont été détectées au moyen de l'imagerie satellite sur le banc d'essai moteur vertical de la base de lancement de satellites de Sohae (Tongchang-ri). Comme lors de précédents essais similaires[28], celui-ci était lié à la mise au point de propulseurs à liquide des missiles balistique. Le 15 décembre 2022, un nouveau propulseur à poudre a été mis à l'essai sur le banc d'essai moteur horizontal à Sohae, récemment construit[29]. Le propulseur a été dimensionné pour un corps de missile balistique intercontinental et le revêtement semblait avoir été fabriqué à partir de fibres composites. D'après des informations relayées par l'Agence centrale de presse coréenne, il avait une poussée de 140 tonnes et était « basé sur la technologie du contrôle de vecteur de poussée », ce qui est étayé par l'image, si elle est authentique, publiée par l'Agence (voir fig. IV et annexe 23).

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[26] « Les récents actes de provocation des États-Unis et de la Corée du sud, qui ont organisé des exercices militaires ..., l'État-major général de l'Armée populaire coréenne a mené à proportion les opérations militaires ci-après du 2 au 5 novembre ... / À la demande de l'Académie des sciences de la défense, le deuxième jour des opérations, l'Armée populaire de Corée a effectué un important tir d'essai de missile balistique pour s'assurer de la fiabilité du mouvement d'une ogive opérationnelle spéciale paralysant le système de commandement des opérations de l'ennemi. Elle a également procédé au tir de cinq missiles à lanceur multiple super large et des missiles balistiques tactiques de diverses missions et 46 missiles à lanceur multiple de longue portée », disponible (en anglais) à l'adresse suivante : https://kcnawatch.org/newstream/1667774164-903270856/report-of-general-staff-of-kpa-on-its-military-operations-corresponding-to-u-s-south-korea-combined-air-drill.

[27] La République populaire démocratique de Corée avait déjà faussement revendiqué le 25 mars 2022 le succès du lancement du puissant missile balistique intercontinental super large Hwasong-17 (voir S/2022/668, par. 21 et annexes 16 et 17).

[28] Voir S/2020/151, annexe 62, pour l'essai du 2 au 8 décembre 2019. Le banc d'essai moteur vertical est situé aux coordonnées 39°39'11.32"N 124°42'51.30"E à Sohae, à 220 mètres du nouveau banc d'essai moteur horizontal.

[29] La construction du nouveau banc d'essai a commencé après le 14 novembre 2022 aux coordonnées 39°39′06″N 124°42′58″E. Le banc d'essai est assez éloigné du secteur de Hamhung (Institut des matières chimiques et fabrique d'explosifs nº 17 de Hungnam) et du complexe militaro-industriel de Chamjin, où la technologie des moteurs-fusées à poudre était habituellement développée (voir S/2019/171, par. 5 ; S/2017/150, par. 42 à 47).

Figure IV
Bancs d'essai moteur à Sohae

Source : Planet Labs, 3 août, 6 septembre et 2 décembre 2022, 4 h 28 UTC ; https://kcnawatch.org ; Télévision centrale coréenne, 16 décembre 2022 (journal de 17 heures, disponible à l'adresse suivante : https://kcnawatch.org/kctv-archive/61f7e740a9bbf).

28. Le rôle que le programme de missiles balistiques à courte portée (SRBM) joue dans la mise au point des capacités opérationnelles nucléaires tactiques a été démontré lors de la dernière série d'essais de SRBM (voir fig. II, tableau 1 et annexes 16A, 24A à 24C et 25) et par la déclaration que Kim Jong-un a faite le 1er janvier 2023 pour marquer le déploiement d'un nouveau système de lance-roquettes multiples super large (le SRBM KN-25)[30] qui « place la Corée du sud dans son ensemble à portée de frappe et peut transporter une ogive nucléaire tactique »[31].

29. Il a été établi que, en plus de sa participation au nouvel essai de missile balistique intercontinental le 18 novembre (voir par. 26 et annexe 24E), la fille de

[30] S/2022/668, figure XVIII.
[31] Voir annexe 21.

Kim Jong-un a accompagné son père lors d'une inspection de 25 Hwasong-12 sans ogives dans une grande installation le 1er janvier 2023. Les ogives ont probablement été présentées lors de l'inspection par Kim Jong-un et Kim Jong Sik (KPi.066, voir annexe 24E) d'au moins 24 coiffes de Hwasong-12, comme le montre une autre photographie. D'autres images montrent le père et la fille inspectant au moins 12 transporteurs-érecteurs-lanceurs (TEL) à roues équipés de missiles balistiques KN-23 dans un autre entrepôt (voir fig. V).

Figure V
Kim Jong-un, sa fille et Kim Jong Sik inspectant des missiles balistiques à portée intermédiaire Hwasong-12, des pointes de fusée-sonde Hwasong-12 et des systèmes d'armes de SRBM KN-23-TEL

Source : captures d'écran tirées d'images diffusées à la Télévision centrale coréenne le 1er janvier 2023.

30. Des États Membres ont corroboré une grande partie des données techniques enregistrées concernant les différentes trajectoires des tirs de missiles balistiques (voir tableau 1 et annexe 25). Au moyen des images satellites, le Groupe d'experts a analysé les divers changements apportés aux infrastructures de l'Administration nationale du développement aérospatial [National Aerospace Development Administration (KPe.029)] à la base de lancement de satellites de Sohae (Tongchang-ri) (voir annexe 23) et autour du centre de contrôle général des satellites de Pyongyang (39°2'33.55"N 125°42'35.02"E) à l'Académie des sciences spatiales (39°2'30.26"N 125°42'26.63"E).

31. Des informations techniques supplémentaires sur les 24 essais qui se sont déroulés du 25 septembre 2022 au 1er janvier 2023 figurent dans le tableau 1 et dans les annexes concernant certains tirs d'essai, y compris le SRBM/missile balistique lancé par sous-marin (SLBM) lancé le 25 septembre (voir annexe 24A), le missile balistique à portée intermédiaire (IRBM) lancé le 4 octobre (voir annexe 24B), les SRBM (ou similaire) lancés le 2 novembre (voir annexe 24C), le MBI lancé le 18 novembre (voir annexe 24 E), ainsi que dans l'annexe 25.

Tableau 1

Récapitulatif des tirs de missiles balistiques ou de missiles associant des technologies balistiques et de guidage et à propergol liquide et solide, effectués par la République populaire démocratique de Corée du 25 septembre 2022 au 1er janvier 2023 (pour des informations plus détaillées, voir annexes 24 et 25 ; les déclarations officielles de la République populaire démocratique de Corée sont en *italique*)

Tests (all) in the year	*Tests solid/ liquid since 2018*	*Tests solid/ liquid in the year*	*Date and time (local)*	*Reported type*	*Number of missiles*	*Reported launch location*	*Reported distance travelled (km)*	*Reported apogee (km)*	*Remark*	*Korean Central News Agency classification*
1st SP+LP	**47th SP**	**1st SP**	**2023**	**Solid fuel BMs fired between 2018 and 1 Jan. 2023:**	**98~108**					
				In 2023:	**1**					
	15th LP	**0 LP**	**2023**	**Liquid fuel BMs fired between 2018 and 18 Dec. 2022:**	**18**					
				In 2023: (0) IRBM + (0) ICBM + (0) SRBM:	**0**					
1st	**47th SP**	**1st SP**	**1 Jan. 2023** 02:50	**SRBM KN-25** *Super large rocket system (600mm)* - solid propellant (SP) engine	**1**	From Pyongyang Yongsong toward east	400 or 350	100	- *"nuclear-capable multiple rocket launcher (MRL) able to strike anywhere in South Korea"*(KCNA 2 Jan. 2023) - *"30 were recently deployed in the army" (KCNA 2 Jan. 2023)*	*"At dawn of January 1, 2023, ...fired one shell towards the east ...with a delivered super-large multiple rocket launcher..."* (KCNA DPRK Today 2 Jan. 2022)

Tests (all) in the year	*Tests solid/ liquid since 2018*	*Tests solid/ liquid in the year*	*Date and time (local)*	*Reported type*	*Number of missiles*	*Reported launch location*	*Reported distance travelled (km)*	*Reported apogee (km)*	*Remark*	*Korean Central News Agency classification*
40th SP+LP	**46th SP**	**26th SP**	**2022**	**Solid fuel BMs fired between 2018 and 31 Dec. 2022:** **In 2022:**	**97~107** **56~66**					
	15th LP	**14th LP**	**2022**	**Liquid fuel BMs fired between 2018 and 18 Dec. 2022:** **In 2022: IRBM (6) + ICBM (8) + SRBM (3):**	**18** **17**					
18th	**29th SP**	**9th SP**	**25 Sep. 2022** 06:53 or 06:52	**- SRBM** underwater launch of a small SLBM - SP engine - based on KN-23 SRBM and resembles the small SLBM presented at the military parade on 25 April 2022 and last tested on 7 May 2022 from a submarine.	**1**	From Taechon Reservoir (in North Pyongan Province) toward the east and splashed down before 07:11 after a less than 18-minute flight.	600 or 650	60 or 50	- max. speed M.5 - irregular trajectory after ballistic trajectory likely KN-23 or KN-24 - resumption of missile launches since 2 CM launches on 17 Aug 2022.	*"...from September 25 to October 9... a **ballistic missile launching drill** under the simulation of loading **tactical nuclear warheads** at a silo under a reservoir"* (KCNA, Rodong Sinmun 10 Oct. 2022)
19th	**30th SP**	**10th SP**	**28 Sep. 2022** 18:10 and 18:17 or 18:20	**- SRBM KN-23 or modified** - SP engine	**2**	From Sunan area toward the east and splashed down, possibly from either the Sariwon or Sakkanmol bases	360 or 350 and 300	30 or 50 and 50	- max. speed M.6 - irregular trajectory after ballistic trajectory - time between launches: 7 min	*"At the ballistic missile launching drill **simulating the loading of tactical nuclear warheads** which was staged on September 28 ..."* (KCNA, Rodong Sinmun 10 Oct. 2022)
20th	**31st SP**	**11th SP**	**29 Sep. 2022** 20:48 or 20:47 and 20:57 or 20:53	**- SRBM KN-23 or modified** - SP engine	**2**	From Sunchon region in South Pyongan Province, toward the east	350 or 300 and 300	50 and 50	- max. speed M.6 or M.5(?) - irregular trajectory after ballistic trajectory - time between launches: 6 min	*"**Various types of tactical ballistic missiles** that were launched on **September 29 and October 1**(KCNA, Rodong Sinmun 10 Oct. 2022)*

21st	**32nd SP**	**12th SP**	**1 Oct.2022** 06:45 or 06:42 and 07:03 or 06:58	- **SRBM KN-23 or modified** - SP engine	**2**	From the Sunan area toward the east	350 or 400 and 350	30 or 50 and 30 or 50	- max. speed M.6 - irregular trajectory after ballistic trajectory - time between launches: 16 min	*"Various types of tactical ballistic missiles that were launched on September 29 and October 1* (KCNA, Rodong Sinmun 10 Oct. 2022)
22nd	**11th LP**	**10th LP**	**4 Oct. 2022** 07:23	- **new IRBM** modified **Hwasong-12** - liquid propellant (LP) engine. - new type of IRBM not very different from Hwasong-12 but without the 4 vernier engines and with probably a single manoeuvrable nozzle (see KCNA picture)	**1**	From Mupyong-ri, Jagang Province area (40°36'40.21"N126°25'33.31"E) toward the east over Aomori Prefecture Japan from about 7:28 to 7:29 and splashed at 07:44-46 about 3 200 km east of Japan.	4500 or 4600	970 or 1000	- max. speed M.17 - flight Time: 21min - 5th launch of a IRBM since 14 May 2017 - first time Democratic People's Republic of Korea launched a missile over Japanese territory in five years - longest range by any BM test over Japan - the Japanese government issued a public alert - the fully encased nozzle suggest that the image may have been manipulated	- *"a decision to send more powerful and clear warning to the enemies on October 4 and took a measure to hit the set water area in the Pacific 4 500 kilometers across the Japanese Islands with new-type ground-to-ground intermediate-range ballistic missile"* (KCNA, Rodong Sinmun 10 Oct. 2022)
23rd	**33rd SP**	**13th SP**	**6 Oct. 2022** 06:01 or 06:00 and 06:23 or 06:15	- **SRBM KN-23 and KN-25** - SP engine	**2**	From Samsok area of Pyongyang toward the east and BM1 splashed down at 06:11 and BM2 at 06:32	350 and 800	80 or 100 and 60 or 50	- BM1 max. speed M.5 - BM2 max. speed M.6 - time between launches: 22min - BM2 possible irregular trajectory after ballistic trajectory	*At dawn of October 6, the striking drills of super-large multiple rocket launchers and tactical ballistic missiles* (KCNA, Rodong Sinmun 10 Oct. 2022)

24th	**34th SP**	**14th SP**	**9 Oct. 2022** 01:48 or 01:47 and 01:58 or 01:53	**- SRBM KN-25** - SP engine	**2**	From Muncheon in Kangwon Province toward the east - These ballistic missiles were very likely to have been launched from the port and harbor area	350 and 350	90 or 100 and 90 or 100	- BM1 max. speed M.5 - time between launches: 10 minutes	*"**The firing drill of the super-large multiple rocket launchers** was waged in simulating the strike of the enemies' main ports at dawn of October 9"* (KCNA, Rodong Sinmun10 Oct. 2022)
25th	**35th SP**	**15th SP**	**14 Oct. 2022** 01:49 or 01:52	**- SRBM KN-25 (?)** - SP engine	**1**	From Sunan area toward the east	650	50	- possible irregular trajectory after ballistic trajectory	No statement or information from the Democratic People's Republic of Korea
26th	**36th SP**	**16th SP**	**28 Oct. 2022** 11:59 and 12:18	**- SRBM** - SP engine	**2**	From Thongchon County (Tongjong-ho) toward the east in the vicinity of Alsom Island.	230	24	- BMs max. speed M.5 - the launch pad is about 60km from the inter-Korean border.	No statement
27th	**37th SP**	**17th SP**	**2 Nov. 2022** 06:51	**SRBM** and unknown projectiles, possible antiaircraft missiles - SP engine	**4** At least 3 BMs	From Jeongju and Pihyeon-gun (North Pyongan Province) near the west coast toward the west	?	?	- Democratic People's Republic of Korea's military operation counter-response drill - At least 33 missiles, 180 artillery shells, and more jets. Democratic People's Republic of Korea claims it launched 86 projectiles, including 46 *"long-range MLRS."* (NKnews 14 Nov. 2022)	On 7 Nov. a global statement was released by the Democratic People's Republic of Korea: *"in the morning ...fired four tactical **ballistic missiles loaded** with dispersion warheads and underground infiltration warheads at a desert island off the West Sea Barrage"* (Report of General Staff of KPA 7 Nov. 2022)

28th	**38th SP**	**18th SP**	**2 Nov. 2022** 08:51 or 08:50	**SRBM possible variant of KN-23** - SP propellant engines - at least one was a **SA-5** with a single stage liquid motor boosted by 4 jettisonable solid propellant boosters	**3** At least 3 BMs	From Wonsan area (in Kangwon Province) near the east coast toward the east: toward southeast of Ulleung island (BM2) landed 26km south of Northern Limit Line (NLL) (57km east of Sokcho and 167km northwest of Ulleung island)	190 or 150 and 200 and short	150 or 150 and 100 and 50	- irregular trajectory - first time since the division of the Koreas that a BM landed in proximity to the territorial waters of the ROK just south of the NLL (Possible malfunction of missile). An air raid warning in the Ulleung island area 8:54 to 14:00 was issued. - a MS recovered an object on Nov. 6 presumed to be a remnant of SA-5 possibly used as SRBM that Democratic People's Republic of Korea fired on Nov. 2	- No statement but on 7 Nov. a global statement was released by the Democratic People's Republic of Korea
29th	**39th SP**	**19th SP**	**2 Nov. 2022** 09:12	**Mix SRBM, LRCM and surface-to-air (SA) missiles** - SP engine	***>10***	From Sinpo area (in South Hamgyong Province) toward the east and From Onchon (South Pyongan Province), Hwajin-ri (South Hwanghae Province) toward the West	?	?	- On the 2 Nov., a MS did not detect anything matching Democratic People's Republic of Korea CM claims (ROK JCS 7 Nov. 2022) - The image of CM was a recycled image already published after April 2022 test from mansion beach in Majon. (NKnews 7 Nov. 2022)	*"The KPA fired two strategic cruise missiles with the shooting range of 590.5 km at the open sea around 80 km off the coast of Ulsan City of south Korea (35°29'51.6" latitude and 130°19'39.6" longitude) from North Hamgyong Province"* (KCNA 7 Nov. 2022)
30th	**40th SP**	**20th SP**	**2 Nov. 2022** 16:30 or 16:00 to 17:10 or 17:00	**Mix SA missiles (6) and possible suspected BM** - SP engine	***<6***	From Sondok and Sinpo areas toward the east and from Kwail and Oncheon area toward the west	Very short	50	- 23 missiles were fired into the sea on Wednesday 2 November, the most missiles fired in a single day.	*"The morning and afternoon the anti-aircraft missile units of the air force on the east and west coastal areas fired 23 ground-to-air missiles"* (KCNA 07 Nov 2022)

31st	**12th LP**	**11th LP**	**3 Nov. 2022** 07:40 or 07:39	**New ICBM** variant of **Hwasong-15** - LP engine. - new ICBM design with liquid propellant engine, - ス 10101907- - shroud seems more elongated, and the proportion between stages (2) appeared to be different from that of Hwasong-15 - this modified Hwasong-15 seems to be related to the improvement of warhead as a third stage	**1**	From Sunan area toward the east, fell into the sea at 08:10. It disappeared from the radar before going over Japan	760 or 750	1920 or 2000	- max. speed M.15 - flight time: 30min - possible failure after the second stage separation process before falling into the sea. (Third stage?) - Japan issued evacuation alerts in central prefectures of Miyagi, Yamagata and Niigata at 07:50 - similar sequence as on 25 May involving two SRBMs and one ICBM	*"The second day of the operations, the KPA conducted important test-fire of ballistic missile to verify the movement reliability of a special functional warhead paralyzing the operation command system of the enemy."* (KCNA 7 Nov.2022)
32nd	**41st SP**	**21st SP**	**3 Nov. 2022** 08:39 08:51 or 08:48	**SRBM KN-25 or KN-23** - SP engine	**2** At least 3BMs	From Kaechon area (South Pyongan province) toward the east, splashed down for BM1 at 08:4 / and the BM2 at 08:55 near the east coast	330 or 350 and 330 or 350	70 or 50 and 70 or 50	- max. speed M.5 - flight time: 8 min for BM1, 4 min for BM2	*"...and it fired five super-large multiple launch missiles and tactical ballistic missiles of various missions and 46 long-range multiple launch missiles "* (KCNA 7 Nov. 2022)
33rd	**13th LP**	**12th LP**	**3 Nov. 2022** 21:34 21:39 21:42	**SRBM possible old Scud-type missile** - LP engine - Hwasong-6/scud-C according to KCNA photos	**3**	From Koksan (North Hwanghae province) toward the east	490 or 500	130 or 150	- max. speed M.6 - 29 missiles were launched since Wednesday 2 November - 80 rounds of artillery into inter-Korean buffer zone off the eastern coast	*"fired five super-large multiple launch missiles and tactical ballistic missiles of various missions and 46 long-range multiple launch missiles..."* (KCNA 7 Nov. 2022)

34th	**42nd** **SP**	**22nd** **SP**	**5 Nov. 2022** 11:32 to 11:59	**SRBM KN-23 and KN-25** - SP engine	**4**	- From Dongrim in North Pyongan Province toward west at uninhabited island off the West Sea Barrage in the Yellow Sea.	130	20	- max. speed M.5 - According to a MS 7 Nov. report, at least 33 missiles were fired between 2 and 5 November 2022 - on 4 Nov. 180 trails of Democratic People's Republic of Korea warplanes detected	*"On the fourth day of the operations, the KPA fired again two tactical ballistic missiles loaded with dispersion warheads and two super-large multiple launch missiles at a desert island off the West Sea Barrage."* – *"at least 86 missiles were fired between 2 and 5 November 2022.* (KCNA Rodong Sinmun 7 Nov. 2022)
35th	**43rd** **SP**	**23rd** **SP**	**9 Nov. 2022** 15:31	**SRBM** possible KN-23 or KN-24 - SP engine	**1 or 2**	- From Sukchon in South Pyongan Province toward east and struck uninhabited island in water off the coast	290 or 250	30 or 50	- max. speed M.6 - very low altitude	No statement
36th	**44th** **SP**	**24th** **SP**	**17 Nov. 2022** 10:48 or 10:47	**SRBM** - SP engine (?)	**1**	- From Kangwon province toward northeast	240	47	- max. speed M.4 - the statement of Minister Choe Son hui may be related to the 18 Nov. launch.	Earlier statement (09:07) of Choe Son hui (MOFA): *"...the fiercer the DPRK's military counteraction will be, in direct proportion to it..."* (KCNA 17 Nov. 2022)

37th	**14th LP**	**13th LP**	**18 Nov. 2022** 10:14 or 10:15	**New type ICBM Hwasong-17** - LP engine - ㅈ 09151751 – TEL no. 321 - BM length 25m diameter 2.8m - 11-axle wheeled TEL 29m long, 4m wide - TEL 321 stored in the aircraft hangar at the west side of the main runway (39° 12′ 26″ N 125° 39′ 58″ E) - TEL 321 (annex S/2022/668 Annex 23.2.1) this TEL number was already presented with **Hwasong-17 ㅈ 03031203** according to 26 March 2022 footage and **Hwasong-17 ㅈ 7220406** at the 10 October 2020 parade. - **ㅈ 09151753 – TEL no. 322** presented on the 26 Nov. photo showing the KJU's daughter attending the ceremony. At the military parade 10 Oct.2020 the **TEL 322** carried a **Hwasong-17 ㅈ 21260405** (S/2022/668 annex 23.2)	**1**	From Sunan international airport (launch pad at 39°13'18.05"N 125°40'27.49"E) toward east and fell into the sea at 11:23 within Japan's exclusive economic zone (EEZ)) about 200 km west of Oshima Island in Hokkaido Prefecture	1000	6100 or 6000	- max. speed M.22 (27,166 km/h) - flight time: 69 min - Possible first full capacity successful launch of the Hwasong-17 - range estimation of over 15,000km, depending on the warhead weight	*"The DPRK strategic forces test-fired a* ***new-type ICBM*** *on Nov. 18"* *.. The test-fire was aimed at checking the reliability of the weapon system and its operation" ...* ***"The new-type ICBM Hwasongpho-17, launched at the Pyongyang International Airport, traveled up to a maximum altitude of 6 040.9 km and flew a distance of 999.2 km for 4 135s*** **[69'55"]** *before accurately landing on the preset area in open waters "* (Rodong Sinmun 19 Nov. 2022)
38th	**15th LP**	**14th LP**	**18 Dec. 2022** 11:13 or 11:11 12:05 or 11:52	**MRBM** - LP engine. - test possibly related to Military reconnaissance satellites	**2**	From Tongchang-ri (Sohae) toward northwest	500 500	500 500	- the BM resembles the Nodong Hwasong-7 (see S/2014/147, para. 34) - Satellite imagery released by the Democratic People's Republic of Korea on this launch needs more analysis	- *"The National Aerospace Development Administration (NADA) of the DPRK conducted an important final-stage test for the development of reconnaissance satellite at the Sohae Satellite Launching Ground on December 18"* (KCNA 19 Dec. 2022)

39th	**45th SP**	**25th SP**	**23 Dec. 2022** 16:32 or 16:31	**SRBM** - SP engine	**2**	From Pyongyang Sunan airport area toward the east splashed down at 16:46	250 and 350 or 300 and 300	50 and 50	- possible irregular trajectory	- No statement or information from the Democratic People's Republic of Korea
40th	**46th SP**	**26th SP**	**31 Dec. 2022 08:00**	**SRBM KN-25** - SP engine - "*Super large rocket system*"	**3**	From Hwanghae province	360		- "*nuclear-capable multiple rocket launcher (MRL) able to strike anywhere in South Korea*" (KCNA 2 Jan. 2023) - "*30 were deployed in the army*" (KCNA 2 Jan. 2023)	*"The three shells of multiple rocket launchers precisely hit a target island in the east …, demonstrating their combat performance"* (KCNA DPRK Today 2 Jan. 2022)

Source: Member States (MS), the Panel.

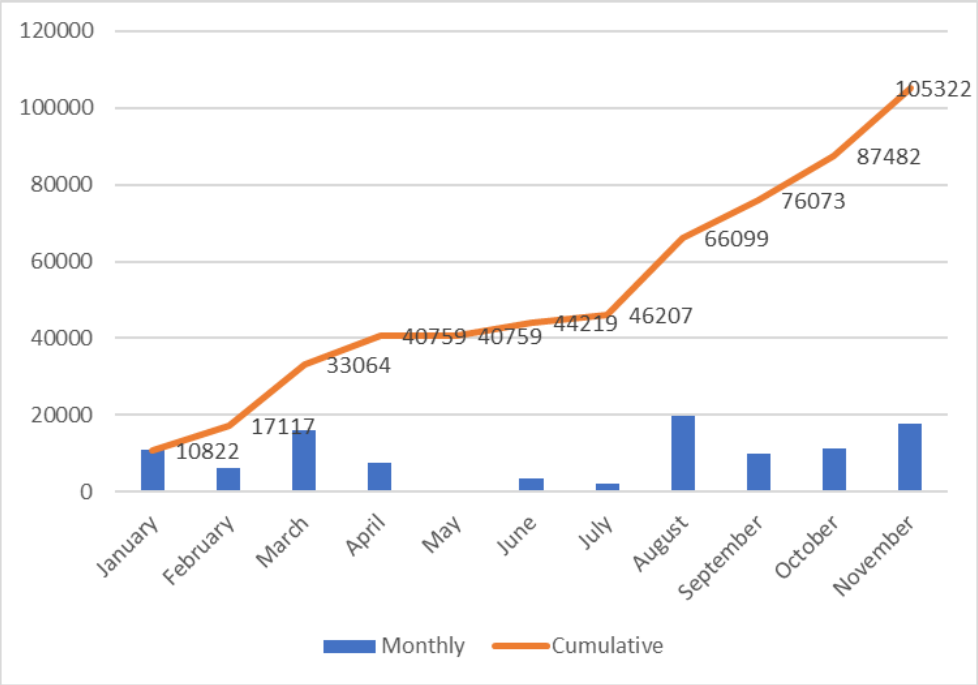
III. Sanctions sectorielles et maritimes

Fourniture illicite de pétrole raffiné[32]

Produits pétroliers raffinés

32. Fin janvier 2023, 21,06 % du volume maximum annuel autorisé pour 2022, à savoir 500 000 barils de produits pétroliers raffinés, avaient été officiellement signalés par un État Membre au Comité (voir fig. VI). Le Groupe d'experts a demandé à la Chine les précisions demandées dans les résolutions concernant ces livraisons. La Chine a répondu qu'elle « avait toujours appliqué strictement les dispositions relatives à l'exportation de produits pétroliers raffinés vers la RPDC » (voir annexe 26, OC.317).

Figure VI
Livraisons de produits pétroliers raffinés à la République populaire démocratique de Corée officiellement signalées au Comité, de janvier à novembre 2022 (en barils)



Source : www.un.org/securitycouncil/fr/sanctions/1718/supply-sale-or-transfer-of-all-refined-petroleum ; le Groupe d'experts.

33. En octobre 2022, 52 États Membres ont écrit au Comité concernant des livraisons de produits pétroliers raffinés aux installations pétrolières de Nampo. Dans le rapport fourni par ces États Membres figurait l'imagerie satellite de pétroliers immatriculés en République populaire démocratique de Corée, qui ont effectué 45 livraisons de produits pétroliers raffinés à Nampo de janvier à août. Les États Membres ont présenté trois cas de figure basés sur les quantités estimées de pétrole pouvant être transportées par les pétroliers. Ils ont estimé que si les navires avaient été pleinement chargés (les produits pétroliers transportés représentant dans ce cas

[32] Sauf indication contraire, toutes les heures et dates figurant sur la plateforme Windward sont exprimées en heure d'hiver de New York et en temps universel coordonné pour les captures d'images satellites.

90 % du port en lourd), jusqu'à 792 383 barils de produits pétroliers raffinés[33] auraient pu être livrés à Nampo au 31 août (voir annexe 27). Deux membres du Comité ont exprimé leur désaccord sur le rapport pour des raisons de procédure et de méthode (voir annexe 28). L'examen par le Groupe d'experts de l'analyse des États Membres, demandé dans le rapport, figure dans l'annexe 29.

34. Les produits pétroliers raffinés ont été livrés à Nampo principalement par des pétroliers battant pavillon de la République populaire démocratique de Corée, comme cela a été le cas depuis le début de la pandémie de maladie à coronavirus (COVID-19)[34]. Un petit nombre de navires de « livraison directe »[35] continuent de transférer des produits pétroliers raffinés à des pétroliers de la République populaire démocratique de Corée (voir par. 36 à 40).

Réaménagement de navires de charge visant à accroître les importations de pétrole raffiné

35. Le Groupe d'experts a précédemment signalé que la République populaire démocratique de Corée avait peut-être illégalement apporté des modifications à certains de ses navires de charge, de manière à transporter des produits pétroliers, une technique notoirement utilisée pour la contrebande de combustible dans la région (voir annexe 30).

Modes de comportement des navires suspects

36. Des transferts illicites de produits pétroliers raffinés de navire à navire continuent de se dérouler dans la zone économique exclusive de la République populaire démocratique de Corée au moyen de pétroliers du pays[36]. La figure VII montre les lieux où des transferts de ce type, tels qu'observés par un État Membre, se sont déroulés en 2022.

[33] Deux experts ont cité la lettre adressée par les 52 États Membres dans laquelle il a été calculé que la quantité livrée pouvait s'établir entre 264 127,5 et 792 382,5 barils.

[34] Fin octobre 2022, un groupe de réflexion a observé un pétrolier battant probablement pavillon étranger à Nampo mais, à la fin de la période considérée, ce navire était peut-être passé sous pavillon de la République populaire démocratique de Corée.

[35] Terme utilisé pour désigner les pétroliers n'appartenant pas à la République populaire démocratique de Corée dont le pavillon a été retiré et qui avaient auparavant livré du pétrole raffiné dans les ports du pays.

[36] S/2022/668, par. 35 et 36 ; S/2022/132, par. 40 et 41.

Figure VII
Zones de transfert illicite de pétrole raffiné de navire à navire en République populaire démocratique de Corée (2022)

Source : un État Membre.

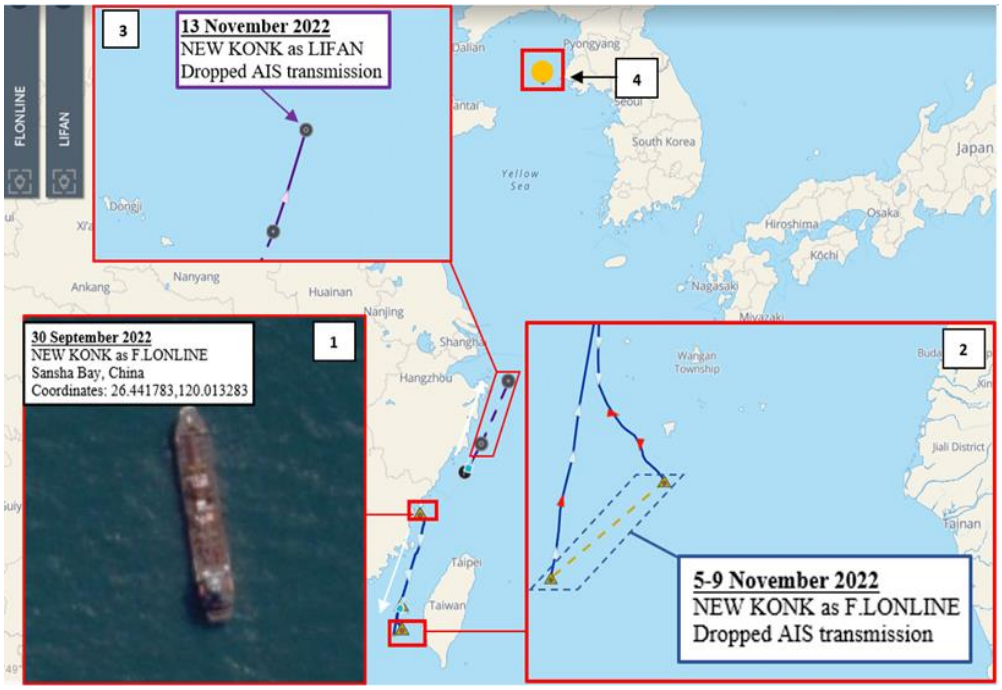
Note : La palette de couleurs illustre la densité des transferts illicites par ordre décroissant, des couleurs chaudes aux couleurs froides.

37. L'*Unica* (numéro Organisation maritime internationale (OMI) d'identification du navire : 8514306) et le *New Konk* (numéro OMI : 9036387), des navires de « livraison directe », ont continué de livrer du pétrole raffiné dans la zone économique exclusive de la République populaire démocratique de Corée. Voir figure VIII pour le *New Konk* et annexe 31 pour de plus amples détails.

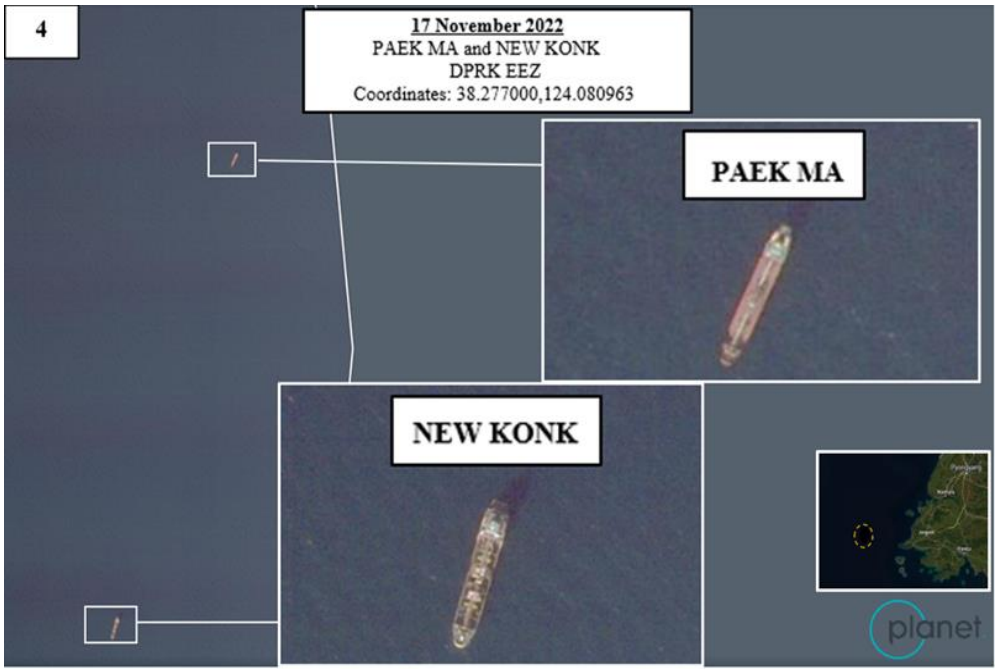
38. D'après plusieurs indicateurs, une coordination commune serait assurée pour le *New Konk*, l'*Unica* et d'autres navires de livraison directe. Le transfert de navire à navire avec le *New Konk* a eu lieu dans la même zone où l'*Unica* avait précédemment été photographié. Le numéro d'identification de station maritime mobile (MMSI) 457400047 utilisé par le *New Konk*, lorsqu'il transmettait en tant que *Lifan*, a également été utilisé par l'*Unica* lorsqu'il naviguait en tant que *Haishun 2*. Les enquêtes du Groupe d'experts sur les facilitateurs associés à ces navires de livraison directe et d'autres navires de ce type se poursuivent[37].

[37] S/2022/668, par. 62.

Figure VIII
Voyage du *New Konk* à destination de la zone économique exclusive de la République populaire démocratique de Corée, de septembre à novembre 2022



Source : Windward ; image en médaillon, Planet Labs, annoté par le Groupe d'experts.



Source : Windward ; imagerie, Panel Labs, annoté par le Groupe d'experts.

39. Le *New Konk* et l'*Unica* continuent d'opérer de la même façon : utilisation d'identifiants falsifiés connus, ancrage dans la zone de la baie de Sansha entre les voyages effectués pour livrer illicitement du pétrole, transferts de navire à navire entre des navires connus faisant office d'intermédiaires dans le détroit de Taiwan

avant de se rendre dans la zone économique exclusive de la République populaire démocratique de Corée où les transferts de pétrole sont effectués avec des pétroliers de la République populaire démocratique de Corée. Le Groupe d'experts a mis à jour sa liste[38] des identifiants frauduleux transmis par les navires de livraison directe (voir tableau 2 et annexe 32)

Tableau 2
Navires de livraisons directes, transmettant au moyen d'identifiants frauduleux

NAME	IMO NUMBER	TRANSMITTING AS	MMSI	LAST PSC INSPECTED**
DIAMOND 8	9132612	CHANGSHUN 8 SHUNLI	457222000 457111000	September 2017
NEW KONK	9036387	M0USON, F.LONLINE LIFAN HAIZHOU 168 FU YUAN YU 98	511444000 312162000 312360680 457400047 667001397 667001800	July 2018
SUBBLIC	8126082	HAI ZHOU 168	667001397	May 2004
UNICA	8514306	LITON HAISHUN2 TAIAN	457106000 457400047 457400047	No data

** PSC = contrôle par l'État du port.

Source : le Groupe d'experts.

40. Bien que les activités menées par ces navires en violation des sanctions aient été recensées de manière détaillée dans bon nombre de rapports établis par le Groupe d'experts, l'ONU n'a pas désigné[39] ces navires, dont le pavillon a été retiré. Le Groupe d'experts continue d'encourager les autorités compétentes à enquêter sur les navires qui auraient pu mouiller ou avoir des activités commerciales dans les eaux territoriales de leur pays et à l'en informer.

Vente et acquisition de navires

41. Le Groupe d'experts a enquêté sur un grand nombre de cas d'acquisition de navires par la République populaire démocratique de Corée pendant la période considérée. Au paragraphe 14 de sa résolution 2397 (2017), le Conseil de sécurité interdit la fourniture, la vente ou le transfert directs ou indirects de navires au pays. Le Groupe d'experts continue de surveiller d'autres navires suspects qui auraient pu

[38] S/2022/132, par. 44.
[39] La dernière désignation de navires remonte à 2018. Voir https://www.un.org/securitycouncil/sites/www.un.org.securitycouncil/files/1718_designated_vessels_list_f.pdf.

être acquis par la République populaire démocratique de Corée ou être passés sous le contrôle du pays.

42. On trouvera dans le tableau 3 une liste actualisée des navires acquis par la République populaire démocratique de Corée et battant officiellement pavillon de ce pays depuis 2020[40]. Le tableau 4 donne la liste des navires considérés comme étant passés sous le contrôle du pays mais ne battant pas encore officiellement son pavillon. Ces navires opèrent pendant de longues périodes, transportant des produits illicites, et apparaissent dans les eaux territoriales de la République populaire démocratique de Corée avant d'avoir été officiellement immatriculés dans le pays. Dans tous ces cas, les navires sont en violation des résolutions de l'ONU.

43. L'acquisition de navires présente des caractéristiques similaires :

a) Les navires sont vendus en faisant appel à de multiples intermédiaires, dont en général des tiers courtiers installés principalement dans un pays tiers particulier, en dernier lieu ;

b) Ils sont vendus par des sociétés qui n'ont pas de présence en ligne ;

c) Ils sont vendus par des sociétés qui dissimulent la propriété effective de l'utilisateur final afin d'occulter les liens avec la République populaire démocratique de Corée ;

d) Les informations relatives au vendeur et à l'acquéreur final disponibles sur le site Web de l'OMI ne sont pas à jour ;

e) Les pavillons sont annulés et une compagnie de pavillon est utilisée pour la livraison du navire.

44. Le Groupe d'experts constate que, contrairement aux cas précédents, les navires acquis ont été immatriculés bien plus rapidement en République populaire démocratique de Corée.

45. Comme la complexité qui caractérise la vente et l'acquisition de navires dans la région (intermédiaires, courtiers et manque d'informations confirmées concernant l'acquéreur par exemple) est exploitée, il est difficile de détecter la vente de navires à la République populaire démocratique de Corée. Étant donné que le pays continue d'acquérir des navires et que des parties prenant part à la vente de navires pourraient accidentellement être associées au contournement de sanctions, le Groupe d'experts recommande que des pratiques optimales soient adoptées et des mesures de diligence raisonnable appliquées lors de la vente de navires (voir par. 97).

[40] S/2022/668, par. 73 et tableau 5.

Tableau 3
Navires immatriculés acquis battant pavillon de la République populaire démocratique de Corée, 2020-2022 (voir annexe 33)[a]

	IMO number	Ship name	Type	DWT	Previously referenced in Panel reports
Year 2022					
1	8355786	RAK WON 1 (ex- AN HAI 6)	Cargo	5075	Current report
2	9054779	SA HYANG SAN 1 (ex- TOMI HARU)	Cargo	5000	Current report
3	9054767	SO BAEK SU (ex- TOYO HARU)	Cargo	5838	Current report
4	8357112	MO RAN BONG 2 (ex- LIN DA 8)	Cargo	5211	Current report
5	8594540	SONGRIM (ex- HUM WONSIN)	Cargo	3800	Current report
6	8594552	RAK NANG 2 (ex-SHUNCHANG 78)	Cargo	3062	Current report
7	9125308	CHOL BONG SAN 1 (ex- OCEAN SKY)	Tanker	5807	Yes (S/2022/668, S/2022/132)
Year 2021					
8	8356120	TAE DONG MUN 2 (ex- JIANG PENG 337)	Cargo	2790	Yes (S/2022/668)
Year 2020					
9	8865121	SIN PHYONG 5 (ex- WOO JEONG)	Tanker	3295	Yes (S/2022/668, S/2022/132, S/2021/777)
10	9016430	SU RYONG SAN (ex CJK OSAKA)	Cargo	4519	Yes (S/2022/668, S/2022/132)
11	8602763	TAE PHYONG 2 (ex- MIING ZHOU 6)	Cargo	26,013	Yes (S/2022/668, S/2022/132, S/2021/777, S/2021/211)
12	8651178	MU PHO (ex- DOUBLE LUCKY)	Cargo	2980	Yes (S/2022/668)
13	9045962	UN HUNG (ex- VIFINE)	Tanker	1978	Yes (S/2022/668, S/2022/132, S/2021/777, S/2020/151)
14	9340257	KANG HUNG (ex- SUN MIRACLE)	Cargo	3800	Yes (S/2022/668, S/2022/132)
15	9340271	RA SON 6 (ex- SUN HUNCHUN)	Cargo	3800	Yes (S/2022/668, S/2021/777)
16	7636638	XIN HAI (ex- WOL BONG SAN)	Tanker	4969	Yes (S/2022/668, S/2021/777, S/2021/211)
17	9011399	TAE DONG MUN (ex- POLE STAR 1)	Cargo	5137	Yes (S/2022/668, S/2021/211)

Year 2020					
	IMO number	Ship name	Type	DWT	Previously referenced in Panel reports
18	9162318	TO MYONG (ex- RI HONG)	Cargo	8773	Yes (S/2022/668, S/2022/132, S/2020/211, S/2020/840)
19	9018751	TAE PHYONG (ex- GREAT WENSHAN)	Cargo	26,369	Yes (S/2022/668, S/2021/211, S/2020/840)
20	9020003	PUK DAE BONG (ex- HUA FU)	Cargo	10,030	Yes (S/2022/668, S/2019/171)

Tableau 4

Navires présumés acquis par la République populaire démocratique de Corée ou sous le contrôle du pays. Le tableau ci-après n'est pas exhaustif ; le Groupe d'experts continue d'enquêter sur d'autres navires que la République populaire démocratique de Corée aurait acquis.

Year 2022					
	IMO number	Ship name	Type	DWT	Previously referenced in Panel reports
21	8669589	HENG XING	Tanker	3250	Yes (S/2022/668) -Sailing de-flagged as of November 2021 -Appeared in DPRK in 2022
22	8356584	ANNI, transmitting as DPRK-flagged KYONG SONG 3	Cargo	5000	-Current report -Sailing de-flagged as of June 2022. -Transmitted on DPRK identifier as KYONG SONG 3 -Appeared in DPRK in 2022
23	8891297	SF BLOOM, transmitting as DPRK-flagged PU YANG 2	Container	3285	-Current report -Sailing de-flagged as of March 2022. -Transmitted on DPRK identifier as PU YANG 2 -Appeared in DPRK in 2022

[a] Un certain nombre de ces navires sur lesquels le Groupe d'experts a enquêté auraient navigué sous d'anciens pavillons lorsqu'ils menaient des activités les rendant passibles de sanctions. On trouvera dans le tableau l'année officielle durant laquelle les navires ont (souvent rétroactivement) été transférés sous pavillon de la République populaire démocratique de Corée.

Source : le groupe d'experts, S&P Global et dossiers de l'OMI[41].

Note : les informations actualisées dans le présent rapport sont surlignées en bleu.

Navires-citernes que la République populaire démocratique de Corée a acquis ou qui lui ont été transférés

46. Parmi les navires-citernes acquis par la République populaire démocratique de Corée sur lesquels le Groupe d'experts a enquêté depuis 2019, ceux recensés ci-après

[41] Statut du pavillon du navire en décembre 2022.

ont continué de faciliter l'acquisition illicite de produits pétroliers raffinés par le pays au second semestre de 2022 (voir tableau 5 et annexes 27 et 34).

Tableau 5
Navires-citernes acquis par la République populaire démocratique de Corée poursuivant les livraisons illicites de pétrole, de juin à août 2022

IMO number	Ship name	DPRK Flag date	DWT	Date of refined petroleum offload at Nampo, DPRK
8817007	SIN PHYONG 2 (ex- TIANYOU)	August 2019	2105	22 June 2022 (*inter alia*)*
8910378	KWANG CHON 2 (ex- SEN LIN 01)	October 2019	1159	22 July 2022 (*inter alia*)*
8669589	HENG XING	De-flagged since November 2021	3250	10 August 2022 (*inter alia*)*
9045962	UN HUNG (ex- VIFINE)	August 2020	1978	12 August 2022 (*inter alia*)*
7636638	WOL BONG SAN (ex- XIN HAI)	March 2020	4969	21 August 2022
8865121	SIN PHYONG 5 (ex- WOO JEONG)	October 2020	3295	27 August 2022 (*inter alia*)*

* Navires-citernes signalés par le Groupe d'experts qui avaient également déjà livré du pétrole raffiné à d'autres reprises en 2022.

Source : un État Membre et le Groupe d'experts. Les informations sur les navires sont tirées des dossiers de l'OMI.

Navires de charge acquis par la République populaire démocratique de Corée

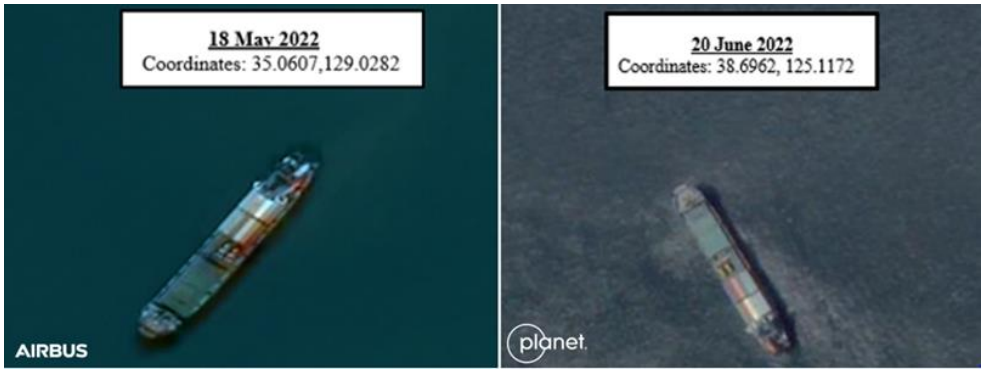
An Hai 6 (maintenant connu sous le nom de[42] Rak Won 1)

47. Le Groupe d'experts a poursuivi ses enquêtes sur l'*An Hai 6* (numéro OMI : 8355786), qui se trouvait à l'extérieur de la porte d'écluse de Nampo à la mi-juin 2022. Les autorités de l'État Membre ont confirmé qu'aucune cargaison n'a été chargée ou déchargée au port de Busan, où le navire se trouvait auparavant afin qu'une partie de l'équipage débarque. L'imagerie satellite a montré qu'une cargaison de conteneurs et de véhicules (voir fig. IX), avait déjà été chargée à bord du navire, les véhicules étant des bulldozers d'après un État Membre. Avant d'arriver à Busan, l'*An Hai 6* s'était rendu dans plusieurs ports ou zones portuaires chinoises, notamment dans un chantier naval. D'après les données de surveillance maritime, le tirant d'eau de l'*An Hai 6* a changé autour du 1er mai 2022 dans la nouvelle zone de la baie de Tongzhou (province de Jiangsu), ce qui laisse supposer que des marchandises ont pu être chargées. Après Busan, l'*An Hai 6* s'est dirigé vers l'ouest et le nord avant d'arriver en République populaire démocratique de Corée (fig. X).

48. Après son acquisition par la République populaire démocratique de Corée, l'*An Hai 6* a fait escale dans des ports chinois, notamment dans la zone portuaire de Longkou, en tant que *Rak Won 1*, au dernier trimestre de 2022.

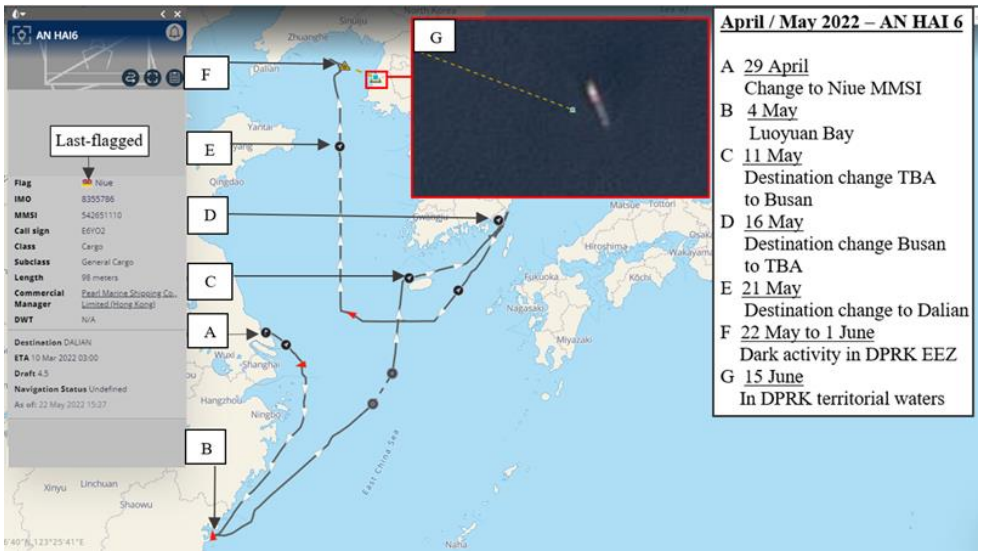
[42] Pour les navires battant pavillon de la République populaire démocratique de Corée.

Figure IX
L'*An Hai 6* arrivant chargé à Busan, et avec une cargaison agencée de manière similaire à l'extérieur de la porte d'écluse de Nampo, le 18 mai et le 20 juin 2022



Source : (gauche) Airbus Defence and Space ; (droite) Panel Labs, annoté par le Groupe d'experts.

Figure X
Itinéraire international suivi par l'*An Hai 6*, d'avril à juin 2022



Source : Windward, annoté par le Groupe d'experts ; image en médaillon, Planet Labs.

Entités et personnes associées

49. L'*An Hai 6* était immatriculé au nom de Pearl Marine Shipping Co. Limited (ci-après « Pearl Marine Shipping »), armateur unique, une société constituée aux Îles Marshall et dirigée par un ressortissant chinois de 24 ans. L'intermédiaire habilité qui s'est occupé de l'immatriculation pour le compte de Pearl Marine Shipping a donné une adresse dans la ville de Fuzhou (province de Fujian)[43]. Dans l'acte de vente, il était indiqué que le navire, le *Bi Xiang 66* battant pavillon de la Chine, était cédé par ses propriétaires à Huludao Bixiang Shipping Co., Ltd, les deux ayant la même adresse dans la province de Liaoning, avant d'être vendu à Pearl Marine Shipping. Pearl Marine Shipping n'a pas encore répondu aux questions du Groupe d'experts.

[43] Ces intermédiaires sont généralement des prestataires de services, notamment des cabinets d'avocats, des services de création d'entreprise et des entreprises de transport maritime.

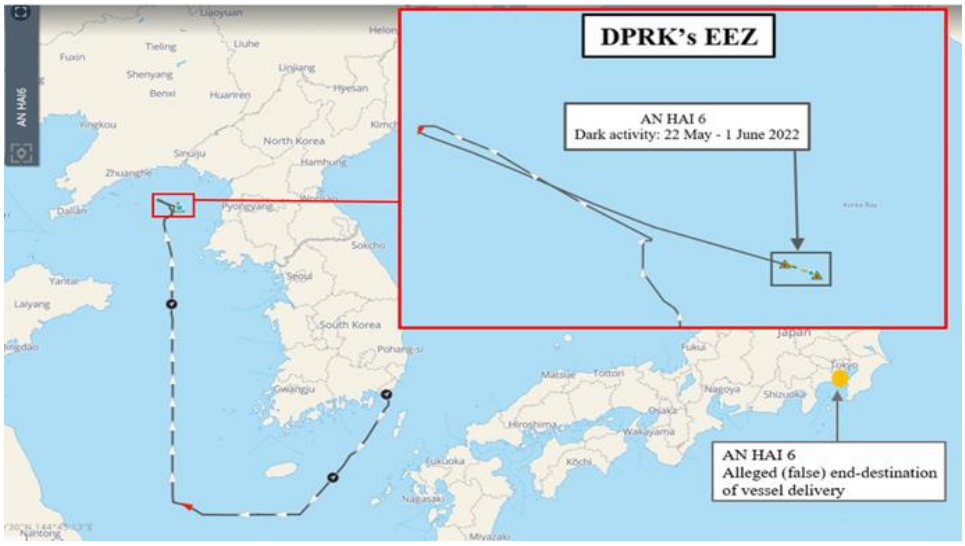
Chantier naval

50. Le Groupe d'experts enquête sur plusieurs navires de charge qui ont fait escale au chantier naval de Taizhou Yuanshan Shipping Project Limited Company[44] (ci-après « chantier naval de Taizhou Yuanshan »), avant que la propriété ne soit transférée à la République populaire démocratique de Corée (voir annexe 37). Comme d'autres navires acquis par la République populaire démocratique de Corée, l'*An Hai 6* a passé du temps (environ deux mois) sur le chantier naval, après avoir été vendu à Pearl Marine Shipping. Le chantier naval n'a pas encore répondu.

Transfert d'équipage

51. Après avoir quitté la Chine, l'*An Hai 6* a fait escale à Busan afin que des membres de l'équipage débarquent. Le Groupe d'experts relève des incohérences dans les rôles d'équipage obtenus de deux sources différentes, ce qui donne à penser que les listes fournies n'étaient peut-être pas tout à fait exactes. Il a demandé à la Chine des renseignements sur les membres de l'équipage restés à bord de l'*An Hai 6* avant que le navire ne soit aperçu en République populaire démocratique de Corée. Les informations relatives au suivi des navires ont montré l'absence de transmission de signaux sur le système d'identification automatique (AIS) entre le 22 mai et le 1er juin 2022 lorsque le navire se trouvait dans la baie de Corée (voir fig. XI). Le Groupe d'experts note que tout ressortissant étranger membre de l'équipage encore à bord aurait dû débarquer, probablement par transbordement, avant que le navire n'entre à Nampo (voir fig. XI)[45].

Figure XI
Activité non signalée de l'*An Hai 6* et équipage affecté, en mai et juin 2022



Source : Windward, annoté par le Groupe d'experts.

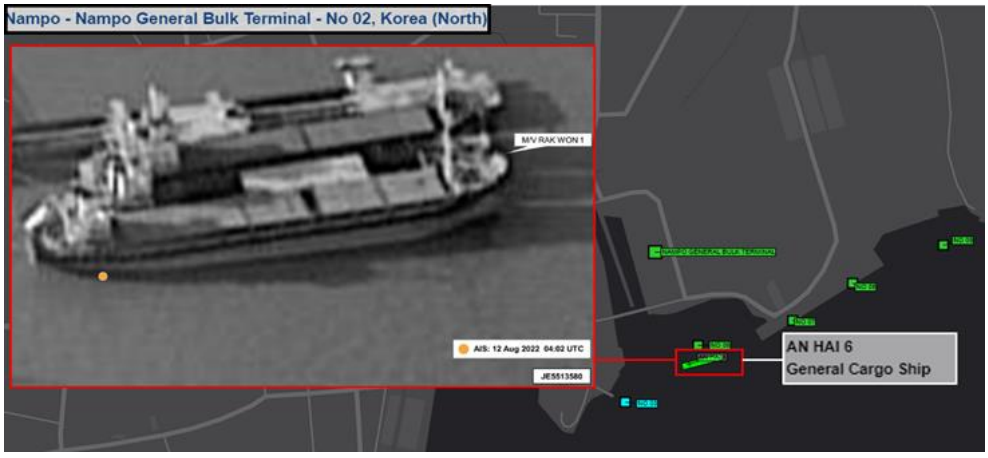
52. En ce qui concerne les informations douanières et celles relatives aux conteneurs et à la cargaison du navire ainsi que le lieu où se trouvait l'équipage avant que le navire ne soit aperçu en République populaire démocratique de Corée, la Chine a répondu que « l'AN HAI 6 a[vait] fait plusieurs escales en Chine en 2022 et que le navire était chargé de soie, de meubles et d'autres biens de consommation courante.

[44] En chinois : 台州市园山船务工程有限公司.
[45] Voir également transfert de l'équipage du *SF Bloom* (par. 77).

Aucun article interdit n'a été trouvé. Le débarquement de l'équipage du navire était une rotation normale » (voir annexe 26, OC.163/OC.191/OC.312).

53. En juillet 2022, l'*An Hai 6* battait pavillon de la République populaire démocratique de Corée. Il transmet depuis en tant que *Rak Won 1* (voir fig. XII)[46]. Le navire a commencé à faire escale dans des ports chinois en août.

Figure XII
L'*An Hai 6*, maintenant connu sous le nom de *Rak Won 1*, transmettant au terminal de marchandises générales de Nampo, les 11 et 12 août 2022



Source : S&P Global, annoté par le Groupe d'experts ; image en médaillon, un État Membre.

54. Des détails sont donnés dans l'annexe 35.

L'Anni (également connu sous le nom de[47] Kyong Song 3)

55. Le même mode de comportement a été suivi par un autre navire de charge, l'*Anni* (numéro OMI : 8356584) lors de son arrivée en République populaire démocratique de Corée (voir fig. XIII et XIV). L'*An Hai 6* et l'*Anni* se sont tous deux trouvés à l'extérieur de la porte d'écluse de Nampo à un mois d'intervalle, en juin et en juillet 2022, respectivement. Les deux navires :

a) battaient auparavant pavillon de la Chine le long des itinéraires côtiers ;

b) ont été vendus à des entités immatriculées dans les Îles Marshall quelques mois avant d'être transférés à la République populaire démocratique de Corée ;

c) ont fait escale au même chantier naval à Taizhou Haimen après avoir été vendus ;

d) ont été inscrits au registre de Nioué pour un seul voyage de livraison, une escale étant prévue à Busan pour une relève de l'équipage, avant de faire route vers des acquéreurs putatifs au Japon ;

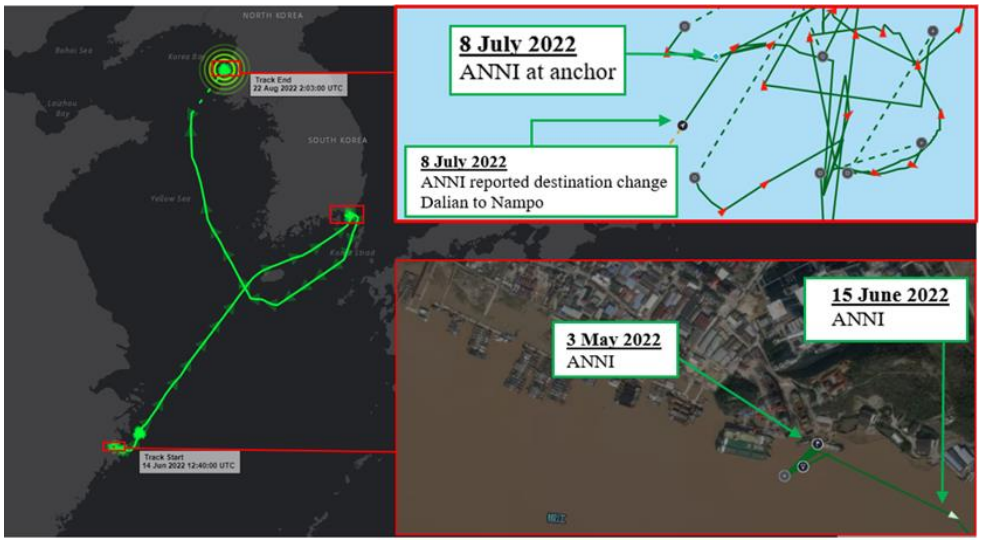
e) mais ont suivi un itinéraire bien différent et sont arrivés en République populaire démocratique de Corée.

56. Après son acquisition, l'*Anni* a transmis sous le nom de *Kyong Song 3*, battant pavillon de la République populaire démocratique de Corée, et a effectué des

[46] Dossiers de l'OMI. Les informations relatives au pavillon ont été mises à jour rétroactivement.
[47] Pour les navires sous le contrôle de la République populaire démocratique de Corée et transmettant au moyen d'identifiants de ce pays.

transbordements avec des navires battant pavillon étranger (voir annexe 36). Compte tenu de la nature identique de l'acquisition de ces deux navires, le Groupe d'experts estime qu'il est fort probable que l'*An Hai* 6 et l'*Anni* aient été acquis par le même réseau. Les enquêtes se poursuivent.

Figure XIII
Itinéraire du voyage international de l'*Anni*, de mai à août 2022



Source : Seaweb de S&P, Windward, annoté par le Groupe d'experts. Image en médaillon, Google Earth Pro (imagerie fournie uniquement à des fins de localisation, et non pour les dates des transmissions AIS).

Figure XIV
L'*Anni* transmettant au moyen de son ancien identifiant sous le nom de *Rong Gang 1* aux côtés d'autres navires de la République populaire démocratique de Corée au mouillage, zone du barrage de la mer de l'Ouest, le 22 août 2022

Source : Seaweb de S&P Global, annoté par le Groupe d'experts.

57. Le Groupe d'experts a écrit aux États Membres, entités et personnes concernés.

58. Les Îles Marshall ont aidé le Groupe d'experts à obtenir la documentation demandée. La République de Corée a confirmé que les deux navires se trouvaient à Busan pour la relève d'une partie de l'équipage et qu'aucune cargaison n'a été chargée ou déchargée. Le registre maritime de Nioué a confirmé avoir inscrit chacun

des deux navires pour un seul voyage de livraison mais n'a pas fourni d'éléments probants montrant qu'il aurait pris les précautions qui s'imposaient à plusieurs égards. Les enquêtes se poursuivent.

59. La Chine a répondu que l'*Anni* a consigné une seule « escale au port de sortie en Chine en 2022 ... et n'a plus été vu depuis dans les eaux territoriales chinoises. La Chine n'a constaté aucune activité en violation » des résolutions du Conseil de sécurité (voir annexe 26, OC.185).

60. Pearl Marine Shipping et Wuzhou Shipping Co., Ltd, les propriétaires inscrits de l'*An Hai 6* et de l'*Anni*, n'ont pas encore répondu. Le chantier naval de Taizhou Yuanshan n'a pas encore répondu.

Le Tomi Haru (maintenant connu sous le nom de Sa Hyang San 1) et loe Toyo Haru (maintenant connu sous le nom de So Baek Su)

61. Le Groupe d'experts a commencé à enquêter sur deux navires qui avaient battu pavillon des Palaos, le *Tomi Haru* (numéro OMI : 9054779) et le *Toyo Haru* (numéro OMI : 9054767), et naviguent actuellement sous le pavillon de la République populaire démocratique de Corée, respectivement en tant que *Sa Hyang San 1* et *So Baek Su*, compte tenu de plusieurs indicateurs : ils ont transmis par l'AIS de nouveaux signaux de la République populaire démocratique de Corée dans les eaux de Nampo et étaient auparavant présents sur un chantier naval suspect. Des entités ayant des liens avec la République populaire démocratique de Corée avaient été propriétaires des navires et en avaient assuré la gestion par le passé. Le *Tomi Haru*, lorsqu'il naviguait sous le nom de *Lucky Star 9* entre 2014 et 2015[48], s'était rendu dans plusieurs ports de la République populaire démocratique de Corée en opérant pour le compte de Sunny International Shipping Co Ltd[49] (ci-après « Sunny International »), une société constituée à Hong Kong (voir par. 64 à 69), ce qui donne à penser que des liens ont persisté avec le navire.

Chantier naval

62. Les signaux transmis par l'AIS ont montré que les deux navires étaient arrivés à Rongcheng Yuantong Ship Repairing Co., Ltd[50] (ci-après « chantier naval de Rongcheng Yuantong »), situé à Shidao (Chine), entre novembre 2021 et janvier 2022. Le *Tomi Haru* a cessé de transmettre par l'AIS au chantier naval avant d'apparaître dans les eaux de la République populaire démocratique de Corée, et le *Toyo Haru* a fait route au nord avant de cesser de transmettre (voir fig. XV). Entre 2021 et 2022, plusieurs autres navires de charge ont fait escale au chantier naval avant d'être ensuite aperçus en République populaire démocratique de Corée (voir fig. XVI et annexe 38). D'autres navires de charge que le Groupe d'experts avait précédemment suivis de près se trouvaient à proximité avant de passer sous le contrôle du pays[51]. Le Groupe d'experts enquête sur d'autres navires battant pavillon étranger qui se trouvaient sur le chantier naval et auraient pu être acquis par la République populaire démocratique de Corée, notamment le SF Bloom (numéro OMI : 8891297) (voir par. 73 à 82).

[48] Ces visites de port ont été effectuées avant que le Conseil de sécurité n'adopte en 2016 et 2017 des résolutions dans lesquelles il a imposé toute une série d'interdictions sectorielles frappant les marchandises.

[49] En chinois : 香港旭日國際海運有限公司.

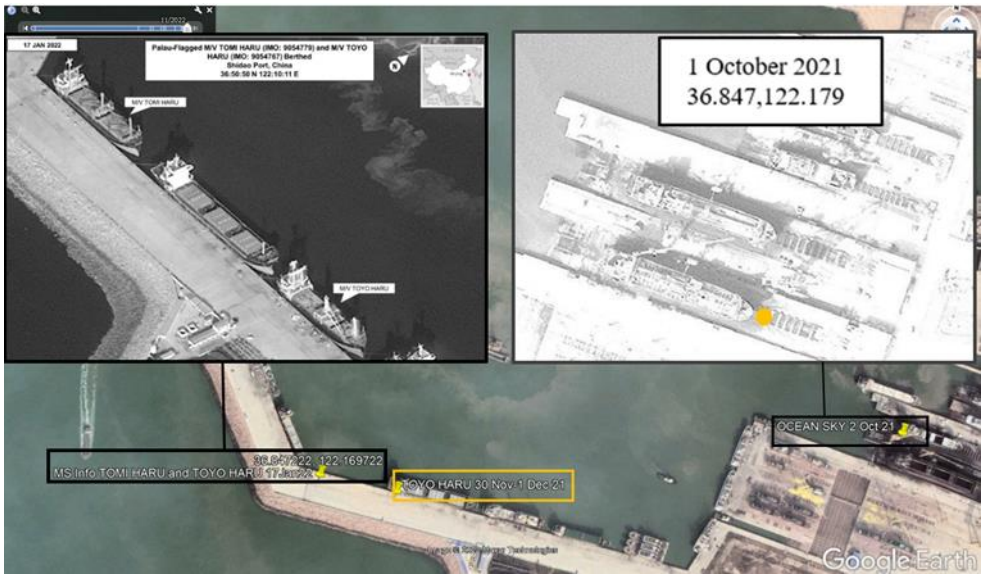
[50] En chinois : 荣成市远通船舶修造有限公司.

[51] S/2021/777, par. 78.

Figure XV
Le *Toyo Haru* et le *Tomi Haru* dans un chantier naval à Shidao avant qu'ils n'apparaissent en République populaire démocratique de Corée, janvier 2022

Source : Windward, annoté par le Groupe d'experts ; image en médaillon, Planet Labs.

Figure XVI
Le *Toyo Haru*, le *Tomi Haru* et l'*Ocean Sky,* chantier naval de Rongcheng Yuantong, 2021-2022



Source : Google Earth Pro, un État Membre, Maxar Technologies et annotation par le Groupe d'experts.

63. Les images satellites ont montré qu'une grue était installée sur le *Toyo Haru* lorsqu'il se trouvait sur le chantier naval (voir fig. XVII), ce qui a probablement accru la capacité de charge utile[52].

[52] À l'emplacement des mâts de charge d'origine.

Figure XVII
Travaux effectués sur le *Toyo Haru,* chantier naval de Rongcheng Yuantong, décembre 2021-janvier 2022

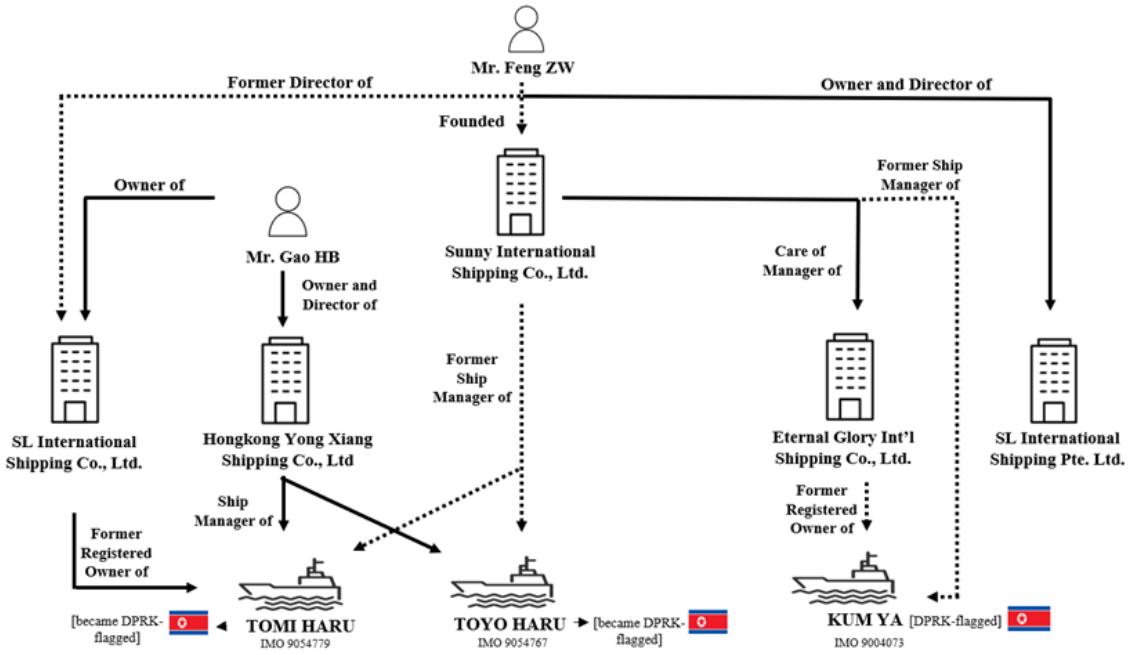
Source : Maxar Technologies, annoté par le Groupe d'experts.

Propriété et gestion

64. Avant leur acquisition par la République populaire démocratique de Corée, le *Tomi Haru* et le *Toyo Haru* étaient tous deux gérés par HongKong Yong Xiang Shipping Limited[53] (ci-après « HongKong Yong Xiang »), dont le Directeur[54] est un ressortissant chinois, M. Gao HB. Les deux navires, qui naviguaient auparavant sous les noms de *Lucky Star 9* et *Lucky Star 8*, respectivement, avaient les mêmes propriétaires et sociétés de gestion (voir fig. XVIII). Sunny International[55] était auparavant l'armateur-gérant du *Tomi Haru* et du *Toyo Haru*. M. Feng ZW, un ressortissant chinois, précédent propriétaire de SL International Shipping Co Ltd[56, 57], société constituée aux Seychelles, a également été le premier Directeur de Sunny International. Il dirige également une société constituée à Singapour portant un nom similaire, SL International Shipping Pte Ltd. En 2020, M. Gao a succédé à M. Feng en tant que propriétaire de SL International (Hong Kong).

[53] En chinois : 香港永祥船務有限公司.
[54] D'après les registres des sociétés de Hong Kong.
[55] Sunny International a également géré le *Lucky Star 7* (numéro OMI : 9004073), qui est ultérieurement passé sous le pavillon de la République populaire démocratique de Corée et naviguait un an plus tard sous le nom de *Kum Ya*.
[56] En chinois : 领航国际海运有限公司.
[57] La société a été dissoute en janvier 2020, d'après les registres.

Figure XVIII
Liens de propriété et de gestion, *Toyo Haru* et *Tomi Haru*[58]



Source : le Groupe d'experts.

65. Le Groupe d'experts a écrit aux États Membres, entités et personnes concernés, notamment aux Palaos, à la Chine, au chantier naval de Rongcheng Yuantong, à M. Gao et à M. Feng.

66. Les Palaos n'ont pas encore répondu.

67. La Chine a répondu que « les informations fournies par le Groupe d'experts concernant TOMI HARU et TOYO HARU n'étant pas suffisamment précises, les autorités chinoises n'ont pas été en mesure d'enquêter efficacement » (voir annexe 26, OC.305).

68. Le chantier naval de Rongcheng Yuantong, M. Gao et M. Feng n'ont pas encore répondu.

69. Des détails sont donnés dans les annexes 39 et 40.

Autres navires acquis

70. La République populaire démocratique de Corée a également acquis le *Lin Da 8* et l'*Hum Wonsin,* des navires de charge qui battaient auparavant pavillon de la Chine, en avril et en octobre 2022, respectivement[59]. Rien n'a été trouvé au sujet de ces navires dans les données de suivi AIS mises à disposition à des fins commerciales. Après leur acquisition, des numéros OMI ont été attribués aux navires, sous le pavillon de la République populaire démocratique de Corée et le nom de *Mo Ran Bong 2* (numéro OMI : 8357112) et de *Songrim* (numéro OMI : 8594540). Par ailleurs, en octobre, la République populaire démocratique de Corée a acquis un autre navire de charge qui battait pavillon de la Chine, le *Shun Chang 78/Sunchang 78* (voir annexe 41). Le navire a obtenu le numéro OMI 8594552 et navigue maintenant

[58] D'après les registres des sociétés.
[59] Dossiers de l'OMI.

sous le nom de *Rak Nang 2*. Le Groupe d'experts avait surveillé le *Sunchang 78* lorsque celui-ci avait transmis au moyen du numéro MMSI 412427130 dans les eaux territoriales de la République populaire démocratique de Corée près de l'île de Ch'o-do, en mai 2022, avant son acquisition (voir par. 88).

71. Le Groupe d'experts constate l'acquisition de navires qui suivent des voies de navigation intérieure sans avoir obtenu de numéro OMI ou sans transmettre de signaux AIS. Si la République populaire démocratique de Corée ne faisait pas officiellement passer sous son pavillon de tels navires, rien dans les données mises à disposition à des fins commerciales ne permettrait de confirmer leur acquisition.

72. Le Groupe d'experts a demandé à la Chine des renseignements sur les navires susmentionnés, notamment sur leur immatriculation, leurs propriétaires réels, les informations douanières, l'achat et la vente des navires avant que ceux-ci ne quittent les eaux chinoises. Il a également demandé aux autorités chinoises de transmettre des questions aux propriétaires de navire. La Chine a répondu qu'à leur départ, « le MO RAN BONG 2 et le SONGRIM transportaient ... du verre, de la farine, du sucre blanc et d'autres biens de consommation courante... et [que la Chine] n'[était] pas au courant du changement de nom de ces navires » et que « la Chine n'a relevé aucun fait prouvant que le SHUN CHANG 78 avait participé à des activités de contrebande de navire à navire. Le navire est radié depuis novembre 2021 » (voir annexe 26, « Maritime activities », OC.308 et OC.307).

Contournement des sanctions et ses facilitateurs

SF Bloom également connu sous le nom de Pu Yang 2

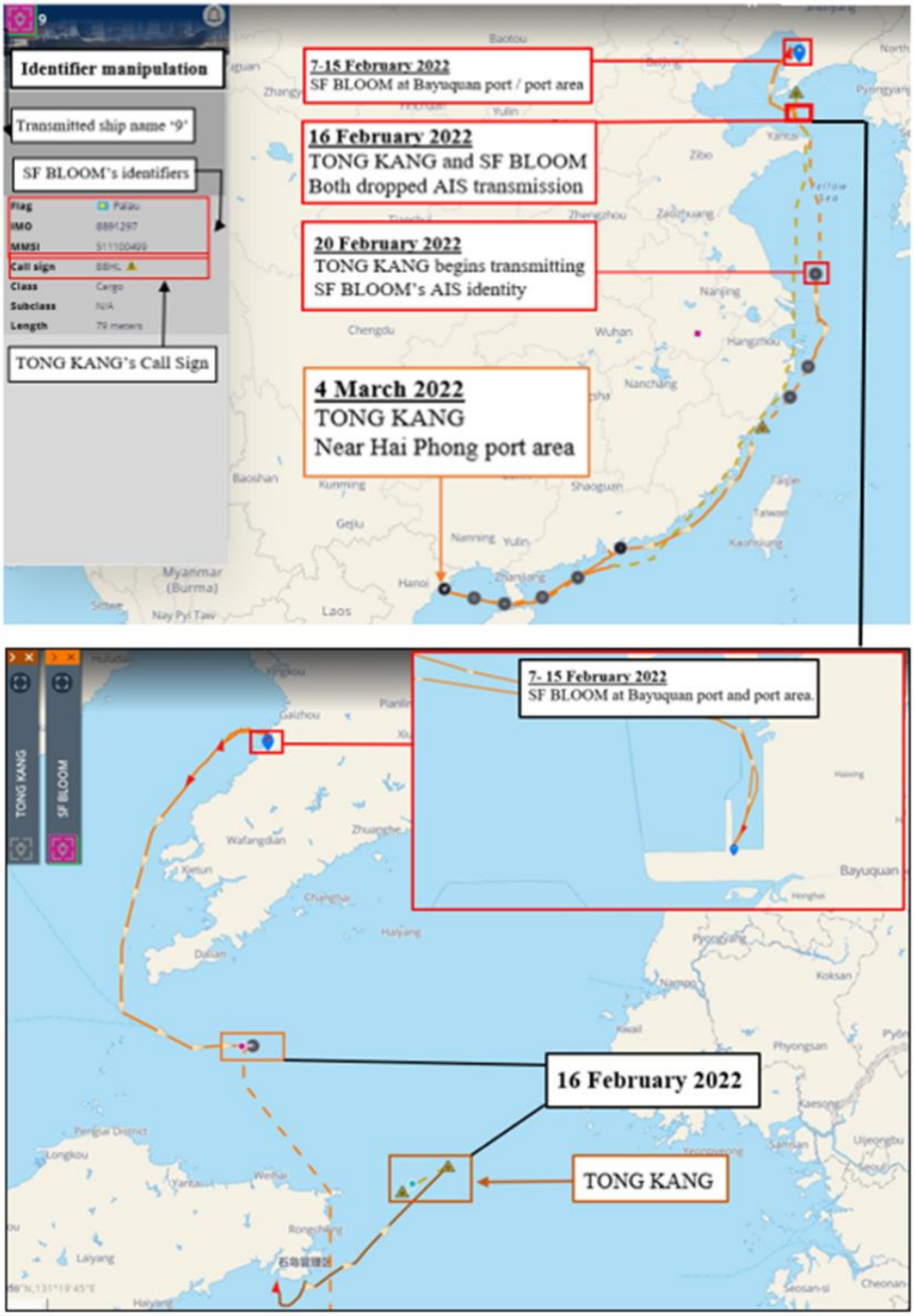
73. Le Groupe d'experts a commencé à enquêter sur le porte-conteneurs *SF Bloom* (numéro OMI : 8891297), qui battait alors pavillon des Palaos, après que le navire a transmis dans les eaux de la République populaire démocratique de Corée, le 30 juillet 2022, sous le nom de *Pu Yang 2*, battant pavillon de la République populaire démocratique de Corée. Comme l'*An Hai 6,* le *SF Bloom* a, d'après l'imagerie satellite, récupéré une cargaison dans un port chinois avant d'entrer dans les eaux de la République populaire démocratique de Corée ; comme le *Tomi Haru* et le *Toyu Haru* (et d'autres navires), le *SF Bloom* s'était également trouvé sur le chantier naval de Rongcheng Yuantong entre décembre 2021 et janvier 2022 (voir annexe 38).

Voyage et cargaison des navires

74. Deux navires ont coopéré pour dissimuler l'itinéraire suivi par le *SF Bloom*, qui a ainsi pu arriver à Nampo sans que sa cargaison ne soit détectée sur les bases de données maritimes. Le *Tong Kang* (numéro MMSI : 412326350), un navire battant pavillon de la Chine, dont la longueur est comparable à celle du *SF Bloom* et qui se trouvait à proximité, a manipulé numériquement ses propres identifiants AIS afin de se faire passer pour le *SF Bloom*, ce qui a permis à ce dernier et à sa cargaison de se rendre au port de Nampo sans être détectés. Ayant adopté le profil numérique du *SF Bloom* après des jours se recoupant durant lesquels aucune donnée n'a été transmise par l'AIS, aux alentours du 16 février 2022, le *Tong Kang* a donné l'impression que le *SF Bloom* avait fait route vers le sud depuis le port de Bayuquan (Chine), plutôt que vers sa destination réelle dans les eaux de la République populaire démocratique de Corée (voir fig. XIX). Un État Membre a signalé que le *SF Bloom* transportait une cargaison illicite de Bayuquan à la République populaire démocratique de Corée au cours de ce voyage (voir fig. XX).

Figure XIX

Le *Tong Kang* transmettant en utilisant les identifiants du *SF Bloom* et le nom frauduleux de navire « 9 », février-mars 2022



Source : Windward, annoté par le Groupe d'experts.

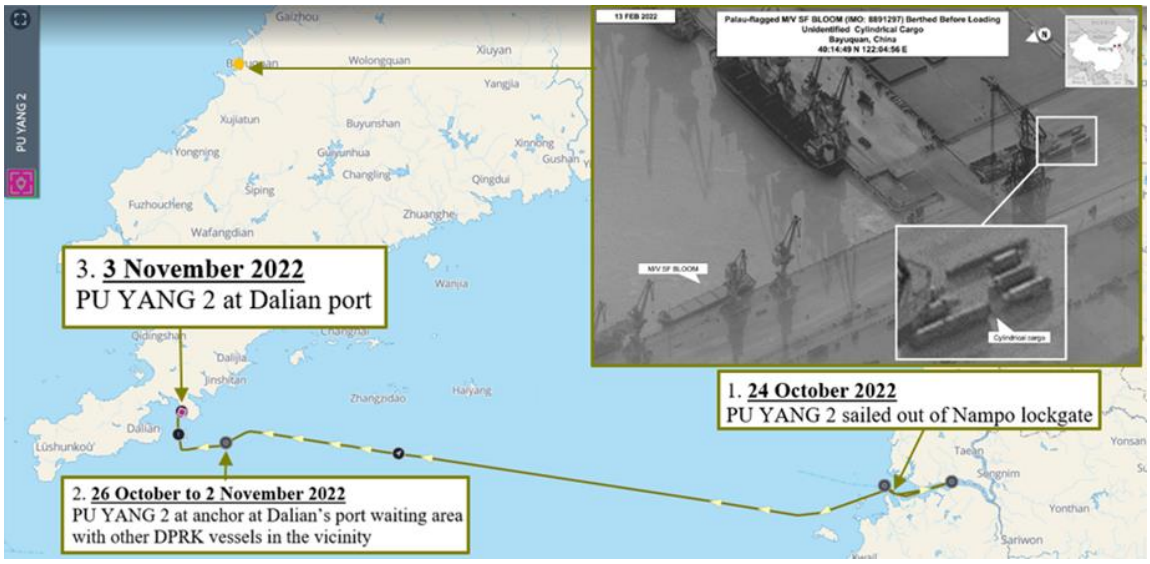
Figure XX
Le *SF Bloom*, le 3 mars, le 19 avril et le 15 mai 2022, à Nampo

Source : un État Membre.

75. Le *Tong Kang*, qui a transmis l'identité du *SF Bloom* à partir du 20 février 2022, a de nouveau utilisé son propre profil numérique en mars mais a continué de transmettre le numéro OMI du *SF Bloom*. Il a arrêté de transmettre en avril 2022.

76. Le *SF Bloom*, transmettant sous le nom de *Pu Yang 2*, battant pavillon de la République populaire démocratique de Corée, navigue entre ce pays et des ports ou zones portuaires chinoises depuis août 2022 (voir fig. XXI). Le Groupe d'experts constate que les navires de la République populaire démocratique de Corée transmettent généralement leurs identifiants déclarés lorsqu'ils transportent une cargaison légitime (éventuellement humanitaire).

Figure XXI
Escales du *Pu Yang 2* dans des ports ou des zones portuaires, octobre-novembre 2022



Source : Windward, annoté par le Groupe d'experts ; image en médaillon, un État Membre.

Transferts d'équipage

77. Le Groupe d'experts a précédemment signalé que des navires avaient été localisés pour la dernière fois près de Shidao avant d'être détectés ensuite en République populaire démocratique de Corée[60]. Le *Tong Kang* se trouvait également dans la même zone à Shidao avant de rejoindre le *SF Bloom* en février 2022. Le *Tong Kang*, transmettant le numéro OMI du *SF Bloom*, a fait route vers le sud et était à l'ancre près de la zone portuaire de Haiphong (Viet Nam) au 3 mars 2022, avant de repartir un jour plus tard. D'après des informations relatives à l'équipage obtenues séparément par le Groupe d'experts, Haiphong était le premier point d'embarquement de l'équipage du *SF Bloom.* Comme pour l'*An Hai 6*, le Groupe d'experts note que les ressortissants étrangers membres de l'équipage auraient dû débarquer avant que le navire n'entre en République populaire démocratique de Corée. Étant donné que le *Tong Kang* s'est rendu à Haiphong en mars, il est possible que l'équipage de départ du *SF Bloom* ait été à bord en vue de débarquer lorsque le navire était en route vers la République populaire démocratique de Corée.

Facilitateurs

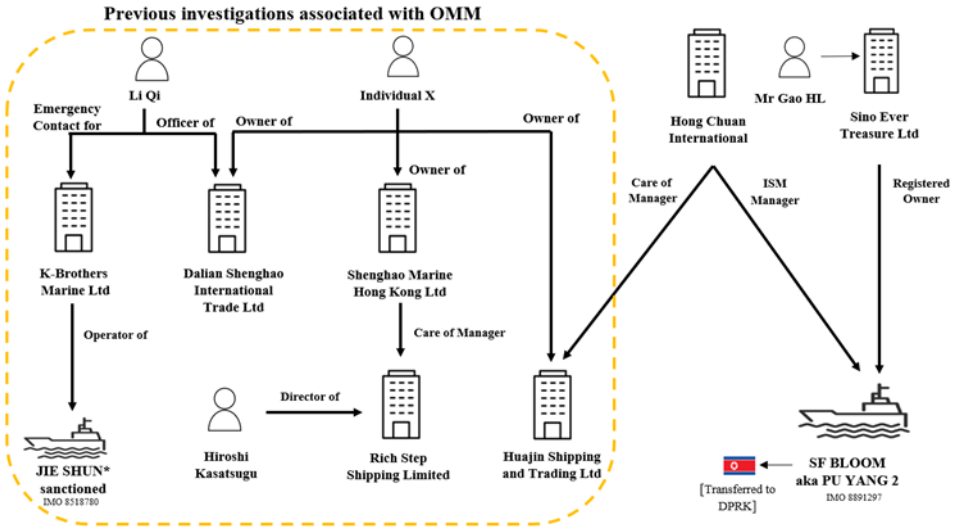
78. Les précédents propriétaires et exploitants du *SF Bloom*, Dalian Taiyuan International Shipping Agency Co Ltd (ci-après « Dalian Taiyuan »), qui a été l'armateur-gérant du navire entre 2012 et 2014, avait précédemment fait l'objet d'une enquête[61] concernant le navire de charge *Enterprise* (numéro OMI : 9153331), qui avait à plusieurs reprises exporté du charbon en provenance de la République populaire démocratique de Corée et est passé plus tard, en septembre 2022, sous le pavillon de ce pays.

79. Hong Chuan International Logistics Co Ltd (ci-après « Hong Chuan »), une entité qui serait basée à Taichung[62], assure également la gestion technique du navire depuis 2012. Le Groupe d'experts note que le nom figurant sur l'adresse électronique d'Hong Chuan ressemble à celui de Dalian Taiyuan. Hong Chuan indique également une adresse « aux bons soins » d'une autre entité liée à une précédente enquête du Groupe d'experts. Hong Chuan a également exploité deux autres navires qui sont plus tard passés sous le pavillon de la République populaire démocratique de Corée : le *Chong Dan* (numéro OMI : 8661719), qui naviguait sous le nom de *Lucida 189* et dont la gestion technique était alors assurée par Dalian Taiyuan, et le *Tae Dong Gang 1* (numéro OMI : 8672110), naviguant sous le nom d'*Ocean Hope*. Sino Ever Treasure Ltd (ci-après « Sino Ever Treasure »), le dernier propriétaire et exploitant étranger connu avant que le *SF Bloom* ne passe sous pavillon de la République populaire démocratique de Corée[63], est une entité fictive établie à Hong Kong ; un seul navire est immatriculé à son nom et elle n'a pas de présence en ligne (voir fig. XXII).

80. Un tel mode de comportement cadre avec ce que le Groupe d'experts a déjà constaté : les mêmes réseaux de personnes et d'entités, se servant de sociétés fictives, sont impliqués dans le contournement des sanctions visant la République populaire démocratique de Corée.

[60] S/2021/211, par. 70 à 72 et annexe 38.
[61] S/2021/777, par. 81 et annexe 40.
[62] Aucune trace d'inscription officielle dans les registres des sociétés. L'adresse donnée est celle d'un immeuble d'habitation.
[63] Dossiers de l'OMI.

Figure XXII
Liens de propriété et de gestion, *SF Bloom*[64]



Source : le Groupe d'experts.

81. Le Groupe d'experts a écrit aux États Membres, entités et personnes concernés, notamment aux Palaos, à la Chine, au Viet Nam, à Sino Ever Treasure et à Hong Chuan International. Le Viet Nam a répondu que, en ce qui concerne le *Tong Kang*, les autorités vietnamiennes « uniss[ait]ent leurs efforts en vue de vérifier et confirmer les informations à ce sujet » et que le Groupe d'experts serait tenu informé. La Chine a répondu que le « TONG KANG [était] radié et que l'enquête menée par les autorités chinoises [était] toujours en cours » (voir annexe 26, OC.311). Les Palaos, Sino Ever Treasure et Hong Chuan International n'ont pas encore répondu.

82. Des détails sont donnés dans l'annexe 42.

Immobilisation d'un navire désigné

Petrel 8

83. Le Groupe d'experts a constaté que le *Petrel 8* (numéro OMI : 9562233), désigné par l'Organisation des Nations Unies, naviguant sous le nom de *Retrel 8*[65], s'était approché des eaux territoriales indonésiennes autour du 1er juillet 2022. Le registre maritime de Nioué a inscrit le *Petrel 8* pour un seul voyage de livraison, au départ de Ningde (Chine) et à destination de l'Indonésie. Le *Petrel 8* avait cessé de transmettre un signal AIS peu de temps après avoir été désigné en octobre 2017[66]. L'Indonésie a immobilisé le *Petrel 8* lorsque ce navire était entré dans ses eaux territoriales en raison d'une infraction administrative. Les autorités indonésiennes ont communiqué des informations obtenues de la société indonésienne qui a acheté le *Petrel 8*. Le propriétaire indonésien a confirmé que le navire avait été mis aux

[64] D'après les registres des sociétés.
[65] Depuis sa désignation en 2017, le *Petrel 8* n'avait pas transmis en utilisant ses identifiants. En mars 2022, le système de suivi d'une base de données maritimes a enregistré une brève transmission par le navire utilisant son ancien numéro MMSI qui avait été attribué par les Comores, naviguant sous le nom d'*Haiyan 8*, lorsqu'il a quitté la zone maritime du Bohai en direction des eaux de Ningbo-Zhoushan.
[66] S/2018/171, par. 51 et annexe 5-2.

enchères dans un pays tiers en 2021[67], et acheté début 2022 par l'intermédiaire d'un courtier étranger. La société indonésienne a déclaré qu'elle ne s'était « jamais rendu compte que le navire figurait toujours sur la liste relative aux sanctions [contre la République populaire démocratique de Corée] ».

Diligence raisonnable

84. Le Groupe d'experts a précédemment recommandé que des mesures de diligence raisonnable soient prises par les registres des navires inscrivant des navires pour un seul voyage de livraison, cette pratique étant couramment utilisée par la République populaire démocratique de Corée dans le cadre de l'acquisition de navires. Le registre maritime de Nioué a inscrit l'*An Hai 6,* l'*Anni* et le *Petrel 8*, un navire désigné, chacun pour un seul voyage de livraison. Bien que le registre maritime ait fourni les informations demandées, le Groupe d'experts note l'absence de mesures de diligence raisonnable essentielles telles que le suivi des navires lorsque les données transmises par l'AIS ont montré que l'*Anni* et l'*An Hai 6* ne faisaient pas route vers leur destination finale déclarée. Les contrôles qui s'imposaient n'ont pas non plus été effectués en vue de faire respecter les conditions de transport restrictives pour ces deux navires, le voyage isolé de livraison inscrit au registre étant assorti d'« une condition stricte et non négociable n'autorisant aucune cargaison ni aucun passager ». En outre, sur son site Web, il était indiqué que le *Petrel 8* était visé par des sanctions ; le navire a quand même été inscrit au registre pour un seul voyage de livraison.

85. M[me] Wei TT, mentionnée en tant que Directrice de Li Quan Shipping Co Ltd, une société constituée à Hong Kong qui a vendu le *Petrel 8* après qu'il a été mis aux enchères, a également été liée à d'autres navires acquis par la République populaire démocratique de Corée[68]. Le Groupe d'experts a écrit à M[me] Wei et attend une réponse. Des détails sont donnés dans l'annexe 43. Les enquêtes sur le navire et sa vente se poursuivent.

Eaux territoriales de la République populaire démocratique de Corée comme zones de transferts de navire à navire

Navires de charge acquis effectuant des transferts de navire à navire

86. Les eaux autour de l'île de Ch'o-do restent une zone active où ont lieu des transferts de cargaisons de navire à navire[69]. Un État Membre a fourni des images satellites montrant le *Kyong Song 3* (anciennement l'*Anni*), navire de la République populaire démocratique de Corée, lors d'un transbordement avec le *Zhenyangxin* (numéro MMSI : 413272340), battant pavillon de la Chine, dans les eaux territoriales de la République populaire démocratique de Corée[70] en septembre 2022 (voir fig. XIII). Lors de ce transfert, seul le *Kyong Song 3* transmettait un signal AIS. Les résolutions du Conseil de sécurité interdisent que soit facilité ou effectué un quelconque transbordement avec des navires de la République populaire démocratique de Corée de tous biens ou articles dont la fourniture, la vente ou le transfert s'effectue depuis ou vers ce pays.

87. Le Groupe d'experts a demandé aux autorités chinoises des informations sur le *Zhenyangxin*, notamment des précisions sur la position, les activités et la cargaison du navire au cours de la période sur laquelle l'enquête portait. La Chine a répondu

[67] Le Comité a constaté que la mise en vente du navire sur plusieurs sites Web de vente de navires. Sur un de ces sites Web, il était indiqué que l'avis de vente avait un caractère judiciaire car le navire était visé par des sanctions.

[68] S/2021/211, par. 40 à 42 et annexe 24 ; S/2020/840, par. 33 et 58.

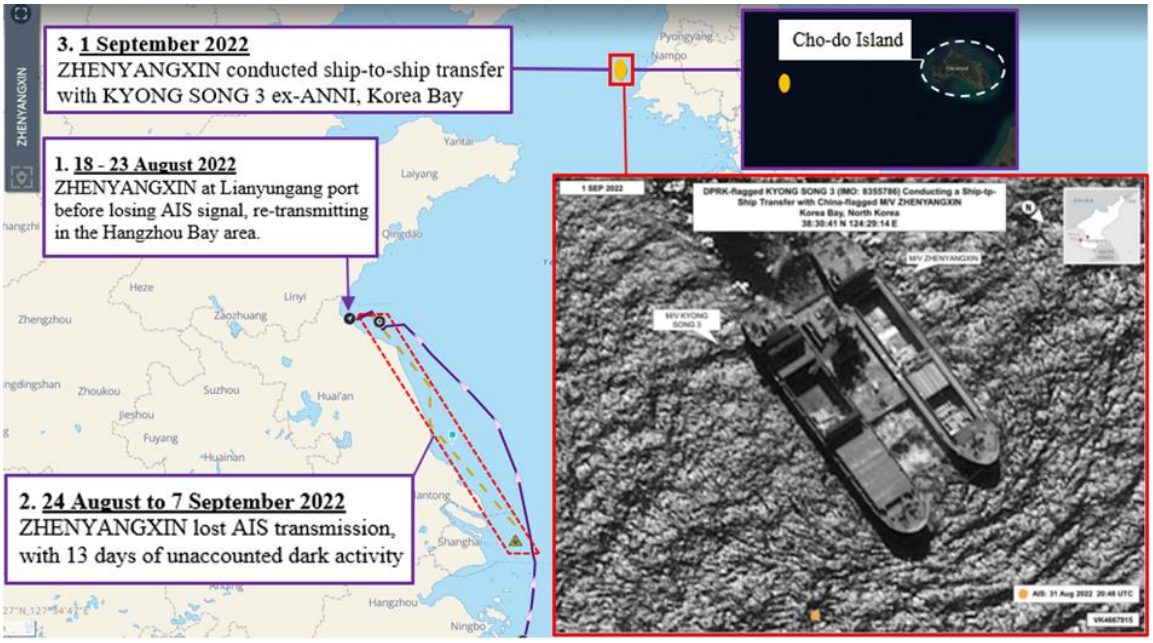
[69] Tels qu'observés par le Groupe d'experts sur des images satellites en 2022. S/2022/668, par. 35 et 36.

[70] Environ 14 milles marins de l'île de Ch'o-do.

qu'elle « n'avait trouvé aucun élément prouvant que le ZHEN YANG XIN était impliqué dans la contrebande de navire à navire » (voir annexe 26, « Maritime activities », OC.310). Des détails sont donnés dans l'annexe 44.

Figure XXIII

Itinéraire du voyage du *Zhenyangxin* et transbordement avec le *Kyong Song 3*, battant pavillon de la République populaire démocratique de Corée, près de l'île de Ch'o-do, août-septembre 2022

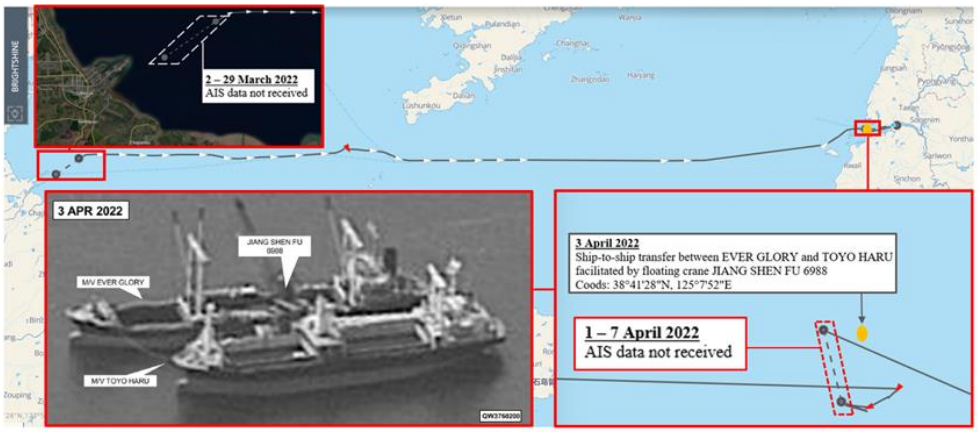


Source : Windward, annoté par le Groupe d'experts ; image en médaillon, un État Membre.

88. Des navires acquis, le *Toyo Haru* et le *Shun Chang 78/Sunchang 78,* ont également, d'après l'imagerie satellite, effectuer des transbordements avec des navires battant pavillon de la République populaire démocratique de Corée dans les eaux territoriales de ce pays (voir fig. XXIV et XXV).

Figure XXIV

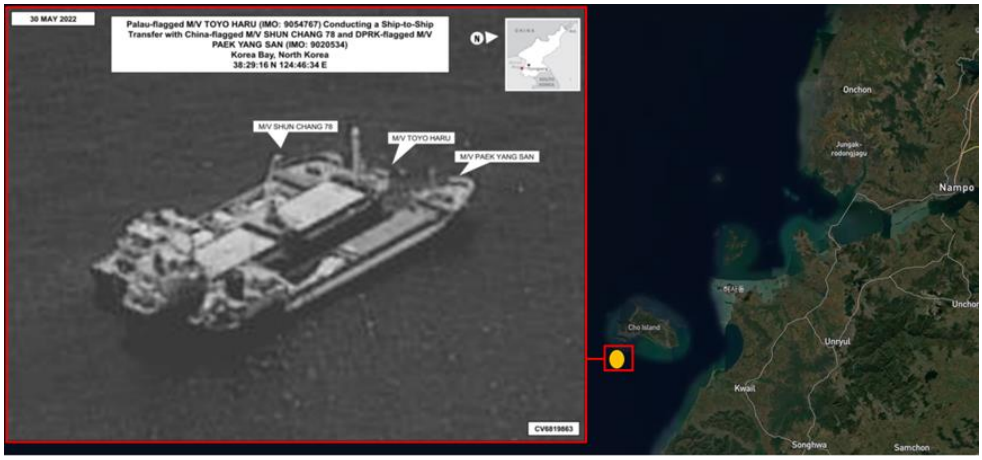
Itinéraire du voyage de l'*Ever Glory*[71], battant pavillon de la République populaire démocratique de Corée et transfert de navire à navire impliquant le *Toyo Haru* et le *Jiang Shen Fu 6988,* barrage de la mer de l'Ouest, mars-avril 2022



Source : Windward ; image en médaillon, un État Membre, annoté par le Groupe d'experts.

Figure XXV

Le *Shun Chang 78*, le *Toyo Haru,* et le *Paek Yang San*, battant pavillon de la République populaire démocratique de Corée, près de l'île de Ch'o-do, le 30 mai 2022



Source : image en médaillon, un État Membre ; carte, le Groupe d'experts.

Pontons-grues

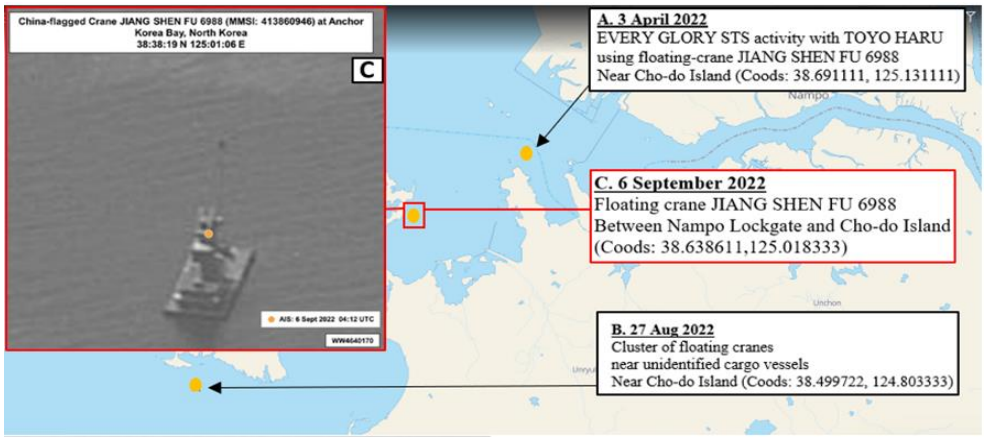
89. Dans son précédent rapport[72], le Groupe d'experts a signalé que des transferts en configurations de trois navires se produisaient près de l'île de Ch'o-do et que des pontons-grues avaient pu être impliqués. Dans un cas, un des pontons-grues, le *Jiang Shen Fu 6988* (numéro MMSI : 413860946), transmettait en utilisant son numéro MMSI chinois (fig. XXVI) (voir également annexe 45). L'imagerie satellite

[71] En 2017, l'*Ever Glory* a cessé de transmettre en utilisant les identifiants qui lui avaient été attribués. Il transmettait probablement en se servant d'autres identifiants faisant l'objet d'un suivi par le Groupe d'experts, notamment sous le nom de *Brightshine*.

[72] S/2022/668, par. 35 et 36 et annexe 26.

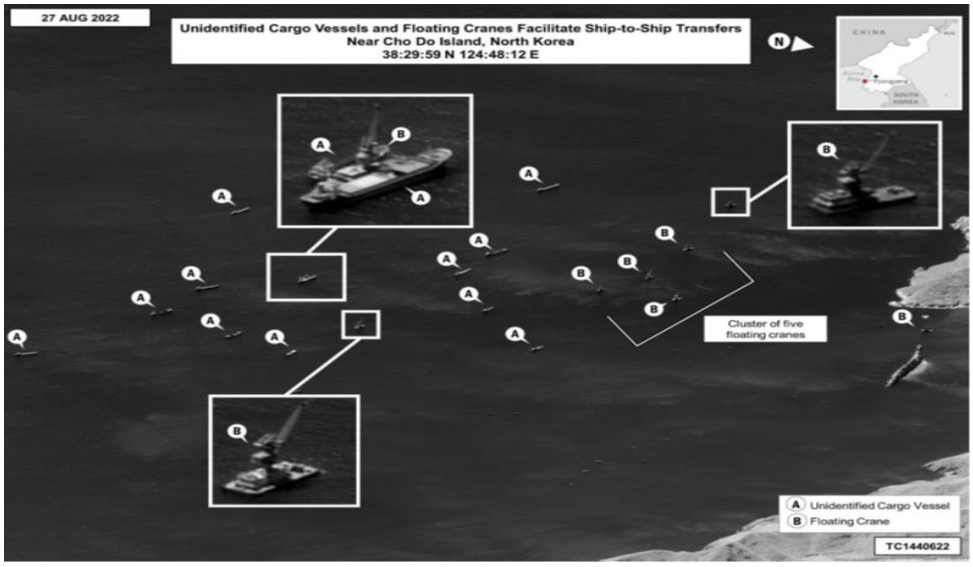
a montré un ensemble de pontons-grues près de l'île de Ch'o-do le 27 août 2022 (fig. XXVII).). Au paragraphe 7 de la résolution 2397 (2017), le Conseil de sécurité interdit la fourniture, la vente ou le transfert des navires classés sous le code 89 du Système harmonisé (SH) (« Navigation maritime ou fluviale ») à la République populaire démocratique de Corée ; cela inclut les pontons-grues. Tous transbordements avec des navires de la République populaire démocratique de Corée sont interdits en vertu du paragraphe 11 de la résolution 2375 (2017). La Chine a répondu qu'elle « n'avait trouvé aucun élément prouvant que le JIANG SHEN FU 6988 était impliqué dans la contrebande de navire à navire. Aucune escale ni aucune déclaration d'informations n'a été enregistrée en Chine pour l'EVER GLORY » (voir annexe 26, OC.306).

Figure XXVI
Ponton-grue opérant dans les eaux territoriales de la République populaire démocratique de Corée en 2022



Source : un État Membre ; carte annotée par le Groupe d'experts.

Figure XXVII
Groupe de pontons-grues, au pavillon indéterminé, près de l'île de Ch'o-do, le 27 août 2022



Source : un État Membre.

Commerce maritime illicite d'articles et produits interdits

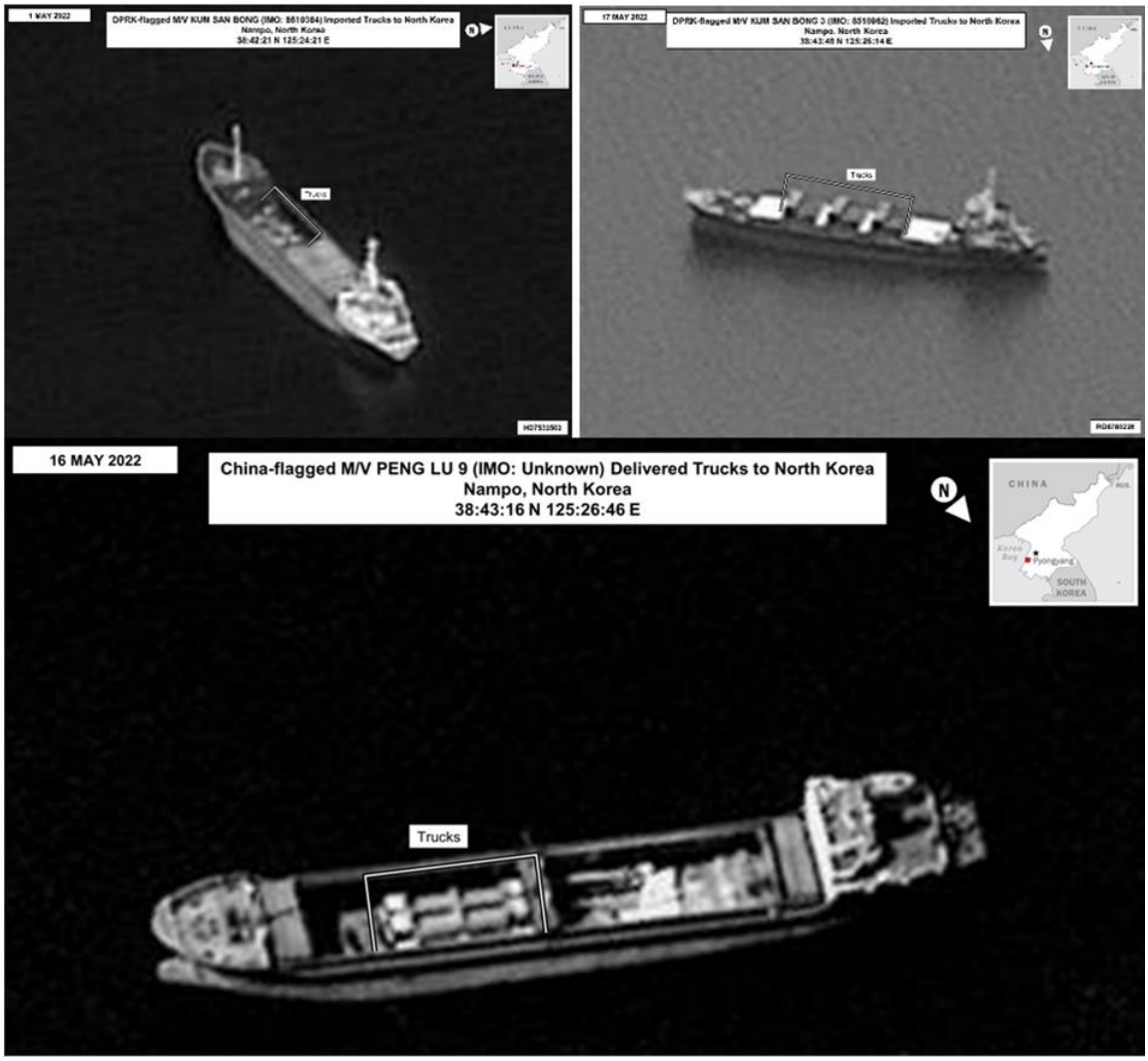
Véhicules de transport

90. Un État membre a fourni des images satellites montrant trois chargements de camions et d'autres articles sur deux navires battant pavillon de la République populaire démocratique de Corée et un navire battant pavillon de la Chine arrivés en République populaire démocratique de Corée en mai 2022 (voir fig. XXVIII). Le *Kum San Bong* (numéro OMI : 8810384) et le *Kum San Bong 3* (numéro OMI : 8518962), des navires battant pavillon de la République populaire démocratique de Corée, se rendent dans des ports ou des zones portuaires chinoises depuis mai 2022. Les bases de données maritimes montrent que le *Peng Lu 9* (numéro MMSI : 412454160) a suivi une voie de navigation intérieure et a fait escale dans plusieurs ports ou zones portuaires chinoises avant son arrivée à Nampo. Le navire n'a pas transmis depuis. Le Groupe d'experts a demandé des informations aux autorités chinoises concernant de précédents voyages effectués par des navires de la République populaire démocratique de Corée et la cargaison de ces navires avant mai 2022. Ont également été demandées des informations sur des documents concernant le *Peng Lu 9* (propriété, gestion, activité maritime et douanes) et tout lien entre les trois navires en rapport avec leur cargaison et approvisionnement. La Chine a répondu que « le KUM SAN BONG et le KUM SAN BONG 3 transportaient des verres et d'autres biens de consommation courante en 2022, et que des camions n'avaient pas été trouvés dans leurs livraisons. Aucune activité des deux navires n'a été trouvée dans les eaux de Ningbo-Zhoushan », et que « la Chine n'a[vait] trouvé aucun élément prouvant que le PENG LU 9 était impliqué dans la contrebande de camions » (voir annexe 26, OC.203 et OC.205).

91. Le *Kum San Bong* et le *Kum San Bong 3* étaient auparavant gérés par des entités communes immatriculées à Hong Kong qui géraient également d'autres navires ultérieurement acquis par la République populaire démocratique de Corée. Lorsque les deux navires n'étaient pas exploités par la République populaire démocratique de Corée, les propriétaires et gérants mentionnés dans les registres étaient des entités étrangères. Ces entités étaient probablement des sociétés fictives, comme cela a déjà été confirmé dans le cas du Kum San Bong[73], pour lequel Xin Sea Shipping Co Ltd a indiqué une adresse « aux bons soins de » en République populaire démocratique de Corée. L'utilisation de sociétés fictives et de sociétés écran pour opacifier les opérations commerciales est une tactique connue employée en vue de contourner les sanctions. Des détails sont donnés dans l'annexe 46.

[73] S/2017/150, annexe 13-4.

Figure XXVIII
Exportation de camions et d'autres articles à destination de la République populaire démocratique de Corée, mai 2022



Source : un État Membre.

Charbon en provenance de la République populaire démocratique de Corée

92. Des navires connus de la République populaire démocratique de Corée ont continué d'exporter du charbon dans les eaux de Ningbo-Zhoushan sans transmettre de signal AIS. Des informations détaillées sur ces enquêtes sont données aux annexes 47 à 51.

Camouflage de navire

93. Un État Membre a fourni au Groupe d'experts des informations sur le *Mi Rim 2* (numéro OMI : 9361407), un navire désigné par l'ONU[74], camouflé en *Song Gwan*, les lettres « SG » peintes sur sa coque (voir fig. XXIX). D'après les données de suivi du navire, le « *Song Gwan* » a transmis par intermittence dans les eaux de Ningbo-

[74] Ce navire est également soumis à un gel des avoirs.

Zhoushan, avant de quitter la zone six semaines plus tard. Des détails sont donnés dans l'annexe 52.

Figure XXIX
Le *Mi Rim 2* camouflé en *Song Gwan*/SG, le 30 août 2022

Source : un État Membre.

Questions relatives aux pêches

Transfert des droits de pêche

94. Un État Membre a interrogé des membres de l'équipage de quatre chalutiers chinois dans[75] les eaux de la République populaire démocratique de Corée et à proximité de ces eaux entre juin et juillet 2021. Selon les informations fournies par l'État Membre, un permis de pêche dans ces eaux n'était assorti d'aucune limite de quota de pêche et sa date d'expiration était fixée à la fin du mois de décembre 2021. Le prix du permis de pêche a augmenté, passant à 3 000 000 renminbi (environ 450 000 dollars) pour la période allant de mai à décembre 2021, soit cinq à neuf fois plus que le montant précédemment indiqué par le Groupe d'experts[76]. D'après ce qui a été dit, les navires de pêche pouvaient pêcher sans permis dans les eaux de la République populaire démocratique de Corée si une somme d'argent était versée à un intermédiaire (voir annexe 53). La Chine a répondu : « Si les faits signalés par le Groupe d'experts sont réels, il doit s'agir d'activités illégales. La position de la Chine au sujet de telles activités illégales est très claire, et les mesures voulues seront prises conformément aux lois et règlements une fois les faits établis... Cependant, les informations fournies par le Groupe d'experts sont vagues et les éléments de preuve communiqués ne sont pas suffisants, et il est donc difficile pour les autorités chinoises de mener des enquêtes approfondies » (voir annexe 26, OC.319).

[75] Deux bateaux qui accompagnaient l'un des quatre chalutiers auraient été « inspectés et saisis » par un navire officiel dans les eaux de la République populaire démocratique de Corée.

[76] S/2021/777, par. 82 et annexe 41.

Exportations possibles de produits de la mer par la République populaire démocratique de Corée

95. L'analyse, par le Groupe d'experts, des statistiques du commerce de la République populaire démocratique de Corée[77] entre avril et septembre 2022 montre que le pays a exporté des produits de la mer (code SH 3) (voir tableau 6). L'Équateur a répondu que ses « organismes nationaux ont confirmé que les déclarations en douane [de produits de la mer] importés... mentionnaient à tort [la République populaire démocratique de Corée] comme pays d'origine » et qu'il n'y avait donc pas d'échanges commerciaux entre l'Équateur et la République populaire démocratique de Corée. Le Nigéria n'a pas encore répondu aux questions du Groupe d'experts.

Tableau 6
Statistiques relatives aux exportations de produits de la mer (code SH 03) par la République populaire démocratique de Corée (avril-septembre 2022)

Month	Importing Member State	Approximate Value (USD)
April	Nigeria	351,000
June	Ecuador	409,000
September	Ecuador	50,000

Source : Trade Map du Centre du commerce international, consulté le 27 janvier 2023.

Recommandations

96. Le commerce maritime constituant un vecteur principal d'achat et de vente de produits proscrits par la République populaire démocratique de Corée, les secteurs public et privé sont tenus d'appliquer les normes réglementaires requises et de procéder aux vérifications nécessaires à tous les niveaux associés à l'exploitation des navires et aux opérations portant sur les produits de base, en particulier celles menées dans les eaux internationales[78] relatives à des produits et à des services interdits ou restreints. Les recommandations liées au domaine maritime figurant dans les rapports précédents conservent toute leur pertinence.

97. **Le Groupe d'experts recommande que les diverses parties prenant part à la vente de navires adoptent les pratiques optimales suivantes :**

a) Préalablement à la signature de contrats :

i) Veiller à ce que les transactions soient effectuées par l'intermédiaire de courtiers maritimes nationaux agréés ;

ii) Confirmer la destination finale du navire et l'identité de la partie contractante (compagnie maritime et fréteur) ;

iii) Contrôler l'identité du courtier par l'intermédiaire duquel le partenaire effectue les transactions ainsi que les informations figurant sur les relevés des opérations que la partie a réalisées par le passé ;

iv) Assurer la bonne tenue des dossiers en consignant l'ensemble de la documentation et procéder aux contrôles qui s'imposent tout au long de la transaction ;

[77] Le Groupe se sert de l'outil Trade Map (carte du commerce) du Centre du commerce international pour analyser les statistiques du commerce de la République populaire démocratique de Corée. Toutes les données commerciales qui y figurent sont celles fournies par les autorités douanières des États Membres concernés.

[78] S/2021/777, par. 57 et fig. VIII.

b) À la signature d'un contrat :

i) Vérifier toutes les informations, les coordonnées et l'identité du consignataire du navire (destinataire du navire) ;

ii) S'efforcer d'obtenir une déclaration de confirmation établissant que les résolutions pertinentes du Conseil de sécurité ont été appliquées (une (des) déclaration(s) et une (des) clause(s) pourraient être ajoutées au contrat en tant que clauses supplémentaires) ;

iii) Appliquer une approche fondée sur les risques et s'abstenir de réaliser des transactions avec des cocontractants desquels on ne peut attendre qu'ils exécutent une telle obligation contractuelle ;

c) À la mise à disposition du navire :

i) Faire en sorte que l'acheteur s'engage à tenir les autorités compétentes et l'OMI informées de son achat/de sa propriété ;

ii) Communiquer à l'OMI des informations actualisées sur la vente du navire et le changement de propriétaire et vérifier qu'elles ont été mises à jour sur le site Web du Système mondial intégré de renseignements maritimes de l'OMI ;

iii) Avertir les autorités nationales compétentes lorsqu'il y a des raisons de penser que les sanctions pourraient avoir été contournées, notamment lorsque le signal AIS est désactivé.

98. **Le Groupe d'experts recommande que le Comité désigne les navires de la République populaire démocratique de Corée ci-après conformément au paragraphe 14 de la résolution 2397 (2017) du Conseil de sécurité dans laquelle le Conseil interdit la fourniture, la vente ou le transfert directs ou indirects à la République populaire démocratique de Corée de tous navires neufs ou d'occasion**[79] **:**

a) ***Rak Won 1*** **(numéro OMI : 8355786) ;**

b) ***Sa Hyang San 1*** **(numéro OMI : 9054779) ;**

c) ***So Baek Su*** **(numéro OMI : 9054767) ;**

d) ***Mo Ran Bong 2*** **(numéro OMI : 8357112) ;**

e) ***Songrim*** **(numéro OMI : 8594540) ;**

f) ***Rak Nang 2*** **(numéro OMI : 8594552) ;**

g) ***Chol Bong San 1*** **(numéro OMI : 9125308) ;**

h) ***Tae Dong Mun 2*** **(numéro OMI : 8356120) ;**

i) ***Sin Phyong 5*** **(numéro OMI : 8865121) ;**

j) ***Su Ryong San*** **(numéro OMI : 9016430) ;**

k) ***Tae Phyong 2*** **(numéro OMI : 8602763) ;**

l) ***Mu Pho*** **(numéro OMI : 8651178) ;**

m) ***Un Hung*** **(numéro OMI : 9045962) ;**

[79] Le Groupe d'experts note que, depuis 2017, la République populaire démocratique de Corée a acquis d'autres navires. Il propose que l'année 2020 soit retenue comme date de départ car c'est l'année durant laquelle il a établi une liste récapitulative des navires ayant fait l'objet d'une enquête acquis après cette date.

n) *Kang Hung* (numéro OMI : 9340257) ;

o) *Ra Son 6* (numéro OMI : 9340271) ;

p) *Xin Hai* (numéro OMI : 7636638) ;

q) *Tae Dong Mun* (numéro OMI : 9011399) ;

r) *To Myong* (numéro OMI : 9162318) ;

s) *Tae Phyong* (numéro OMI : 9018751) ;

t) *Puk Dae Bong* (numéro OMI : 9020003) ;

u) *SF Bloom* également connu sous le nom de *Pu Yang 2* (numéro OMI :8891297).

99. **Le Groupe d'experts recommande que le Comité désigne les navires ci-après conformément aux résolutions pertinentes du Conseil de sécurité :**

a) *Heng Xing* (numéro OMI : 8669589), conformément au paragraphe 14 de la résolution 2397 (2017) et au paragraphe 5 de la résolution 2397 (2017) dans laquelle le Conseil a interdit les transferts illicites non signalés de pétrole raffiné à la République populaire démocratique de Corée ;

b) *Anni*, également connu sous le nom de *Kyong Song 3* (numéro OMI : 8356584), conformément au paragraphe 14 de la résolution 2397 (2017) et au paragraphe 11 de la résolution 2375 (2017) dans laquelle le Conseil a interdit que soit facilité ou effectué un quelconque transbordement avec des navires de la République populaire démocratique de Corée de tous biens ou articles dont la fourniture, la vente ou le transfert s'effectue depuis ou vers ce pays.

100. **Le Groupe d'experts recommande de nouveau la désignation des navires de « livraison directe » suivants :**

a) *New Konk* (numéro OMI : 9036387), conformément au paragraphe 5 de la résolution 2397 (2017) et au paragraphe 11 de la résolution 2375 (2017) ;

b) *Unica* (numéro OMI : 8514306), conformément au paragraphe 5 de la résolution 2397 (2017) et au paragraphe 11 de la résolution 2375 (2017).

Statistiques du commerce et questions douanières

101. En 2022[80], le volume global des échanges commerciaux enregistrés par la République populaire démocratique de Corée était supérieur au total enregistré en 2021. Les données disponibles[81] montrent qu'en 2022, le volume des échanges pour les trois premiers trimestres de l'année représentait environ 83 % du volume total des échanges pour 2020 (voir fig. XXX) et, sur l'année, était probablement supérieur à celui de 2020. Le Groupe d'experts estime que cela s'explique principalement par la reprise du trafic ferroviaire de marchandises entre ce pays et la Chine[82] ; le commerce avec la Chine a représenté environ 96 % du commerce extérieur de la République populaire démocratique de Corée au cours des trois premiers trimestres de 2022.

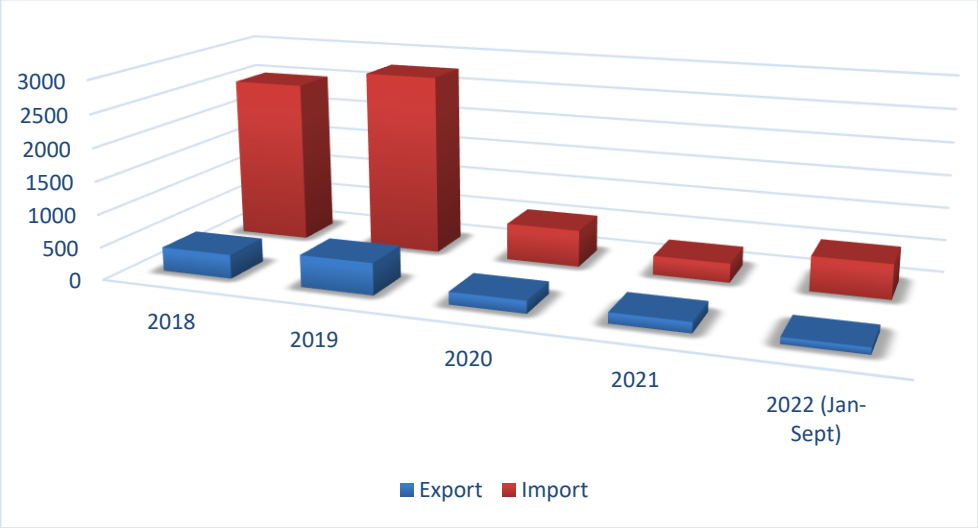
[80] D'une manière générale, les statistiques du commerce de la République populaire démocratique de Corée disponibles au 27 janvier 2023 portent sur la période allant jusqu'à septembre 2022. Elles continueront de changer à mesure que d'autres États Membres feront état de leurs échanges commerciaux avec la République populaire démocratique de Corée sur les plateformes de statistiques du commerce concernées, tel l'outil Trade Map du Centre du commerce international.

[81] Le Groupe d'experts note que l'emploi erroné de codes de pays (voir par. 108) explique certains des chiffres publiés relatifs aux échanges commerciaux et que ces erreurs seront corrigées par les autorités douanières des États Membres.

[82] S/2022/668, par. 97 et 98.

Néanmoins, même d'après les statistiques du commerce disponibles pour 2022, ce montant représente une fraction du montant enregistré avant la pandémie (25 % et 29 % du montant enregistré pour la même période en 2019 et 2018, respectivement).

Figure XXX
République populaire démocratique de Corée, commerce enregistré, 2018-2022
(En millions de dollars des États-Unis)

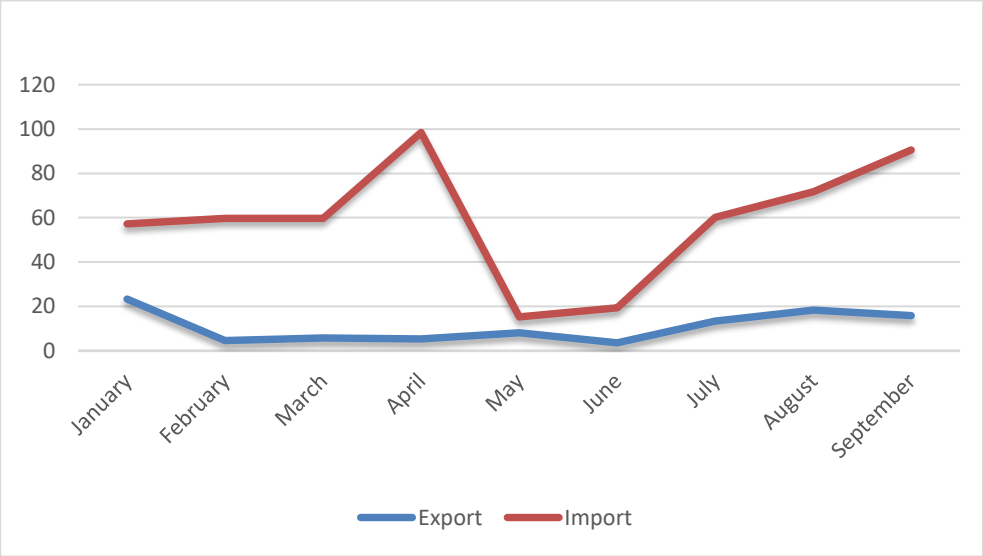


Source : Trade Map du Centre du commerce international, consulté le 27 janvier 2023.

102. Les statistiques du commerce disponibles sur une base mensuelle pour la République populaire démocratique de Corée en 2022 montrent que le trafic ferroviaire de marchandises entre Dandong et Sinuiju a pesé sur le volume global des échanges du pays (voir fig. XXXI), qui après avoir atteint un maximum en avril, a chuté lorsque le trafic de fret ferroviaire a été suspendu du fait de la COVID-19. Le volume des échanges a toutefois commencé à augmenter à partir de juillet et, en septembre, il a été confirmé que le trafic ferroviaire de marchandises avait repris[83].

[83] Voir www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/202209/t20220926_10771910.html.

Figure XXXI
Statistiques du commerce, République populaire démocratique de Corée, janvier-septembre 2022 (par mois)
(En millions de dollars des États-Unis)



Source : Trade Map du Centre du commerce international, consulté le 31 décembre 2022.

103. Les liaisons de fret ferroviaire entre la République populaire démocratique de Corée et la Fédération de Russie passant par le fleuve Tumen, qui avaient été interrompues en février 2020, ont repris en novembre 2022. Fin 2022, au moins trois livraisons par train de marchandises de petite taille de Khassan à la gare de Tuman'gang ont été observées, et les trains sont ensuite retournés en Fédération de Russie[84]. Bien qu'elle ait temporairement suspendu la publication de ses statistiques douanières en avril 2022, la Fédération de Russie a informé le Groupe d'experts que, « en 2022, des animaux vivants (chevaux), des produits alimentaires, de la farine et des produits pharmaceutiques en provenance de Russie ont été livrés à la [République populaire démocratique de Corée] ». Des instruments de musique, dont le pays d'origine était la [République populaire démocratique de Corée], ont été livrés depuis la Chine » (voir annexe 54).

104. D'après les statistiques en accès libre, au cours des neuf premiers mois de 2022, les cinq premiers produits déclarés exportés par la République populaire démocratique de Corée étaient : a) les minerais et scories (code SH 26) ; b) le fer et l'acier (code SH 72) ; c) les combustibles minéraux et huiles minérales (code SH 27) ; d) la soie (code SH 50) ; d) le verre (code SH 70). Les cinq premiers produits déclarés importés pendant la même période étaient : a) les matières plastiques (code SH 39) ; b) le caoutchouc (code SH 40) ; c) les graisses et huiles d'origine microbienne (code SH 15) ; d) le tabac (code SH 24) ; e) les produits pharmaceutiques (code SH 30). Comme indiqué dans les précédents rapports du Groupe d'experts, ces statistiques ne recouvrent pas les marchandises exportées et importées illicitement par la République populaire démocratique de Corée comme le charbon et le pétrole raffiné, entre autres (voir par. 46 et 90 à 92).

[84] Voir www.38north.org/2022/11/first-traffic-observed-on-north-korea-russia-railway-link-in-several-years et www.38north.org/2022/12/a-north-korean-rail-yard-near-russia-springs-to-life.

105. Le Groupe d'experts a continué de surveiller les exportations et importations interdites de la République populaire démocratique de Corée conformément aux résolutions pertinentes[85, 86]. Le présent rapport porte principalement sur la période allant d'avril à septembre 2022.

106. D'après les dossiers du Centre du commerce international relatifs aux données commerciales nationales, certaines marchandises semblent relever de catégories visées par les sanctions. Le Groupe d'experts a demandé à 16 États Membres des informations sur les opérations menées avec la République populaire démocratique de Corée, ainsi que des précisions sur tout cas de refus de dédouanement ou de saisie de biens à destination ou en provenance de ce pays[87]. Pour la liste des codes SH concernant les marchandises soumises à des restrictions que le Groupe d'experts utilise afin de surveiller l'application de l'interdiction sectorielle, voir annexe 56.

107. Le Groupe d'experts a également continué de demander des informations aux autorités douanières des États Membres sur l'application concrète des obligations que leur imposent les sanctions, telle que l'exigence d'inspecter toutes les cargaisons en provenance et à destination de la République populaire démocratique de Corée, de saisir les articles interdits trouvés lors des inspections et de les neutraliser. Les informations reçues des États Membres sur de telles pratiques sont insuffisantes.

108. Sur les 16 États Membres, un certain nombre ont indiqué qu'aucune activité commerciale n'avait été enregistrée avec la République populaire démocratique de Corée et que les chiffres relatifs aux échanges commerciaux s'expliquaient principalement par des données erronées dans les statistiques du commerce résultant d'une mauvaise utilisation des codes de pays durant les procédures de déclarations de douane respectives. Le code de pays pour la République populaire démocratique de Corée (KP) avait été saisi par erreur à la place de celui de la République de Corée (KR), le véritable partenaire commercial. Un autre État Membre a affirmé que les opérations menées avaient été conformes au régime des sanctions de l'ONU (voir annexes 26 (OC.301), 57 et 58)[88].

109. Le Groupe d'experts attend toujours des réponses des États suivants : Afrique du Sud, Barbade, Bosnie-Herzégovine, Canada, Espagne, Indonésie, Madagascar, Nigéria, Ouganda, Pays-Bas et Thaïlande. Il note que certains continuent d'avoir du mal à établir s'il s'agit, dans certains cas, d'articles dont le transfert à destination ou en provenance de la République populaire démocratique de Corée est interdit. Il prévoit de poursuivre l'analyse comparative des statistiques en accès libre et des données fournies par les États Membres, en vue de relever les incohérences éventuelles et de chercher à savoir à quoi celles-ci sont dues.

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[85] Pour les réponses de la Zambie et du Honduras concernant les statistiques du commerce, voir S/2022/668, annexe 45. La Zambie a indiqué que les statistiques du commerce étaient inexactes du fait d'une « capture de données abusive ». Le Honduras a confirmé les données commerciales et souligné que des mesures avaient été prises afin que les biens en provenance de la République populaire démocratique de Corée fassent l'objet d'un contrôle strict. Voir également annexe 55.

[86] Pour les échanges commerciaux de la République populaire démocratique de Corée concernant les produits de la pêche, voir par. 95, et concernant les armes légères et de petit calibre, voir par. 118 à 121.

[87] Selon les statistiques disponibles, 27 États Membres ont signalé des échanges commerciaux avec la République populaire démocratique de Corée ; 15 d'entre eux avaient inclus des échanges avec la République populaire démocratique de Corée concernant des marchandises dont les codes SH sont soumis à des restrictions.

[88] S/2022/132, par.127 à 129.

Recommandations

110. **Le Groupe d'experts recommande de nouveau que des mesures appropriées soient prises par l'Organisation internationale de normalisation et par les États Membres, y compris des activités de sensibilisation à l'intention des différentes autorités douanières, pour empêcher l'utilisation erronée des codes de pays.**

111. **Le Groupe d'experts recommande de nouveau que les États Membres rationalisent leurs listes de contrôle des exportations et des importations, en s'appuyant sur la liste informelle des produits interdits (voir annexe 56).**

112. **Le Groupe d'experts recommande de nouveau que les autorités douanières des États Membres utilisent la liste susmentionnée pour informer les agents commerciaux se trouvant dans leur juridiction à des fins de diligence raisonnable, en particulier lorsqu'ils ont affaire à de tels produits à proximité de territoires de juridiction visés par des sanctions, telle la République populaire démocratique de Corée.**

113. **Le Groupe d'experts recommande de nouveau, concernant les États Membres qui ont besoin d'assistance sur la question de l'interdiction sectorielle, que le Comité envisage une action de sensibilisation à des fins d'information.**

IV. Embargos, entités et personnes désignées et travailleurs à l'étranger

Embargos

Global Communications (Glocom)/Pan Systems

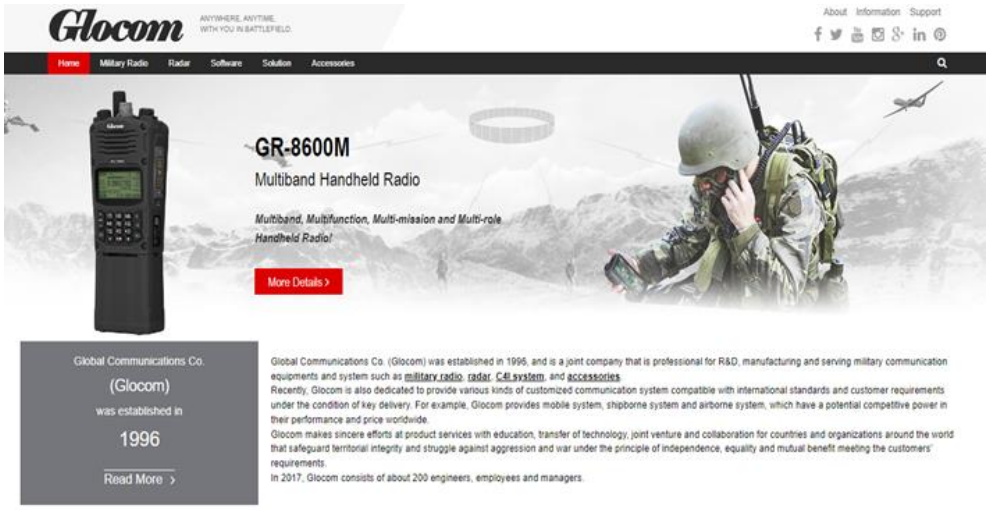
114. Selon les enquêtes préliminaires du Groupe d'experts, les informations fournies par un État Membre et les articles de presse[89], Glocom[90] demeure opérationnel (voir fig. XXXII) et continue d'offrir et de faire la promotion d'une gamme de plus en plus diverse de radios militaires, de radars de surveillance du champ de bataille et de systèmes de contrôle programmé. Les nouvelles catégories de produits de Glocom se sont multipliées[91].

[89] Voir www.fanabc.com/archives/164987.

[90] S/2022/132, par. 135 à 137, annexes 18 et 65 ; S/2022/668, par. 108.

[91] Glocom proposait sept systèmes de radiocommunication militaire en février 2020 mais ce chiffre a augmenté, passant à 11 en février 2021 puis à 15 en janvier 2023. Glocom proposait également 4 types de radar, 4 types de logiciels, 13 types de systèmes (militaires) et 8 types d'accessoires (de communication militaire).

Figure XXXII
Site Web de Glocom



Source : https://glocom-corp.com.

115. Selon un État Membre, deux lots de matériel radio Glocom destiné aux forces de défense éthiopiennes ont été expédiés à la Direction du Ministère de la défense nationale de l'Éthiopie en juin 2022. Le 5 novembre 2022, les médias éthiopiens ont publié une photographie du Chef d'État-major général des Forces armées, le maréchal Birhanu Jula, utilisant du matériel de communication radio Glocom selon toute probabilité (voir fig. XXXIII et annexe 59)[92]. Le Groupe d'experts a posé des questions à l'Éthiopie à ce sujet mais n'a pas encore reçu de réponse.

Figure XXXIII
Photographie diffusée dans des médias éthiopiens

Source : www.fanabc.com/archives/164987, flouté par le Groupe d'experts.

[92] Voir https://note.com/cccp1917/n/n86757c1d04ca.

116. La société Privacy Protect Business Development, établie dans le Massachusetts (États-Unis d'Amérique), a enregistré les informations d'identification du domaine du site Web de Glocom. Le Groupe d'experts a de nouveau écrit à la société et attend toujours une réponse.

117. Le Groupe d'experts a de nouveau[93] écrit à l'Érythrée au sujet des achats présumés de matériel Glocom mais n'a pas encore reçu de réponse.

Commerce présumé d'armes légères et de petit calibre par la République populaire démocratique de Corée

118. Les résolutions du Conseil de sécurité relatives aux sanctions interdisent à la République populaire démocratique de Corée d'importer et d'exporter des armes classiques, notamment des armes légères et de petit calibre[94]. Tout en notant que, selon l'analyse d'un groupe de réflexion, l'embargo sur les armes imposé par le Conseil de sécurité au pays a de manière générale les effets escomptés[95], le Groupe d'experts a enquêté sur des transactions concernant des articles qui pourraient être considérés comme faisant partie de la catégorie des « armes et matériel connexe » effectuées ces dernières années entre la République populaire démocratique de Corée et plusieurs États Membres.

119. Selon la base de données Comtrade de l'Organisation des Nations Unies, la République populaire démocratique de Corée a échangé des articles qui pourraient être qualifiés d'« armes et matériel connexe » avec Chypre, El Salvador, les Fidji, le Niger, les Philippines et la Trinité-et-Tobago (voir tableau 7).

Tableau 7
Statistiques du commerce de la République populaire démocratique de Corée concernant de possibles armes et matériel connexe[96]

Member State	*Year*	*Import from/ export to the Democratic People's Republic of Korea*	*HS code*	*Amount (United States dollars)*
Cyprus	2017	Export	9303	11 661
	2018			7 721
El Salvador	2017	Import	9306	59 858
Fiji	2020	Import	9301	487 170
	2019		9304	214 115
	2021			168 577
	2019		9306	743 550
	2020			861 723
Niger	2016	Import	9304	37 544
	2017		9301	172
Philippines	2016	Export	9304	29 552
			9305	39 795
Trinidad and Tobago	2015	Import	9304	35 973
			9305	1 089
			9306	1 598

Source : https://comtradeplus.un.org.

[93] S/2022/132, par. 137.
[94] Résolution 1718 (2006) du Conseil de sécurité, par. 8 ; résolution 1874 (2009), par. 9 et 10 ; résolution 2270 (2016), par. 8.
[95] Voir www.38north.org/2022/09/north-koreas-trading-of-small-arms-and-light-weapons-open-source-information-analysis-of-sanctions-implementation.
[96] Pour le libellé des produits classés sous les codes SH 9301 et 9303 à 9306, voir annexe 60.

120. Chypre, El Salvador et la Trinité-et-Tobago ont répondu que les échanges commerciaux concernant ces articles avaient été réalisés avec la République de Corée et non avec la République populaire démocratique de Corée, comme consigné par erreur (voir annexes 61 à 63).

121. Les Fidji, le Niger et les Philippines n'ont pas encore répondu.

Signalements non confirmés d'exportations d'armes par la République populaire démocratique de Corée

122. Des représentants des États-Unis ont affirmé publiquement à partir de septembre 2022 (voir annexe 64) que des munitions (obus d'artillerie, roquettes et missiles d'infanterie) avaient été exportées de la République populaire démocratique de Corée vers la Fédération de Russie. Ces affirmations ont été invariablement démenties par la République populaire démocratique de Corée, la Fédération de Russie et l'entité qui serait impliquée (voir annexes 65 à 67).

123. En janvier 2023, le Gouvernement des États-Unis a publié des images qui se rapporteraient à la livraison de roquettes d'infanterie par train à la Fédération de Russie. Dans le cadre de son enquête, le Groupe d'experts a analysé l'imagerie satellite d'un train qui a traversé la frontière entre la Fédération de Russie et la République populaire démocratique de Corée le 18 novembre 2022 (voir annexe 68)[97]. Les enquêtes se poursuivent.

124. Un État Membre a signalé que, à la mi-2022, une société du Myanmar appelée Royal Shune Lei Co. ltd, agissant en qualité de courtier, a importé des armes destinées à l'armée du Myanmar fournies par Korea Mining Development Trading Corporation (KPe.001), une entité désignée par l'ONU. Le Groupe d'experts a écrit à la Mission permanente du Myanmar auprès de l'Organisation des Nations Unies pour demander des informations. Les enquêtes se poursuivent.

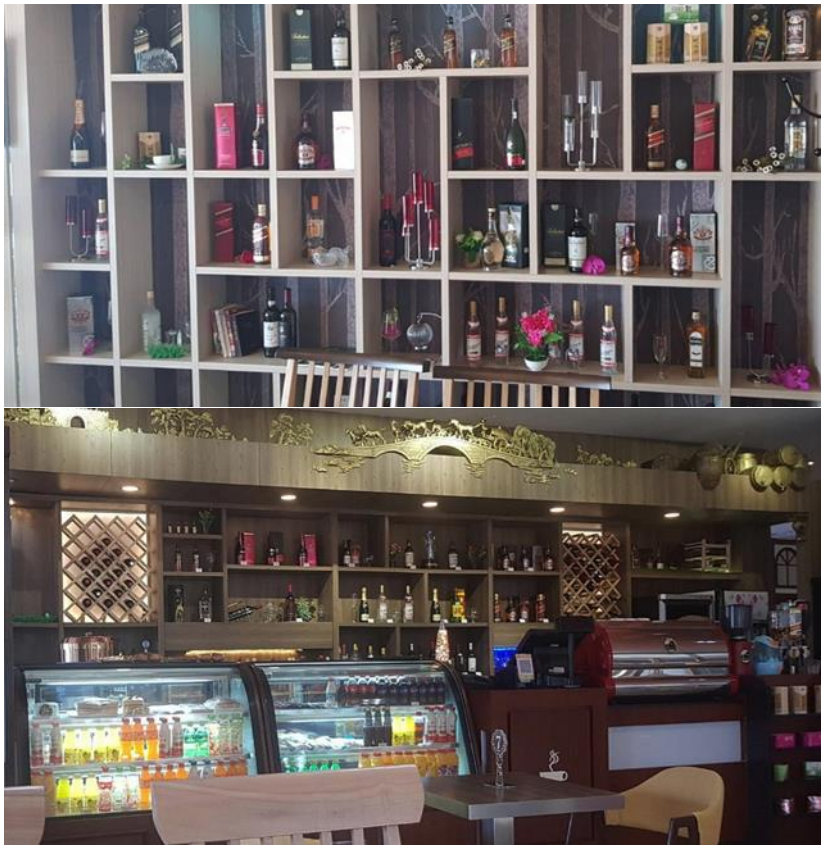
Application de l'interdiction relative aux articles de luxe

125. La réouverture partielle des frontières a rendu possible le transfert d'articles de luxe, les biens de consommation ayant refait leur apparition dans les boutiques d'articles payables en devises étrangères et dans des marchés. Des images diffusées dans les médias montrent que des boissons alcoolisées de marque étaient disponibles dans des boutiques de luxe, notamment à « Ryugyong Golden Plaza »[98], qui a ouvert ses portes en 2022, et ailleurs (voir fig. XXXIV et annexe 69).

[97] Un expert est convaincu que l'évaluation de ce cas est prématurée car l'enquête a tout juste démarré.

[98] La construction de ces installations était au départ liée à la société singapourienne OCN/« T Specialist », qui a déjà fait l'objet d'une enquête par le Groupe d'experts (S/2019/171, par. 142 à 144 et annexe 72 ; S/2020/151, par. 157, 161 et 162 ; S/2020/840, par. 96 et annexes 41 à 43).

Figure XXXIV
Whiskys et autres boissons importées, « Ryugyong Golden Plaza » à Pyongyang

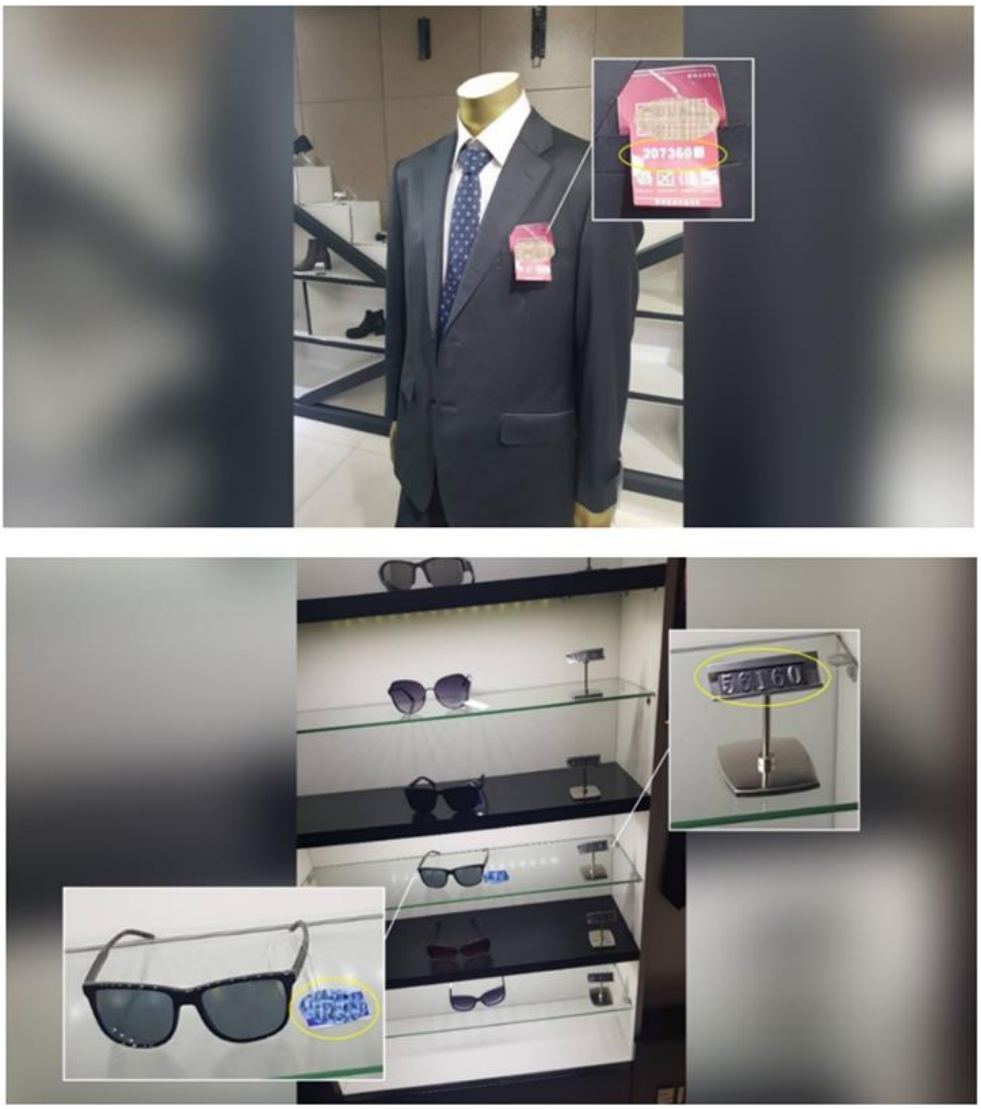


Source : NK News.

126. Comme suite à des informations diffusées dans les médias, le Groupe d'experts a enquêté sur un grand magasin à Pyongyang, Rim Mi Yong Aeguk Sonnae Hall, géré par la Rim Mi Yong Aeguk Joint Venture Company, et sur un magasin en ligne associé, « Apnal ». D'après les informations diffusées[99] et les observations faites sur place, les ventes au détail d'articles, dont certains peuvent être qualifiés d'articles de luxe, ont continué (voir fig. XXXV et annexe 69). En 2022, de nouveaux produits, notamment des boissons alcoolisées (du whisky écossais et de la vodka d'origine allemande par exemple) ont été livrés au magasin.

[99] Voir www.nknews.org/pro/new-photos-give-first-look-inside-renovated-japanese-luxury-store-in-pyongyang et www.nknews.org/pro/expanding-japan-linked-mall-online-shop-in-pyongyang-targets-modern-tastes.

Figure XXXV
Biens importés en vente au Rim Mi Yong Aeguk Sonnae Hall, automne 2022



Source : NK News, annoté par le Groupe d'experts.

127. La Rim Mi Yong Aeguk Joint Venture Company aurait coopéré avec une « société installée au Japon appelée Mirai ». Les logos de la boutique sont en japonais mais une adresse à Pyongyang a été donnée (voir fig. XXXVI). Le propriétaire ou le bénéficiaire de la société serait une personne d'origine coréenne. Le Groupe d'experts a demandé des informations au Japon mais n'a pas été en mesure de corroborer celles dont il a été fait état dans les médias (la réponse du Japon figure dans l'annexe 70).

Figure XXXVI
Logos de la société « Mirai » sur des cartes-cadeaux et des étiquettes fournies par le magasin

Source : NK News.

128. D'après des articles parus dans les médias[100], de l'alcool importé avait de nouveau été mis à la vente au détail à l'automne 2022 (voir annexe 71). L'alcool en général n'est pas un produit visé par des sanctions, mais certaines boissons alcoolisées peuvent être considérées comme des articles de luxe[101]. Les statistiques douanières chinoises montrent qu'entre juin et octobre 2022, des boissons alcoolisées d'une valeur de plus de 3,2 millions de dollars ont été exportées vers la République populaire démocratique de Corée, mais aucune information n'est donnée sur les marques et les spécifications de ces boissons (voir annexe 72). Comme suite aux questions du Groupe d'experts, la Chine a répondu que « les boissons alcoolisées ne figuraient pas sur la liste des articles dont l'exportation vers la RPDC est interdite, et la Résolution n'a pas autorisé le Groupe d'experts à interpréter ce que sont des articles de luxe » (voir annexe 26, OC.300).

129. En ce qui concerne l'enquête relative à l'utilisation en République populaire démocratique de Corée de caméras de marque Canon et Nikon par des photojournalistes professionnels[102], le Groupe d'experts a reçu trois réponses d'États Membres donnant des explications sur ces cas.

130. Le Groupe d'experts a poursuivi ses enquêtes sur l'expédition prévue fin septembre 2020 d'une cargaison de véhicules de luxe, dont des utilitaires sportifs Lexus, à la République populaire démocratique de Corée[103], ainsi que sur l'achat de quatre véhicules utilitaires sportifs de luxe Toyota auquel l'Administration générale de l'aviation civile avait par ailleurs tenté de procéder. Le Groupe d'experts n'a pas encore reçu de réponses des entités chinoises qui seraient impliquées, bien que Toyota Motors ait répondu que « ni Toyota ni ses distributeurs au Moyen-Orient ou en Chine n'ont relevé une quelconque trace de transactions réalisées avec la participation d'une des sociétés ou personnes mentionnées dans la demande d'informations formulée par

[100] Voir www.nknews.org/pro/north-korea-imports-2m-in-alcohol-from-china-exports-huge-sum-of-tungsten.
[101] Le Groupe d'experts note qu'il revient aux États Membres de définir ce qu'est un article de luxe.
[102] S/2022/668, par. 111.
[103] S/2021/777, par. 147.

le Groupe d'experts .... il est très difficile pour Toyota ou tout autre constructeur automobile de surveiller les transferts illicites de véhicules effectués dans le cadre de transactions non déclarées et de ventes de seconde main ».

Recommandations

131. **Le Groupe d'experts recommande de nouveau que les États Membres envisagent d'actualiser leurs listes de contrôle des exportations pour qu'elles cadrent avec la liste des articles de luxe interdits, d'une manière qui soit compatible avec les objectifs des résolutions 1718 (2006), 1874 (2009), 2094 (2013), 2270 (2016) et 2321 (2016) du Conseil de sécurité, en évitant d'en élargir inutilement le champ d'application, afin de ne pas restreindre la fourniture de marchandises autorisées à la population civile et d'éviter les conséquences humanitaires, une fois que les échanges auront repris.**

132. **Le Groupe d'experts recommande de nouveau que les États Membres encouragent leurs entreprises et ressortissants qui exportent des articles de luxe à intégrer une disposition contractuelle visant à empêcher toute revente à la République populaire démocratique de Corée.**

Munitions Industry Department (KPe.028)

133. Le Groupe d'experts a précédemment signalé qu'un informaticien de la République populaire démocratique de Corée lié au Département de l'industrie des munitions (Munitions Industry Department), Song Rim, avait touché illégalement des devises étrangères au moyen de la vente d'applications de piratage par hameçonnage vocal et de la mise en opération de multiples serveurs et adresses de protocole Internet à l'étranger[104]. Song Rim vendrait ces applications de piratage par hameçonnage vocal en Chine depuis juillet 2020. Conformément aux résolutions[105], les ressortissants de la République populaire démocratique de Corée travaillant à l'étranger devraient être rapatriés à l'initiative de l'État Membre concerné.

134. Le Groupe d'experts a reçu des informations d'un État Membre selon lesquelles un ressortissant chinois, Wu ZhuJing, un représentant de Dandong Hongshengan Clothing Co., Ltd, a servi d'intermédiaire dans le commerce illicite d'applications d'hameçonnage vocal pour le compte de Song Rim et a facilité la réception de paiements par ce dernier. Un autre ressortissant chinois, Wang Feng, propriétaire de Yiwu Gangchao Trading, a prêté son compte bancaire à des informaticiens de la République populaire démocratique de Corée et leur a offert une aide financière. En outre, un réseau criminel spécialisé dans l'hameçonnage vocal et dirigé par un Chinois, Hong Yong, exploitait six centres d'appels locaux d'hameçonnage vocal et aurait acheté des applications de piratage par hameçonnage vocal à Song Rim. Les noms de plusieurs membres du réseau criminel de Hong Yong ont été trouvés dans le serveur de commande et de contrôle de l'application de piratage par hameçonnage vocal géré par Song Rim, dont celui de Jin ChengHao. Hong Yong et Jin ChengHao font tous deux l'objet de notices rouges publiées par l'Organisation internationale de police criminelle (INTERPOL)[106].

135. Comme suite aux questions du Groupe d'experts au sujet de Song Rim, la Chine a répondu qu'elle n'avait « trouvé aucun élément prouvant que Song Rim avait joué un rôle dans la vente de logiciels d'hameçonnage ou dans le fonctionnement de

[104] S/2022/668, par. 121 et 122 et annexes 51 et 52.

[105] Résolution 2270 (2016) du Conseil de sécurité, par. 14 ; résolution 2397 (2017), par. 14.

[106] Voir annexes 74 et 75 pour des informations supplémentaires sur Song Rim et des précisions sur les associés chinois.

centres d'appels d'hameçonnage à l'intérieur des frontières chinoises » (voir annexe 26, OC.226).

Reconnaissance General Bureau (KPe.031)

Direction

136. D'après des États Membres, en juin 2022, il a été confirmé que le général de corps d'armée Ri Chang Ho (né en 1967) était nommé Directeur du Bureau général de reconnaissance (Reconnaissance General Bureau)[107] et membre du Comité central du Parti des travailleurs de Corée. La participation symbolique de Ri Chang Ho à la tête d'une colonne de troupes de reconnaissance au défilé organisé le 25 avril à l'occasion de la journée de la fondation de l'Armée populaire coréenne laissait supposer qu'il serait nommé Directeur du Bureau.

Auteurs de cybermenace

137. Selon un État Membre, et comme un autre l'a confirmé, la plupart des auteurs de cybermenace font partie d'organisations relevant du troisième Bureau du Bureau général de reconnaissance[108]. Les groupes appelés Kimsuky, le Lazarus Group et Andariel comptent parmi ces auteurs de cybermenaces (voir fig. XXXVII)[109]. Pendant la période considérée, ces auteurs ont continué de prendre pour cible de manière illicite des victimes en vue de générer des revenus (voir par. 159 à 169) et de solliciter des informations présentant un intérêt[110] pour la République populaire démocratique de Corée, notamment pour ses programmes d'armement[111].

[107] Voir S/2020/840, annexe 48, concernant les rôles joués par le Bureau général de reconnaissance.

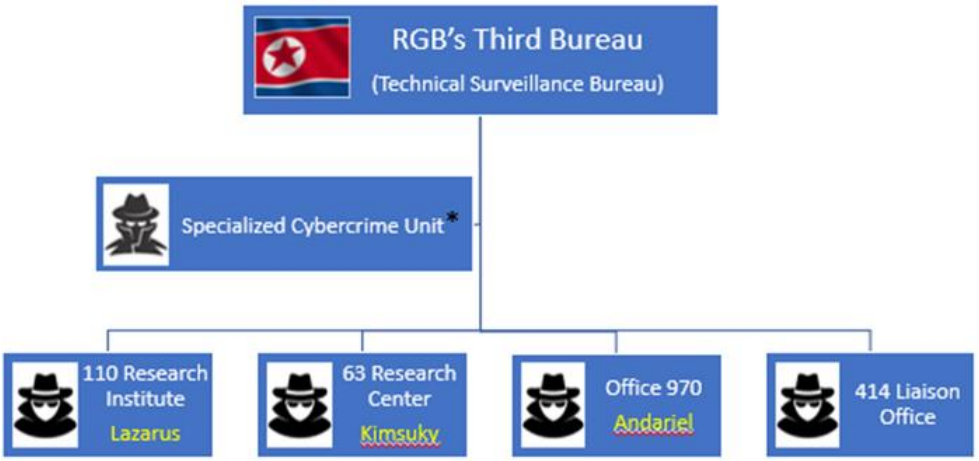
[108] Selon l'analyse des États Membres, le Bureau général de reconnaissance compte six Bureaux : surveillance aéroterrestre (premier Bureau), analyse des informations (deuxième Bureau), surveillance technique (troisième Bureau), renseignement extérieur (cinquième Bureau), affaires intercoréennes (sixième Bureau) et appui (septième Bureau) ; il n'y aurait pas de quatrième Bureau.

[109] Les noms figurant dans la présente section concernant les auteurs de cybermenace et les campagnes que ceux-ci mènent sont largement employés dans le secteur de la cybersécurité.

[110] Ces tentatives visant à solliciter des informations, notamment afin d'obtenir illégalement des technologies sensibles, pourraient constituer des violations du paragraphe 8 a) ii) de la résolution 1718 (2006) du Conseil de sécurité et du paragraphe 27 de la résolution 2270 (2016).

[111] Le Groupe d'experts a exploité les informations fournies par les États Membres et la documentation librement accessible et a collaboré avec des groupes de réflexion et des entreprises spécialisés dans la cybersécurité afin d'enquêter sur près de 40 grands cas connus de cyberaction menée par la République populaire démocratique de Corée (voir annexe 76).

Figure XXXVII
Auteurs de cybermenaces dans l'organigramme du Bureau général de reconnaissance (non exhaustif)



Source : un État Membre, annoté par le Groupe d'experts.

Note : en blanc, cyberunité/service spécialisé dans le cyberespace au sein du troisième Bureau du Bureau général de reconnaissance ; en jaune, les cyberacteurs de la République populaire démocratique de Corée/noms en usage dans le secteur de la cybersécurité.

* Cyberunité telle que qualifiée par l'État Membre.

138. Des informations émanant d'une société de cybersécurité ont montré que Kimsuky avait diffusé des fichiers Word malveillants contenant des données liées à la République populaire démocratique de Corée en utilisant le courrier électronique de personnes fictives. Les fichiers Word poussent les victimes à ouvrir les pièces jointes et à cliquer sur les liens, ce qui permet aux auteurs d'obtenir des informations sur les ordinateurs des victimes et le contenu des appareils. Dans un autre cas, il a été constaté que le logiciel malveillant à porte dérobée « AppleSeed », utilisé par Kimsuky afin que des attaquants puissent exécuter à distance des commandes sur les ordinateurs compromis, a été partagé avec une entreprise de maintenance travaillant pour des bases militaires et des entreprises dont les activités sont en lien avec les centrales nucléaires. Ce logiciel malveillant à porte dérobée a également été dissimulé dans des bons de commande et des formulaires de demande. Une fois exécuté sur un ordinateur, « AppleSeed » envoie des informations telles que les identifiants du compte utilisateur, des données réseau (par exemple, des adresses de protocole Internet) et même des dossiers et des fichiers[112].

139. Une société de cybersécurité a informé le Groupe d'experts qu'il avait été observé que Kimsuky (qu'elle appelle « Sharptongue »)[113] avait déployé un logiciel malveillant qui utilise une extension malveillante de navigateur appelée « SHARPEXT » afin de pirater des courriels et de voler des informations. Le logiciel malveillant « SHARPEXT » installe sur les navigateurs Chrome et Edge une extension qui ne peut pas être détectée par les services de messagerie, et comme le navigateur a déjà été authentifié au moyen des protections par authentification multifactorielle, les mesures de sécurité ne contribuent aucunement à protéger le compte compromis. La campagne « SHARPEXT » aurait ciblé, dans plusieurs États Membres, des organisations dont les activités concernent les armes nucléaires et

[112] Voir annexe 77 pour les liens vers les rapports de la société.
[113] Voir www.volexity.com/blog/2022/07/28/sharptongue-deploys-clever-mail-stealing-browser-extension-sharpext.

d'autres questions que la République populaire démocratique de Corée considère comme importantes pour sa sécurité nationale.

140. En décembre 2022, la Police nationale de la République de Corée a annoncé[114] que Kimsuky avait pris pour cible 892 spécialistes des questions de politique étrangère en vue de voler des données personnelles et des listes de diffusion par courrier électronique entre avril et octobre 2022. Quarante-neuf victimes ont été amenées à se connecter à de faux sites Web. Leurs identifiants de connexion ont donc pu être vus par les auteurs de cybermenace, mais la Police nationale a indiqué que les attaquants n'avaient pas réussi à voler d'informations sensibles. Les pirates ont blanchi les adresses de protocole Internet des victimes et utilisé 326 serveurs de contournement dans 26 États Membres afin qu'il soit difficile de retrouver leur trace. La Police nationale a également expliqué que c'était la première fois qu'elle repérait l'utilisation d'un rançongiciel par Kimsuky. Dix-neuf serveurs de 13 entreprises ont été touchés, et deux d'entre elles ont versé une rançon de 2,5 millions de wons (1 980 dollars) en bitcoins au groupe.

141. Une société de cybersécurité a constaté que le groupe Lazarus (Lazarus Group) avait déployé des outils de dissimulation d'activité, un ensemble de logiciels malveillants conçus afin de donner accès sans autorisation à un ordinateur personnel, en exploitant une faille dans un pilote de micrologiciel Dell. Un employé d'une entreprise aérospatiale a été pris pour cible lors de la campagne. D'après la société de cybersécurité[115], la campagne a exploité la vulnérabilité « CVE-2021-21551 »[116] dans les pilotes Dell DBUtil[117] en utilisant une porte dérobée HTTP(S) appelée « BLINDINGCAN »[118]. Ce logiciel malveillant à porte dérobée joue le rôle de cheval de Troie d'accès à distance totalement opérationnel qui désactive les contrôles de sécurité sur les appareils compromis. D'après l'analyse réalisée par la société, le groupe Lazarus s'intéressait avant tout à certains secteurs – l'aérospatiale et la défense, la finance classique et les cryptomonnaies – son objectif étant d'avoir accès aux banques de connaissances internes des entreprises compromises.

142. Selon une section de la cybersécurité d'une société informatique[119], le groupe Lazarus (également connu sous le nom de ZINC) prend pour cible des ingénieurs et des employés chargés de l'assistance technique en utilisant des versions malveillantes d'applications libres, notamment PuTTY, KiTTY, TightVNC et les lecteurs de PDF Sumatra[120]. Des campagnes d'ingénierie sociale malveillantes ont été menées par ZINC, l'espionnage et le vol de données étant les principaux objectifs visés. Ces campagnes visaient des employés d'organisations de divers secteurs, notamment la

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[114] Voir annexe 78 pour le communiqué de presse (en coréen) publié par la Police nationale de la République de Corée.

[115] Voir www.welivesecurity.com/2022/09/30/amazon-themed-campaigns-lazarus.

[116] Pour des informations plus détaillées sur la vulnérabilité « CVE-2021-21551 », voir www.cvedetails.com/cve/CVE-2021-21551.

[117] Dell a fourni des mises à jour de sécurité pour corriger cette vulnérabilité (voir www.dell.com/support/kbdoc/en-uk/000186019/dsa-2021-088-dell-client-platform-security-update-for-an-insufficient-access-control-vulnerability-in-the-dell-dbutil-driver).

[118] La Cybersecurity Infrastructure and Security Agency des États-Unis d'Amérique a publié un rapport d'analyse du logiciel malveillant « BLINDINGCAN ». Voir www.cisa.gov/uscert/ncas/analysis-reports/ar20-232a.

[119] Voir www.microsoft.com/en-us/security/blog/2022/09/29/zinc-weaponizing-open-source-software.

[120] Une autre société de cybersécurité a également fait état d'une campagne lors de laquelle PuTTY (protocole de communication réseau) a été utilisé comme moyen d'attaque. Voir www.mandiant.com/resources/blog/dprk-whatsapp-phishing. Des versions instrumentalisées de KiTTY (un autre type de protocole de communication réseau) et des lecteurs PDF Sumatra peuvent être utilisés comme moyen d'attaque pour installer ZetaNile (également connu sous le nom de BLINDINGCAN). TightVNC [Virtual Network Computing (informatique en réseau virtuel)] est une application utilisée pour avoir accès à un autre appareil et le contrôler à distance.

défense et l'aérospatiale dans plusieurs États Membres. Les premiers contacts avec les personnes étaient établis via LinkedIn et une fois que les cibles étaient quelque peu en confiance, des charges utiles malveillantes étaient transmises lors d'échanges prolongés sur WhatsApp.

143. Entre février et juillet 2022, le groupe Lazarus aurait ciblé des fournisseurs d'énergie dans plusieurs États Membres en exploitant une vulnérabilité dans Log4j (également appelé Log4Shell), selon plusieurs sociétés de cybersécurité[121], en vue de compromettre des serveurs VMware Horizon exposés sur Internet[122]. Les auteurs ont fini par s'implanter dans les réseaux des victimes une fois que les logiciels malveillants appelés « VSingle » et « YamaBot »[123] ont été déployés pour établir un accès persistant à long terme. Il a également été observé que l'auteur de cybermenace avait utilisé un autre cheval de Troie d'accès à distance, appelé « MagicRAT », pour des activités de reconnaissance et le vol de données d'identification[124]. Ces attaques auraient été menées principalement pour établir un accès à long terme aux réseaux utilisés par les victimes, ce qui « correspond aux intrusions constatées dans le passé lors desquelles Lazarus avait pris pour cible des infrastructures critiques et des entreprises du secteur de l'énergie ... afin d'absorber la propriété intellectuelle exclusive ».

144. D'après des informations émanant d'une société de cybersécurité, le logiciel malveillant à porte dérobée « Dtrack », dont on sait qu'il est couramment utilisé par le groupe Lazarus, a été déployé pour viser des organisations en Europe et en Amérique latine. Le logiciel malveillant permet aux pirates de téléverser, télécharger, démarrer ou supprimer des fichiers sur l'appareil de la victime. Entre autres outils, « Dtrack » dispose d'un enregistreur de frappe, d'un outil de capture d'écran et d'un modèle permettant de recueillir les données système de l'appareil de la victime. La dernière modification apportée au logiciel malveillant « Dtrack » permet de l'implanter furtivement dans un programme apparemment légitime. Les secteurs ci-après étaient les principales cibles mentionnées : éducation, production de substances chimiques, centres de recherche publics et instituts spécialisés dans les politiques publiques, prestataires de services informatiques, fournisseurs de services collectifs de distribution et télécommunication[125].

145. Selon un rapport publié par une société de cybersécurité en novembre 2022[126], « Lazarus, rallié à la Corée du Nord est un autre .... groupe APT [auteur de menace persistante avancée] opérant en Ukraine. Il s'en est pris à une entité gouvernementale en juin 2022 ». Il se serait agi de « cyberespionnage classique visant le vol de propriété intellectuelle ». L'enquête du Groupe d'experts sur les faits signalés se poursuit.

146. D'autres cas concernant les activités de Kimsuky et du groupe Lazarus liées à l'espionnage sont présentés dans l'annexe 79.

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[121] Voir https://blog.talosintelligence.com/lazarus-three-rats.

[122] La Cybersecurity Infrastructure and Security Agency a publié un avis d'alerte concernant la vulnérabilité Log4Shell dans les serveurs VMware Horizon. Voir www.cisa.gov/uscert/ncas/alerts/aa22-174a.

[123] « YamaBot » a récemment été attribué au groupe Lazarus par l'équipe nationale d'intervention en cas de cyberurgence du Japon. Voir https://blogs.jpcert.or.jp/en/2022/07/yamabot.html.

[124] Le Groupe d'experts a fait état d'un mode opératoire similaire aux paragraphes 124 et 125 de son rapport publié sous la cote S/2022/668.

[125] Voir https://securelist.com/dtrack-targeting-europe-latin-america/107798.

[126] Voir www.welivesecurity.com/wp-content/uploads/2022/11/eset_apt_activity_report_t22022.pdf.

Associés de Sok Kha

147. Sok Kha est un officier du renseignement du Bureau général de reconnaissance qui avait exploité des hôtels, des casinos, des restaurants et des bars au Cambodge. Les autorités cambodgiennes ont déjà mis fin aux activités commerciales de Sok Kha, gelé les comptes bancaires concernés et s'employaient à engager une action en justice afin que Sok Kha soit jugé, mais celui-ci a quitté le Cambodge en novembre 2020[127].

148. Le Groupe d'experts a été informé par un État Membre que cinq associés probables de Sok Kha au Bureau général de reconnaissance, dont la plupart sont en possession de passeports de la République populaire démocratique de Corée, continuent de mener des activités commerciales au Cambodge. Ces personnes sont Kim Nam Ryong, Jon Sung Jin, Pak Jin Song, Jo Won Jong et Han Ji Yon[128]. Jon Sung Jin aurait géré la société C.H. World Travel Co. Ltd, précédemment immatriculée au nom de Sok Kha. Le Cambodge n'a pas encore répondu aux questions du Groupe d'experts. Les enquêtes se poursuivent.

Mansudae Art Studio (KPe.050)[129]

149. La vente d'œuvres d'arts du Mansudae Art Studio constitue une violation du paragraphe 3 de la résolution 2371 (2017) ; l'entité est soumise à un gel des avoirs et les œuvres d'art peuvent être saisies.

150. Beijing Chaoyi Online Cultural Exchange Co., Ltd (Painted Arirang, voir annexe 81)[130] et Dandong Jinping Korea Cultural Art Co., Ltd (voir annexes 83 et 84)[131] ont des plateformes en ligne sur lesquelles sont offertes à la vente des peintures de la République populaire démocratique de Corée, notamment celles produites au Mansudae Art Studio. Painted Arirang a invité des artistes de la République populaire démocratique de Corée à créer des œuvres et à les vendre dans son studio à Beijing (voir annexe 82), ce qui constituerait une violation du paragraphe 8 de la résolution 2397 (2017) du Conseil de sécurité. Le Groupe d'experts ne dispose d'aucun élément probant concernant les ventes ou la commission des artistes et n'a pas encore reçu de réponse des sociétés.

151. Un État Membre a fourni des informations relatives à un article paru dans les médias[132] qui laissait entendre qu'on ignorait où étaient passées plusieurs peintures du Mansudae Art Studio, sorties de la République populaire démocratique de Corée pour des expositions. Les enquêtes du Groupe d'experts sur le contournement possible des sanctions se poursuivent.

Travailleurs à l'étranger

152. Le Groupe d'experts poursuit ses enquêtes sur les ressortissants de la République populaire démocratique de Corée qui perçoivent des revenus à l'étranger (travailleurs à l'étranger).

République démocratique populaire lao

153. Le Groupe d'experts a déjà signalé qu'un informaticien de la République populaire démocratique de Corée, Oh Chung Song, avait fui Doubaï en compagnie d'autres informaticiens pour se rendre à Vientiane[133]. La République démocratique

[127] S/2022/132, par. 162 à 165 et annexes 75 et 76.
[128] Voir annexe 80 pour des informations détaillées sur les cinq associés.
[129] Également connu sous le nom de Mansudae Overseas Project Group of Companies.
[130] En chinois : 北京朝艺在线文化交流有限公司(画说阿里郎).
[131] En chinois : 丹东金坪高丽文化艺术品有限公司.
[132] Voir https://news.jtbc.co.kr/article/article.aspx?news_id=NB12081480.
[133] S/2022/668, par. 142.

populaire lao a confirmé que M. Oh était arrivé à Vientiane le 14 décembre 2021 et que huit autres personnes « pourraient s'être rendues en [République démocratique populaire lao] avec lui ». Selon la République démocratique populaire lao, M. Oh est arrivé en tant qu'expert dans le cadre d'un projet d'échange éducatif et culturel entre la République démocratique populaire lao et la République populaire démocratique de Corée, pour « une visite temporaire dans le cadre des activités de projet prévues ». Par ailleurs, des informations relatives aux activités que M. Oh aurait pu mener en République démocratique populaire lao ont été communiquées au Groupe d'experts. Ce dernier a demandé des renseignements supplémentaires sur la « visite temporaire » de M. Oh, notamment sur la durée de son séjour et le type de visa qui lui a été accordé pour le projet en question. D'autres informations ont également été demandées à la République démocratique populaire lao au sujet de huit autres personnes. Les enquêtes se poursuivent.

154. Selon un État Membre, des ressortissants de la République populaire démocratique de Corée ont continué de travailler dans des restaurants en République démocratique populaire lao. Le Groupe d'experts a envoyé plusieurs demandes de renseignements à la République démocratique populaire lao mais n'a pas encore reçu de réponse.

Cambodge

155. Le Groupe d'experts enquête sur les activités d'un ressortissant de la République populaire démocratique de Corée, Ri Chol Nam[134], qui prend part à plusieurs activités commerciales générant des revenus pour la République populaire démocratique de Corée.

156. Selon les autorités cambodgiennes, M. Ri est arrivé au Cambodge en 2005 et s'est rendu à maintes reprises dans plusieurs villes d'Asie du Sud-Est et d'Asie du Nord-Est, en utilisant de multiples passeports de la République populaire démocratique de Corée (portant les numéros 645431352, 290321100, 654420454 et 109120342). M. Ri a créé une société, Pyongyang Unhasu Co., Ltd[135], constituée au Cambodge en 2016 et qui menait diverses activités, notamment dans les domaines de la restauration, du commerce de gros non spécialisé et des services de change. En décembre 2019, la société a été radiée du registre du commerce et, en janvier 2020, son compte bancaire a été clos par les autorités cambodgiennes. Sur le document d'immatriculation de la société, les informations relatives à la nationalité, « République de Corée », sont frauduleuses mais une adresse à Pyongyang a été donnée. Le titre de séjour cambodgien de M. Ri a expiré en décembre 2019 et, en janvier 2022, les autorités cambodgiennes ont informé le Groupe d'experts qu'elles s'efforçaient de procéder à l'arrestation de M. Ri et à son expulsion vers la République populaire démocratique de Corée (voir annexes 85 à 87).

157. Selon un État Membre, M. Ri a joué un rôle dans de possibles ventes d'armes, ainsi que dans la vente par courtage de diamants et d'or, et dans des activités financières illégitimes avec un ressortissant de la République populaire démocratique de Corée, Kim Se Un, qui dirigeait « U.J Import Export Co., Ltd »[136]. M. Ri a également été impliqué dans de possibles ventes de matériel relevant du domaine militaire pour le compte de la République populaire démocratique de Corée,

[134] 리철남, date de naissance : le 4 novembre 1974.

[135] Le registre des sociétés cambodgien montre que Pyongyang Unhasu a été renommé « Nikapich Restaurant Co. Ltd » en 2016 et radié en janvier 2023. Les principales activités commerciales de Nikapich Restaurant Co. Ltd sont les suivantes : restaurants, boîtes de nuit et commerce de gros de différents biens (voir annexe 87).

[136] La société a été radiée du registre du commerce par les autorités cambodgiennes en décembre 2019 (voir S/2020/151, par. 139 et annexe 38).

notamment dans une opération visant l'acquisition et la revente de gilets pare-balles de pays tiers. Depuis qu'il a quitté le Cambodge, M. Ri aurait multiplié les déplacements entre le Viet Nam, la République démocratique populaire lao et la Chine. Le Groupe d'experts a envoyé des demandes de renseignements à ces États Membres.

158. Le Viet Nam a répondu que M. Ri avait séjourné dans le pays avec un passeport « de service » (officiel) entre avril et juin 2022 avant de se rendre dans un autre pays d'Asie du Sud-Est. Le but de son voyage était de rendre visite à un membre du corps diplomatique de la République populaire démocratique de Corée au Viet Nam. Après que M. Ri est sorti du pays en juin 2022, le Viet Nam a rejeté la demande de visa à entrée unique de trois mois que celui-ci avait déposée en vue de revenir dans le pays depuis un pays tiers. Le Viet Nam n'a « jusqu'à présent constaté aucune violation des résolutions... pertinentes du Conseil de sécurité par M. Ri Chol Nam au Viet Nam ». La Chine n'a « trouvé aucun élément prouvant que Ri Chol Nam a mené des activités en violation des résolutions du Conseil de sécurité à l'intérieur des frontières chinoises » (voir annexe 88 et annexe 26, OC.254).

V. Financement

Génération illicite de revenus au moyen de cyberactivités

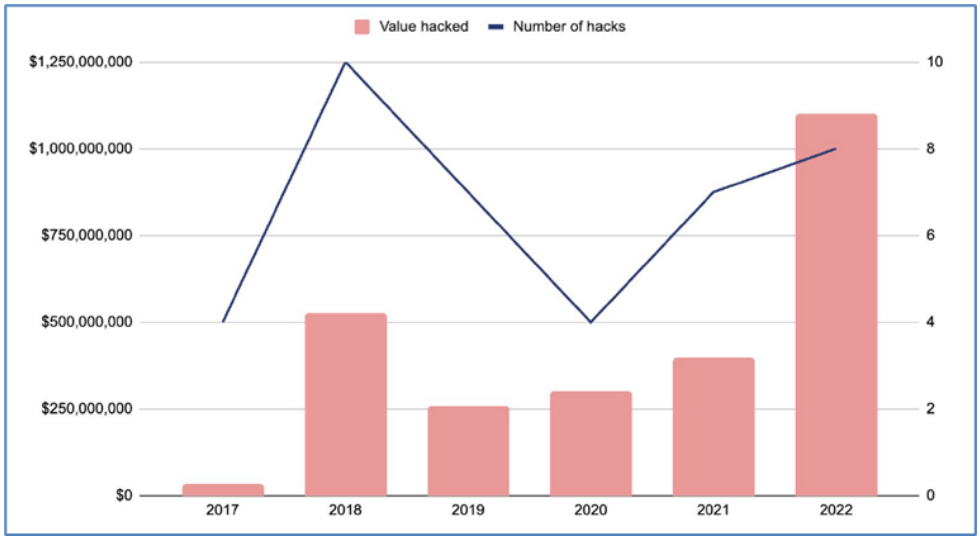
159. Le Groupe d'experts continue d'enquêter sur les violations des sanctions financières imposées par le Conseil de sécurité commises par des cyberacteurs de la République populaire démocratique de Corée. Les actifs virtuels obtenus de manière illicite sont protégés à la fois par le caractère anonyme de la chaîne de blocs et l'offuscation délibérée du passage des actifs sur la plateforme d'échange de cryptomonnaies.

160. D'après des articles parus dans les médias[137], les autorités de la République de Corée ont chiffré à environ 1,2 milliard de dollars, dont 630 millions de dollars pour la seule année 2022, la valeur des actifs virtuels volés par des auteurs de cybermenace de la République populaire démocratique de Corée dans le monde depuis 2017. Selon les estimations d'une société de cybersécurité, en 2022, la cybercriminalité a rapporté à la République populaire démocratique de Corée l'équivalent de plus de 1 milliard de dollars (au moment du vol) en cybermonnaies, soit plus du double du produit total obtenu en 2021 (voir fig. XXXVIII). La fluctuation de la valeur en dollars des États-Unis des cryptomonnaies observée ces derniers mois a probablement eu des incidences sur ces estimations[138], mais, dans un cas comme dans l'autre, le vol d'actifs virtuels par des acteurs de la République populaire démocratique de Corée a atteint un record en 2022.

[137] Voir https://apnews.com/article/technology-crime-business-hacking-south-korea-967763dc88e422232da54115bb13f4dc.

[138] À moins que des éléments irréfutables justifient d'autres types d'estimations, le Groupe d'experts utilise la valeur en dollars des États-Unis déclarée au moment du vol.

Figure XXXVIII
Actes de piratage liés à la République populaire démocratique de Corée par valeur totale piratée et nombre total d'actes de piratage (2022)



Source : Chainalysis.

161. Les autorités des États-Unis, après avoir imposé en mai 2022[139] les toutes premières sanctions bilatérales à une société de mixage de cryptomonnaies appelée Blender, ont imposé des sanctions à un autre mixeur de cryptomonnaies appelé Tornado Cash, expressément pour « sa participation au blanchiment d'une partie des plus de 600 millions de dollars volés par des pirates [de la République populaire démocratique de Corée] lors d'un des plus grands braquages de cryptomonnaies connus à ce jour »[140]. Ces deux désignations montrent que les protocoles décentralisés devraient également être assujettis aux obligations de conformité auxquelles les services centralisés se tiennent.

162. Pendant la période considérée, les cyberattaques par logiciels rançonneurs et les piratages visant des plateformes d'échange et des sociétés de cryptomonnaies ont continué. Les techniques utilisées par les auteurs de cybermenace sont devenues plus complexes, ce qui rend plus ardue toute surveillance des fonds volés.

Logiciel rançonneur

163. Le Groupe d'experts a précédemment signalé que le logiciel rançonneur « Maui ransomware » attribué à des auteurs de cybermenace avait été utilisé contre des organisations du secteur de la santé publique[141]. En juillet 2022, les autorités des États-Unis ont annoncé la saisie de bitcoins d'une valeur de 500 000 dollars qui avaient été extorqués à plusieurs organisations liées au secteur de la santé aux États-Unis. Une société de cybersécurité a constaté qu'il existait de nombreuses similarités entre les méthodes employées lors des attaques menées en utilisant le logiciel rançonneur « Maui ransomware » et celles qu'Andariel avaient utilisées par le passé. Elle a également noté[142] que la campagne « Maui ransomware » ne visait pas de

[139] S/2022/668, par. 147.
[140] Voir www.state.gov/imposing-sanctions-on-virtual-currency-mixer-tornado-cash et https://home.treasury.gov/news/press-releases/jy0916.
[141] S/2022/668, note de bas de page 138 et annexe 66.
[142] Voir https://securelist.com/andariel-deploys-dtrack-and-maui-ransomware/107063.

secteurs particuliers et que des entreprises de multiples États Membres en étaient victimes.

164. Une société de cybersécurité a constaté qu'un auteur de menace de la République populaire démocratique de Corée se faisant appeler « H0lyGh0st », avait extorqué des rançons à des petites et moyennes entreprises dans plusieurs États Membres en distribuant des logiciels rançonneurs dans le cadre d'une vaste campagne à but lucratif. Le groupe procédait généralement comme suit : chiffrement des fichiers se trouvant dans l'appareil pris pour cible, utilisation de l'extension de fichier « .h0lyenc », envoi de quelques fichiers à la victime comme preuve, puis paiement exigé en bitcoins afin que la victime puisse de nouveau avoir accès aux fichiers. Ses techniques d'extorsion consistaient également à menacer de publier des données des victimes dans les médias sociaux ou de les envoyer aux clients des victimes si la cible refusait de payer. La société a désigné « H0lyGh0st » sous le nom de « DEV-0530 » et a estimé que « DEV-0530 » semblait communiquer et coopérer avec Andariel[143].

Secteur des cryptomonnaies

165. Le piratage du pont Horizon de la chaîne de blocs Harmony (juin 2022)[144] a été attribué au groupe Lazarus car les méthodes utilisées ressemblaient énormément à celles employées lors du piratage du réseau Ronin d'Axie Infinity (mars 2022)[145]. Selon de multiples sources[146], dont plusieurs sociétés de cybersécurité, le 13 janvier 2023, ce groupe a déplacé environ la moitié des actifs volés lors du piratage du pont Horizon dont la valeur est estimée à l'équivalent de 63,4 millions de dollars en ethereum[147]. Railgun[148] a été utilisé pour déposer des fonds dans trois plateformes d'échange de cryptomonnaies différentes[149]. Lors du transfert, plus de 350 adresses distinctes de portefeuilles du groupe Lazarus ont été détectées[150]. Les plateformes concernées ont bloqué les transferts et gelé les comptes, ce qui leur a permis de récupérer 124 bitcoins d'une valeur alors estimée à 2,6 millions de dollars[151].

166. Le groupe Lazarus aurait également mené une campagne d'hameçonnage ciblé afin d'infecter les appareils ayant pour système d'exploitation Apple MacOS, et pris pour cible les développeurs du secteur de la technologie financière en distribuant des fichiers PDF dans lesquels sont dissimulés des logiciels malveillants faussement présentés comme des offres d'emploi pour Coinbase, une plateforme d'échange de cryptomonnaies. Selon le fil Twitter d'une société de cybersécurité[152], le logiciel malveillant du groupe Lazarus, une fois lancé, livrait trois fichiers – le dossier

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[143] Voir www.microsoft.com/en-us/security/blog/2022/07/14/north-korean-threat-actor-targets-small-and-midsize-businesses-with-h0lygh0st-ransomware.

[144] S/2022/668, par. 147 et 148.

[145] Le Federal Bureau of Investigation a également confirmé que le groupe Lazarus était à l'origine de ce piratage. Voir www.fbi.gov/news/press-releases/fbi-confirms-lazarus-group-apt38-cyber-actors-responsible-for-harmonys-horizon-bridge-currency-theft.

[146] Voir www.coindesk.com/tech/2023/01/16/north-korean-hacking-group-tied-to-100m-harmony-hack-moves-41000-ether-over-weekend et https://twitter.com/zachxbt/status/1614771861266792449?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1614771861266792449%7Ctwgr%5Eb27203be4def19edc30a61133549fcccbbfe6c8d%7Ctwcon%5Es1_&ref_url=https%3A%2F%2Fdecrypt.co%2F119315%2Flazarus-group-moves-41000-ethereum-nabbed-harmony-bridge-hack.

[147] 41 000 ETH.

[148] Railgun est « un contrat intelligent destiné aux opérateurs professionnels et aux utilisateurs de la DeFi [finance décentralisée] qui renforce la protection des données personnelles lors des échanges de cryptomonnaies ». Voir www.railgun.org/#/.

[149] Binance, Huobi et OKX.

[150] Voir www.chainabuse.com/report/0a2e8e00-00e2-4749-9b00-ceb1c6202d33.

[151] Voir https://twitter.com/cz_binance/status/1614887319177428992?s=20.

[152] Voir https://twitter.com/esetresearch/status/1559553324998955010?lang=en.

FinderFontsUpdated.app, le téléchargeur safarifontagent et un leurre au format PDF. Ce fichier PDF leurre installait une bibliothèque de liens dynamiques (DLL) malveillante qui finissait par permettre à l'auteur de cybermenace d'envoyer des commandes aux appareils infectés. En prenant pour cible les développeurs de cryptomonnaies, cette campagne a probablement servi à générer des revenus illicites au profit de la République populaire démocratique de Corée[153].

167. Une autre société de cybersécurité a prévenu que le groupe Lazarus avait mené une campagne de logiciels malveillants visant les utilisateurs de cryptomonnaies. Il a été relevé que les auteurs de cybermenace diffusaient de fausses applications de cryptomonnaies sous le nom de marque inexistant « BloxHolder ». Ces applications distribuaient le logiciel malveillant « AppleJeus »[154] afin d'ouvrir l'accès à des réseaux qui finiraient par voler des cryptomonnaies. La campagne en question a débuté en juin 2022, lorsqu'un clone du domaine d'un site Web légitime, HaasOnline (haasonline.com), a été mis en place sous le nom de « bloxholder.com ». Les auteurs des attaques se sont servis du site Web pour distribuer un programme d'installation Windows MSI dissimulé sous l'application BloxHolder, qui a été utilisée pour installer le logiciel malveillant « AppleJeus »[155].

168. BlueNoroff, dont on sait qu'il s'agit d'un sous-groupe de Lazarus, a, d'après ce qu'a constaté une société de cybersécurité, lancé de nouvelles attaques au moyen de nouveaux logiciels malveillants et des techniques de livraison actualisées, notamment de nouveaux types de fichiers et une méthode permettant de contourner les protections Mark-of-the-Web (MotW) de Microsoft. BlueNoroff a distribué des fichiers d'images disques optiques (.iso) et de disques durs virtuels (.vhd) contenant de faux documents Microsoft Office, ce qui lui a permis de contourner l'avertissement MotW que Windows affiche généralement lorsqu'un utilisateur tente d'ouvrir un document téléchargé sur Internet. La société a estimé que, par l'hameçonnage, BlueNoroff a tenté d'infecter des organisations cibles afin d'intercepter les transferts de cryptomonnaies et de vider les comptes. Par ailleurs, dans le cadre de cette campagne, le groupe de piratage informatique a enregistré de faux domaines ressemblant à ceux de banques et de sociétés de capital-risque bien connues[156].

Jetons non fongibles

169. Le Groupe d'experts a précédemment noté que les auteurs de cybermenace de la République populaire démocratique de Corée pourraient voler des jetons non fongibles (NFT) en vue de générer de plus en plus de revenus[157]. La mise en place de près de 500 domaines d'hameçonnage, notamment des sites Web camouflés en projets et plateformes légitimes affiliés à des NFT, a été attribuée au groupe Lazarus par une société de cybersécurité. Les auteurs, dont l'objectif était d'escroquer des jetons non fongibles aux investisseurs directement lors de transferts, ont également obtenu des données pouvant leur permettre d'avoir directement accès aux portefeuilles de cryptomonnaies de leurs victimes[158].

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[153] D'après la société de cybersécurité, le logiciel malveillant visant MacOS était lié à l'« Operation In(ter)ception » du groupe Lazarus (voir S/2020/840, par. 117, note de bas de page 79), lors de laquelle ce dernier avait de manière similaire pris pour cible des organisations mondialement connues de l'industrie aérospatiale et du secteur militaire.

[154] S/2020/151, par. 181. Voir également www.cisa.gov/uscert/ncas/alerts/aa21-048a pour en savoir plus sur le logiciel malveillant AppleJeus.

[155] Voir www.volexity.com/blog/2022/12/01/buyer-beware-fake-cryptocurrency-applications-serving-as-front-for-applejeus-malware.

[156] Voir https://securelist.com/bluenoroff-methods-bypass-motw/108383.

[157] S/2022/668, par. 151.

[158] Voir https://slowmist.medium.com/slowmist-our-in-depth-investigation-of-north-korean-apts-large-scale-phishing-attack-on-nft-users-362117600519.

Recommandations

170. **Le Groupe d'experts recommande la désignation de la personne ci-après pour la contribution et le soutien que celle-ci apporte au programme d'armement interdit conformément au paragraphe 27 de la résolution 2094 (2013) du Conseil de sécurité et au paragraphe 43 de la résolution 2270 (2016) du Conseil : le général Ri Chang Ho (리창호), Directeur du Bureau général de reconnaissance, une organisation dont les cyberunités (appelées Lazarus Group, Kimsuky, Andariel, etc.) participent sans cesse à la génération illicite de revenus et à l'acquisition d'informations sensibles. Le Bureau a été désigné en mars 2016.**

171. **Le Groupe d'experts souligne qu'il a précédemment recommandé que :**

a) les organismes des États Membres, ainsi que les institutions financières, les entreprises et les prestataires de services liés aux actifs virtuels consacrent l'attention nécessaire au renforcement de la cyberhygiène en exigeant de tous les usagers qui cherchent à accéder à un échange de cybermonnaies l'établissement d'un seuil par défaut plus élevé, comme une authentification à deux facteurs ;

b) les États Membres appliquent dès que possible les directives du Groupe d'action financière sur les actifs virtuels, qui visent à prévenir le financement de la prolifération des armes de destruction massive, en imposant des exigences en matière de lutte contre le blanchiment d'argent et le terrorisme concernant ces actifs et les prestataires de services liés aux actifs virtuels ;

c) toute entité subissant une cyberattaque contacte dans les meilleurs délais les autorités juridiques concernées pour signaler l'incident, fasse une annonce publique et se concerte avec les organismes compétents, notamment les firmes d'analyse des chaînes de blocs, afin d'augmenter les perspectives de récupérer une partie des actifs volés ;

172. **Le Groupe d'experts recommande que les États Membres envisagent des lois nationales qui établissent des directives relatives à la cybersécurité pour faire appliquer des protocoles « connaître son client », et resserrer les procédures relatives à l'enregistrement des prestataires de services liés aux actifs virtuels.**

173. **Le Groupe d'experts recommande que les États Membres resserrent la coopération, facilitent le dialogue et renforcent l'échange d'informations, notamment dans leur région géographique, afin d'écarter la menace croissante de la cybercriminalité, sur les plans financier et du renseignement. Il faudrait notamment que :**

a) des informations soient mises en commun avec d'autres institutions financières par l'intermédiaire d'organisations telles que le Financial Services Information Sharing and Analysis Center (www.fsisac.com) ;

b) les institutions financières soient formées à la cybersécurité par des organisations telles que l'Office des Nations Unies contre la drogue et le crime, le Groupe d'action financière et diverses cybersociétés.

VI. Effets humanitaires involontaires des sanctions

174. Au paragraphe 25 de la résolution 2397 (2017), le Conseil de sécurité a réaffirmé que les sanctions de l'ONU étaient censées être sans conséquences humanitaires négatives pour la population civile de la République populaire démocratique de Corée et ne pas nuire ni faire obstacle aux activités, y compris aux activités économiques et à la coopération, à l'aide alimentaire et à l'assistance humanitaire, qui ne sont pas

interdites par les résolutions, et a souligné également qu'il était de la responsabilité première et du devoir de la République populaire démocratique de Corée d'assurer pleinement les moyens de subsistance et les besoins de sa population. Dans la résolution 2664 (2022), adoptée en décembre 2022, l'accent est mis sur « la nécessité de minimiser toute conséquence humanitaire négative involontaire » des sanctions et les mesures proposées à cette fin[159].

Situation humanitaire

175. Le Groupe d'experts sait bien que les données totalement fiables manquent du fait de la fermeture des frontières de la République populaire démocratique de Corée et que les observateurs et les organisations humanitaires ne sont donc pas en mesure de rendre compte de la situation dans le pays. Il note également l'absence de méthode permettant de dissocier les conséquences des sanctions multilatérales d'autres facteurs, ce qui empêche d'évaluer les effets des sanctions sur les plans quantitatif et qualitatif.

176. Au second semestre de 2022, la situation humanitaire a empiré, d'après plusieurs indicateurs clés. En effet, le rendement des cultures était faible, les frontières nationales sont restées fermées et le montant de l'aide extérieure destinées à remédier à ces facteurs était en baisse. L'accès à la nourriture a été entravé par les conditions climatiques et des structures de marché insatisfaisantes[160], qui ont entraîné une baisse de 4 % de la production alimentaire et eu des effets négatifs sur la nutrition de l'enfant[161].

177. Le Groupe d'experts a envoyé son questionnaire aux organisations humanitaires (voir annexe 89), dont les réponses anonymisées sont présentées dans l'annexe 90. Les organisations ont exprimé diverses vues ; plusieurs ont notamment déclaré que la politique de fermeture des frontières menée par le Gouvernement, les effets de la COVID-19 et les effets des sanctions avaient contribué à la détérioration de l'accès aux biens de consommation, aux services de santé, à l'eau propre et aux services d'assainissement tout au long de l'année 2022. Les vulnérabilités sociales ont continué de s'accentuer et le pays a connu des ruptures de stock de ressources essentielles.

178. En août, les autorités de la République populaire démocratique de Corée ont annoncé qu'elles avaient réussi à vaincre l'épidémie de COVID-19. Même si peu de données sont disponibles, plusieurs entités des Nations Unies ont déclaré que les mesures de quarantaine et les 4,7 millions de cas signalés avaient exacerbé la crise humanitaire[162].

179. Bien qu'il soit difficile de le dire avec précision, et compte tenu de ses conclusions précédentes[163] et des informations communiquées par les intervenants humanitaires, le Groupe d'experts estime qu'il ne fait guère de doute que les sanctions

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[159] Ladite résolution pourrait peser légèrement sur les conséquences que les sanctions ont sur la population de la République populaire démocratique de Corée car elle concerne principalement les gels des avoirs et les interdictions de voyager.

[160] Voir www.nknews.org/2022/12/drop-in-north-korean-crop-output-aggravates-domestic-food-shortages-report.

[161] Voir www.unicef.org/documents/east-asia-and-pacific-humanitarian-situation-report-no-1-31-march-2022.

[162] Voir www.38north.org/2022/08/north-korea-appears-to-have-managed-its-covid-19-outbreak-what-comes-next.

[163] S/2020/151, par. 209 ; S/2021/777, par. 174 ; S/2022/132, par. 188 et 189 ; S/2022/668, par. 121 et 122 et annexes 51 et 52.

de l'ONU avaient influé de manière involontaire sur la situation humanitaire, même si l'influence relative des sanctions avait probablement diminué en 2020[164].

Opérations des organisations humanitaires

180. Les réponses que les organisations humanitaires ont fournies au Groupe d'experts font ressortir les difficultés posées par la fermeture continue des frontières ainsi que les divergences de vues concernant les effets que les sanctions de l'ONU et le Comité ont sur les activités de ces organisations, qui ont fait observer que les restrictions liées à la COVID-19 et l'absence de circuit bancaire étaient particulièrement préoccupantes[165].

181. À la mi-octobre 2022, l'ONU a facilité l'application d'une mesure ponctuelle, à savoir le transfert d'un montant en euros, équivalent à 1 million de dollars, à la Mission permanente de la République populaire démocratique de Corée à New York, en vue d'aider les entités des Nations Unies qui ne disposaient pas des réserves financières suffisantes dans le pays à payer le personnel résident et à couvrir les dépenses de fonctionnement.

182. Les organisations humanitaires ont accueilli avec satisfaction les mesures que le Comité a prises afin de simplifier la procédure de dérogation et certaines ont proposé que soit envisagé un élargissement de la procédure, notamment en mettant en place des dérogations « globales » ou « permanentes » pour les produits et les organisations. La plupart d'entre elles ne s'attendaient pas à ce que la République populaire démocratique de Corée ouvre les frontières en 2023 et quelques-unes craignaient que seul un accès limité ne soit autorisé à l'avenir.

183. Le Fonds des Nations Unies pour l'enfance et l'Organisation mondiale de la Santé ont acheminé une aide médicale dans le pays[166, 167]. Par ailleurs, les organisations d'aide de la République de Corée ont signalé qu'une aide humanitaire privée d'une valeur de 4,4 millions de dollars était arrivée en République populaire démocratique de Corée[168], mais le Bureau de la coordination des affaires humanitaires

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[164] Au paragraphe 209 de son rapport publié, avant la pandémie, sous la cote S/2020/151, le Groupe d'experts avait conclu que les effets involontaires des sanctions sur les besoins humanitaires de la population civile pourraient être les suivants : la réduction des moyens de subsistance pour les personnes employées dans des secteurs touchés par les sanctions ; l'augmentation de la marginalisation sociale dans la mesure où les élites font face aux sanctions de l'ONU comme à d'autres en exerçant un contrôle croissant sur les ressources rares, et, dans certains cas, en détournant ces ressources à des fins autres que la satisfaction des besoins de la population ; une pénurie constante de matériel agricole et de carburant, accentuant encore plus le faible niveau de mécanisation agricole ; une augmentation des perturbations dans les chaînes d'approvisionnement médical.

[165] Lors d'entretiens avec des organisations non gouvernementales, le Groupe d'experts a appris que la dette intérieure en République populaire démocratique de Corée pesait lourdement sur les organisations : celles-ci n'étaient pas en mesure de payer le loyer des bâtiments qu'elles occupaient, d'acheter des fournitures d'aide et de verser le salaire des employés ; le contrat de certains employés a dû être résilié faute de ressources financières suffisantes et d'autres employés ont simplement quitté l'organisation. Il convient de noter que la République populaire démocratique de Corée, sans le faire savoir, prend en charge les dépenses locales de fonctionnement des bureaux de représentation pour l'aide humanitaire, ce qui montre que cette partie a dans une certaine mesure le souci de poursuivre la coopération en vue d'obtenir une aide humanitaire sans en faire la demande.

[166] Voir www.nknews.org/2023/01/unicef-delivers-25-containers-of-medical-and-nutritional-aid-to-north-korea.

[167] Voir www.nknews.org/2022/08/unicef-aid-reaches-north-korean-capital-after-almost-two-year-delay.

[168] Voir www.nknews.org/2022/12/seoul-says-it-sent-state-sponsored-humanitarian-aid-to-north-korea.

a indiqué que seuls 2,3 millions de dollars d'aide humanitaire avaient été enregistrés en 2022, contre 14 millions de dollars en 2021 et 40,3 millions de dollars en 2020[169].

Recommandations

184. **Le Groupe d'experts recommande que le Comité envisage d'accorder des dérogations reconductibles et permanentes aux acteurs fournissant une aide humanitaire et aux fins de la fourniture de produits de base pour raison humanitaire.**

185. **Le Groupe d'experts souligne qu'un circuit bancaire durable doit être rétabli d'urgence afin que les opérations humanitaires puissent reprendre sans interruption en République populaire démocratique de Corée.**

186. **Le Groupe d'experts apprécie les exposés semestriels faits par les organismes compétents des Nations Unies sur les effets involontaires des sanctions et recommande que le Comité poursuive cette pratique.**

187. **Le Groupe d'experts recommande de nouveau que le Conseil de sécurité continue de se pencher sur les questions et les procédures qui sont à même d'atténuer les éventuelles conséquences négatives involontaires des sanctions sur la population civile de la République populaire démocratique de Corée et sur les opérations d'aide humanitaire.**

188. **Le Groupe d'experts recommande que le Comité et d'autres parties prenantes concernées envisagent d'un point de vue pratique l'idée d'obtenir des dérogations concernant des exportations choisies, faisant actuellement l'objet de sanctions, dont les bénéfices pourraient servir à financer des fournitures humanitaires.**

189. **Le Groupe d'experts recommande que le Comité envisage d'intensifier les contacts avec la société civile apportant une aide humanitaire à la République populaire démocratique de Corée en vue de faciliter l'application de la résolution 2664 (2022) du Conseil de sécurité, notamment en contribuant à l'établissement du rapport du Secrétaire général.**

VII. Rapports nationaux de mise en œuvre

État de la situation concernant les rapports des États Membres sur l'application des résolutions pertinentes

190. Au 27 janvier 2023, 66 États Membres avaient présenté des rapports sur l'application du paragraphe 8 de la résolution 2397 (2017), 81 sur celle du paragraphe 17 de la résolution 2397 (2017), 95 sur celle de la résolution 2375 (2017), 90 sur celle de la résolution 2371 (2017), 107 sur celle de la résolution 2321 (2016) et 115 sur celle de la résolution 2270 (2016). Malgré l'augmentation du nombre de rapports présentés, le Groupe d'experts note que le nombre d'États Membres (127) qui n'ont pas établi de rapport sur la résolution 2397 (2017) demeure important.

191. En novembre 2022, le Groupe d'experts a envoyé un questionnaire (voir annexe 92) aux États Membres concernant la manière dont ils ont appliqué le régime de sanctions en 2022. Il a joint au questionnaire la note d'orientation établie par le Comité concernant les obligations incombant aux États à cet égard (voir annexe 93).

[169] Voir https://fts.unocha.org/countries/118/summary/2022 et https://en.yna.co.kr/view/AEN20230120004000325#:~:text=N.%20Korea%20received%20US%242.3%20mln%20in%20humanitarian%20aid,due%20to%20the%20coronavirus%20pandemic%2C%20data%20showed%20Sunday.

Une première évaluation des réponses faite par le Groupe d'experts figure dans l'annexe 94.

VIII. Recommandations

192. Une liste récapitulative des recommandations figure dans l'annexe 95.

Annex 1: Comparison of newly-adopted "Law on DPRK's Policy on Nuclear Forces"[1] in September 2022 and earlier "Law on Further Consolidating the Position of the Self-Defense Nuclear Weapons State"[2] adopted in 2013

New Law (2022)	Earlier Law (2013)
1. Mission of Nuclear Forces The nuclear forces of the DPRK shall be a main force of the state defence which safeguards the sovereignty and territorial integrity of the country and the lives and safety of the people from outside military threat, aggression and attack. 1) The nuclear forces of the DPRK shall regard it as their main mission to deter a war by making hostile forces have a clear understanding of the fact that the military confrontation with the DPRK brings about ruin and give up attempts at aggression and attack. 2) The nuclear forces of the DPRK shall carry out an operational mission for repulsing hostile forces' aggression and attack and achieving decisive victory of war in case its deterrence fails.	1. The nuclear weapons of the DPRK are just means for defence as it was compelled to have access to them to cope with the ever-escalating hostile policy of the U.S. and nuclear threat.
2. Constitution of Nuclear Forces **The nuclear forces of the DPRK shall be composed of different kinds of nuclear warheads, delivery means, command and control system** and all the personnel, equipment and facilities for the system's operating and updating.	2. They serve the purpose of deterring and repelling the aggression and attack of the enemy against the DPRK and dealing deadly retaliatory blows at the strongholds of aggression until the world is denuclearized.
3. Command and Control of Nuclear Forces **1) The nuclear forces of the DPRK shall obey the monolithic command of the president of the State Affairs of the DPRK.** 2) The president of the State Affairs of the DPRK shall have all decisive powers concerning nuclear weapons. **The state nuclear forces command organization composed of members appointed by the president of the State Affairs of the**	3. The DPRK shall take practical steps to bolster up the nuclear deterrence and nuclear retaliatory strike power both in quality and quantity to cope with the gravity of the escalating danger of the hostile forces' aggression and attack.

[1] In Korean, 조선민주주의인민공화국 핵무력정책에 대하여
[2] In Korean, 자위적 핵보유국의 지위를 더욱 공고히 할 데 대하여

New Law (2022)	Earlier Law (2013)
DPRK shall assist the president of the State Affairs of the DPRK in the whole course from decision concerning nuclear weapons to execution. 3) In case the command and control system over the state nuclear forces is placed in danger owing to an attack by hostile forces, **a nuclear strike shall be launched automatically and immediately** to destroy the hostile forces including the starting point of provocation and the command according to the operation plan decided in advance.	
4. Execution of Decision on Use of Nuclear Weapons The nuclear forces of the DPRK shall immediately execute an order of using nuclear weapons.	4. The nuclear weapons of the DPRK can be used only by a final order of the Supreme Commander of the Korean People's Army to repel invasion or attack from a hostile nuclear weapons state and make retaliatory strikes.
5. Principle of Using Nuclear Weapons 1) The DPRK shall regard it as its main principle to use nuclear weapons as the last means in order to cope with outside aggression and attack seriously threatening the security of the country and the people. 2) The DPRK shall neither threaten non-nuclear weapons states with its nuclear weapons nor use nuclear weapons against them unless they join aggression or attack against the DPRK in collusion with other nuclear weapons states.	5. The DPRK shall neither use nukes against the non-nuclear states nor threaten them with those weapons unless they join a hostile nuclear weapons state in its invasion and attack on the DPRK.
6. Conditions of Using Nuclear Weapons The DPRK can use nuclear weapons in the following cases: **1) In case an attack by nuclear weapons or other weapons of mass destruction was launched or drew near is judged** **2) In case a nuclear or non-nuclear attack by hostile forces on the state leadership and the command organization of the state's nuclear forces** was launched or drew near is judged	6. The DPRK shall strictly observe the rules on safekeeping and management of nukes and ensuring the stability of nuclear tests.

New Law (2022)	Earlier Law (2013)
3) <u>In case a fatal military attack against important strategic objects</u> of the state was launched or drew near is judged 4) In case the need for operation for preventing the expansion and protraction of a war and taking the initiative in the war in contingency is inevitably raised. 5) In other case an inevitable situation in which it is compelled to correspond with catastrophic crisis to the existence of the state and safety of the people by only nuclear weapons is created.	
7. Regular readiness of nuclear forces The nuclear forces of the DPRK shall be regularly ready for action so that if an order to use nuclear weapons is issued, it can immediately execute it in any conditions and circumstances.	7. The DPRK shall establish a mechanism and order for their safekeeping and management so that nukes and their technology, weapon-grade nuclear substance may not leak out illegally.
8. Safe maintenance, management and protection of nuclear weapons 1) The DPRK shall establish a thorough and safe system of storing and managing nuclear weapons to make sure that all the processes such as storage and management, the assessment of their lifespan and performance and their updating and dismantlement are conducted in conformity with administrative and technical regulations and legal procedures, and shall guarantee its implementation. 2) The DPRK shall take thorough protective steps for fear that nuclear weapons, technology and equipment concerned, nuclear substances, etc. will leak out.	8. The DPRK shall cooperate in the international efforts for nuclear non-proliferation and safe management of nuclear substance on the principle of mutual respect and equality, depending on the improvement of relations with hostile nuclear weapons states.
9. Qualitative and quantitative increasing and upgrading of nuclear forces 1) The DPRK shall constantly assess outside nuclear threats and the change in the posture of international nuclear forces and correspondingly **<u>upgrade and beef up its nuclear forces in a qualitative and quantitative way in response to it.</u>**	9. The DPRK shall strive hard to defuse the danger of a nuclear war and finally build a world without nukes and fully support the international efforts for nuclear disarmament against nuclear arms race.

New Law (2022)	Earlier Law (2013)
2) The DPRK shall regularly update its strategy of using nuclear weapons according to different situations to enable its nuclear forces to reliably perform their mission.	
10. Non-proliferation The DPRK, as a responsible nuclear weapons state, shall neither deploy nuclear weapons in the territory of other countries nor share them and not transfer nuclear weapons, technology and equipment concerned and weapon-grade nuclear substances.	10. The related institutions shall take thorough practical steps for implementing this ordinance.
11. Others 1) The Law of the Supreme People's Assembly of the DPRK "On further consolidating the position of the self-defence nuclear weapons state" adopted on April 1, 2013 shall be invalid. 2) Relevant organs will take technical measures to execute the law. 3) None of the articles of the law shall be interpreted to restrain or limit the exercise of the DPRK's just right to self-defense.	

Source: The original text of "Law on DPRK's Policy on Nuclear Forces" was extracted from KCNA, http://kcna.kp/en/article/q/5f0e629e6d35b7e3154b4226597df4b8.kcmsf and highlighted by the Panel, "Law on Further Consolidating the Position of the Self-Defense Nuclear Weapons State" was cited from https://kcnawatch.org/newstream/1451896124-739013370/law-on-consolidating-position-of-nuclear-weapons-state-adopted/.

Annex 2: Activities at Punggye-ri nuclear test site (41° 16′ 35″ N 129° 05′ 18″ E)

*In the annexes of the nuclear section, annotations in red boxes are recent observations, while those with yellow characters in black boxes are previous observations.

Annex 2.1: Renovation of the main administrative area continued (41° 16′ 41″ N 129° 05′ 15″ E)

Source: Planet Labs Inc., 29 June 2022 and 18 August 2022.

Source: Maxar Technologies, 17 November 2022; Planet Labs Inc., 19 May 2018 and 22 October 2018.

Source: Planet Labs Inc., 5 December 2022; Maxar Technologies, 1 January 2023.

Annex 2.2: Tunnel 3 (41°16′35″N129°05′18″E)

Source: Maxar Technologies, 24 August 2022 and 29 September 2022.

Source: Maxar Technologies, 20 October 2022 and 8 January 2023.

Annex 2.3: Activities near Tunnel 4 (41°16′47″N129°05′08″E)

A landslide appeared to collapse the access road to Tunnel 4 at the end of July 2022 and the reconstruction of the road and retaining wall was observed.

Source: Planet Labs Inc., 30 July 2022 and 10 August 2022.

Source: Maxar Technologies, 8 January 2023.

Annex 2.4: Bypass road construction between Command Center and Southern Support area (41°13′37″N129°06′34″E, 41°13′13″N129°06′27″E)

A think-tank reported[3] that a bypass was constructed between the southern support area and the command centre in order to mitigate flood damage and to maintain access to the command centre. The Panel also has observed construction of the road and believes that this pre-existing road or trail has been renovated or cleared.

Source: Planet Labs Inc., 2 July 2022 and 7 September 2022.

[3] See https://beyondparallel.csis.org/punggye-ri-update-flood-mitigation/.

Annex 3: Activities at LWR (39° 47′ 39″ N 125° 45′ 18″ E)

Source: Maxar Technologies, 30 September 2022.

1) Construction of buildings (39° 47′ 39″ N 125° 45′ 18″ E, 39° 47′ 43″ N 125° 45′ 15″ E)

Source: Planet Labs Inc., 22 July 2022 and 11 August 2022.

Source: Maxar Technologies, 17 November 2022

2) Riverbank modification (39° 47′ 38″ N 125° 45′ 21″ E)

Source: Planet Labs Inc., 18 October 2022, 26 October 2022 and 4 November 2022.

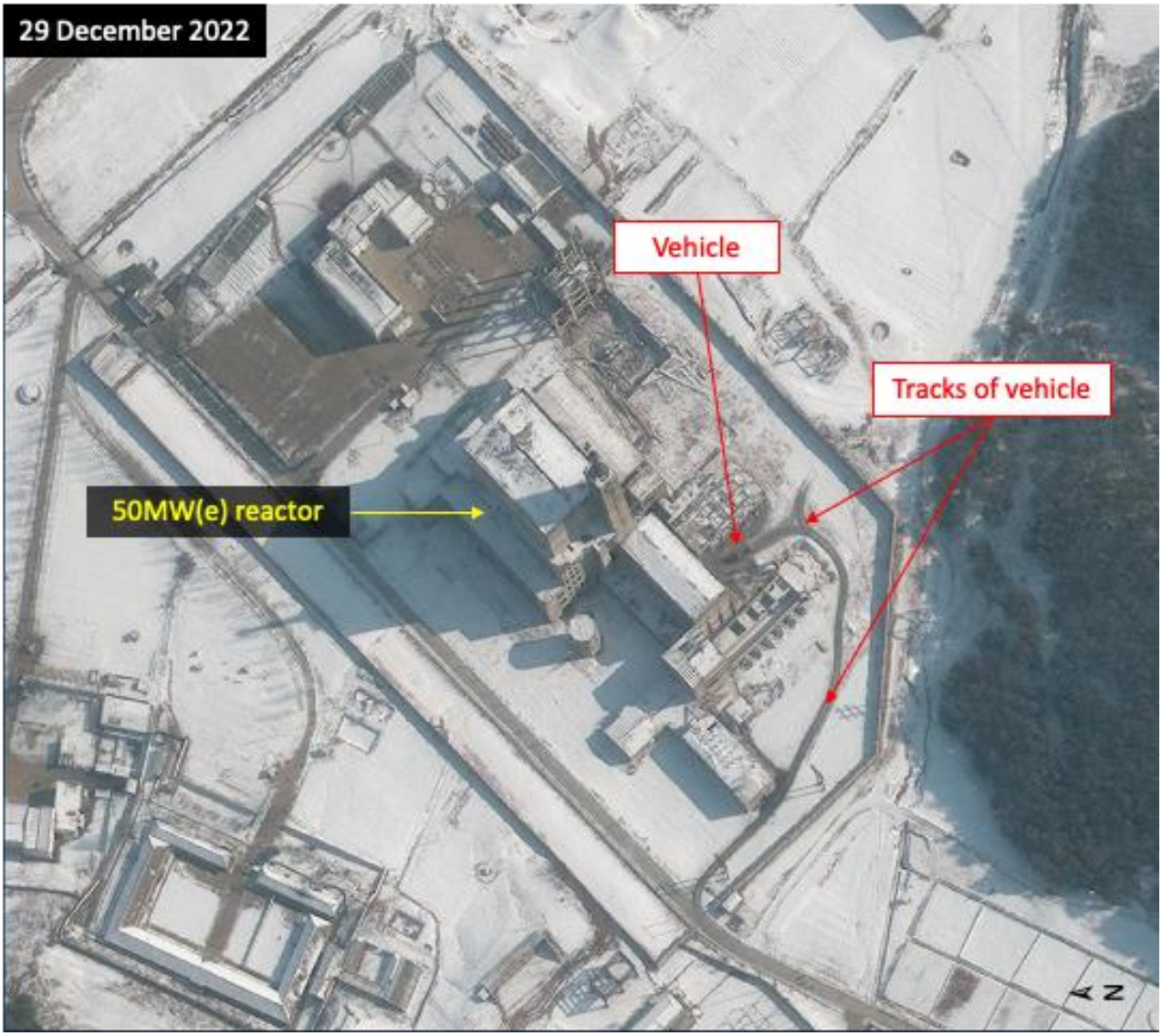
Annex 4: Activities at 5MW(e) reactor (39° 47′ 51″ N 125° 45′ 20″ E)

Source: Maxar Technologies, 22 July 2022; Planet Labs Inc., 18 September 2022; Maxar Technologies, 27 September 2022.

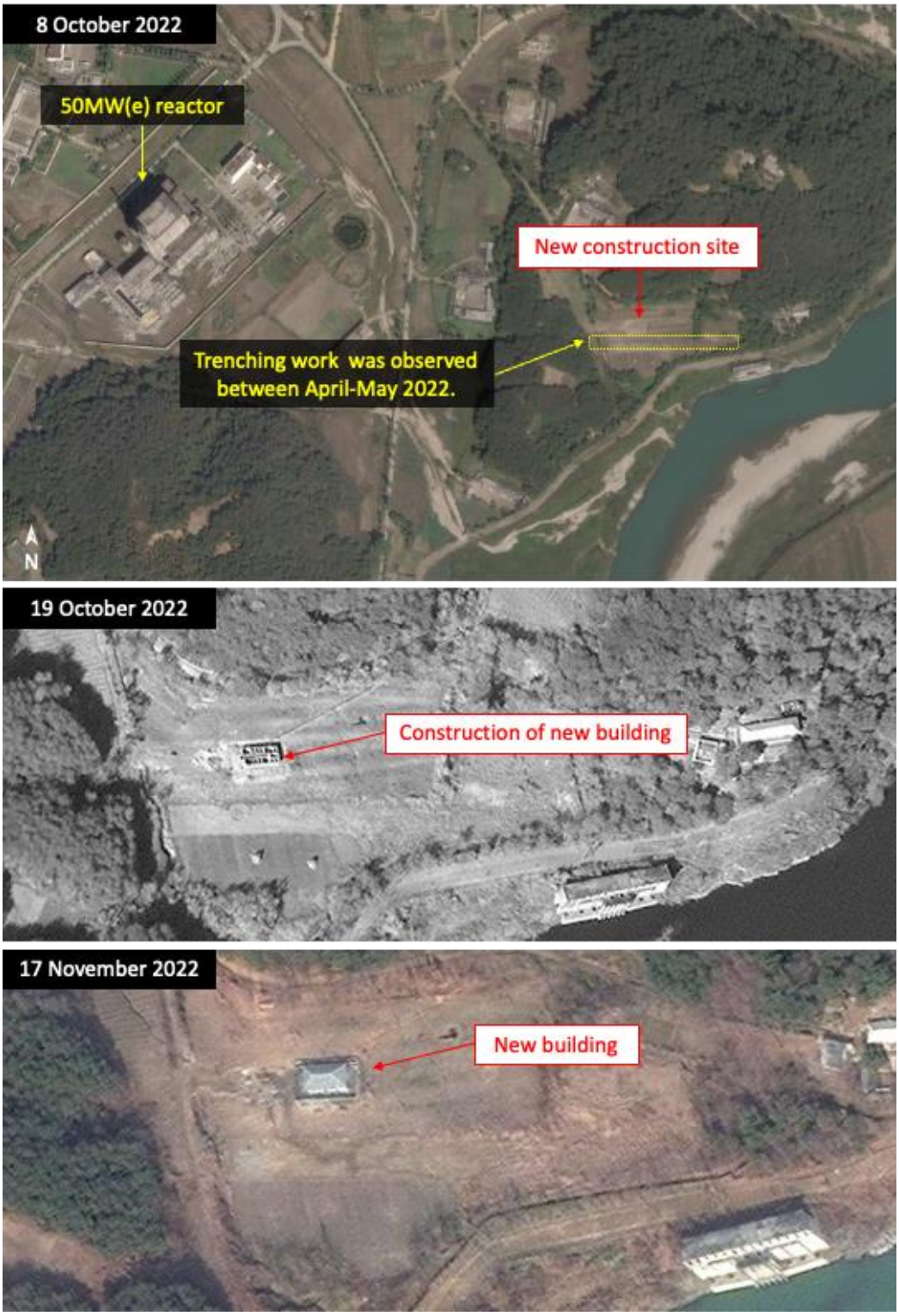
Source: Planet Labs Inc., 29 October 2022 and 4 November 2022.

Source: Maxar Technologies, 17 December 2022 and 29 December 2022.

Annex 5: Activities at 50MW(e) reactor (39° 47′ 20″ N 125°45′46″E)



Source: Maxar Technologies, 29 December 2022.



Source: Planet Labs Inc., 26 October 2022; Maxar Technologies, 19 October 2022 and 17 November 2022.

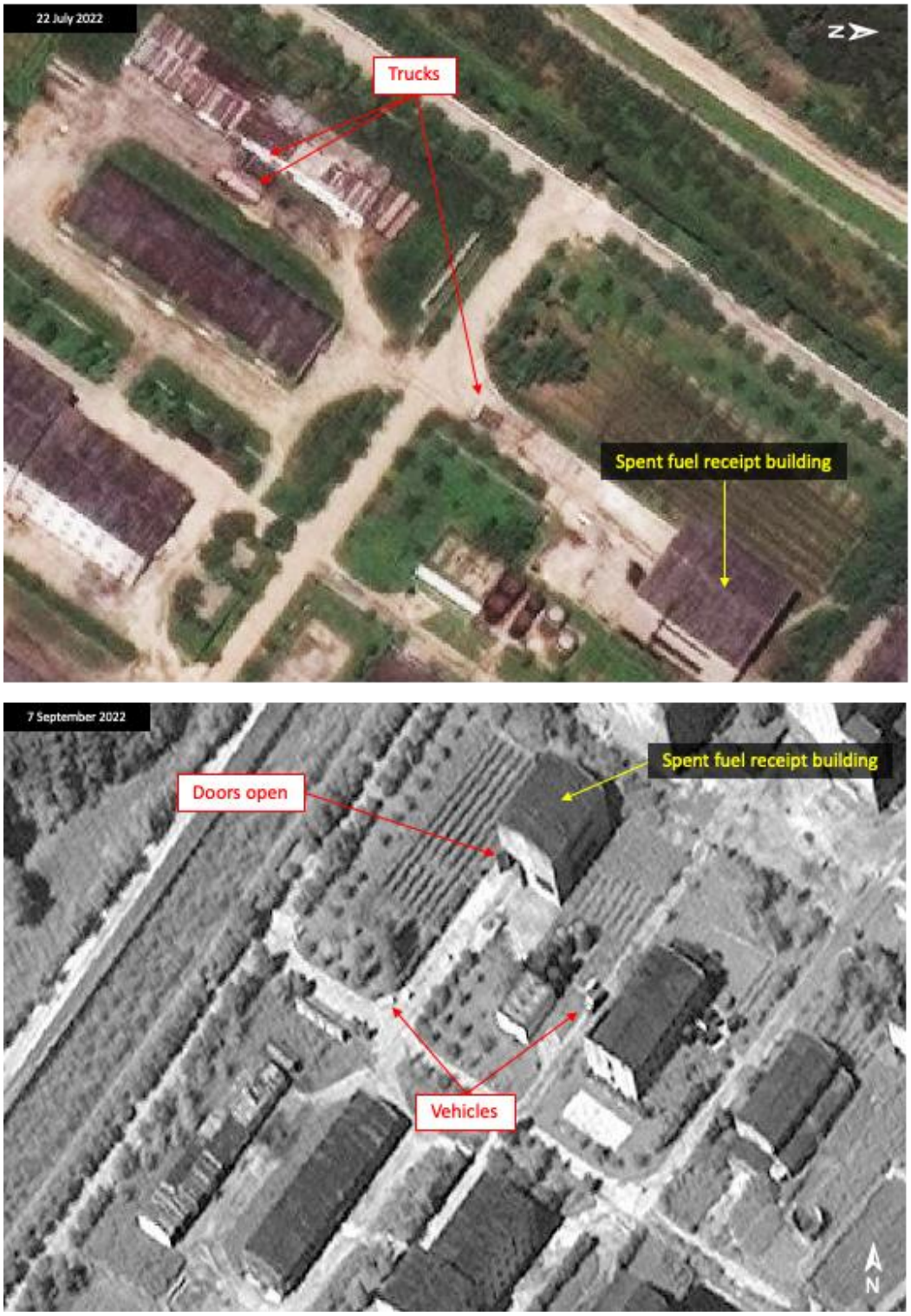
Annex 6: Radiochemical Laboratory and Coal-fired thermal plant (39° 46′ 50″ N 125° 45′ 08″ E)

Source: Maxar Technologies, 17 November 2022.

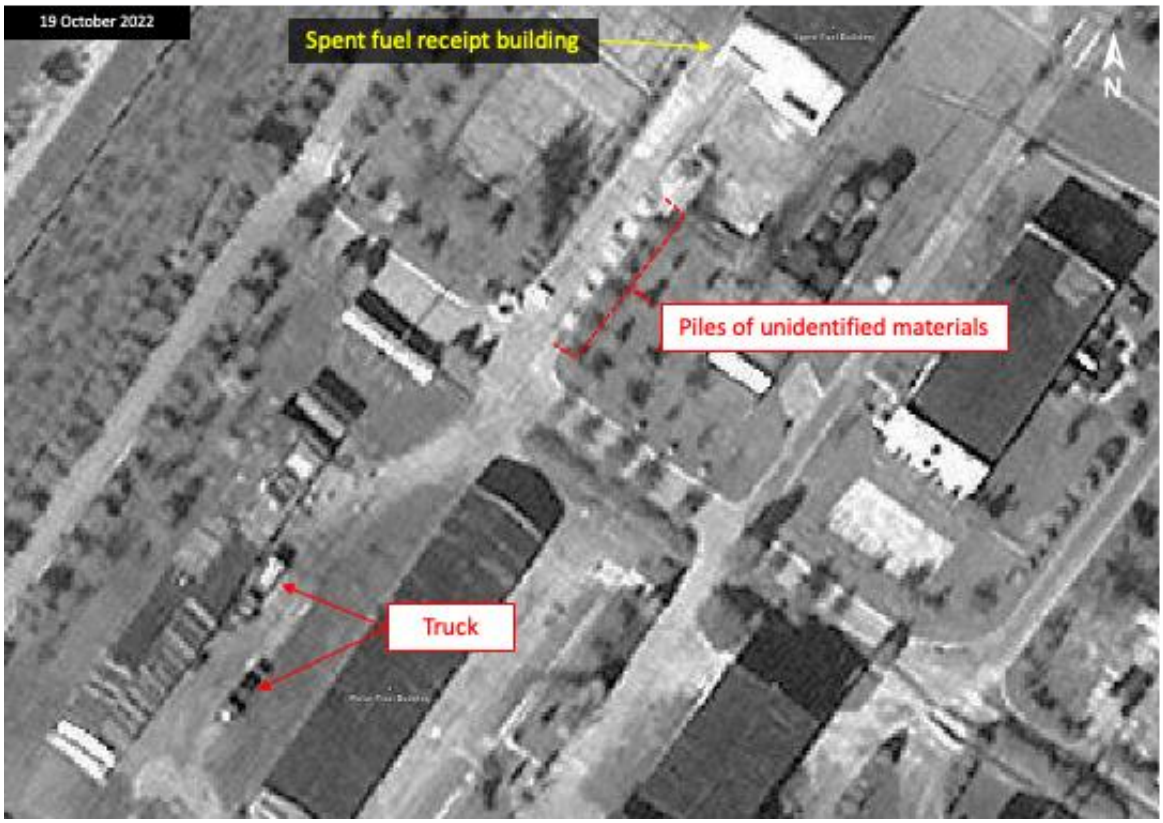
1) Smoke from thermal plant (39° 46′ 33″ N 125° 45′ 27″ E)

Source: Planet Labs Inc., 22 July 2022, 20 August 2022, 20 September 2022 and 8 October 2022.

2) Vehicular activities around the spent fuel receipt building (39° 46′ 50″ N 125° 45′ 08″ E)



Source: Maxar Technologies, 22 July 2022 and 7 September 2022.



Source: Maxar Technologies, 7 September 2022 and 19 September 2022.

3) New construction (39° 46′ 43″ N 125° 45′ 09″ E)

Source: Planet Labs Inc., 20 August 2022; Maxar Technologies, 19 October 2022; Maxar Technologies, 17 November 2022.

4) Suspected nuclear waste storage site (aka: Building 500) (39° 46′ 49″ N 125° 45′ 24″ E)

A think tank reported that previous excavation activity was observed at the east side of the facility in April 2016.[4] The Panel corroborated this observation.

According to the IAEA, this facility was not declared by the DPRK in its initial report submitted to the Agency in May 1992.[5] As the IAEA learned from a Member State that DPRK had disguised the facility by using camouflage, the Agency requested access to the facility in order to determine undeclared plutonium separation activities by analysing nuclear waste from the past reprocessing campaign.

IAEA visited the site in September 1992, although IAEA officials were not allowed to take samples and photographs of the facility because it was a military site.[6] Despite repeated requests by the Agency for additional access to the facility, DPRK continued to refuse.

Source: Planet Labs Inc., 11 April 2016, 12 June 2022 and 20 June 2022.

[4] See https://www.38north.org/2016/05/yongbyon053116/.
[5] See https://www-pub.iaea.org/mtcd/publications/pdf/pub1032_web.pdf.
[6] See The Institute for Science and International Security, *Solving the North Korean Nuclear Puzzle*.

Annex 7: Activities at the Yongbyon Nuclear Fuel Rod Fabrication Plant (39°46′15″N 125°44′57″E)

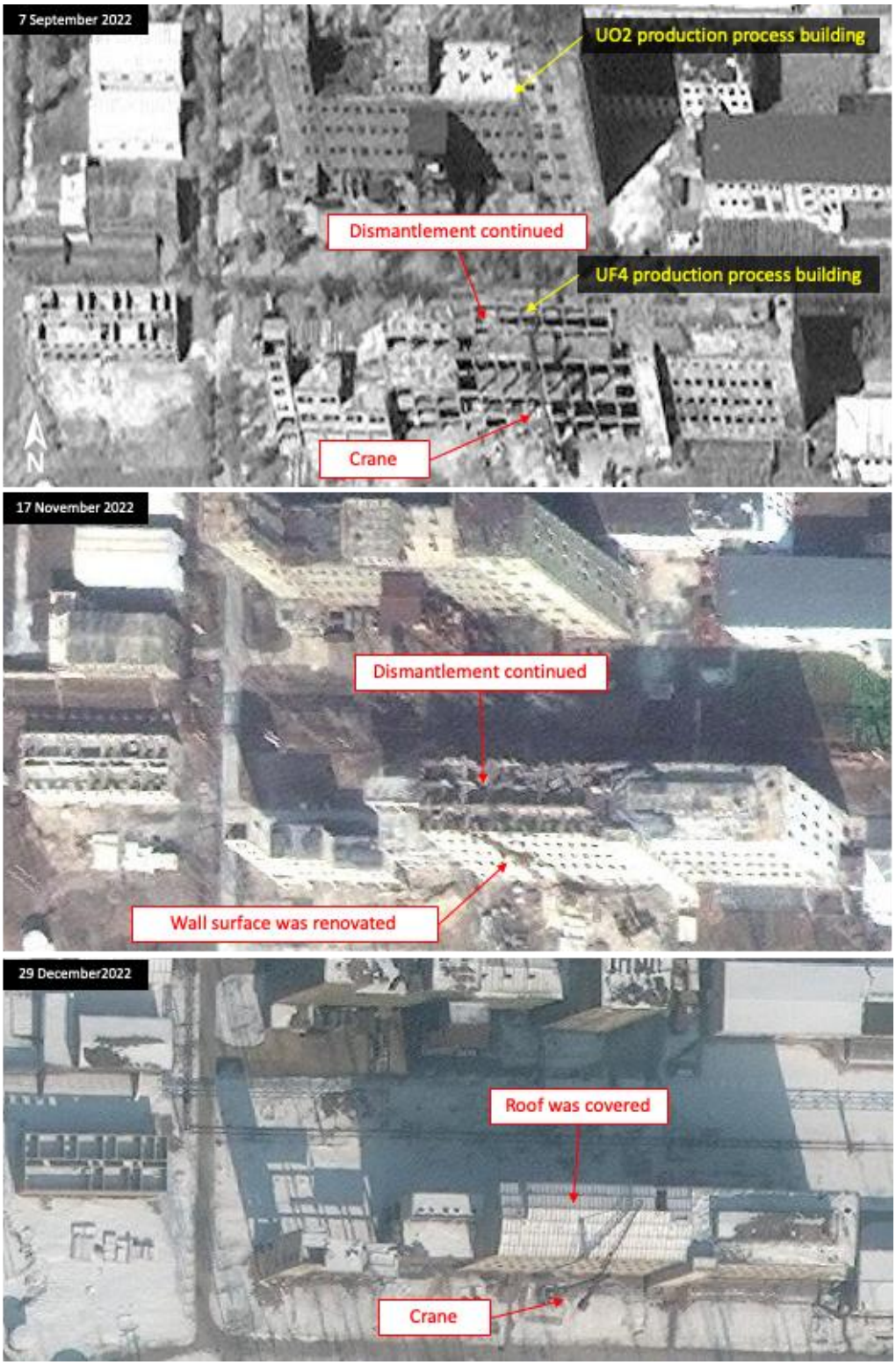
Source: Maxar Technologies, 22 July 2022.

1) Dismantlement or renovation of UF4 production process building (39° 46′ 10″ N 125° 44′ 55″ E)

According to the IAEA, production of UF 4 for conversion to natural uranium metal was conducted in this building until 1992 and was subject to the freeze under the Agreed Framework between 1994 and 2002. However, due to extensive corrosion of the equipment and interior of the building, IAEA assessed that building have not been used since 2002.[7]

Source: Planet Labs Inc., 8 June 2022 and 20 August 2022.

[7] See IAEA, GOV/2022/40-GC(66)/16, para. 22.

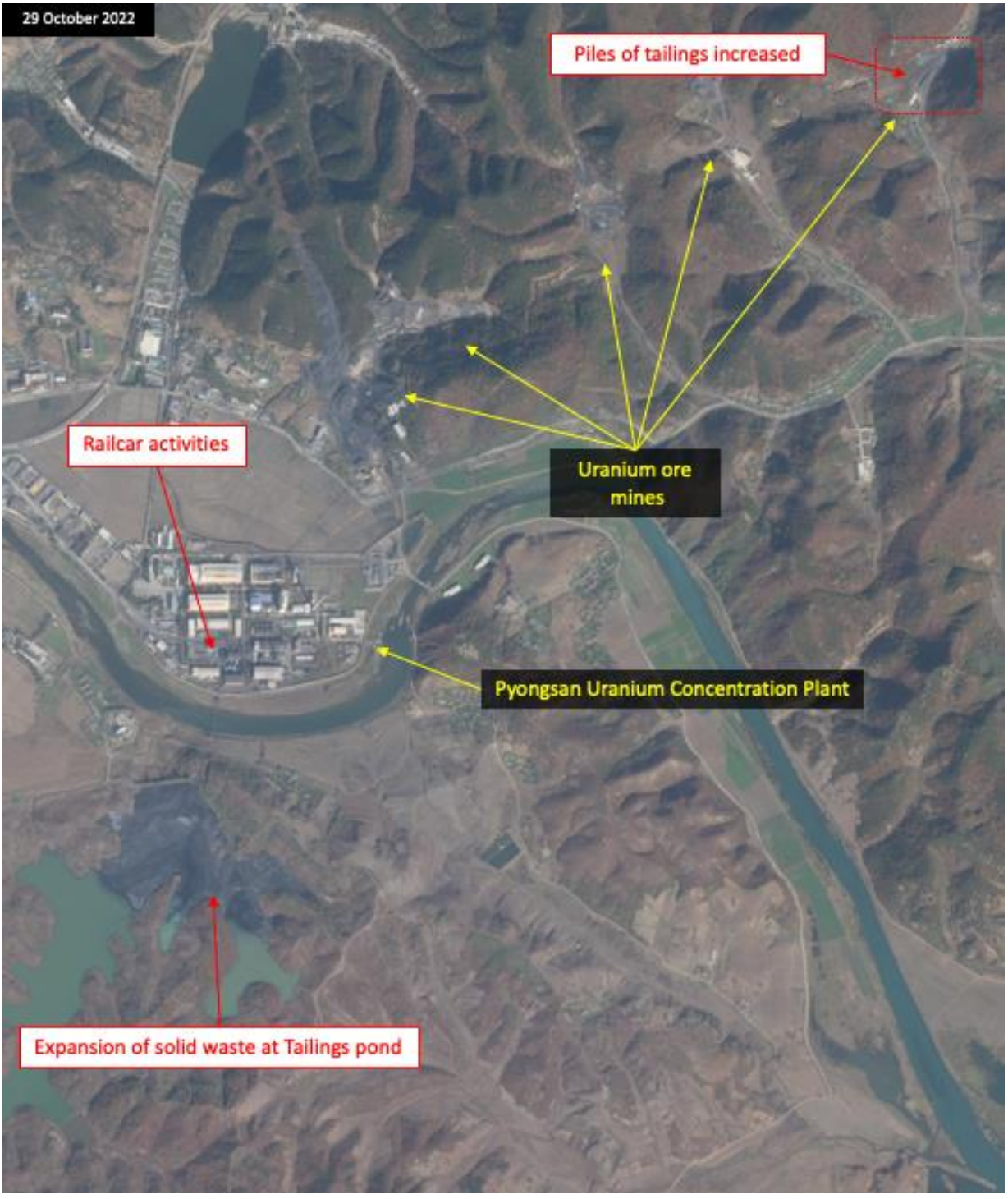


Source: Maxar Technologies, 7 September 2022, 17 November 2022 and 29 December 2022.

2) Plumes of steam from UO2 production process building (39° 46′ 12″ N 125° 44′ 55″ E)

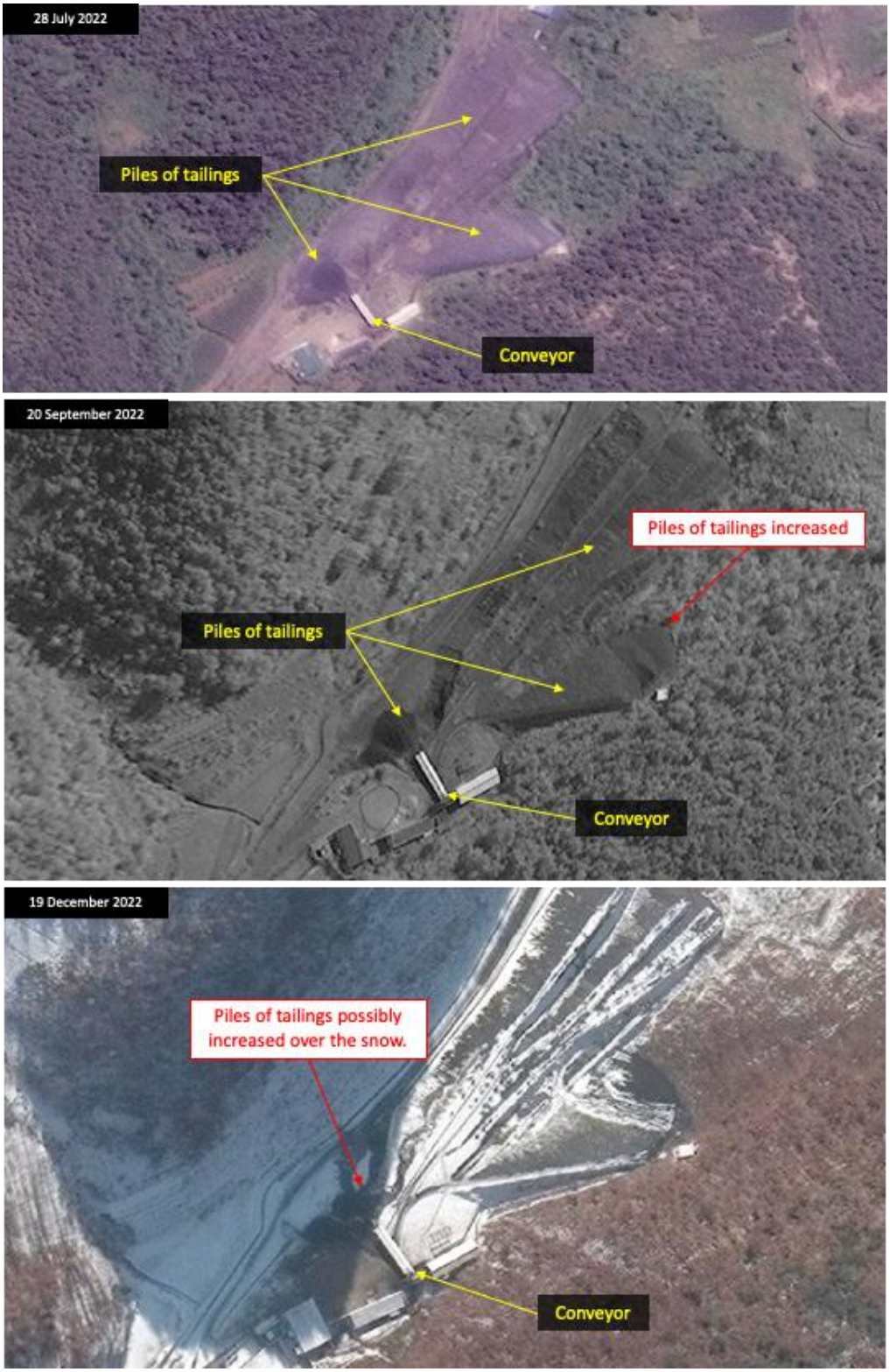
Source: Planet Labs Inc., 10 August 2022 and 4 November 2022; Maxar Technologies, 30 November 2022.

Annex 8: Activities at Pyongsan Uranium Mine and Concentration Plant (Location of the possible yellowcake production building at 38° 19′ 04″ N 126° 25′ 54″ E)



Source: Planet Labs Inc., 29 October 2022.

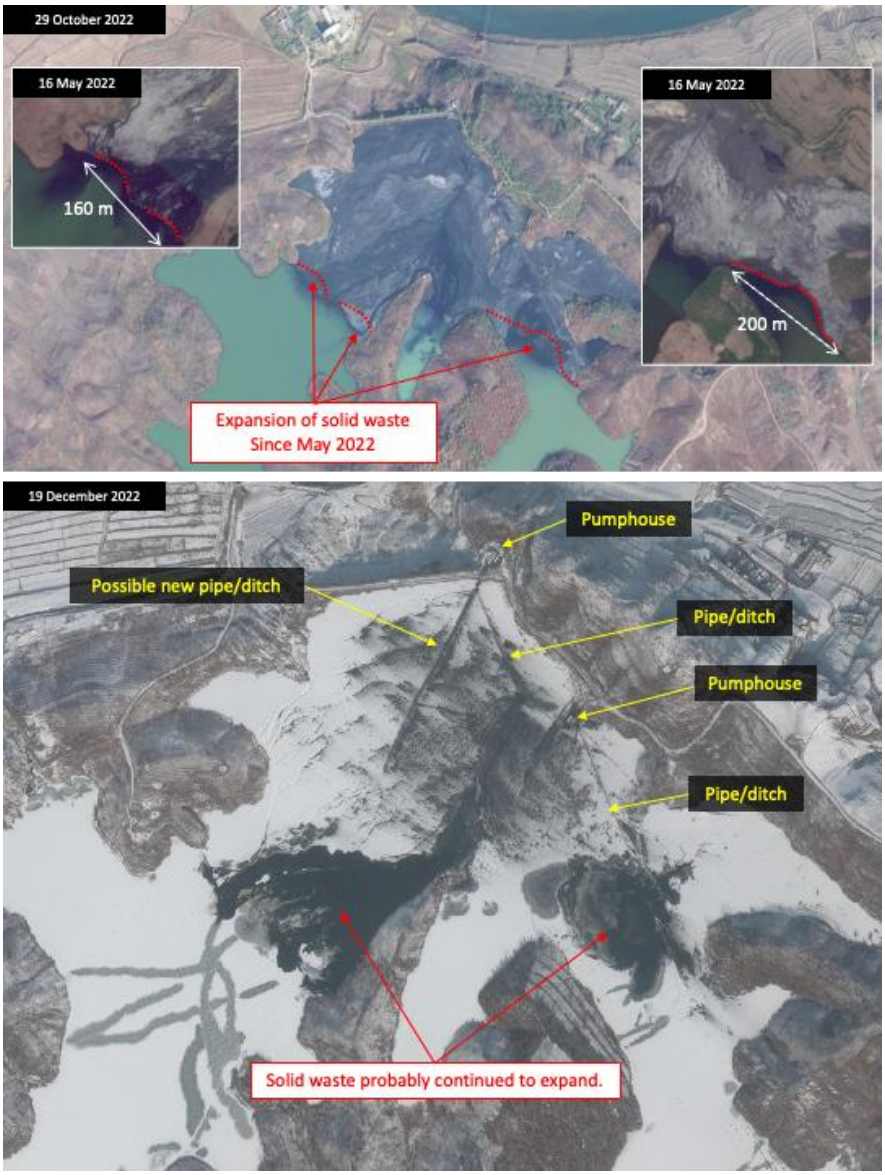
1) Expansion of the piles of tailings at the mine (38° 19′ 58″ N 126° 27′ 21″ E)



Source: Maxar Technologies, 28 July 2022, 20 September 2022 and 19 December 2022.

2) Tailings pond of Pyongsan Uranium Concentration Plant (38° 18′ 40″ N 126° 25′ 46″ E)

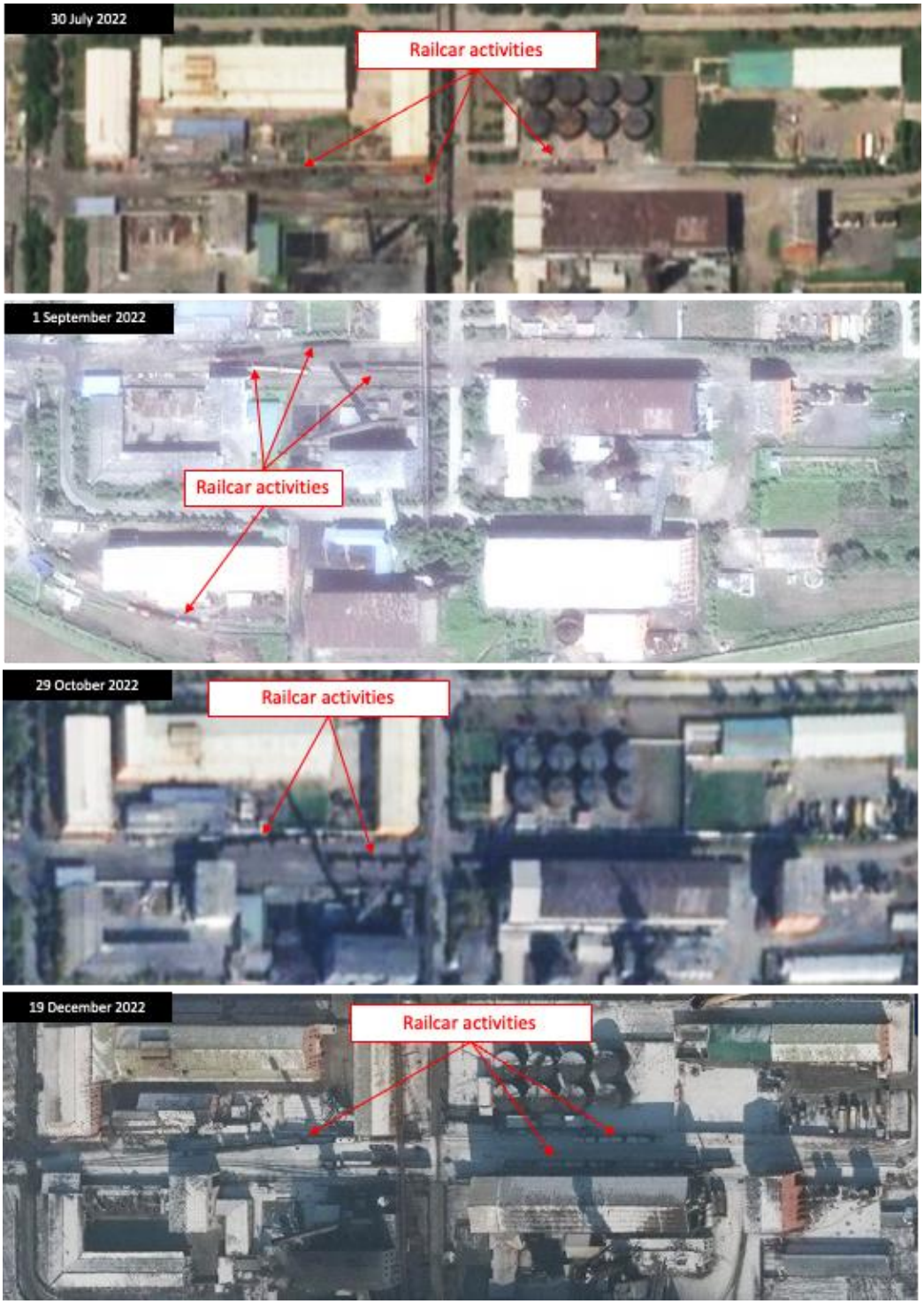
Images captured during the reporting period showed that solid waste in the tailings pond located to the south of the concentration plant continued to expand through pipes or ditches. A think tank reported that these pipes and ditches were laid on top of the accumulated solid waste and a slurry of solid/liquid is distributed from the pumphouses.[8]



Source: Planet Labs Inc., 16 May 2022 and 29 October 2022; Maxar Technologies, 19 December 2022.

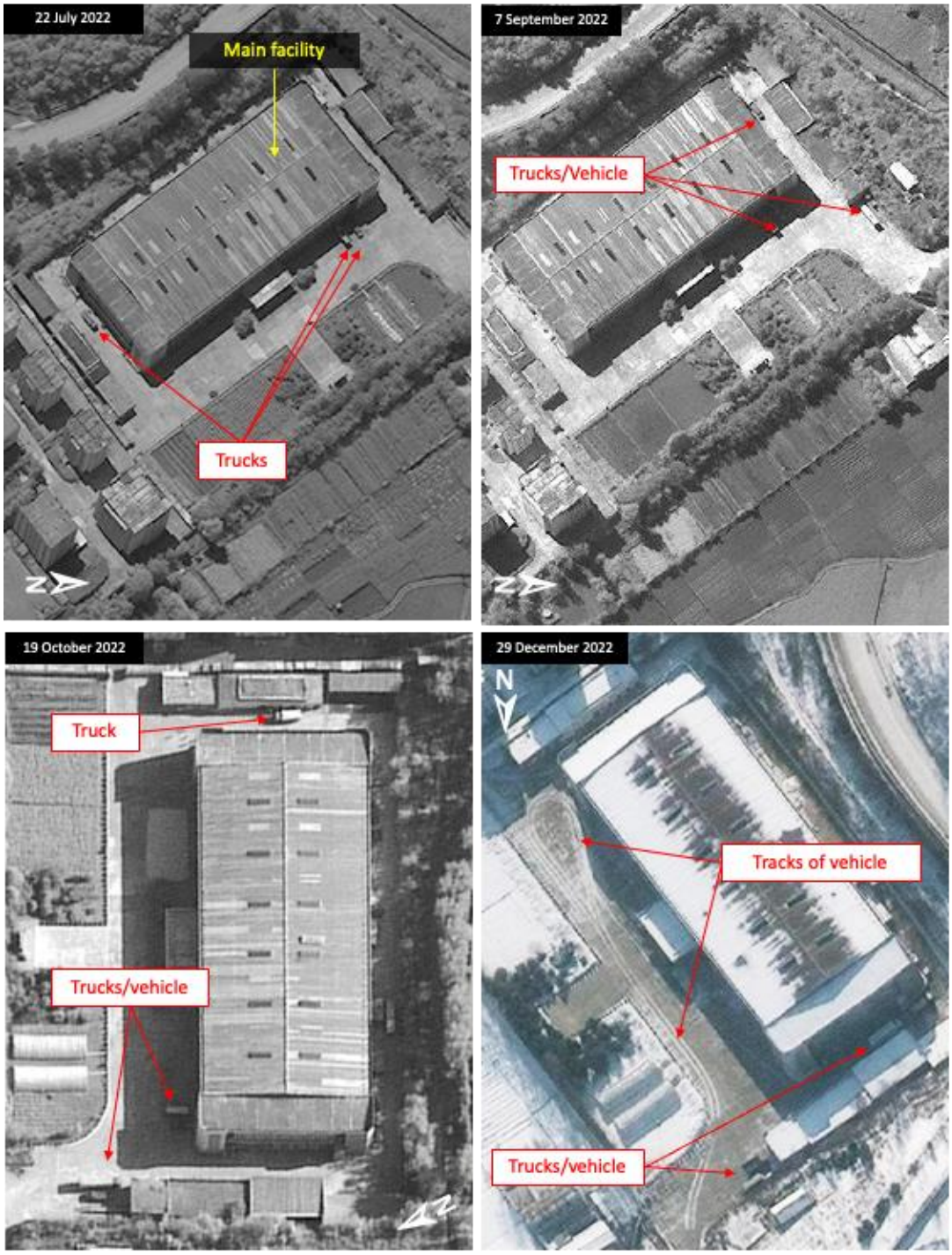
[8] See https://beyondparallel.csis.org/current-status-of-the-pyongsan-uranium-concentrate-plant-nam-chon-chemical-complex-and-january-industrial-mine/ and https://www.csis.org/analysis/pyongsan-uranium-concentrate-plant-nam-chon-chemical-complex-0.

3) Railcar activities at Pyongsan Uranium Concentration Plant (38° 19′ 03″ N 126° 25′ 56″ E)



Source: Planet Labs Inc., 30 July 2022; Maxar Technologies, 1 September 2022; Planet Labs Inc., 29 October 2022; Maxar Technologies, 19 December 2022.

Annex 9: Activities at Kangson (38° 57′ 26″ N 125° 36′ 43″ E)



Source: Maxar Technologies, 22 July 2022, 7 September 2022, 19 October 2022 and 29 December 2022.

Annex 10: Activities at Yongdoktong (40°01′51″N 125°18′28″E)

Source: Google Earth Pro, 27 September 2022.

1) Activities near the entrances of the tunnels (40° 01′ 51″ N 125° 18′ 28″ E)

Source: Maxar Technologies, 27 September 2022, 19 October 2022 and 29 December 2022.

2) Possible storage site for explosives (40° 03′ 16″ N 125° 18′ 11″ E)

Source: Maxar Technologies, 29 December 2022.

Annex 11: Reply from the research institute in Sweden

[redacted]

University Director

2022-10-04

[redacted]

[redacted]
Coordinator of the Panel of Experts
established pursuant to Security Council
Resolution 1874 (2009)

By email only

Reference: [redacted]

Dear [redacted]

In reference to your letter dated 1 September 2022 in which you requested [redacted] assistance in providing you with certain information, please find below as requested:

1. An individual with that name was employed as a laboratory technician at [redacted] between 23 April 2020 and 24 August 2021 and is currently employed as a postdoctoral researcher as of 25 august 2021. His employment will terminate on the 24 August 2023. His salary is SEK 34 000 per month, and he has no other benefits than holiday entitlement.

2. There are no wider academic exchanges between [redacted] and universities in DPRK nor have any other students or academics been accepted or employed at [redacted]

3. No other DPRK students or academics are currently studying or involved in research at [redacted]

4. [redacted] preventive measures to prevent unintentional proliferation and informs and educates its employees on making risk assessments of scientific studies, collaborations, and dual-use items; goods and technologies that may be used for both civilian and military purposes.

   For [redacted] it is important to prevent the misuse of academic knowledge for military purposes or for illegal weapons of mass destruction programs. Dual-use items may not be exported outside the EU without a license from the Swedish Inspectorate of Strategic Products (ISP). In some special cases, transfer within the EU of such items also requires a license. [redacted] must ensure that all handling of dual-use items is carried out in accordance with applicable export control laws and regulations.

[redacted]

Furthermore, [redacted] International Relations Office works with responsible internationalization and risk assessment of international collaborations.

As a preventive measure, there are also guidelines for export control available at [redacted] outlining the responsibility and the support available regarding these issues. Moreover, there is information available for researchers and teachers regarding regulations and how to risk assess international partnerships.

[redacted]

5. [redacted] mission is to conduct education and research. Questions about visits, residence, citizenship and asylum are the responsibility of Sweden's central immigration authority, the Swedish Migration Agency, which is a Swedish government administrative authority. [redacted] therefore kindly refers you to contact the Swedish Migration Agency for an answer to this question.

[redacted] has nothing further to add at this point and trusts the above proves useful and satisfactory.

Yours sincerely,

[redacted]

Acting University Director

Source: The Panel.

Annex 12: Replies from institutes in the United Kingdom and Brazil

1) Reply from the University in the United Kingdom

[redacted]

[redacted]
Coordinator of the Panel of Experts
United Nations Headquarters
Siege
New York NY10017
USA

[redacted]

28th September 2022

Dear [redacted]

[redacted]

I write on behalf of Professor [redacted], President and Vice-Chancellor of the [redacted], in response to your letter of 1 September 2022. You refer in that letter to a previous letter dated 19 May 2022, and I do need to take this opportunity to note that we have no record of having received your previous correspondence.

In your letter of 19 May 2022, you asked four questions directed at clarifying the extent of academic exchanges between the [redacted] and the Democratic People's Republic of Korea (DPRK) research institutions, notably the Pyongyang University of Science and Technology (PUST). Our response in Appendix 1, attached, seeks to respond fully to the first three questions. I should also add that we are not aware of any formal collaboration arrangements between DPRK institutions, including PUST, and the [redacted]

Responding to question four, the three students in question were here for only a short, six-month, study-abroad undergraduate study programme. These undergraduate studies would have only involved access to widely published open-access information, and we can therefore be confident that none of their studies would or could have contributed in any way to proliferation in the sensitive areas you have asked about. The [redacted] does not routinely recruit students from the DPRK. In the rare instances, covered above, where any students holding DPRK nationality have studied here, we are confident we have complied with all relevant British Government guidance and legislation. All international students are subject to UK Government visa regulations. Student visas are issued by the UK Home Office, and can only be issued where the applicant has provided a Confirmation of Acceptance for Studies from the UK university they hold a place with. We provide all necessary information to facilitate the UK Government's scrutiny and assessment of applications.

In responding to your request we have consulted our Data Protection Officer to ensure that sharing the personal data is necessary and proportionate. Under the UK General Data Protection Regulations together with the Data Protection Act (DPA) 2018 we have identified UK GDPR Article 6(1)(e) as our lawful basis for processing this personal data and Article 9(2)(g) (substantial public interest), as a specific condition for processing special category data, with the linked condition in paragraph 10 of Schedule 1 of the DPA 2018 (preventing or detecting unlawful acts).

[redacted]

We are relying on this condition because:

- the disclosure (sharing) is necessary for the purposes of preventing or detecting an unlawful act;
- asking for the individual's consent would prejudice those purposes; and
- the disclosure is necessary for reasons of substantial public interest.

I trust you find this a comprehensive response to your enquiries. Please do not hesitate to get in touch again should you have any further queries.

Yours sincerely

[redacted]

[redacted]
Vice-President (External Engagement)

[redacted]

APPENDIX 1

Date of compilation: 21st September 2022

1. Confirmation of students named in Annex 1

Our records indicate a match with the students named in Annex 1 of the UN letter.

[redacted]

- Was registered with the University between 24th September 2018 and 11th March 2019
- Registered on the route: UCD00004: Biosciences Module Only – UG
- Completed the following modules

[redacted]	Clinical Immunology And Immunohaematology
[redacted]	Introduction To Mathematical Biology
[redacted]	Man And The Environment
[redacted]	Management Of Scientific Research

[redacted]

- Was registered with the University between 24th September 2018 and 11th March 2019
- Registered on the route: UCD00004: Biosciences Module Only – UG
- Completed the following modules:

[redacted]	Clinical Immunology And Immunohaematology
[redacted]	Introduction To Mathematical Biology
[redacted]	Man And The Environment
[redacted]	Management Of Scientific Research

[redacted]

- Was registered with the University between 24th September 2018 and 11th March 2019
- Registered on the route: UCD00004: Biosciences Module Only – UG

[redacted]

- Completed the following modules:

[redacted]	Clinical Immunology And Immunohaematology
[redacted]	Introduction To Mathematical Biology
[redacted]	Man And The Environment
[redacted]	Management Of Scientific Research

2. Current students at [redacted]

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	Enrolled	[redacted]	[redacted]	[redacted]	Economics BSc	North Korean	UK	Overseas

- [redacted]

- [redacted]
  - First registered on 19th September 2022
  - Is expected to complete her programme in June 2025
  - Is on an 'Exempt Family Member' vignette, so they are exempt from immigration requirements as someone in their immediate family is here in a Diplomatic capacity
  - Is not eligible for the University's scholarships and bursaries due to overseas status.

[redacted]

Source: Panel, redacted by the Panel.

2) Reply from the institute in Brazil

To	**United Nations** [redacted] Coordinator of the Panel of Experts established pursuant to Security Council Resolution 1874 (2009)
From	Professor Robe [redacted] [redacted]
Reference	***S/AC.9/2000/PE/OC.177***

September 26th, 2022

Dear [redacted]

[redacted] is a nonprofit organization created in 1980 by professors from the Business Administration Department of the [redacted], Brazil's foremost state-owned research university, with the original mission of supporting the development and dissemination of management knowledge in Brazil through consulting, executive education, and extension activities. Anticipating a need for skilled managers in a changing environment, in 1993 [redacted] designed and launched the first International Executive MBA in Brazil, currently still a flagship program of the institution.

[redacted] has signed many partnerships over the years with important universities and business schools all around the world, such as [redacted], among others.

On May 13th, 2015 FXX signed a Memorandum of Understanding (MOU) with Graduate School of Pyongyang University of Science & Technology, located in Pyongyang, D.P.R. Korea.

On November 11th, 2016, more than a year after the MOU was signed, The United Nations' Security Council approved the Resolution 2123, which suspends scientific and technical cooperation involving persons or groups officially sponsored by or representing the DPRK except for medical exchanges unless in specified cases exempted by the 1718 Committee or in all other cases notified to the Committee in advance.

On June 20th, 2016, two North Korean students ([redacted] and [redacted]) had already graduated from [redacted]'s International MBA.

The Security Council Resolution was introduced in the Brazilian legal system through Presidential Decree No. 9,033, dated April 19th, 2017. By that time, two other North Korean students had already started their MBA studies at [redacted] ([redacted] and [redacted], the two students mentioned in the letter).

The two students were already in Brazil and had started their studies at [redacted] before the Decree was in force and were allowed to complete the MBA. Once they were already living in Brazil, spent money and efforts to adapt to a new culture, and had not violated any rule, and the Decree was not in force, the retroaction of the rule could not harm them.

In view of this, [redacted] did not notify the Committee in advance, as the Resolution was not in force in the Brazilian legal system. To clarify, [redacted] has not maintained academic relations of any nature with Graduate School of Pyongyang University of Science & Technology, or any other DPRK institution, since the Decree No. 9,033/2017 came into effect.

Furthermore, we would like to point out that all the classes taken by the North Korean students are related to the field of business and administration and are not associated to any of the fields that could contribute to the DPRK nuclear activities or the development of nuclear weapons delivery systems, in accordance with paragraph 17 of The United Nations Security Council Resolutions 2270 (2016) and paragraph 10 of 2321 (2016).

In this regard, we would like to respond the questions posed by the Panel:

1) **Any confirmation of the information in Annex 1. Have these named students from PUST participated in graduate studies of any sort at [redacted]?**

   We confirm that [redacted] and [redacted] have graduated from [redacted]'s International MBA. They were enrolled at [redacted] from March 13th, 2017 to August 28th, 2018.

   Two other students had already graduated from the same program, on June 20th, 2016, before the Security Council Resolution 2321 (2016) came into existence. Their names are [redacted] and [redacted].

2) **Information on the current status of any academic exchanges between [redacted] and PUST. How many PUST students or academics have studied at or visited [redacted] since 2016?**

   [redacted] currently has no academic relationship of any kind with Graduate School of Pyongyang University of Science & Technology, or any other DPRK institution.

3) **Are there other DPRK students or academics currently studying or involved in research at [redacted], which could be considered as falling under the paragraph 11 of the resolution 2321(2016) mentioned above? If so, please provide names, any academic affiliation in DPRK, course and thesis titles, the period of affiliation with the University and details about these individuals' source(s) of income whilst in Brazil, including sponsorship or scholarships (if applicable);**

   There are no other DPRK students or academics currently studying or involved in research at [redacted].

4) **Information on any preventive measures taken by [redacted] to determine that any scientific or technical studies undertaken by any DPRK students or academics would not contribute to the DPRK's proliferation-sensitive nuclear activities, ballistic missile-related or other WMD programmes; and**

[redacted]'s courses do not address any issue or matter that could contribute to DPRK proliferation-sensitive nuclear activities, ballistic missile-related or other weapon of destruction programs. [redacted] is a business school, teaches subjects only related to the field of Business and Administration.

5) **Information about their immigration (departure) after they received Masters (if applicable).**

[redacted] has no information on the immigration (departure) of its alumni.

We remain at your disposal for any further clarification.

Yours faithfully,

Professor [redacted]
President of [redacted]

Annexes:

1. Information about DPRK students:

[redacted]

Source: Panel, redacted by the Panel.

Annex 13: Joint studies of DPRK scholars with MBI

1) List of papers

No	Title and we reference	Journal or source of information	Authors
1	Deep subwavelength flow-resonant modes in a waveguide-coupled plasmonic nanocavity	***Physical Review B*** Volume 101, Issue 24 15 June 2020 https://journals.aps.org/prb/abstract/10.1103/PhysRevB.101.245420	**Pae Ji-Song** **Im Song-Jin** **Song Kil-Song** **Ri Chol-Song** **Ho Kum-Song** **Han Yong-Ha** [redacted]
2	Nanoscale magnetization and third-order nonlinearity by the plasmon-induced inverse Faraday effect in graphene-covered semiconductors	***Physical Review B*** Volume 100, Issue 15 15 October 2019 https://journals.aps.org/prb/abstract/10.1103/PhysRevB.100.155404	**Ri Chol-Song** **Im Song-Jin** **Pae Ji-Song** **Ho Kum-Song** **Han Yong-Ha** [redacted]
3	Magnetoplasmonic isolators based on graphene waveguide ring resonators	***Physical Review B*** Volume 100, Issue 4 15 July 2019 https://journals.aps.org/prb/abstract/10.1103/PhysRevB.100.041405	**Pae Ji-Song** **Im Song-Jin** **Ri Chol-Song** **Ho Kum-Song** **Song Gil-Song** **Han Yong-Ha** [redacted]
4	All-optical magnetization switching by two-frequency pulses using the plasmon-induced inverse Faraday effect in a magneto-plasmonic structure	***Physical Review B*** Volume 99, Issue 4 15 January 2019 https://arxiv.org/pdf/1808.04230.pdf	**Im Song-Jin** **Pae Ji-Song** **Ri Chol-Song** **Ho Kum-Song** [redacted]
5	Ultracompact high-contrast magneto-optical disk resonator side-coupled to a plasmonic waveguide and switchable by an external magnetic field	***Physical Review B*** Volume 98, Issue 4 15 July 2018 https://arxiv.org/pdf/1808.00539.pdf	**Pae Ji-Song** **Im Song-Jin** **Ho Kum-Song** **Ri Chol-Song** **Sok-Bong Ro** [redacted]
6	Switchable plasmonic routers controlled by external magnetic fields by using magneto-plasmonic waveguides	***Scientific Reports*** volume 8, Article number: 10584 (2018) 12 July 2018 https://www.nature.com/articles/s41598-018-28567-8#citeas	**Ho Kum-Song** **Im Song-Jin** **Pae Ji-Song** **Ri Chol-Song** **Han Yong-Ha** [redacted]
7	Ultrafast Nonlinear Optical Effects of Metal Nanoparticles Composites	Nanoplasmonics - fundamentals and applications IntechOpen (2017) https://cdn.intechopen.com/pdfs/54303.pdf	**Kim Kwang-Hyon** [redacted]
8	Third-order nonlinearity by the inverse Faraday effect in planar magnetoplasmonic structures	***Physical Review B*** Volume 96, Issue 16 15 October 2017 https://arxiv.org/pdf/1807.06961.pdf	**Im Song-Jin** **Ri Chol-Song** **Ho Kum-Song** [redacted]
9	Magnetically-tunable cutoff in asymmetric thin metal film plasmonic waveguide	***Applied Physics Letters*** Volume 111, Issue 7 15 August 2017 https://arxiv.org/pdf/1807.06255.pdf	**Im Song-Jin** **Ri Chol-Song** **Pae Ji-Song** **Han Yong-Ha** [redacted]

*DPRK scholars are underlined and bold.
Source: Max-Born Institute, https://mbi-berlin.de/p/joachimherrmann (annotated by the Panel).

2) List of DPRK scholars and their affiliations contributing abovementioned papers

Name	Department	Affiliation
Im Song-Jin	Department of Physics	Kim Il Sung University
Pae Ji-Song		
Song Kil-Song		
Ri Chol-Song		
Ho Kum-Song		
Han Yong-Ha		
Song Gil-Song		
Ro Sok-Bong		
Kim Kwang-Hyon*	Institute of Lasers Institute of Physics	State Academy of Science

*The publication of Kim Kwang-Hyon in 2017 showed that he was affiliated with Institute of Lasers, State Academy of Science, but the publication in 2022 showed Institute of Physics, State Academy of Science.

Source: The Panel.

Annex 14: Assessment by Member States (Excerpt)

[Member State 1]

Assessment of the potential application of laser research conducted by the Max-Born-Institute and the Democratic People's Republic of Korea to the development of weapons of mass destruction and/or military capabilities

[MS1] has assembled the opinions of domestic experts on strategic items and nuclear materials. Some of the experts have stated that the nine joint studies listed in Annex 1 of the Panel's letter are expected to be fundamental theories that can be applied to advanced optical sensors, optical communication, inter-satellite communication, surveillance and reconnaissance, and military special-purpose communications systems.

They also indicated that Professor Song-Jin Im's group and Dr. Kwang-Hyon Kim's research are related to the technologies applicable to advanced optical sensors, optical communication, and lasers, which fall under the basic technology research of the dual-use items controlled by the Wassenaar Arrangement, such as optical sensors, devices, and lasers.

In addition, all of the experts assessed that the joint studies are unlikely to be applied to uranium enrichment technology. /END/

Source: Member State.

[Member State 2]

It is not possible this stage to further link the research in the publications to WMD / BM directly as the research is fundamental and generally theoretical and as such is a long way from application.
It would be difficult for us to confirm whether this technology is being used for means in contravention of existing sanctions and we are not currently able to link this research directly to BM development.

We do note the following points.

- Theoretical and fundamental research could have nano-optical applications for advanced processing and optical computing.
- Collaboration with a highly regarded Research Institute such as Max-Born will give a level of credence to the collaborators from DPRK; access to Internationally recognized peer reviewed journals; feedback and tutoring in fundamental and theoretical physics.
- Advanced data processing and high performance computing developments will have military applications including WMD type projects in the future.
- Max -Born collaboration opens up opportunity to translate theoretical to experimental research for nano-optical photonics. The fundamental nature suggests a long term interest for DPRK which would require experimental verification i.e. laboratory based before being scaled and applied.

Source: Member State.

Annex 15: Reply from MBI

MAX-BORN-INSTITUT FÜR NICHTLINEARE OPTIK UND KURZZEITSPEKTROSKOPIE IM FVB E.V.

Max-Born-Institut

To: [redacted]
Coordinator of the Panel of Experts
established pursuant to Security Council
Resolution 1874 (2009)

[redacted]
Name Prof. [redacted]
☎ [redacted]
email: [redacted]

Berlin, 17. Januar 2023

Dear [redacted]

on 2.12.2022 we have received your letter on behalf of the Panel of Experts established pursuant to Security Council Resolution 1874, expressing concern about a number of publications that MBI researchers Dr. [redacted] and Dr. [redacted] have produced together with DPRK researchers. We comment on your questions as follows:

1) Confirmation of, or explanation or comment on, the information contained in the media report in Annex 1. How was this joint research funded?

As correctly reported by Deutsche Welle on November 28th 2022, one of our scientists (Dr. [redacted]) has continued a scientific cooperation with DPRK scientists after the UN Security Council resolution of November 2016.
Dr. [redacted] continued to work for us beyond his retirement with a reduced job share. He has continued his theoretical research work and has continued publishing papers with his MBI affiliation. As a retiree, he no longer had access to the resources at MBI to perform computational work to test his theoretical ideas. Therefore, he decided to resume his collaboration with a DPRK researcher (Dr. Im) who previously worked with him at MBI from 2008 to 2010. This collaboration led to 7 of the 9 papers that are listed in Annex 2. Paper 7 in Annex 2 is not the result of research that was carried out after 2016, but is an invited review article together with the other DPRK researcher who worked at MBI from 2009 to 2012 (Dr. Kim), as well as with Dr. [redacted]´s previous MBI colleague Dr. [redacted], who is still working for MBI. Paper 7 had already been submitted at the time of the UN Security Council resolution (on September 21st 2016). Paper 1 is a paper that was published by Dr. Im and co-workers without involvement of Dr. [redacted], and was submitted and published after Dr. [redacted] terminated his collaboration with DPRK researchers at the request of the MBI Directorate. The MBI Directorate has asked Dr. [redacted] to contact the editors of Physical Review B in order to get his name removed from the author list. We note that Dr. Im and Dr. Kim originally came to the MBI on their own initiative via fellowship programs funded by German organizations, independently of any institutional cooperation. These visits were completed in 2012.
Within Germany, the funding for the research work and the publications that were published after the UN Security Council resolution was limited to a modest supplement of Dr.

Prof. Dr. [redacted] Prof. [redacted]
Max-Born-Institut, Max-Born-Straße 2 A, D-12489 Berlin, Tel.: +49 30/6392 1505, Fax: +49 30/6392 1519

Berlin Adlershof

Max-Born-Institut

[redacted]'s reduced job share. The work in the DPRK was not at any time financially supported by MBI. In particular, no expenses were incurred, e.g. for the computational work. In a few cases, the Institute has covered the open access publication cost within the usual scope of the Institute.

While the existence of the joint publications is correctly described in the Deutsche Welle article, MBI strongly disagrees with the suggestion in the article that MBI has permitted a research collaboration with North-Korea with a dual-use risk. The subject of this cooperation were theoretical calculations and modelling of the physical properties of a special form of optically excited matter, so-called plasmons. These purely theoretical results have not been experimentally tested, nor technologically applied. Like all research results produced at MBI, these are fundamental research results that have been published in the freely accessible scientific literature. In the view of MBI, there is no recognizable dual-use potential of these research results.

We emphasize that MBI conducts basic research for civilian purposes only on the interaction of light with matter, and uses lasers in combination with methods of ultrafast nonlinear spectroscopy and structure research. MBI does not engage in any research with military relevance and does not collaborate with research organizations that pursue military goals. MBI vehemently rejects any suggestion of a possible connection between MBI's research activities and the nuclear weapons program in North-Korea.

2) Further information regarding the abovementioned DPRK academics (their specific expertise, their affiliation in DPRK, their contact details);

Because the cooperation related exclusively to the specific publications, the Institute does not have a conclusive overview of the scientists' affiliation within DPRK. As far as we know the specific expertise of Prof. Song Jin Im is on the theory of nonlinear optical phenomena in nano-plasmonic devices, magneto-plasmonic nanostructures, plasmonic waveguides, and the next generation of magnetic memory devices. Prof. Im is currently a professor at the department of physics, Kim Il Sung University, Pyongyang. His e-mail address is [redacted]@ryongnamsan.edu.kp

The specific expertise of Dr. Kwang-Hyon Kim is topological photonic crystal fibers and systems, material sciences, and solid state physics. He is affiliated with the [redacted]. We do not have further contact information for him.

3) Information on the current status of any wider academic exchanges between your institute and DPRK universities. Have any DPRK students or academics studied at or visited your institute since 2016, and if so, please provide details? What other collaborative academic work has your institute conducted with DPRK academics, institutions or universities?

There have been no academic exchanges of MBI staff with DPRK universities since the Security Council resolution was passed other than listed under (1). There have been no visits from DPRK students or academics to MBI since Dr. Kim left in 2012, and there has been no other collaborative work.

4) Please explain the relative scientific contributions of the research teams involved in the co-authored research. What did the DPRK academics contribute (in terms of expertise or experimental data)? What data was provided to the DPRK academics in the process of joint research?

In line with what was described in response to question 1), the collaboration consisted of computational work that was carried out by the DPRK academics on the basis of theoretical ideas put forward by Dr. [redacted]. The computational work was conducted using software that was developed by the DPRK academics. No transfer of software or other form of technology transfer took place.

5) Details regarding any preventive measures taken by your institute to determine that any scientific or technical studies undertaken by academics at your institute with any DPRK students or academics would not contribute to the DPRK's proliferation-sensitive nuclear activities, ballistic missile-related or other WMD programmes.

In 2018 MBI has adapted its internal processes with respect to export control regulations and the institute has asked for advice from the German Federal Office for Economic and Export Controls (BAFA), which is responsible for technology transfer and the export of scientific results.
In 2019, the MBI requested Dr. [redacted] to end his collaboration with DPRK academics, on the basis of increasing concerns in the MBI Directorate. We emphasize that the MBI did not detect a contribution to the DPRK's proliferation-sensitive nuclear activities, ballistic missile-related or other WMD programmes within the publications.

Sincerely yours,

[redacted]
Managing Director, Division A, MBI

[redacted]
Director, Division B, MBI

[redacted]
Digital unterschrieben von Dr. Nicole Münnich
Datum: 2023.01.17 14:24:43 +01'00'
Managing Director FVB

Source: Panel, redacted by the Panel.

Annex 16A: From 25 September 2022 to 1 January 2023, between 35 and 45 solid propellant engine SRBMs and at least 8 liquid propellant engine BMs (3 SRBMs, 3 MRBM/IRBMs, 2 ICBMs) were launched

The first BM launched in this report period, on 25 September, was similar to the new small SLBM previously launched on 7 May 2022 and identified by the DPRK as "*a new-type of submarine-launched ballistic missile*" (see S/2022/668, figure XVII). The ICBM launched on 18 November was named by the DPRK as "*a new-type ICBM Hwasong-17*". The SRBMs KN-25 launched on 31 December 2022 and 1st January 2023 was described by the DPRK's statements (in italics here and below) as a "*nuclear-capable multiple rocket launcher (MRL) able to strike anywhere in South Korea*". **In the following list of 24 launch tests, at least twelve made explicit reference to ballistic technology:**

1) the 25 September BM test from 06:53 (1 SRBM) was "…*a* ***ballistic missile launching drill*** *under the simulation of loading* ***tactical nuclear warheads*** *at a* ***silo under a reservoir****"* (see annex 24A)

2) the 28 September BM test from 18:10 (2 SRBMs) was *"…at the* ***ballistic missile launching drill*** *simulating the* ***loading of tactical nuclear warheads*** *which was staged on September 28*"

3) the 29 September BM test from 20:48 (2 SRBMs) was *"…various types of* ***tactical ballistic missiles*** *that were launched on September 29 and October 1"*

4) the 1 October BM test from 06:45 (2 SRBMs) was *"…various types* ***of tactical ballistic missiles*** *that were launched on September 29 and October 1"*

5) the 4 October BM test from 07:23 (1 IRBM) was *"…a new-type ground-to-ground* ***intermediate-range ballistic missile****"* (see annex 24B)

6) the 6 October BM test from 06:01 (2 SRBMs) was *"…at dawn of October 6, the striking drills of* ***super-large multiple rocket launchers and tactical ballistic missiles****"*

7) the 9 October BM test from 01:48 (2 SRBMs) was *"…the firing drill of the* ***super-large multiple rocket launchers"***

8) a detected BM test on 14 October from 01:49 (1 SRBM) was not specifically reported by the DPRK but 2 long-range cruise missile (LRCM) tests on the same day were, "…*2 LRCM launches expanding nuclear weapons units' capabilities"*

9) a detected BM test on 28 October from 11:59 (2 SRBMs) was not specifically reported by the DPRK

10) the 2 November BM test from 06:51 (4 SRBMs) was "…***fired four tactical ballistic missiles*** *loaded with dispersion warheads and underground infiltration warheads…"*

11) a detected BM test on 2 November from 08:51 (3 SRBMs and Surface to Air (SA) was not specifically reported by the DPRK (see annex 24C)

12) the 2 November BM test from 09:12 (several SRBMs, CM and SA) was not specifically reported by the DPRK, only ***"…****the KPA fired two strategic cruise missiles"*

13) the 2 November BM test from 16:30 (around 6 BMs and SA) was not specifically reported by the DPRK only "… *and in the morning and afternoon the anti-aircraft missile units"* (see annex 24C)

14) the 3 November BM test from 07:40 (1 ICBM) was "…*conducted important test-fire of* ***ballistic missile****"* (see annex 24D)

15) the 3 November BM test from 08:39 (2+ SRBMs) was "… *fired five* ***super-large multiple launch missiles and tactical ballistic missiles****"* (see annex 24D)

16) the 3 November BM test from 21:34 (3 liquid propellant SRBMs) was "… *five* ***super-large multiple launch missiles and tactical ballistic missiles****"* (see annex 24D)

17) the 5 November BM test from 11:32 (4 SRBMs) was "…*, the KPA fired again two* ***tactical ballistic missiles*** *loaded with dispersion warheads and two* ***super-large multiple launch missiles****"* (see annex 24D)

18) the 9 November BM test from 15:31 (2 SRBMs) was not specifically reported by the DPRK

19) the 17 November BM test from 10:48 (1 SRBM) was not specifically reported by the DPRK

20) the 18 November BM test from 10:14 (1 ICBM) was "…*the DPRK strategic forces test-fired* ***a new-type ICBM*** *on Nov. 18";* (see annex 24E)

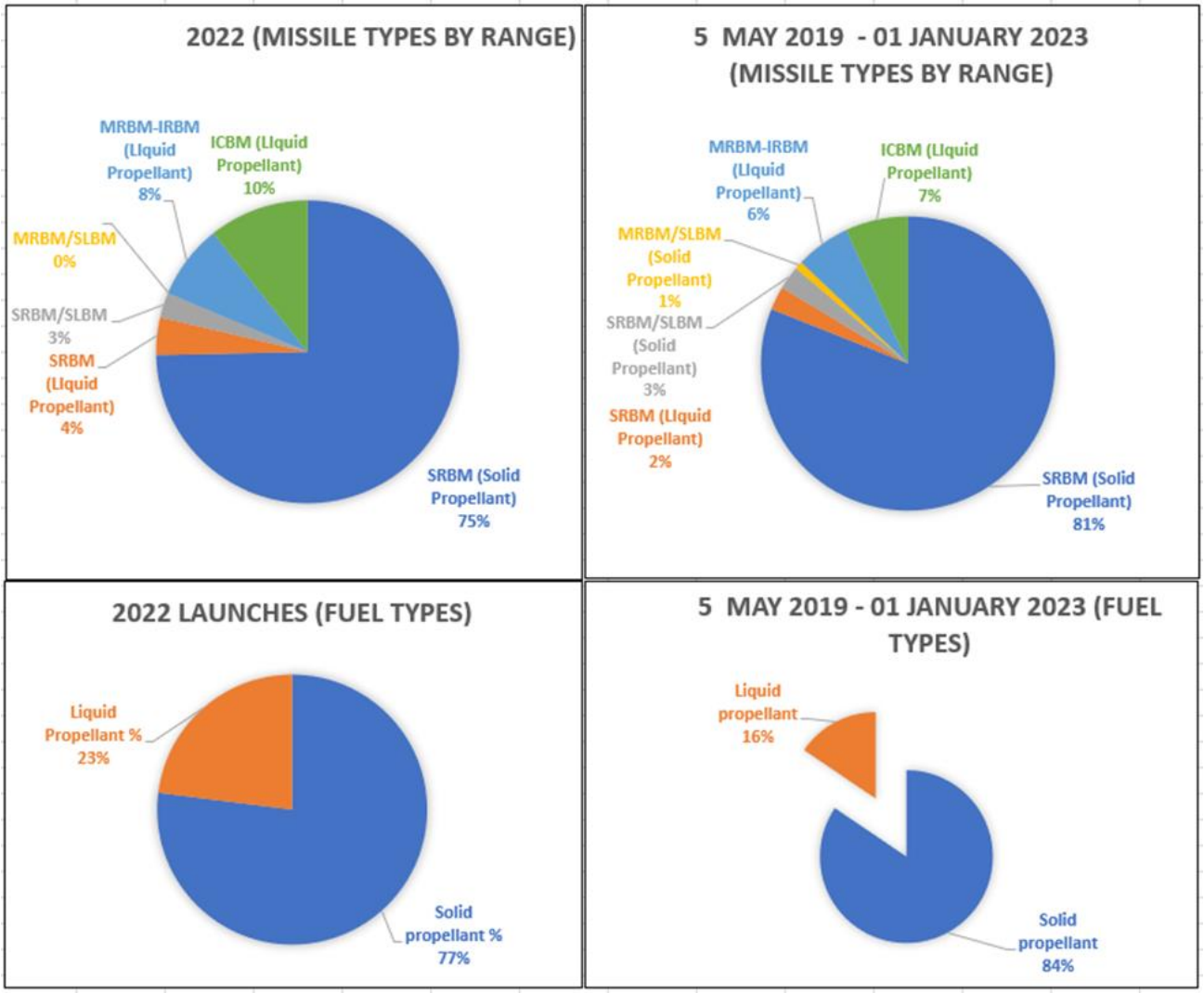
21) the 18 December BM test from 11:13 (2 MRBMs) was "…*an important final-stage test for the development of reconnaissance satellite at the Sohae Satellite Launching Ground on December 18"*

22) the 23 December BM test from 16:32 (2 SRBMs) was not specifically reported by the DPRK

23) the 31 December BM test (3 SRBMs KN-25) was "*The three shells of multiple rocket launchers precisely hit a target island ... demonstrating their combat performance"*

24) the 1 January BM test from 02:50 (1 SRBM KN-25) was "*At dawn of January 1, 2023, a long-range artillery sub-unit in the western area of the Korean People's Army fired one shell ... with a delivered super-large multiple rocket launcher"*

Annex 16B: Percentage of ballistic missile launches by missile type and fuel type from 5 May 2019 to 1 January 2023



Source: The Panel.

Annex 17: KCNA reporting of Kim Jong Un's January 2021 speech at 8th Party Congress (excerpt related to military objectives)

Source: https://kcnawatch.org/newstream/1610502377-14004652/great-programme-for-struggle-leading-korean-style-socialist-construction-to-fresh-victory/?t=1665001072714

Excerpts relevant to BMs:

…for possessing the completely new nuclear capabilities aimed at attaining the goal of modernization of the nuclear force…

…intermediate-range and intercontinental ballistic rockets of Hwasongpho series and submarine-launched and ground-based ballistic rockets of Pukkuksong series were manufactured in our own style

…review ***the already accumulated nuclear technology developed to such a high degree as to miniaturize, lighten and standardize nuclear weapons and to make them tactical ones and to complete the development of a super-large hydrogen bomb****…*

…was accomplished four years after the line of simultaneously promoting economic construction and nuclear build up was set forth and one year after the Seventh Congress of the Party…

…to develop a global strike rocket with more powerful warheads and an improved warhead control system…

… ***new cutting-edge weapon systems were developed in the sector of national defence science*** *…*

*…****developed the super-large MLRS,*** *…*

… ***develop ultra-modern tactical nuclear weapons*** *including* ***new-type tactical rockets*** *and* ***intermediate-range cruise missiles*** *…*

… ***achieved such successes as developing world-class anti-air rocket complex,*** *…*

… ***perfecting the guidance technology for multi-warhead rocket*** *at the final stage, finished research into* ***developing warheads of different combat missions including the hypersonic gliding flight warheads for new-type ballistic rockets*** *…*

… ***in the modernization of medium-sized submarine was set correctly*** *…*

… ***that the design of new nuclear-powered submarine was researched*** *…*

… ***means of reconnaissance and detection and military reconnaissance satellite were completed****,*

Full text:

Great Programme for Struggle Leading Korean-style Socialist Construction to Fresh Victory On Report Made by Supreme Leader Kim Jong Un at Eighth Congress of WPK

Date: 09/01/2021 | Source: Minju Choson KCNA

The report detailed the historic course of masterminding a great revolutionary turn for possessing the completely new nuclear capabilities aimed at attaining the goal of modernization of the nuclear force.

Under the direct guidance of the Party Central Committee, intermediate-range and intercontinental ballistic rockets of Hwasongpho series and submarine-launched and ground-based ballistic rockets of Pukkuksong series were manufactured in our own style to meet their unique operational missions. This gave a clearer

description of the status of our state as a nuclear weapons state and enabled it to bolster its powerful and reliable strategic deterrent for coping with any threat by providing a perfect nuclear shield.

In the period under review the already accumulated nuclear technology developed to such a high degree as to miniaturize, lighten and standardize nuclear weapons and to make them tactical ones and to complete the development of a super-large hydrogen bomb. By succeeding in the test-fire of ICBM Hwasongpho-15 on November 29, 2017, the Party Central Committee declared with pride to the world the accomplishment of the historic cause of building the national nuclear force and the cause of building a rocket power.

The great cause of building the national nuclear force, which was impossible to achieve even in 20 to 30 years in terms of existing formula, was accomplished four years after the line of simultaneously promoting economic construction and nuclear build up was set forth and one year after the Seventh Congress of the Party. This is a miracle unprecedented in history and the exploit of greatest significance in the history of the Korean nation the Seventh Central Committee performed for the Party and revolution, the country and people and posterity.

The Party Central Committee achieved new great victories by vigorously leading the struggle for upgrading the nuclear force even after the great historic November event in 2017.

Recalling that the Party Central Committee decided to develop a global strike rocket with more powerful warheads and an improved warhead control system and carried out this historic task by relying on the patriotism and loyalty of national defence scientists, the report affirmed that the new-type gigantic rocket on an 11-axis self-propelled launcher displayed during the military parade in celebration of the 75th founding anniversary of the Party fully demonstrated the ultra-modernity and great striking capability of our nuclear force.

The accomplishment of the great cause of building the national nuclear force and its continued development constitute a victory of the organizational and leadership abilities of the Party Central Committee headed by Kim Jong Un and a great victory of the national defence scientists and all other Koreans who waged a death-defying struggle with an indomitable faith in independence and valiant spirit.

The report reviewed the fact that new cutting-edge weapon systems were developed in the sector of national defence science one after another to cope with the enemy's desperate arms buildup, thus making our state's superiority in military technology an irreversible one and putting its war deterrent and capability of fighting a war on the highest level.

The national defence science sector developed the super-large MLRS, a super-power attack weapon the world's weaponry field had never known and proceeded to develop ultra-modern tactical nuclear weapons including new-type tactical rockets and intermediate-range cruise missiles whose conventional warheads are the most powerful in the world.

This enabled us to gain a reliable edge in military technology.

National defence scientists and workers in the munitions industry properly set the orientation of developing main tank of our style following the world's development trends and have begun to enter a new track of development while upgrading production processes. They also achieved such successes as developing world-class anti-air rocket complex, self-propelled gun howitzer and anti-armour weapons.

The report also noted that in the period under review the sector of national defence scientific research was conducting research into perfecting the guidance technology for multi-warhead rocket at the final stage, finished research into developing warheads of different combat missions including the hypersonic gliding flight warheads for new-type ballistic rockets and was making preparations for their test manufacture.

The report made public with pride that the standard of the goal in the modernization of medium-sized submarine was set correctly and it was remodelled experimentally to open up a bright prospect for remarkably enhancing the existing subsurface operational capabilities of our navy, that the design of new nuclear-powered submarine was researched and was in the stage of final examination and the designing of various electronic weapons, unmanned striking equipment, means of reconnaissance and detection and military reconnaissance satellite were completed, and that other achievements were made in national defence research of gigantic significance in developing the People's Army into a powerful one with the strongest military muscle in the world.

The report evaluated that the bold leap forward brought about in the national defence science and munitions industry made sure that the country ranked high in the world in terms of defence capabilities, and, at the same time, it was of great significance in realizing the strategic plan of the Party Central Committee for developing the overall Korean revolution.

The report said that a great advance was made in the work of turning the People's Army into elite forces in the period under review.

Annex 18: Kim Jong Un's speech at a military parade held in celebration of 90th founding anniversary of KPA, 25 April 2022

"... but our nukes can never be confined to the single mission of war deterrent even at a time when a situation we are not desirous of at all is created on this land..."; "... if any forces try to violate the fundamental interests of our state, our nuclear forces will have to decisively accomplish its unexpected second mission..."

Source: http://kcna.kp/kp/article/q/e30da1bef4848c57353068fea9c7860f.kcmsf

Excerpt relevant to the BMs:

In particular, the nuclear forces, the symbol of our national strength and the core of our military power, should be strengthened in terms of both quality and scale, so that they can perform nuclear combat capabilities in any situations of warfare, according to purposes and missions of different operations and by various means…

To cope with the rapidly-changing political and military situations and all the possible crises of the future, we will advance faster and more dynamically along the road of building up the self-defensive and modern armed forces, which we have followed unwaveringly, and, especially, will continue to take measures for further developing the nuclear forces of our state at the fastest possible speed.

The fundamental mission of our nuclear forces is to deter a war, but our nukes can never be confined to the single mission of war deterrent even at a time when a situation we are not desirous of at all is created on this land.

If any forces try to violate the fundamental interests of our state, our nuclear forces will have to decisively accomplish its unexpected second mission.

The nuclear forces of our Republic should be fully prepared to fulfil their responsible mission and put their unique deterrent in motion at any time.

Full text :

조선 www.Kcna.kp 중앙통신

Respected Comrade Kim Jong Un Makes Speech at Military Parade Held in Celebration of 90th Founding Anniversary of KPRA

Pyongyang, April 26 (KCNA) -- The respected Comrade

Kim Jong Un made a speech at the military parade held in celebration of the 90th anniversary of the founding of the Korean People's Revolutionary Army (KPRA) on April 25, Juche 111 (2022).

The following is the full text of the speech:

All the brave officers and men of the armed forces of our Democratic People's Republic of Korea,

Officers and men of the units participating in the military parade,

Comrade war veterans, exemplary soldiers and merited persons invited to this square of celebration,

Esteemed Pyongyang citizens,

Dear comrades,

Today we are holding a grand military parade in celebration of an anniversary, significant and glorious for our great Party, state and people.

At this moment overflowing with the glory of the long history of our army building, we are all here filled with a great pride in having the armed forces that firmly defend the Party, the revolution, the country and the people and reliably guarantee peace and stability.

Seeing the dependable elite units massed in this Kim Il Sung Square with their victorious colours and feeling, through them, the level of the modern character of the armed forces of our Republic, all the people across the country will realize once again the profound and great significance the birth of their country's first genuine armed forces 90 years ago had in the history of our revolution and nation and will have in the future development of our state and people.

The founding of the Korean People's Revolutionary Army was an event of national significance that declared a death-defying resistance against imperialism under the unfurled banner of winning national liberation and independence by our own efforts, as well as a historic event that ushered in a new era of the Juche revolution that relies on powerful revolutionary armed forces.

The major meaning of this event is not confined only to the fact that our people, who were forced to live a pitiable life in the turmoil of history, could have their own national army and the hope of their revival; it also lies in the fact that the event declared at home and abroad the steadfast idea of anti-imperialist revolution of the Korean revolutionaries to settle accounts to the end and by force of arms with those who infringed upon the dignity and sovereignty of our nation and their unyielding will to win the people's freedom and liberation and the revolution's victory without fail by the internal forces.

History has clearly proved that this determination and will the Korean revolutionaries opted for to carve out the destiny and future of their people was absolutely correct.

The revolutionary weapons the fine sons and daughters of our people held aloft in the forests of Paektu were an expression of the soaring spirit of independence of the Korean nation, their hope and the great banner of their unity, as well as the force that loaded the mettle of self-dependence and Herculean strength in the tear-stained fists of the Korean people.

Thanks to these armed ranks, a far-reaching plan of the Korean revolution was matured, the unyielding spirit and formidable strength with which to prevail over the imperialist tyranny were nurtured, and the great traditions, basic and everlasting in the development of our revolution, were created.

The ideology, faith and traditions, which our revolutionary army cherished and succeeded from the outset of its founding, constituted the basis of the spiritual strength and ever-victorious guarantee that made it possible to display an undying heroic and self-sacrificing spirit in defending the Party, the revolution, the territory and the people in the fiercest-ever anti-imperialist confrontation, in the first line of grim class struggle and in the ever-changing circumstances of history, mindful of its intrinsic revolutionary and class nature and mission. This army achieved the great cause of the country's liberation and nation's revival through an unprecedented bloody struggle, repulsed the armed aggression by the US-led allied imperialist forces and defended with honour the sovereignty, dignity and safety of the country with an unrivalled heroic spirit; it has recorded ever-victorious feats while defending the ruling Party, the government, the territory and the people throughout the

historical course of the socialist revolution and construction with an ennobling self-sacrificing spirit. Our Party and people regard it as a source of their greatest honour and pride to have such a brave, steely and loyal army.

All our priceless gains, plus everything else on this land, are associated, first of all, with the services of our revolutionary army. This we should keep in mind.

Not only as the main force for national defence but also as a powerful force for national development, our revolutionary army, true to the Party's intentions, has always made devoted efforts to carry out the ambitious revolutionary undertakings aimed at attaining lofty ideals. By doing so, it has performed such great exploits, which no others could do, in creating a new history of socialist construction and enhancing the dignity and honour of our great state. Regarding it as its lifeblood and top honour to be faithful to the Party, the government and the people, our revolutionary army has kept the lineage of the Korean revolution safe and sound and defended the ideology and cause of the Workers' Party of Korea resolutely, and reliably guaranteed the existence and development of our state and the welfare of our people. Thanks to these exploits of lasting value it has performed over the past 90 years, the annals of the Korean revolution spanning a century are resplendent with victory and glory.

We will remember for all ages that our great armed forces have always opened up the way for advance in the vanguard at each of the difficult revolutionary stages and that the glorious and worthwhile victories of our Republic have been won at the cost of the priceless blood and sweat our revolutionary army shed and the noble self-sacrifice it made.

The glorious history of our armed forces is embodied in the proud and honourable successors, that is, the officers and men from the elite units of the Republic's armed forces, who will march in fine array across this square of victors, and all other soldiers standing guard at the air, ground and naval posts and performing feats of labour at sites of grand socialist construction throughout the country.

Availing myself of this meaningful opportunity, I, on behalf of our Party and government, would like to pay noble tribute to the anti-Japanese revolutionary forerunners and martyrs of the People's Army, who dedicated their precious lives in the struggle for national sovereignty and independence and the people's liberation, for the build-up of the revolutionary armed forces and for the victorious advance of the socialist cause. I also offer hearty congratulations to all the officers and men of the Korean People's Army and all other members of the armed forces of our Republic, who are making a great journey of faithful succession to their revolutionary forerunners.

In addition, I would like to offer heartfelt thanks to all the families on this land, which have had their dear husbands and children stand at the forefront of national defence.

Comrades,

The glorious 90-year journey our revolutionary armed forces have made safeguarding the prosperity and development of the country by force of arms, should be continued for another hundred, nay a thousand years.

In the era we are living in now, we should continue to exalt the glory of the powerful army and change to be more powerful at a fast speed incomparable with the past 90 years.

In the present world where different forces collide fiercely with one another, a nation's dignity and sovereignty and reliable genuine peace are guaranteed by powerful defence capability that can overpower any enemy.

We should continuously grow stronger.

There is no satisfaction or accomplishment in cultivating strength for defending ourselves, and, whoever we confront, our military supremacy should be more secure.

The revolution demands this, and the future of all the generations to come depends upon this.

Our general line of building the revolutionary armed forces is to make the People's Army an ever-victorious army.

An ever-victorious army–this must be the eternal name of our People's Army and shine as a priceless honour belonging only to our revolutionary armed forces.

The People's Army should hold fast to our Party's orientation and general line of army building and dynamically open up a new phase of its development.

To do so, it should define it as the core target to strengthen itself politically and ideologically and make itself strong in military technology, and give a stronger impetus to consolidating itself into an army, strong in ideology and faith, which is absolutely loyal to the leadership of the Workers' Party of Korea and boundlessly faithful to its revolutionary cause and into an elite force possessed of courage, capability and self-confidence for responding to any type of war and crisis without any hesitation.

Strengthening it politically and ideologically is the main aspect and first strategic task of our building of the army.

The political and ideological preparedness of the army and the ideological and spiritual preparedness of the masses of the soldiers, the motive force of the armed forces, are basic in the effort to make our revolutionary army fulfil its mission as the army of the Party, people and class and actively respond to any type of war and crisis.

The staunch revolutionary spirit and class awareness of the army we have to further cultivate in the future will play a decisive role in building up the fighting efficiency of our army and defence capabilities of the nation.

The unique character of our revolution is that one generation of the revolution is continually replaced by another and we have to face for a long period of time the imperialists who grow ever more ferocious with each passing day. This presents it as a crucial strategic task of army building and anti-imperialist struggle to stoutly carry on the baton of the great revolutionary ideology and spirit which originated in Paektu. When we carry out this task as the core in army building, we will surely be able to maintain and consolidate the qualitative supremacy of our revolutionary armed forces.

All the Party organizations and political bodies of the People's Army should continue to stoke up the flames of the ideological revolution and focus their all-out effort on cultivating the revolutionary ideology and spiritual strength of the soldier masses.

Regarding it as our top-priority task to develop the People's Army into an army strong in ideology and faith, we should prepare all the service personnel to be ideological guardsmen who fight only in line with the revolutionary ideology and will of the Party Central Committee, who cherish staunch class awareness and indomitable fighting spirit as part of their mental qualities, and who never allow a single misfire or an inch of deviation from the centre of the target designated by the Party Central Committee.

We should also strongly push ahead with building it up into an army strong in military technology with a view to radically improving its fighting efficiency.

The global trend of military development and rapidly-changing style of warfare at present demand that we modernize our army at a faster rate in terms of military technology.

Holding aloft the slogan of modernizing the army, we should strive to the utmost to develop our People's Army into a powerful army equipped with highly advanced military technology.

By pressing ahead with the modernization of the military talents training system, we should bring up a larger number of officers who are fully capable of commanding units of different arms and services at all levels. And we should make all the units and sub-units of the army fully ready to carry out any combat missions by modernizing their operation and combat training.

The sectors of defence science and munitions industry should continue to develop and deploy for actual combat cutting-edge military hardware of new generations so as to ceaselessly increase the military power of the People's Army.

In particular, the nuclear forces, the symbol of our national strength and the core of our military power, should be strengthened in terms of both quality and scale, so that they can perform nuclear combat capabilities in any situations of warfare, according to purposes and missions of different operations and by various means.

The prevailing situation demands that more proactive measures be taken to provide a firm and sustained guarantee for the modern character and military technological supremacy of our Republic's armed forces.

To cope with the rapidly-changing political and military situations and all the possible crises of the future, we will advance faster and more dynamically along the road of building up the self-defensive and modern armed forces, which we have followed unwaveringly, and, especially, will continue to take measures for further developing the nuclear forces of our state at the fastest possible speed.

The fundamental mission of our nuclear forces is to deter a war, but our nukes can never be confined to the single mission of war deterrent even at a time when a situation we are not desirous of at all is created on this land.

If any forces try to violate the fundamental interests of our state, our nuclear forces will have to decisively accomplish its unexpected second mission.

The nuclear forces of our Republic should be fully prepared to fulfil their responsible mission and put their unique deterrent in motion at any time.

Comrades, officers and men of the People's Army,

Our armed forces are now fully prepared for any type of war.

If any forces attempt military confrontation with the Democratic People's Republic of Korea, they will be perished.

All the armed forces of the DPRK, with the heroic Korean People's Army as their core, should always firmly believe in their cause, march forward valiantly against all challenges filled with confidence, remain faithful to their sacred mission of defending the safety, dignity and happiness of the people, and securely guarantee the development of our socialism by maintaining their invincible military supremacy.

All the officers and men of the armed forces of the Republic,

As long as your hearts are pulsating with the precious blood and noble spirit of the revolutionary forerunners and as long as the revolutionary armed forces are always standing at the vanguard of the revolution as the embodiment of the ideology and will of the Workers' Party of Korea and of the strength of our state and people, the cause of socialism of our own style will be ever-victorious in the future, too.

Commanding officers and men of the KPA and all other armed forces of the DPRK,

For the safety and happiness of our great people,

For the eternal glory and victory of our great state,

Let us fight vigorously.

Long live our great revolutionary armed forces!

Long live our great country, the Democratic People's Republic of Korea! -0-

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Annex 19: Nuclear doctrine, the 7 September 2022 law on the "*state policy on the nuclear forces*"

*- **Article 2.** Constitution of Nuclear forces: The nuclear forces of the DPRK shall be composed of different kinds of nuclear warheads, delivery means, a command-and-control system and all the personnel, equipment and facilities for operating and updating that system.*

*- **Article 3.3.** Command and Control of Nuclear Forces: In case the command-and-control system over the state nuclear forces is placed in danger owing to an attack by hostile forces, a nuclear strike shall be launched automatically and immediately to destroy the hostile forces including the origin of provocation and the commanding leadership according to the operation plan decided in advance*

*- **Article 5.2.** Principle of using nuclear weapons: The DPRK shall neither threaten non-nuclear weapons states with its nuclear weapons nor use nuclear weapons against them unless they join aggression or attack against the DPRK in collusion with other nuclear weapons states.*

*- **Article 6.** Conditions of using nuclear weapons: 6.1: "In case it is judged that an attack by nuclear weapons, or other weapons of mass destruction (WMD), was launched or is imminent;…"; 6.2: "… In case it is judged that a nuclear or non-nuclear attack by hostile forces against the state leadership and the command organization of the state's nuclear forces was launched or is imminent…"; 6.3: "…In case it is judged that a fatal military attack against important strategic objects of the state was launched or is imminent…"; 6.4: "In case the need for an operation to prevent an expansion and protraction of war,…"; 6.5: "In other cases where a catastrophic crisis has occurred that threatens the existence of the state and the safety of the people,…"*

Source: http://rodong.rep.kp/en/index.php?MTJAMjAyMi0wOS0xMC1OMDAyQDExQDBATnVjbGVhciBGb3JjZXNAMEAx== and https://www.nknews.org/pro/full-text-how-north-korea-transformed-its-nuclear-doctrine-law/

KCNA *KCNA.kp (En)*

Source: https://kcnawatch.org/newstream/1662687258-950776986/law-on-dprks-policy-on-nuclear-forces-promulgated/

Law on DPRK's Policy on Nuclear Forces Promulgated

Date: 09/09/2022 | Source: KCNA.kp (En) | Pyongyang, September 9 (KCNA) -- The law of the Supreme People's Assembly of the DPRK on the state policy on the nuclear forces was promulgated on September 8.

According to the law, the DPRK, as a responsible nuclear weapons state, opposes all forms of war including nuclear wars and aspires to build a peaceful world in which the international justice is realized.

The nuclear forces of the DPRK are a powerful means for defending the sovereignty, territorial integrity and fundamental interests of the state, preventing a war on the Korean peninsula and in Northeast Asia and ensuring the strategic stability of the world.

The nuclear posture of the DPRK is guaranteed by the reliable, effective and matured nuclear deterrence, defensive and responsible nuclear forces policy and flexible and purposeful strategy for using nuclear weapon capable of actively coping with any existing and developing nuclear threats in future.

The opening of the DPRK's policy on the nuclear forces and legal stipulation of the use of nuclear weapons are aimed to reduce the danger of a nuclear war to the maximum by preventing misjudge among nuclear weapons states and misuse of nuclear weapons.

The Supreme People's Assembly of the DPRK decides as follows in order to make the nuclear forces, the backbone of the state defence capacity, and discharge their heavy mission in a responsible manner.

Mission of Nuclear Forces

The nuclear forces of the DPRK shall be a main force of the state defence which safeguards the sovereignty and territorial integrity of the country and the lives and safety of the people from outside military threat, aggression and attack.

1) The nuclear forces of the DPRK shall regard it as their main mission to deter a war by making hostile forces have a clear understanding the fact that the military confrontation with the DPRK brings about ruin and give up attempts at aggression and attack.

2) The nuclear forces of the DPRK shall carry out an operational mission for repulsing hostile forces' aggression and attack and achieving decisive victory of war in case its deterrence fails.

2. Constitution of Nuclear Forces

The nuclear forces of the DPRK shall be composed of different kinds of nuclear warheads, delivery means, command and control system and all the personnel, equipment and facilities for the system's operating and updating.

Command and Control of Nuclear Forces

The nuclear forces of the DPRK shall obey the monolithic command of the president of the State Affairs of the DPRK.

The president of the State Affairs of the DPRK shall have all decisive powers concerning nuclear weapons.

The state nuclear forces command organization composed of members appointed by the president of the State Affairs of the DPRK shall assist the president of the State Affairs of the DPRK in the whole course from decision concerning nuclear weapons to execution.

In case the command and control system over the state nuclear forces is placed in danger owing to an attack by hostile forces, a nuclear strike shall be launched automatically and immediately to destroy the hostile forces including the starting point of provocation and the command according to the operation plan decided in advance.

Execution of Decision on Use of Nuclear Weapons

The nuclear forces of the DPRK shall immediately execute an order of using nuclear weapons.

Principle of Using Nuclear Weapons

The DPRK shall regard it as its main principle to use nuclear weapons as the last means in order to cope with outside aggression and attack seriously threatening the security of the country and the people.

The DPRK shall neither threaten non-nuclear weapons states with its nuclear weapons nor use nuclear weapons against them unless they join aggression or attack against the DPRK in collusion with other nuclear weapons states.

Conditions of Using Nuclear Weapons

The DPRK can use nuclear weapons in the following cases:

In case an attack by nuclear weapons or other weapons of mass destruction was launched or drew near is judged

In case a nuclear or non-nuclear attack by hostile forces on the state leadership and the command organization of the state's nuclear forces was launched or drew near is judged

In case a fatal military attack against important strategic objects of the state was launched or drew near is judged

In case the need for operation for preventing the expansion and protraction of a war and taking the initiative in the war in contingency is inevitably raised.

In other case an inevitable situation in which it is compelled to correspond with catastrophic crisis to the existence of the state and safety of the people by only nuclear weapons is created.

7. Regular readiness of nuclear forces

The nuclear forces of the DPRK shall be regularly ready for action so that if an order to use nuclear weapons is issued, it can immediately execute it in any conditions and circumstances.

8. Safe maintenance, management and protection of nuclear weapons

1) The DPRK shall establish a thorough and safe system of storing and managing nuclear weapons to make sure that all the processes such as their storage and management, the assessment of their lifespan and performance and their update and dismantlement are conducted in conformity with administrative and technical regulations and legal procedures, and shall guarantee its implementation.

2) The DPRK shall take thorough protective steps for fear that nuclear weapons, technology and equipment concerned, nuclear substances, etc. will leak out.

9. Qualitative and quantitative increasing and upgrading of nuclear forces

1) The DPRK shall constantly assess outside nuclear threats and the change in the posture of international nuclear forces and correspondingly upgrade and beef up its nuclear forces in a qualitative and quantitative way in response to it.

2) The DPRK shall regularly update its strategy of using nuclear weapons according to different situations to enable its nuclear forces to reliably perform their mission.

10. Non-proliferation

The DPRK, as a responsible nuclear weapons state, shall neither deploy nuclear weapons in the territory of other countries nor share them and not transfer nuclear weapons, technology and equipment concerned and weapon-grade nuclear substances.

11. Others

1) The Law of the Supreme People's Assembly of the DPRK "On further consolidating the position of the self-defensive nuclear weapons state" adopted on April 1, 2013 shall be invalid.

2) Relevant organs will take technical measures to execute the law.

3) None of the articles of the law are explained to restrain or limit the exercise of the DPRK's just right to self-defense. -0-

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Annex 20: Statement on 10 October 2022: *Respected Comrade Kim Jong Un Guides Military Drills of KPA Units for Operation of Tactical Nukes*

Official DPRK statement *on* ***the operation of tactical nukes staged military drills*** *from September 25 to October 9*

Source: https://kcnawatch.org/newstream/1665471853-933771973/respected-comrade-kim-jong-un-guides-military-drills-of-kpa-units-for-operation-of-tactical-nukes/

Excerpts on BMs:

There took place a ballistic missile launching drill under the simulation of loading tactical nuclear warheads at a silo under a reservoir in the northwestern part of the DPRK at dawn of September 25.

The drill was aimed at confirming the order of taking tactical nuclear warheads out and transporting them and of managing them in a rapid and safe way at the time of operation, checking the reliability of the overall management system, making the units acquire launching capabilities of the ballistic missile at the underwater silos and inspecting their rapid response posture.

The tactical ballistic missile flied in the air above the set target … along the appointed orbit, and the reliability of warhead exploding was clearly proved at the set altitude

Through the drill, the orientation of building a planned silo beneath the reservoir was confirmed.

At the ballistic missile launching drill simulating the loading of tactical nuclear warheads which was staged on September 28 for the purpose of neutralizing the airports in the operation zones of south Korea, the stability of overall system related with the operation of warheads was proved. Various types of tactical ballistic missiles that were launched on September 29 and October 1 hit th*e set targets with the combination of air explosion and direct precision and dispersion strike, proving the accuracy and might of our weapon systems.*

In order to cope with the unstable situation of the Korean peninsula, the Central Military Commission of the Workers' Party of Korea adopted a ***decision to send more powerful and clear warning to the enemies on October 4 and took a measure to hit the set water area in the Pacific 4 500 kilometers across the Japanese Islands with new-type ground-to-ground intermediate-range ballistic missile.***

At dawn of October 6, the striking drills of super-large multiple rocket launchers and tactical ballistic missiles for verifying the might of functional warheads were conducted in simulation of striking the enemies' main military command facilities, and the firing drill of the super-large multiple rocket launchers was waged in simulating the strike of the enemies' main ports at dawn of October 9

Through seven times of launching drills of the tactical nuclear operation units *…*

Full text:

Date: 10/10/2022 | Source: KCNA.kp (En) |

Pyongyang, October 10 (KCNA) -- The units of the Korean People's Army (KPA) for the operation of tactical nukes staged military drills from September 25 to October 9 in order to check and assess the war deterrent and nuclear counterattack capability of the country, which comes to be a severe warning to the enemies.

The military drills were carried out amid the ongoing dangerous military drills staged by large-scale combined naval forces, including U.S. carrier, Aegis destroyer and nuclear-powered submarine in the waters off the Korean Peninsula.

The U.S., based on an agreement to provide more intensive extended deterrence to south Korea against the DPRK's adoption of the law on the policy of state nuclear forces, brought the nuclear-powered aircraft carrier

Ronald Reagan task force into the waters off the Korean Peninsula as the first demonstration on September 23 to stage joint naval drills with south Korea … from September 26 to 29 and joint anti-submarine drills together with Japan and south Korea on September 30.

The U.S. dispatched again the nuclear carrier task force in the waters … to stage combined missile defence exercise on October 6 and naval combined mobile exercise on Oct. 7 and 8, taking a regretful attitude further escalating the tension in the region while openly posing a military threat to the DPRK.

In this period, the so-called south Korean military chief let loose such unreasonable and provocative remarks as the "existence" of our power, baldly revealing his will for confrontation.

Under such inevitable circumstances, the Central Military Commission of the Workers' Party of Korea (WPK), after discussing the politico-military situation prevailing on the Korean Peninsula and its future in the latter half of September, decided to organize military drills under the simulation of an actual war at different levels in order to check and improve the reliability and combat power of our state war deterrence and send a strong military reaction warning to the enemies.

Kim Jong Un , general secretary of the Workers' Party of Korea and chairman of its Central Military Commission, guided the military drills on the spot.

Members of the Party Central Military Commission observed the drills.

There took place a ballistic missile launching drill under the simulation of loading tactical nuclear warheads at a silo under a reservoir in the northwestern part of the DPRK at dawn of September 25.

The drill was aimed at confirming the order of taking tactical nuclear warheads out and transporting them and of managing them in a rapid and safe way at the time of operation, checking the reliability of the overall management system, making the units acquire launching capabilities of the ballistic missile at the underwater silos and inspecting their rapid response posture.

The tactical ballistic missile flied in the air above the set target … along the appointed orbit, and the reliability of warhead exploding was clearly proved at the set altitude.

Through the drill, the orientation of building a planned silo beneath the reservoir was confirmed.

At the ballistic missile launching drill simulating the loading of tactical nuclear warheads which was staged on September 28 for the purpose of neutralizing the airports in the operation zones of south Korea, the stability of overall system related with the operation of warheads was proved. Various types of tactical ballistic missiles that were launched on September 29 and October 1 hit the set targets with the combination of air explosion and direct precision and dispersion strike, proving the accuracy and might of our weapon systems.

In order to cope with the unstable situation of the Korean peninsula, the Central Military Commission of the Workers' Party of Korea adopted a decision to send more powerful and clear warning to the enemies on October 4 and took a measure to hit the set water area in the Pacific 4 500 kilometers across the Japanese Islands with new-type ground-to-ground intermediate-range ballistic missile.

At dawn of October 6, the striking drills of super-large multiple rocket launchers and tactical ballistic missiles for verifying the might of functional warheads were conducted in simulation of striking the enemies' main military command facilities, and the firing drill of the super-large multiple rocket launchers was waged in simulating the strike of the enemies' main ports at dawn of October 9.

Through seven times of launching drills of the tactical nuclear operation units, the actuality of the nuclear combat forces of our state and its militant effectiveness and actual war capabilities, which is fully ready to hit and wipe out the set objects at the intended places in the set time, were displayed to the full.

The respected Comrade Kim Jong Un highly appreciated that our nuclear combat forces holding an important mission of war deterrent maintains high alert of rapid and correct operation reaction capabilities and nuclear response posture in unexpected situation at any time.

He said that he was firmly convinced that he can entrust the paramount military duty of deterring war and holding the initiative in the war to any tactical nuclear operation units through the drills for an actual war. This is the verification of the operation posture of our war deterrent and, at the same time, an occasion that proved the reliability of the thorough preparedness of the state nuclear defnece posture, and an obvious warning and clear demonstration of informing the enemies of our nuclear response posture and nuclear attack capabilities, he added.

He said that the busy military moves of the enemies are being focused at this time, too, and such the U.S. and the south Korean regime's steady, intentional and irresponsible acts of escalating the tension will only invite our greater reaction, and we are always and strictly watching the situation crisis.

Saying that the enemies have still talked about dialogue and negotiation while posing military threats to us, but we have no content for dialogue with the enemies and felt no necessity to do so, he stated that, above all, we should send a clearer signal to the enemies escalating the regional situation by involving the huge armed forces in any time with more powerful and resolute will and action.

He added that we would sharply watch the instable security circumstance on the Korean peninsula and all military moves of the enemies which cannot be overlooked and strongly take all military countermeasures if necessary.

He expressed belief and conviction that the nuclear combat forces of the DPRK would maintain their strongest nuclear response posture and further strengthen it in every way, well aware of the important duty of defending the dignity, sovereignty and right to existence of our state. -0-

www.kcna.kp (Juche111.10.10.)

Annex 21: Speech at Ceremony of Donating 600mm Super-large Multiple Launch Rocket System

Date: 01/01/2023 | Source: KCNA.kp (En) | https://kcnawatch.org/newstream/1672543895-380674944/respected-comrade-kim-jong-un-makes-reply-speech-at-ceremony-of-donating-600mm-super-large-multiple-launch-rocket-system/

Excerpts on BM programme:

...has donated to our Party, along with the hearts of all the working class in the munitions industry, 30 units of 600mm super-large multiple launch rocket system, …

That military hardware, which the working class in the munitions industry have donated to the Party and revolution today, has a high capability of overcoming complicated terrain conditions, great manoeuvrability and an ability to conduct a surprise and precision launch of multiple rockets in terms of military technology; and as it has south Korea as a whole within the range of strike and is capable of carrying tactical nuclear warhead, it will discharge in future the combat mission of overpowering the enemy as a core, offensive weapon of our armed forces…

Full text:

Pyongyang, January 1 (KCNA) -- The respected Comrade Kim Jong Un made a reply speech at the ceremony of donating 600mm super-large multiple launch rocket system on December 31, Juche 111 (2022).

The full text of the reply speech is as follows:

Comrades attending this event as representatives of the working class in the munitions industry,

Other dear comrades,

We have reviewed our struggle in the arduous year of 2022 and risen up for a fresh struggle in the coming new year. At this moment standing in fine array in the yard of the headquarters of the Central Committee of the Workers' Party of Korea for the first time after the founding of this state and our Party are the core means of strike, which our working class in the munitions industry have built through a struggle for increased production of loyalty and which would form the backbone of our armed forces.

They are, indeed, a precious and encouraging donation.

They are powerful in that they will give a fresh strength and courage to the whole country as it greets a new year, will further amplify the historic significance of the plenary meeting of our Party, and will strike another terror and shock into the enemy.

All the working class in the munitions industry and their representatives,

The working class, scientists and officials in the defence industry, with indefatigable and limitless energy and sense of mission, fully displayed the infinite revolutionary zeal and mettle and the thoroughgoing and perfect pattern of creation, which are the original features and a symbol of the working class in the munitions

industry. They thus have made an outstanding contribution to the advance and development of our revolution till the last day of the arduous year of 2022. On behalf of the Central Committee of the Party and the government of the Republic and along with the hearts of all the Party members and other people and soldiers of the People's Army across the country, I extend warm thanks to them.

Indeed, I always cannot but feel solemn and respectful to think about the unparalleled patriotism, faithfulness and creativity of our working class in the munitions industry and their heroic struggle for increased production, and extend warm thanks and thanks and make a deep bow to them.

Comrades, have a look at them.

I really feel invigorated.

I feel unwittingly invigorated to see them. I think this is not merely because I am aware of their value and might but because they are permeated with the patriotism and loyalty of our working class who devote their all to our revolution in the severe struggle and in the face of trials and because I am proud that we have made the unique Juche-type weapons by our own wisdom and efforts.

Having accepted as the demand of the revolution and people, and of their lives, the determination and plan of the Party Central Committee to raise the supremacy of our armed forces on to the highest level without any hesitation and without any letup, the working class in the munitions industry rose up as one with a resolve to build a larger number of 600mm multiple launch rocket system units to be supplied to the People's Army, and launched a campaign of loyalty in late October.

As was the same case when this kind of weapon, which the world had never imagined, was born three years ago, our working class in the munitions industry, this time, too, performed miraculous feats day after day by displaying a super-powerful spirit.

I have heard that the relevant complex, while stepping up the production for attaining the crucial targets in bringing about a revolution in the defence industry which had been set forth at the Eighth Party Congress, assembled one, even two, gigantic units in addition every two days, in the course of which it created a surprising production record.

As it had done in the past, this factory, in the recent struggle for increased production, too, fully demonstrated its tradition and trait of always supporting the Party and promoting the country's prosperity with loyalty and practice, thereby giving birth to these proud crystallizations of patriotism and loyalty.

This year the working class in the munitions industry have worked admirably, indeed.

Unlike any of the earlier years, this year was the most arduous period, and our state was faced with the worst-ever challenges in its history. But the defence industry rose up and supplied as many as 5 000 farm machines to our cooperative farms, which was a strong support to the agricultural front. This is quite inspiring, and that is not all.

Many munitions factories and enterprises have waged a tenacious struggle, making undaunted efforts in high spirits with a firm determination to defend the Party and revolution by means of unmatched military capabilities, and thus made a tangible contribution to increasing our state's defence capabilities incomparably in 2022, a year full of adversities.

I have been immensely grateful to and deeply admiring our working class in the munitions industry for their ardent patriotism and loyalty with which they have worked for the Party and revolution throughout the year. And as we see now, the complex, by working with loyalty and pure conscience up to the last day of the year, has donated to our Party, along with the hearts of all the working class in the munitions industry, 30 units of 600mm super-large multiple launch rocket system, the main weapon of strike that our Party was most desirous of and our army waited for most anxiously.

This represents an eye-opening success that has demonstrated to the whole world the unusual patriotism and loyalty, inexhaustible potentialities and revolutionary fighting mettle of our working class in the munitions industry, who have shouldered full responsibility for the development of the military technology of the armed forces of our Republic.

We should never forget their historic services and painstaking efforts.

Comrades,

Our working class in the munitions industry regard the valuable title, revolutionary industry of the Workers' Party of Korea, which cannot be bartered for anything, as a source of their exceptional honour and pride. As we see, they are always honourable and faithful to the cause of the Party and revolution.

That we have such a self-supporting defence industry which displays such heroism and possesses characteristic features and absolute strength is something no other country in the world can have or build even though it wants to, and this is a source of pride of prides of our Party.

All of our working class in the munitions industry always accept it as their main duty to relieve our Party of its anxiety and worry, prioritize before anybody else the problems of its concern, even though they number thousands or tens of thousands, support it without any conditions attached and carry them out without yielding. They are true revolutionaries and patriots and model heroes.

Comrades,

That military hardware, which the working class in the munitions industry have donated to the Party and revolution today, has a high capability of overcoming complicated terrain conditions, great manoeuvrability and an ability to conduct a surprise and precision launch of multiple rockets in terms of military technology; and as it has south Korea as a whole within the range of strike and is capable of carrying tactical nuclear warhead, it will discharge in future the combat mission of overpowering the enemy as a core, offensive weapon of our armed forces.

As we can hand additional 30 units of offensive military hardware of great importance over to the People's Army units at a time thanks to the devoted struggle of the working class in the munitions industry for increased production, I cannot suppress surging excitement and emotion.

Extending warm thanks again to our working class in the munitions industry, I would like to conclude by making an ardent appeal to them.

Our Party and the government of our Republic have declared their resolute will to respond with nuke for nuke and an all-out confrontation for an all-out confrontation in order to deal with the enemy's rash acts and reckless moves.

Our working class in the munitions industry should surely guarantee this declaration of ours, this staunch will to deal with the enemy, with matchless sword, spear and shield.

All the revolutionary fighters in the munitions industry should harden their indomitable faith and militant spirit with which to carry out unto death the grand strategy of defence development set out by the Party Central Committee, and turn out as one and strive in the efforts to produce powerful Juche-type weapons which will absolutely overwhelm the US imperialist aggressive forces and their puppet army.

Our revolution and the prevailing situation demand that we, by concentrating our efforts on ensuring continuous development of our defence industry, increase the state's defence capabilities without interruption so as to fully guarantee a reliable and solid security environment for the development of socialism.

As long as we have our laudable and trustworthy working class in the munitions industry, who challenge difficulties and impossibilities on the strength of Juche to bring about transformations and leaps, and the great people, who are rallied around the Party with one mind and one will, our Party's cause of building a powerful army is sure to succeed.

Full of courageous mettle and due self-assurance, let us all fight with redoubled courage and great confidence to bring earlier even greater victory and glory by launching a more gigantic struggle and working new miracles.

The year of 2022 is drawing to a close, an unforgettable year when we have struggled and advanced undauntedly for our revolution, socialism, braving all sorts of trials. At this moment, I extend warm greetings of the new year of 2023 to all of our working class in the munitions industry, defence scientists, officials and their dear families who have provided a distinctive and significant finale to this year through this meaningful donating ceremony.

Thank you. -0-

www.kcna.kp (Juche112.1.1.)

Annex 22: Report on 6th enlarged plenary meeting of 8th WPK Central Committee

Date: 01/01/2023 | Source: KCNA.kp (En) | *Source:* https://kcnawatch.org/newstream/1672543894-200963704/report-on-6th-enlarged-plenary-meeting-of-8th-wpk-central-committee/

Excerpts related to the BM programme:

… the official legalization of the DPRK's policy on its nuclear force at the most appropriate and crucial time …
… however, if it fails to deter, it will carry out the second mission, which will not be for defense

… ***a task was raised to develop another ICBM system whose main mission is quick nuclear counterstrike.***

… ***it highlights the importance and necessity of a mass-producing of tactical nuclear weapons and calls for an exponential increase of the country's nuclear arsenal, the report said, clarifying the epochal strategy of the development of nuclear force and national defence for 2023 with this as a main orientation****.*

*…****the National Aerospace Development Administration will launch the first military satellite of the DPRK at the earliest date possible by pushing ahead with the full preparation for a reconnaissance satellite and its vehicle in progress at the final stage, the report pointed out*** *...*

Full text:

Pyongyang, January 1 (KCNA) -- The vigorous development of the sacred Korean revolution pioneered and advancing with the most just mission and far-reaching ideal is firmly guaranteed by the wise guidance of the Workers' Party of Korea which sets forth scientific path and clear practical strategy at each period and at every stage and leads to thorough and perfect implementation.

Our Party members, working people and service personnel have honorably defended the year 2022 full of all the unprecedented challenges and threats with the indomitable spirit and perseverance peculiar to the great Korean people under the militant banner of the ever-victorious WPK. They are recollecting with great pride and self-confidence the days when they have overcome the most difficult hardships with stubborn wisdom in the gigantic course for a comprehensive development of socialist construction.

In 2022 filled with manifold trials, our Party members, working people and officers and men of the People's Army have waged a heroic struggle to defend the validity of their cause and their dignity and honor, thus powerfully demonstrating the potentiality of the DPRK, its spirit and the staunch character of the Korean revolution. And through the process of making remarkable and meaningful progress, they came to believe their own strength more firmly, find out the main links of changes more clearly and map out the road of overall development more vividly.

Under the present situation of aspiring after a new advance after successfully overcoming the dangerous and urgent difficulties decisive of the existence of the state, the Korean revolution has persistently faced unavoidable obstacles which can be overcome only by the correct and seasoned leadership of the WPK and the united, powerful and courageous struggle of the Korean people.

The Sixth Enlarged Plenary Meeting of the Eighth Central Committee of the WPK was held at the office building of the Party Central Committee, the supreme headquarters of the revolution, from December 26 to 31, Juche 111 (2022) to clarify the positive and scientific policy orientation for dynamically leading the Korean-

style socialism to a fresh change and development by thoroughly applying the idea of independence, self-sustenance and self-reliance, the invariable guidelines of the Korean revolution.

Kim Jong Un , general secretary of the WPK, was present at the plenary meeting.

When Kim Jong Un appeared at the platform, stormy cheers of "Hurrah!" broke out in the meeting hall.

All the participants extended the highest glory to the respected Comrade Kim Jong Un , the great leader of our Party and revolution and the banner of all glories and victories of our state and people, who has confidently led the socialist cause to radical overall development while ushering in a heyday of strengthening the whole Party with his transparent idea of independence and distinguished leadership activities, holding fast to the helm of the Juche revolution.

Present there were members of the Presidium of the Political Bureau of the WPK Central Committee, members and alternate members of the Political Bureau of the WPK Central Committee and members and alternate members of the WPK Central Committee. Officials of the departments of the Party Central Committee and leading officials of ministries, national institutions, provincial level leadership bodies and cities and counties and major industrial establishments were present as observers.

The presidium of the meeting was elected with members of the Political Bureau of the Party Central Committee.

The Political Bureau of the Central Committee of the WPK authorized Kim Jong Un to preside over the meeting.

Kim Jong Un appreciated that the WPK has pushed ahead with socialist construction more dynamically and extensively by further increasing the enthusiasm of the whole Party and all the people for struggle, while overcoming the difficulties and hardship equivalent to the ten-year struggle since the 8th Congress of the WPK. He said it is the most precious experience that the WPK correctly grasped the peculiarities of the internal and external environment of the Korean revolution during this course and confirmed our revolutionary principle, methodology and orientation of advance.

He said that the plenary meeting should serve as an occasion for opening a wide avenue for the development of the state and giving the people greater confidence and optimism by clarifying the path of new leap forward and mapping out the most correct and effective strategy on the basis of the experience, lessons and substantial advance accumulated through the stubborn struggle in 2022.

Stressing the need for the members of the leadership body of the Party Central Committee to display a high sense of responsibility and activeness to this end, he declared the 6th Plenary Meeting of the 8th Party Central Committee open.

The plenary meeting put the following matters on its agenda items:

1. On review of the implementation of major Party and state policies in 2022 and the work plan for 2023

2. Organizational matter

3. On the fulfillment of the state budget for 2022 and the draft state budget for 2023

4. On strengthening the Party guidance over the revolutionary schools

5. On the five-point line of party building in the new era

The plenary meeting unanimously approved the agenda items.

The plenary meeting discussed the first agenda item "On review of the implementation of major Party and state policies in 2022 and the work plan for 2023".

Kim Jong Un made a report on the first agenda item.

In his report he appreciated the successes made in 2022 in which our Party and people have made steady and powerful progress while waging an arduous struggle in firm unity.

The remarkable successes and progress have been made in the activities of our Party and its self-strengthening.

The Party Central Committee directed the general orientation of the Party activities to the thorough implementation of the decisions of the Fourth and Fifth plenary meetings of the Eighth Party Central Committee, and powerfully led the whole Party and all the people to continuous advance and development with its leading and superb leadership practice in the face of the sudden and severe changes in internal and external situation. It also further refined its leadership ability by thoroughly maintaining its leadership traits of responding courageously and promptly, and developed the united might of the revolutionary ranks onto a remarkably high level.

Substantial measures were taken to reinforce the key links in strengthening the Party work throughout the Party and a theory of party building in the new era guaranteeing the eternal future of the Party was established, providing a powerful weapon for the rosy development of the Party.

The settlement of the historic task of making the world clearly recognize the strategic position of the DPRK to provide an eternal security through the official legalization of the DPRK's policy on its nuclear force at the most appropriate and crucial time--this is a demonstration of the transparent stand of independence and the idea of self-defence of the WPK, which has greater significance than any political event in the view of steering the change of the world political structure and in the view of putting the track of the development of the state on a new high level.

The report analyzed and evaluated the dramatic changes made in developing the defence capabilities and in the struggle against the enemy.

It is the great pride of the Party, the DPRK government and the people to make the DPRK's great power more certain and build up powerful and matchless military muscle by making a strenuous struggle for bolstering up the defence capabilities.

The basic principle of defending the national interests and raising the national prestige of the WPK was successfully implemented despite the trend of the eventful and changeful international political situation, thus dealing a severe blow at the U.S. imperialists' high-handed and arbitrary practices and policy toward the DPRK in line with the Party's strategic plan and resolution.

The report referred to the remarkable progress made in the economic construction and cultural construction in the year 2022.

Splendid successes symbolizing the struggle of the year 2022 have been made in the construction of the Hwasong and Ryonpho areas, which were the most important tasks in the field of construction, and projects of great significance in economic growth and improvement of the people's living standard were inaugurated.

The drive for implementing the new programme for rural revolution started dynamically, model houses representing the new era of rural development were built in cities and counties across the country and a positive drive was launched to improve economic management and raise the country's ability to cope with crisis and the country's level of civilization.

2022 was a time which was by no means meaningless and we have made clear advance, the General Secretary said, adding that certain successes made in all the work of the Party and state are a praiseworthy victory won only by our great people who have displayed the spirit of self-reliance and fortitude and the creativity while stoutly enduring the grave national crises, and the immortal feats to shine long in the history of the country forever.

He extended warm thanks to all the Party members and other people across the country on behalf of the Party Central Committee for having firmly defended and implemented the Party policies with the most powerful and courageous struggle unprecedented in history, thus demonstrating the honor, dignity and prestige of the state before the whole world and glorifying the year 2022 as a year of an important milestone in opening a new surging phase of our revolution.

Saying that 2023, which is to carry out the tasks of the third year of key significance in implementing the five-year plan set forth at the Eighth Congress of the Party and mark the 70th anniversary of the victory in the Fatherland Liberation War and the 75th founding anniversary of the Republic, is an important year in the course of our socialist development and the history of the DPRK, he set it as the general direction of new year's work to further expand and develop the all-people struggle to open a new phase in socialist construction so as to lay a decisive guarantee for the fulfillment of the five-year plan.

He stressed the need to turn the year 2023 into a year of great turn and change to be remarkably recorded in the course of development of the DPRK by redoubling the fighting spirit displayed in 2022 and making all efforts to attain this year's goal and fulfill the new long-term tasks.

The General Secretary indicated all the tasks for ensuring stable development of the national economy and bringing about a substantial change in the improvement of the people's living standard.

The report defined the year 2023, which faces the higher goals and huge tasks for accomplishing the five-year plan for national economic development, as a year of making a big stride in the development of the national economy, a year of attaining key goals in increasing production, carrying out the strategy of readjustment and reinforcement and improving the people's living standard, and set it as the main task of economic work to mainly complete the plan for readjustment and reinforcement decided by the Party Congress while pepping up production in all sectors and units.

The General Secretary said that the WPK has made strenuous efforts to thoroughly embody the idea of self-sustenance laid down by President Kim Il Sung and eliminate defeatism and mysticism in technology in the whole course of socialist construction since the foundation of the state. He reprimanded that however, the tendency of such old idea still remains among some economic officials as incurable and indigenous diseases with clever disguise.

The plenary meeting dealt a resolute and heavy blow to the outdated idea of trying to bargain the principle of self-reliance, not abandoning dependence on the technology of others, and recognized that it is necessary to continue the struggle to wipe out all the remnants of wrong ideas which are obstructing our work under the pretense of objective circumstances.

The General Secretary ardently and militantly called upon the workers, scientists and technicians of core sectors for the successful development of the national economy to overcome the difficulties of the revolution by their own efforts, holding high the fighting spirit and banner of the 1960s and 70s once again.

The report set as the main targets the economic indices and 12 major goals to be attained by all sectors of the national economy in the new year and specified the ways for attaining them. It stressed the need to focus the operation and guidance on making the implementation of this year's plan lead to the implementation of the medium- and long-term strategy for economic development.

Setting it as the first major policy task to build more dwelling houses, a revolution that brings about epochal changes and a project greatly favored by the people, the report stressed the need to build a new street composing of 3 700 flats along with the construction of 10 000 flats of the second stage in the Hwasong area by building up the capital city in a bolder way in the third year of the construction of 50 000 flats in Pyongyang City. It also stressed the need to direct greater efforts to the construction of rural dwelling houses on the basis of the experience accumulated in the year 2022.

The report raised it as a policy task to bring about a substantial change in the people's living which the Party attaches most importance to and is pushing forward with much effort, and detailed the important tasks and ways to which the agricultural sector should give priority.

It called for finding a realistic and rational work system and method and unconditionally carrying them out in light industry, regional industry, public service, fishery, urban management and other sectors directly related to the people's living so that the policies of the Party and state can reach the people correctly.

The report stressed the need to thoroughly adhere to the Party's principle of attaching importance to and prioritizing science and technology, clearly understanding the importance of science and technology playing a locomotive role in developing the national economy and improving the people's living standard, and set forth the orientation of innovation to raise the country's scientific and technological level to a new higher level.

It dealt with the principles and ways to amplify the successes and experience gained in education, public health and all other fields for developing socialist culture in the course of the struggle of the year 2022 and to overcome deviations.

The General Secretary stressed the need to actively organize and properly lead the socialist patriotic movement and the revolutionary mass movement, the powerful driving force for the prosperity and development of the state.

Noting that priority should be paid to firmly adhering to and inheriting the tradition of loyalty peculiar to the Korean revolution and the tradition of patriotism peculiar to our state, and the revolution should be advanced by dint of loyalty and patriotism, he clarified the principled issues arising in actively organizing and conducting various popular patriotic movements to be conducted by the Party and working people's organizations.

The report clarified the crucial policy resolution on giving spurs to strengthening the self-defensive capabilities on the basis of the analysis of the present situation of the inter-Korean relations and the external challenges seriously threatening regional peace and security.

The U.S. and other hostile forces have recently been hit hard by the rapid development of the military muscle of the DPRK and the promulgation of the peerless nuclear law in the world. Though seized with fear and uneasiness due to the DPRK's toughest counteraction, they are now keen on isolating and stifling the DPRK, unprecedented in human history.

In 2022 the U.S. frequently deployed various nuclear strike means in south Korea at the level of constant deployment, increasing the level of military pressure on the DPRK to the maximum. And, at the same time, it is pushing forward the realization of triangular cooperation with Japan and south Korea on a full scale while working hard to establish a new military bloc like Asian version of NATO under the signboard of "tightening alliance".

Under the pretext of coping with any "threat", south Korea is hell-bent on imprudent and dangerous arms buildup while busying itself with hostile military moves to pose a confrontational challenge.

The prevailing situation calls for making redoubled efforts to overwhelmingly beef up the military muscle to thoroughly guarantee the sovereignty, security and fundamental interests of the Republic in response to the worrying military moves by the U.S. and other hostile forces precisely targeting the DPRK.

Stressing the importance of bolstering the nuclear force, the report made clear that our nuclear force considers it as the first mission to deter war and safeguard peace and stability and, however, if it fails to deter, it will carry out the second mission, which will not be for defense.

According to the strategy and plan for bolstering up nuclear force of the Party and the DPRK government to firmly safeguard the Republic's absolute dignity, sovereignty and right to existence, a task was raised to develop another ICBM system whose main mission is quick nuclear counterstrike.

Now that the south Korean puppet forces who designated the DPRK as their "principal army" and openly trumpet about "preparations for war" have assumed our undoubted enemy, it highlights the importance and necessity of a mass-producing of tactical nuclear weapons and calls for an exponential increase of the country's nuclear arsenal, the report said, clarifying the epochal strategy of the development of nuclear force and national defence for 2023 with this as a main orientation.

The National Aerospace Development Administration will launch the first military satellite of the DPRK at the earliest date possible by pushing ahead with the full preparation for a reconnaissance satellite and its vehicle in progress at the final stage, the report pointed out.

The report raised it as a major task to boost the political and ideological and military and technical strength of the People's Army, the main force of the national defense capabilities.

In accordance with the army-building orientations put forward at the 8th Party Congress and major Party meetings, it is necessary to make the year 2023 marking the 70th anniversary of the victory in the great Fatherland Liberation War and the 60th anniversary of advancement of the slogan "A-match-for-a-hundred" as a year of strengthening the political and ideological might of the armed forces of the Republic in every way and a year of bringing about a change in making preparations to mobilize for war and enhancing the actual war capacity.

The report highly appreciated the devoted efforts and feats by the workers, scientists and officials in the munitions industrial sector who creditably carried out the major national defense policy-oriented tasks set forth by the Party through the whole year's super-intense drive for production and scientific research, and laid down next year's goals of developing and producing weapons and equipment.

The report made clear the main tasks faced by the sectors in charge of affairs with the south and foreign affairs on the basis of the analysis of the external circumstances of the Korean revolution.

As the structure of international relations has been apparently shifted to the "new Cold War" system and a push for multipolarization is further expedited, the report stressed the principles of external work to be thoroughly adhered to by the Party and the DPRK government to raise national prestige, defend national rights and safeguard national interest and to protect regional peace and security.

Notably, the report put forward the detailed orientations of responding to the U.S. and other enemy on shifting to the actual action of more reliably and surely cementing our physical force on the principle of struggle against the enemy - might for might, frontal match - and it sounded a note of warning against those

countries which started joining the U.S. with its partnership strategy to deprive the DPRK of its sacred dignity and sovereignty.

The General Secretary in his report raised the important issues arising in solidifying and developing our state and social system and giving play to its advantages and might.

When the socialist legal system has been further improved and strengthened, the original features of our system as the genuine people's country that the law defends the people and the people observe the law can be preserved, Party policies and state policies can be properly implemented and the purity of the revolutionary ranks and the consolidation of the Korean-style socialism can be defended and maintained.

Raised in the report were the principled issues arising in readjusting the state management structure system in a practical way and in improving the work attitude and style of officials as required by the changing and developing circumstances and the intensified struggle for socialist construction.

The General Secretary indicated important items, orientations of improvement and principled issues for preserving and solidifying the political climate peculiar to the Party and substantially guaranteeing the prospective development of the Party by boosting the combat efficiency of Party organizations at all levels and improving Party work and personnel management in a fundamental manner.

A change should be made in the work of all the Party organizations and officials and, in particular, the provincial Party committees, the political staff of relevant regions and their chief secretaries.

The General Secretary concluded his three-day report, warmly appealing to the leading officials, who are fully responsible for the work of all fields of the revolution and the destiny of Party policies, to make decisive progress in carrying out their duties to live up to the trust and expectations of the Party and the people with their high sense of loyalty and devoted service at the most critical and responsible time in the history of the development of the Republic and thus powerfully demonstrate to the world how the WPK shouldering the destiny of the country and the people overcomes trials and advance towards a greater victory through new year's struggle.

All the participants expressed full support and approval with a big clap to the report which proudly reviewed the all-people struggle of 2022 that made brilliant achievements in the spirit of fortitude and clearly indicated our advance orientations and keys to making a leap forward under the changing revolutionary situation.

The General Secretary's passionate report full of confidence in victory that calls for shaping the future of socialist construction in our own way and by our own efforts from A to Z serves as an undying militant banner that makes it possible to further boost the great and inexhaustible strength of single-minded unity between the Party and the people, thus using the absolute power and admirably steering the struggle, dynamically achieve substantial change of development for national prosperity.

The propositions put by Premier of the Cabinet Kim Tok Hun to the measures taken for improving and cementing the overall state affairs including the economic field were heard and leading officials of various fields made speeches and written speeches at the meeting.

Based on the idea and spirit of the important report by the General Secretary, two-day sectional workshops and consultative meetings took place to establishing, in a scientific and detailed way, a thoroughgoing and correct implementation plan for next year's colossal fighting tasks.

The cadres of the Party and the government guided the sectional workshops and consultative meetings.

The Political Bureau of the Party Central Committee finally deliberated the opinions on the draft decision, examined the deliberation of the draft state budget for the new year and discussed the issue of taking important measures for the development of major sectors of the national economy.

The plenary meeting unanimously adopted the resolution on the first agenda item.

The plenary meeting discussed the organizational matter as the second agenda item.

Members and alternate members of the Workers' Party of Korea (WPK) Central Committee were recalled and by-elected.

Jon Sung Guk, Kim Tu Il, Song Yong Gon and Pak Song Chol were by-elected as members of the C.C., WPK from alternate members and Pang Tu Sop, Choe Chol Ung, Pak Myong Son, Ri Yong Sik, Paek Song Guk, Kim Yong Su, Kim Yong Hwan, Ri Ho Rim, Ho Chol Yong, Yu Jin, Sin Ki Chol, Kim Sang Gon and Ri Hye Jong as members of the C.C., WPK.

By-elected as alternate members of the C.C., WPK were Kim Yong Sik, Thae Hyong Chol, Kim Chang Sok, Jo Sok Chol, Jong Yong Nam, Ri Song Bom, Kim Phyong Hyon, Won Kyong Mo, Sin Song Guk, An Sung Hak, Ho Chol Ho, Song Myong Hun, Pae Song Guk, Kim Kum Chol, O Chol Su, Choe Son Il, Kim Son Guk, Jang Se Il, Ri Kyong Il, Jon In Chol, Kim Tu Hong, Pak In Gi, Yu Chol U, Kim Song Chol, Choe Tu Yong and Ryang Kil Song.

Recalled and by-elected were members and alternate members of the Political Bureau of the C.C., WPK.

Pak Su Il was by-elected as member of the Political Bureau of the C.C., WPK and Ju Chang Il, Ri Hi Yong, Kim Su Gil, Kim Sang Gon and Kang Sun Nam as alternate members of the Political Bureau of the C.C., WPK.

Dismissed and elected were secretaries of the C.C., WPK.

Pak Jong Chon was dismissed and Ri Yong Gil was elected as secretary of the C.C., WPK.

Recalled and by-elected were vice-chairmen of the WPK Central Military Commission.

Pak Jong Chon was recalled and Ri Yong Gil was by-elected as vice-chairman of the WPK Central Military Commission.

Recalled and by-elected were vice-chairmen of the WPK Central Inspection Commission.

Kim Sang Gon was by-elected as vice-chairman of the WPK Central Inspection Commission.

Dismissed and appointed were department directors and first vice department director of the C.C., WPK.

O Il Jong, Kim Sang Gon, Kim Yong Su and Ri Hye Jong were appointed as department directors of the C.C., WPK, and Kim Yong Sik as first vice department director of the C.C., WPK.

Dismissed and appointed were chief secretaries of provincial Party committees.

Kim Su Gil was appointed as chief secretary of the Pyongyang City Committee of the WPK, Pak Thae Dok as chief secretary of the South Hwanghae Provincial Committee of the WPK and Paek Song Guk as chief secretary of the Kangwon Provincial Committee of the WPK.

Dismissed and appointed were cadres of the government organs.

Kim Chol Ha was appointed as minister of Chemical Industry, Kim Chang Sok as minister of Light Industry, Jo Sok Chol as chairman of the Quality Control Commission and Ri Yong Sik as director of the Political Bureau of the Cabinet and concurrently chief secretary of its Party committee.

Dismissed and appointed were some commanding officers of the armed forces organs.

Pak Su Il was appointed as the chief of the Korean People's Army General Staff, Kang Sun Nam as minister of National Defence of the DPRK and Ri Thae Sop as minister of Public Security.

In the debate on the third agenda item, the plenary meeting finally deliberated the fulfillment of the state budget for 2022 and the draft state budget for 2023, examined and submitted by the state budget assessment group, and approved to bring them to the 8th Session of the 14th Supreme People's Assembly.

The plenary meeting discussed the fourth agenda item "On strengthening the Party guidance over the revolutionary schools" and unanimously approved a relevant resolution.

The plenary meeting discussed the fifth agenda item "On the five-point line of party building in the new era".

Kim Jong Un made a report on the fifth agenda item.

It is an important issue for our Party, which has covered a long ruling course of nearly 80 years with its important mission to be responsible for the destiny and future of the Korean people, to provide powerful guidelines for firmly preserving its revolutionary character and nature and remarkably enhancing its leading and vanguard role on the basis of directly facing up to the changes of the times and examining the Party's reality.

The idea and theory of Party building in the new era, originally advanced by the General Secretary, included the revolutionary essence, content and valuable experience of the building of organization, ideology and leadership art which has been accumulated historically, suggested all urgent problems arising in the practice of Party work and solved them scientifically. So, they won full support and approval of the Party officials and members in a few months after their announcement.

The work was executed to newly frame the theoretical system on the Party building with political, organizational, ideological, disciplinary and work-style building and enrich and regularize their contents.

In particular, the struggle to open up a new era of strengthening the whole Party provided a solid springboard for steadily and stably developing the Party building, including the overall and detailed refinement of the fighting capabilities of the Party organizations at all levels and the intensification of the political awareness and role of the party officials and members.

It is a reliable force and a solid foundation for strengthening the party that the Party has its organizations and millions of its members, who are working hard to establish a sound and clear political climate, rallied close around its Central Committee organizationally and ideologically and in moral obligation, and tens of millions of people have absolutely trusted the Party as the ever-victorious guide and the great mother, following it in one mind.

It is raised as an appropriate and matured issue to define the five-point orientation for party building in the new era as the Party's line, in accordance with the new requirements of the developing revolution, the continuity of the trend confirmed in the historical course and the scientific and objective confirmation of its feasibility.

Expressing the belief that the WPK would be able to constantly maintain and strengthen its character and nature and discharge its sacred mission and responsibility for the people forever if the five-point orientation based on the theory of Party building in the new era is confirmed as the line of the party building of the WPK, the General Secretary courteously proposed to the plenary meeting to formally define the Party building orientation in the new era in which the will of the whole Party is integrated as the Party's line.

A resolution on defining the five-point orientation based on the General Secretary's unique idea and theory of party building as the WPK's line of party building in the new era was adopted with unanimous applause.

Kim Jong Un made a concluding speech.

Our struggle is an unprecedented great cause of not only enduring the difficulties facing it and maintaining itself but advancing toward new changes and development and the overall development of socialist construction.

In the new year, too, our struggle will face trials and difficulties which are not easy to overcome, but we should vigorously advance towards a new horizon of development of the state with firm confidence in our cause and faith in our own strength.

We will resolutely tide over the challenges and difficulties facing us by our own efforts and accelerate the advance into a new era as planned, decided and scheduled by us, not by any fortunes or help from outside.

The General Secretary declared the plenary meeting closed, expressing firm belief that its decisions would lead to steady implementation and substantial changes and a new heyday of the development of the Party and the revolution would be ushered in forever thanks to the high Party spirit, revolutionary spirit and devotion of all the participants.

All the participants broke into stormy cheers, looking up to the august General Secretary of the WPK who opened up a broad avenue for strengthening the whole Party and achieving national prosperity and has vigorously guided the work with his rare ideological and theoretical wisdom, seasoned art of leadership and tireless devotion, and solemnly took a pledge of invariable loyalty to the revolutionary cause following the Party Central Committee while setting up their minds full of new confidence and will before the ordeals to be faced again for the great state and people.

The Sixth Plenary Meeting of the Eighth Central Committee of the WPK, which fully demonstrated the mature leadership ability of our Party confidently leading the socialist cause of Korean style and added fresh courage and vigour to the dynamic advance of our state along the road chosen by itself and to the indomitable fighting spirit of our people, will shine long in the sacred history of the Juche revolution as a significant occasion that made an important turning point peculiar to the victorious path of our revolution.

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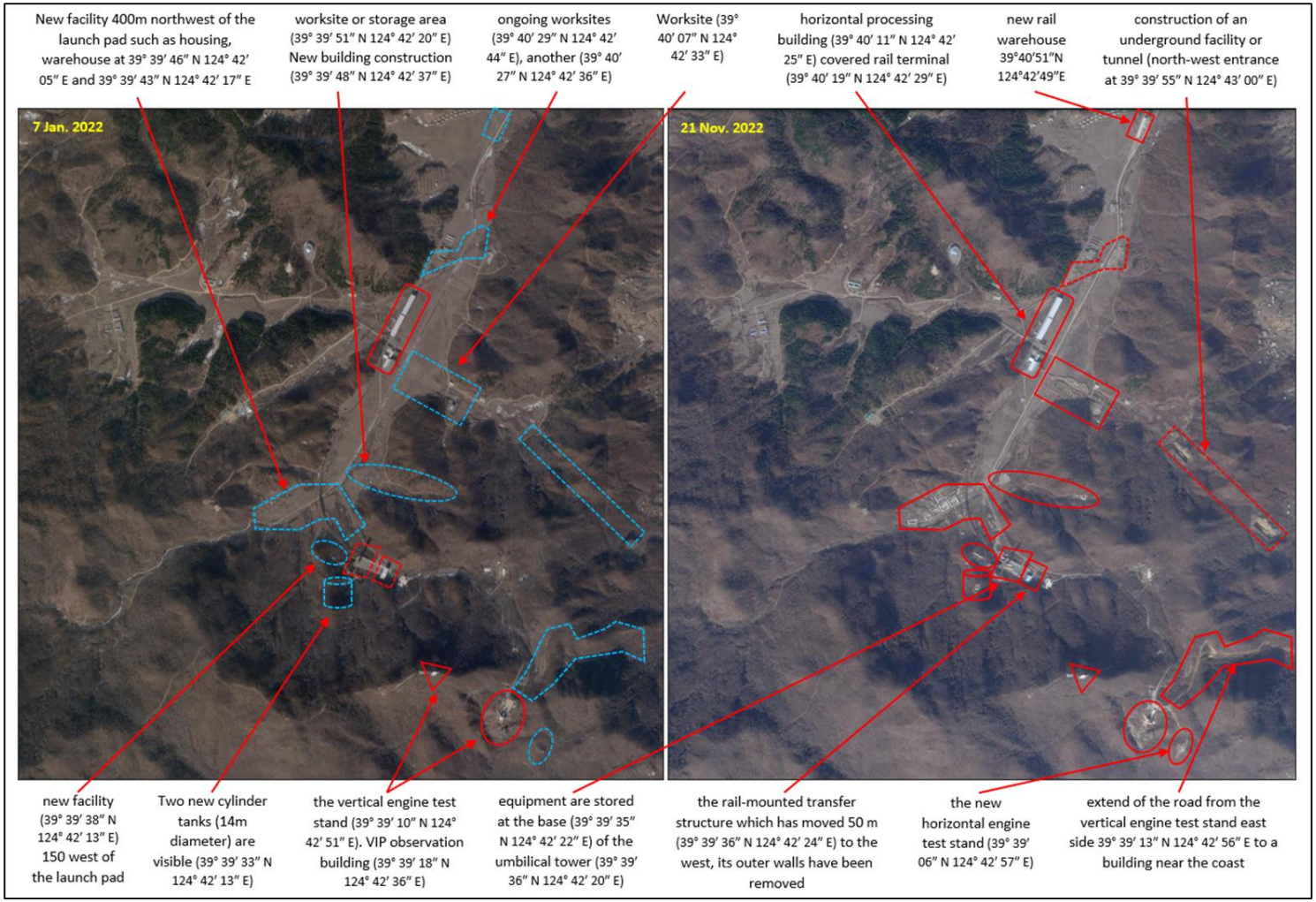
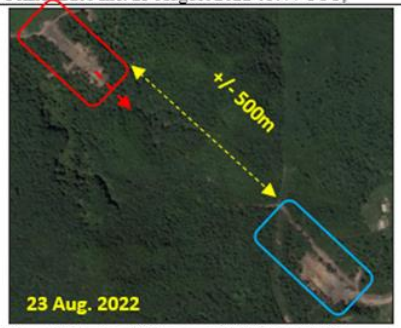
www.kcna.kp (Juche112.1.1.)

Annex 23: Infrastructure developments of the National Aerospace Development Administration (NADA, KPe.029) at the Sohae (Tongchang-ri) satellite launching ground[9]



[9] See S/2020/840, para. 17 and annex 13, and S/2020/151, para. 198 and annex 62, and the Panel analysis is corroborated by the CSIS report "New Engine Test Stand and Construction Progress at Sohae Satellite Launching Station available" at https://beyondparallel.csis.org/probable-new-engine-test-stand-and-construction-progress-at-sohae-satellite-launching-station/.

Sohae Satellite launch station worksites (from north to south)	JULY-AUGUST 2022	SEPTEMBER-OCTOBER 2022	NOVEMBER-DECEMBER 2022
New rail warehouse 39° 40′ 51″ N 124° 42′ 49″ E and possible problem during the roof construction 39° 40′ 51″ N 124° 42′ 49″ E. New building 39° 40′ 50″ N 124° 42′ 53″ E at 100m east of this railway warehouse. Cargo railcars visible on 23 October 39° 40′ 25″ N 124° 42′ 33″ E at the north of the old rail warehouse 39° 40′ 19″ N 124° 42′ 29″ E.			
Source:	Planet Labs Inc. 3 July 2022 02:53 UTC	Planet Labs Inc. 16 October 2022 05:49 UTC; 18 October 05:11 UTC	Planet Labs Inc. 25 October 02:00 UTC, 28 October 05:39 UTC, 2 December 2022 04:28 UTC,
Ongoing worksites (39° 40′ 29″ N 124° 42′ 44″ E) 145m east and another (39° 40′ 27″ N 124° 42′ 36″ E) 135 m south of the administration and security headquarters (39° 40′ 30″ N 124° 42′ 39″ E) (see S/2020/840 Para. 17. Annex 13 and S/2020/151 para. 198 annex 62) Cargo railcars visible at 39° 40′ 25″ N 124° 42′ 33″ E from 7 October to 18 November at the north of the old rail warehouse 39° 40′ 19″ N 124° 42′ 29″ E			
Source:	Planet Labs Inc. 3 August 2022 05:33 UTC	Planet Labs Inc. 25 October 2022 02:00 UTC	Planet Labs Inc. 2 December 2022 04:28 UTC
New building construction (39° 39′ 48″ N 124° 42′ 37″ E) 460 m south of the control center (39° 40′ 03″ N 124° 42′ 40″ E) which was erased in October and has since been rebuilt and worksite or storage area (39° 39′ 51″ N 124° 42′ 20″ E) at the beginning of the road leading to this new house			
Source:	Planet Labs Inc. 3 July 2022 02:53 UTC	Planet Labs Inc. 7 September 2022 05:46 UTC	Planet Labs Inc. 2 December 2022 04:28 UTC;

Sohae Satellite launch station worksites (from north to south)	JULY-AUGUST 2022	SEPTEMBER-OCTOBER 2022	NOVEMBER-DECEMBER 2022
Worksite (39° 40′ 07″ N 124° 42′ 33″ E) 255 m east of the horizontal processing building (39° 40′ 11″ N 124° 42′ 25″ E)			
Source:	Planet Labs Inc. 23 August 2022 05:44 UTC;	Planet Labs Inc. 25 October 2022 02:00 UTC	Planet Labs Inc. 2 December 2022 04:28 UTC;
Construction of **an underground facility or tunnel** (length about 500 m, width 30m) with **a north-west entrance** at (39° 39′ 55″ N 124° 43′ 00″ E) and **south-east entrance** (39° 39′ 44″ N 124° 43′ 15″ E)			
Source:	Planet Labs Inc. 23 August 2022 05:44 UTC;	Planet Labs Inc. 25 October 2022 02:00 UTC	Planet Labs Inc. 2 December 2022 04:28 UTC;
New facility 400m northwest of the launch pad such as housing, warehouse (39° 39′ 46″ N 124° 42′ 05″ E) and north (39° 39′ 43″ N 124° 42′ 17″ E). **New facility** (39° 39′ 38″ N 124° 42′ 13″ E) 150 west of the launch pad (39° 39′ 36″ N 124° 42′ 19″ E) and (39° 39′ 34″ N 124° 42′ 17″ E) 90 m southwest probably to replace the former fuel and oxidizer buildings located respectively at 39° 39′ 35″ N 124° 42′ 17″ E and 39° 39′ 34″ N 124° 42′ 19″ E. **Two new cylinder tanks (14m diameter) are visible** (39° 39′ 33″ N 124° 42′ 13″ E possible other fluid tank) 175 m southwest of the launch pad.			
Source:	Google Earth 31 Aug. 2022	Planet Labs Inc. 25 October 2022 02:00 UTC;	Planet Labs Inc. 2 December 2022 04:28 UTC;

Sohae Satellite launch station worksites (from north to south)	JULY-AUGUST 2022	SEPTEMBER-OCTOBER 2022	NOVEMBER-DECEMBER 2022
Activity is detected on **the launch pad** with the storage of equipment and **the rail-mounted transfer structure** which has moved 50 m (39° 39′ 36″ N 124° 42′ 24″ E) to the west from its original position on the side of the processing building (39° 39′ 35″ N 124° 42′ 25″ E), its outer walls have been removed, only its internal structure is visible waiting for a new coating. So, **the underground rail transfer access** is visible, length 20 m and width 4m. Equipment are storage at the base (39° 39′ 35″ N 124° 42′ 22″ E) of the **umbilical tower** (39° 39′ 36″ N 124° 42′ 20″ E). *Source:*	 Google Earth 31 Aug. 2022	 Planet Labs Inc. 7 October 02:57 UTC, 25 October 2022 02:00 UTC;	 Planet Labs Inc. 2 December 2022 04:28 UTC;
according to a MS, **the vertical engine test stand** (39° 39′ 10″ N 124° 42′ 51″ E) was used in summer on 27 August 2022 (MS) The panel corroborated the information because of the trace of burnt grass observable at the back of the vertical test stand after that date. *Source:*	 Planet Labs Inc. 24 Aug. 2022, 05:35 UTC and 6 Sep. 2022, 05:37 UTC	 Planet Labs Inc. 6 Sep. 2022, UTC	 Planet Labs Inc. 2 December 2022 04:28 UTC;
extend of the road from the vertical engine test stand east side 39° 39′ 13″ N 124° 42′ 56″ E to a building near the coast 39° 39′ 25″ N 124° 43′ 28″ E where a construction site is very active as well as the new road construction *Source:*	 Google Earth 31 Aug. 2022	 Planet Labs Inc. 25 October 2022 02:00 UTC;	 Maxar 9 Dec. 2022

Sohae Satellite launch station worksites (from north to south)	JULY-AUGUST 2022	SEPTEMBER-OCTOBER 2022	NOVEMBER-DECEMBER 2022
The new horizontal engine test stand (39° 39′ 06″ N 124° 42′ 57″ E) under construction until December 2022, was used on **16 December 2022** to test a wound-filament encased engine (see S/2021/777 Para. 18 and annex 18-2, about the Pukguksong-5) with a tested engine diameter of about 2 m. The KCNA images are consistent to show a possible Thrust Vector Controlling (TVC) technology because a flex-bearing is visible and no visible jet deflector. The presence of Kin Jong Un marked the importance of this stage			
Source:	Planet Labs Inc. 3 August 2022 05:33 UTC	Planet Labs Inc. 14 November 2022 05:54 UTC	Planet Labs Inc. 2 December 2022 04:28 UTC; KCNA on 16 Dec. 2022, https://kcnawatch.org/ and KCTV - 5 PM Bulletin https://kcnawatch.org/kctv-archive/639c7a13ac1fa/

Annex 24: Analysis of the available data on the SRBM/SLBM launched on 25 September 2022 (annex 24A), on the IRBM launched on 4 October 2022 (annex 24B), on SRBMs (or similar) launched on 2 November 2020 (annex 24C), on the ICBM launched on 3 November 2022 (annex 24D), and the ICBM launched on 18 November 2022 (annex 24E).

Annex 24A. 25 September 2022 (local time): A SRBM launched in an easterly direction from the Taechon Reservoir (North Pyongan Province). The DPRK claimed that "…*a ballistic missile launching drill under the simulation of loading tactical nuclear warheads at a silo under a reservoir"*[10] *and* provided statements and photographs in the following days referring to it.

1. According to KCNA information and photographs[11] released on 10 October 2022, the SRBM design is based on KN-23 and KN-24 SRBMs, and it is similar to the small SLBM presented at the military parade on 25 April 2022 and last tested on 7 May 2022 from a submarine or a submersible test stand barge (see S/2022/668 Para. 24, Figure 17). From the photos of Kim Jong Un's location on the reservoir dam to watch the launch, the Panel identified his location a few meters west of the eastern end of the dam (39° 58′ 24″ N 125° 31′ 21″ E), and the launch area to the north of a line from west (39° 59′ 10″ N 125° 31′ 03″ E) to east (39° 59′ 11″ N 125° 31′ 10″ E) (see figure 3).

2. The Panel has identified a possible support area with a mobile pier/platform where the platform or the system used to launch the missile could have been prepared (39° 59′ 08″ N 125° 29′ 42″ E) located 2.7 kilometres north-west of the dam. Two other sites that could be used for support activities related to this specific BM sub-programme are located near the pier area, respectively 400 m (39° 58′ 58″ N 125° 29′ 39″ E) and less than 2 km away by road (39° 58′ 50″ N 125° 30′ 14″ E) (see figure 24A below).

3. The reported flight performance of the SRBM tested are consistent with the statement published by the DPRK. However, the initial phase of the launch presented by the photos taken at the water surface (nevertheless comparable to those taken at sea during the launch of the same SLBM on 19 October 2021, see S/2022/132 annex 20-2) do not make it possible to specify the conditions of ejection and ignition of the missile with regard to the declarations of the DPRK concerning a "*launching drill under the simulation of loading tactical nuclear warheads at a silo under a reservoir".* The analysis of the metadata excerpt from the EXILE-file of the photos of the published by KCNA taken by "*Kim Hyunok829 on Sept. 25, 2022, with a Canon EOS-1D X Mark II (424029000179)*[12] confirmed the date of the launch as well as the photo taken from altitude *with a Canon EOS-1D X Mark II (364028000060).*

4. At the time of the test, Kim Jong Un was on the dam (see para. above) with officials.

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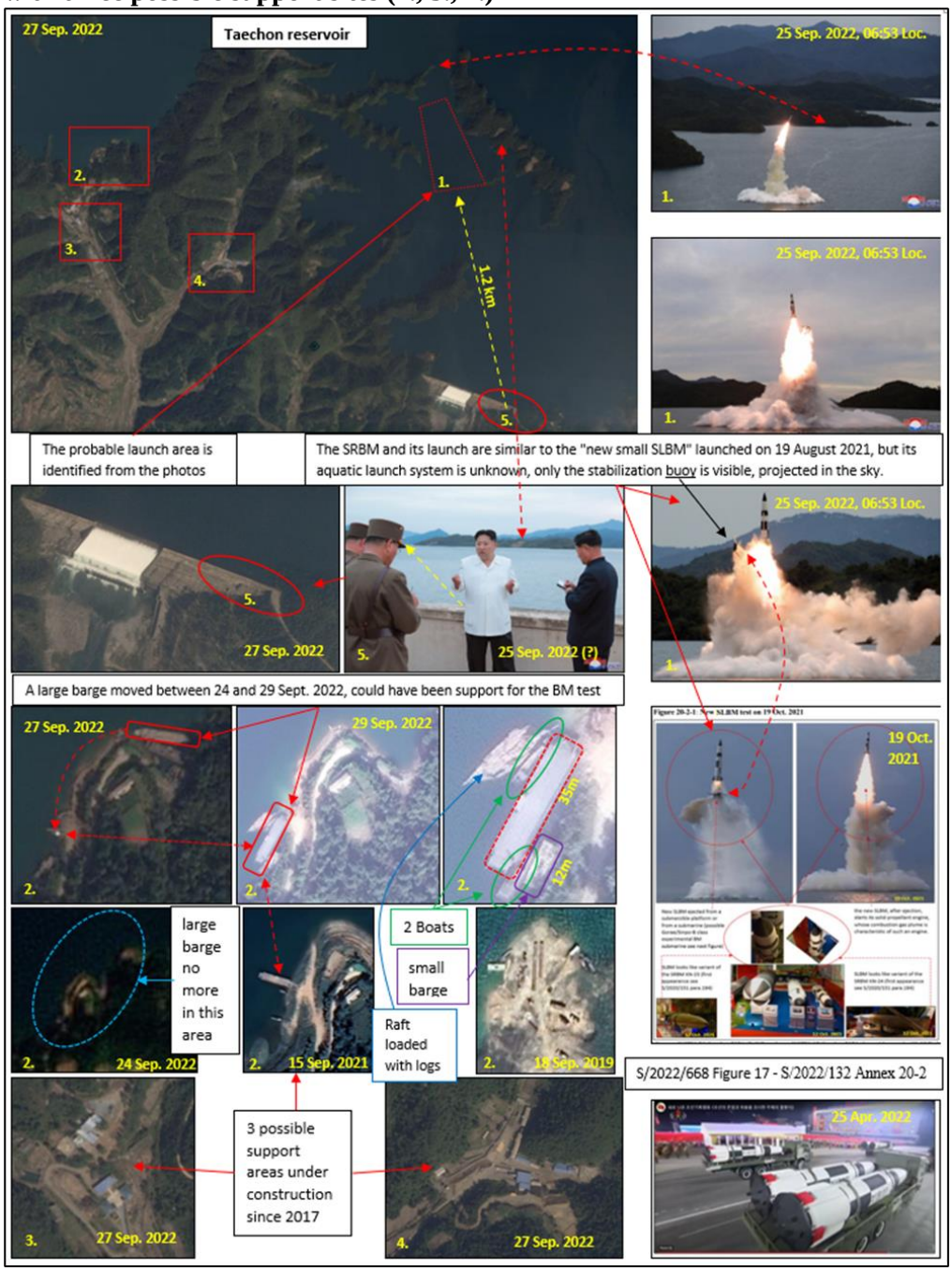
[10] Statement on for the operation of **tactical nukes staged military** drills from **September 25** to **October 9** https://kcnawatch.org/newstream/1665471853-933771973/respected-comrade-kim-jong-un-guides-military-drills-of-kpa-units-for-operation-of-tactical-nukes/; See annex 6 on statement 10 October 2022

[11] https://kcnawatch.org/newstream/1665471853-933771973/respected-comrade-kim-jong-un-guides-military-drills-of-kpa-units-for-operation-of-tactical-nukes/ and KCNA pictures https://kcnawatch.org/

[12] See article from NK NEWS: "What metadata reveals about North Korea's latest long-range missile test" available at https://www.nknews.org/pro/what-metadata-reveals-about-north-koreas-latest-long-range-missile-test/

Figure 24A: Launch of a SRBM (similar to new small solid-fuel SLBM, presented at the military parade on 25 April 2022)[13] on 25 September 2022 from the surface of area (1.) observed from the dam (5.) and with three possible support sites (2., 3., 4.)



Source: KCNA 10 October 2022; Maxar 29 September 2022; Planet Labs Inc. 27 September 2022, 01:58 UTC; Google earth 15 September 2021; 18 September 2019 S/2022/668 Figure 17; S/2022/132 Annex 20-2 KCTV, 20 October 2021

[13] It was probably derived from SRBMs KN-23 and KN-24. According to several Member States, two of its most recent possible test launches were on 9 October 2021 and 7 May 2022, when it was declared tested as “a new-type of submarine-launched ballistic missile”. It was unveiled at the “Self-Defence 2021” exhibition on 11 October 2021

Annex 24B. 4 October 2022, 07:23 (local time): one launch of an IRBM, the DPRK claimed that the BM was *"…a new-type ground-to-ground intermediate-range ballistic missile…"*

1. On 4 October 2022, the DPRK conducted its 5th test launch since 14 May 2017 of an IRBM which appeared to be an upgraded version of the Hwasong-12 and described as an "*a new-type ground-to-ground intermediate-range ballistic missile"* (Rodong Sinmun 10 Oct. 2022). As with previous test launches, the test was conducted without any forewarning and constituted a safety hazard for vessels and aircraft in the relevant areas. According to two Member States, the missile was launched at 07:23 (local time), from the Mupyong-ri (aka Jonchon) area in Jagang Province in an easterly direction. According to this Member States the flight distance was around 4600 km with a maximum altitude of 1000 km. The flight time was 21 minutes, and the maximum speed of the missile was Mach 17. The missile flew over Aomori prefecture (Japan) at around 7:28 - 7:29 and its possible reentry vehicle splashed down at 07:44 - 07:46 about 3 200 km east from Japan. This was the longest recorded range of a DPRK BM over Japan. Considering the potential threat, the Japanese government issued a public alert. DPRK BMs have now overflown Japan three times, on 29 Aug 2017, 15 Sep 2017, and 4 Oct 2022. (See figure 24B below)

2. According to KCNA photos [14] released on 10 October 2022, the IRBM appeared to be a new version of the Hwasong-12, but without the 4 vernier engines and with a single manoeuvrable encased nozzle. The preparation of the TEL was under the scrutiny of Kim Jong Un at the well-known launch point located by the Panel at 40°36'40.21"N 126°25'33.31"E, the same location as the Hwasong-12 launch on 30 January 2022 and the Hwasong-14 launch on 28 July 2017. As demonstrated in KCNA pictures of the launch, both the slightly modified shroud and the main missile body (that of a single-stage liquid-fuelled missile) closely resembled the single-stage IRBM Hwasong-12 without vernier engines (aka KN-17) tested on 30 January 2022, 29 August and 15 September 2017.[15] The burnt gas had the characteristic elongated plume-like shape and colours of the combustion of a liquid propellant (orange and yellow colours, see S/2017/150 para.36).[16] (See figure 24B below)

3. According to the DPRK this launch test was a result of *"a decision to send more powerful and clear warning to the enemies on October 4 and took a measure to hit the set water area in the Pacific 4 500 kilometers across the Japanese Islands with* ***new-type ground-to-ground intermediate-range ballistic missile"***.[17] Moreover a stamp was specially produced by North's Korea Stamp Corp to celebrate : *"the new-type ground-to-ground IRBM hit the target waters in the Pacific 4,500 kilometers away across the Japan on Oct. 4 in accordance with the decision made by the Central Military Commission of the Workers' Party of Korea."*[18]

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[14] KCNA pictures https://kcnawatch.org/

[15] Hwasong-12 has been successfully tested on 30 January 2022, 29 August and 15 September 2017, see S/2022/668 Para.24 annex 15; S/2022/132 annex 12; S/2021/777 para.26, S/2019/171 para.174; S/2018/171 para.7, 12; S/2017/742 para.7-13.

[16] According to Jane's Intelligence Review "*North-Korea test multiple long-range missile systems*" available at https://customer.janes.com/Janes/Display/BSP_8038-JIR*,"the published launch photo shows a flame and exhaust colour consistent with hypergolic propellant combination of unsymmetrical dimethylhydrazine (UDMH) and nitrogen tetroxide (NTO), as well as a reddish cloud that is typical for nitrogen-based propellants at engine ignition"*

[17] See KCNA and Rodong Sinmun 10 Oct. 2022, available at https://kcnawatch.org/newstream/1665469970-543643927/respected-comrade-kim-jong-un-guides-military-drills-of-kpa-units-for-operation-of-tactical-nukes/

[18] See Figure 4 and www.korstamp.com.kp/stamps/leadership-en-Sp5440.html

4. The reported flight performance of the missiles tested is consistent with the statements and images published by the KCNA on 10 October and 7 November 2022 (see figure 24B).[19] Member States confirmed the similarities identified between this missile and the Hwasong-12, but the images could have been manipulated in particular at the level of the engines with an encased nozzle. [20]

[19] "*…a decision to send more powerful and clear warning to the enemies on* ***October 4*** *and took a measure to hit the set water area in the Pacific 4 500 kilometers across the Japanese Islands with new-type* ***ground-to-ground intermediate-range ballistic missile****" (*KCNA 10 October 2022) available at https://kcnawatch.org/newstream/1665469970-543643927/respected-comrade-kim-jong-un-guides-military-drills-of-kpa-units-for-operation-of-tactical-nukes/

[20] The maximum length of the IRBM Hwasong-12 is around 17.4 m, its diameter around 1.65 m and its engine derived from the RD-250 (S/2021/211 para.17 and S/2018/171 paras.13-14). Its range was estimated at 4 500 km with a 500kg warhead, (see CSIS "Missile defense project", available at https://missilethreat.csis.org/missile/hwasong-12/ and Jane's Defence Weekly January 31, 2022, available https://customer.janes.com/Janes/Display/BSP_12569-JDW)

Figure 24B: Launch test of a possible modified Hwasong-12 IRBM from a 6-wheel TEL on 4 October 2022 from same location as the Hwasong-12 launch test on 30 January 2022, and as the Hwasong-14 launch test on 28 July 2017, at Mupyong-Jonchon 65 factory (40° 36′ 41″ N 126° 25′ 33″ E). The stamp produced by the DPRK to celebrate the IRBM flight over Japan and its recorded trajectory.

Source: KCNA 10 October and 7 November 2022. Planet Labs Inc. 12 October 2022, 07:00 UTC

Annex 24C. 2 November 2022 from 06:51 to 17:10 (local time): More than 7 BMs were launched in addition to a wide range of missiles and projectiles, the DPRK claimed that it "…*fired four tactical ballistic missiles loaded with dispersion warheads and underground infiltration warheads at a desert island off the West Sea Barrage…*"

1. On 2 November, the DPRK conducted several BM launches or equivalent from 06:51 to 17:10 (loc.). According to Member States, at 06:51, 4 SRBM; at 08:50 at least 3 SRBMs or equivalent; at 09:12 a mix of SRBM, LRCM and SA missiles; at 13:27 more than 100 artillery shells; and between 16:30 and 17:10 a mix of SRBM and SA missiles were launched. As with previous test launches, the tests were conducted without any forewarning and constituted a safety hazard for vessels and aircraft in the relevant areas.

   a. 3 or 4 SRBM were launched at 06:51 (local time) from Jeongju and Pihyeon-gun (North Pyongan Province) near the west coast toward the west.

   b. 2 or 3 SRBM were launched at 08:51 from Wonsan area (in Gangwon-do) near the east coast toward the east and the second toward southeast Ulleungdo landed 26km south of Northern Limit Line (NLL, 57km east of Sokcho and 167km northwest of Ulleung). The flight distance of the SRBMs was between 150 and 200 km with a maximum altitude between 50 and 150 km. On the 6 November, a member state recovered remnant of missile that was a SA-5 with a single stage liquid motor boosted by 4 jettisonable solid propellant boosters. Such SA missile could be also used as ground-to ground missile. (See Figure C.1 below)

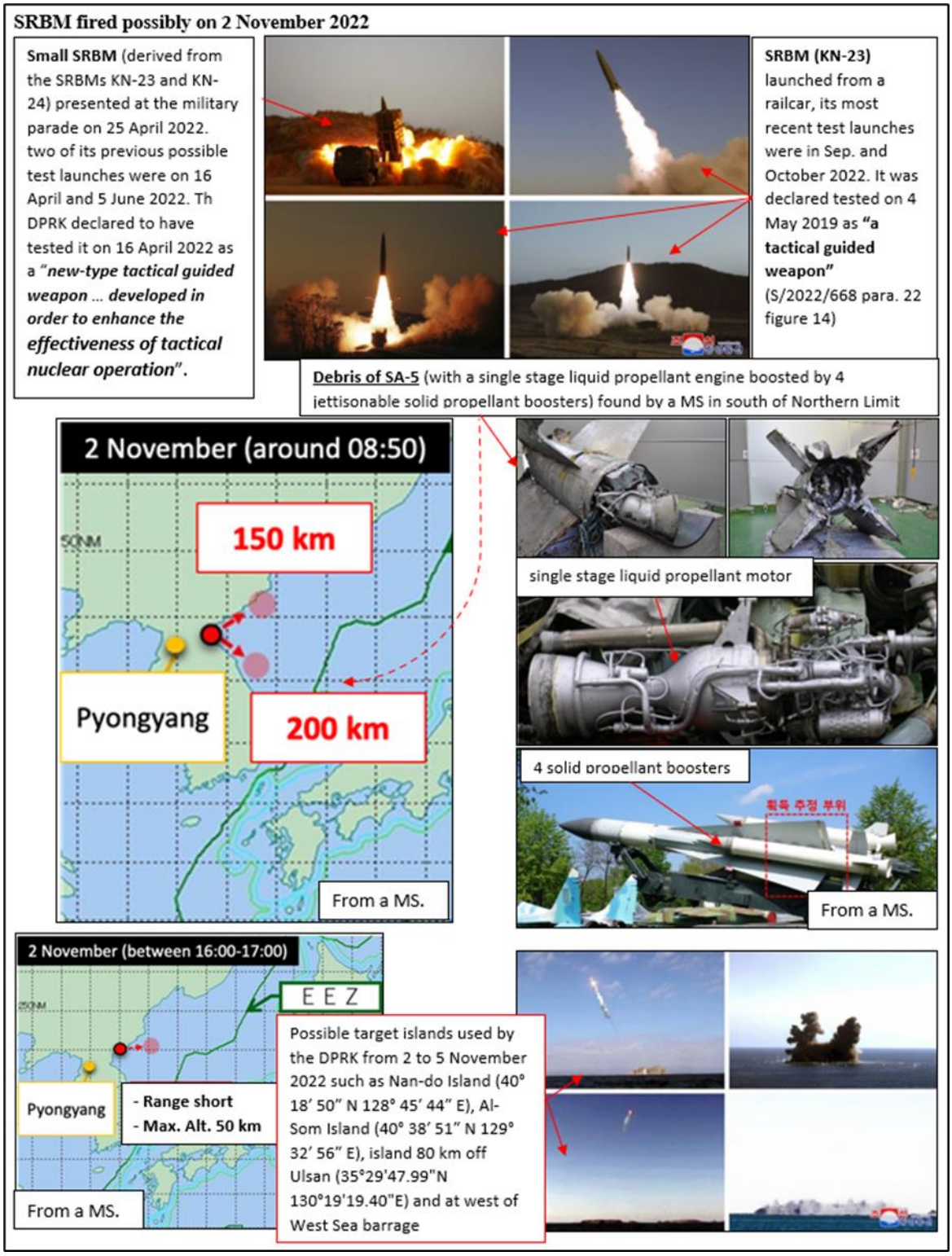
   c. A mix of at least 10 missiles were launched at 09:12 From Nakwon, Jeongpyeong, Sinpo area (in south Hamgyong Province) toward the east and from Oncheon (south Pyongan), Hwajin-ri (South Hwanghae) toward the West (in the sea).

   d. Less than 6 missiles, as a mix of SA missiles, SRBM and possible LRCM were launched between 16:30 and 17:10 from Sondok and Sinpo areas (eastern coast) toward the east in the Sea and from Kwail and Onchon area toward the west (in the sea). According to a Member State, the flight distance was very short with a maximum altitude 50 km.

2. According to KCNA photos and statement released on 7 November 2022 (see annex 8)[21], the DPRK's report on the 06:51 launches are consistent with the Member States reported flights, "*in the morning of the first day of the operations, missile units in North Phyongan Province* ***fired four tactical ballistic missiles loaded with dispersion warheads and underground infiltration warheads*** *at a desert island off the West Sea Barrage, and in the morning and afternoon the anti-aircraft missile units of the air force on the east and west coastal areas fired 23 ground-to-air missiles while staging an exercise to annihilate air targets at different altitudes and distances"* (See figure 24C below)

[21] KCNA Report of General Staff of KPA on Its Military Operations Corresponding to U.S.-South Korea Combined Air Drill https://kcnawatch.org/newstream/1667774164-903270856/report-of-general-staff-of-kpa-on-its-military-operations-corresponding-to-u-s-south-korea-combined-air-drill/ and photos from 2 – 5 Nov. 2022 available at https://kcnawatch.org/.

Figure 24C: SRBM fired possibly on 2 November 2022



Source: DPRK photographs from 2 – 5 Nov. 2022 available at https://kcnawatch.org/; Map: Member State, SA-5 photographs: A Member State, annotated by the Panel

Annex 24D. 3 November 2022 from 07:40 to 21:42 (local time): The DPRK launched a 7th ICBM, the DPRK claimed that "*…the KPA conducted important test-fire of ballistic missile…*". From 3 to 17 November, several SRBMs were launched (See annex 25 and table 25**)**

1. From 3 to 17 November, the DPRK conducted several BM launches or SA missiles with ballistic trajectories. As with previous test launches, the tests were conducted without any forewarning and constituted a safety hazard for vessels and aircraft in the relevant areas. According to Member States:

   a. On 3 November, a new ICBM was launched at 07:40 (local time) from Sunan area toward the east, fell into the sea at 08:10. It disappeared from the radar over the sea before going over Japan. (See Para. 23 below)

   b. 2 or 3 SRBMs were launched at 08:39 to 08:51 (or 08:48) from Kaechon area (South Pyongan province) toward the east, splashed down for the first at 08:47 and the second at 08:55 near the east coast. SRBM KN-25 and KN-23 were likely launched. DPRK claimed to fire "…***five super-large multiple launch missiles*** *and* ***tactical ballistic missiles*** *of various missions and* ***46 long-range multiple launch missiles*** *…"* (KCNA 7 November 2022).

   c. 3 SRBMs with liquid propellant engines (possible SCUD-C) were launched at 21:34, 21:39 and 21:42 from Koksan (north Hwanghae province) toward the east.

   d. On 5 November, 4 SRBMs were launched between 11:32and 11:59 from Dongrim (North Pyongan Province) towards the west at an uninhabited island off the West Sea Barrage in the Yellow Sea. SRBM KN-25 and KN-23 were likely launched, DPRK claimed to fire "*On the the fourth day of the operations, the KPA fired again* ***two tactical ballistic missiles loaded with dispersion warheads*** *and* ***two super-large multiple launch missiles*** *at a desert island off the West Sea Barrage."* (KCNA 7 November 2022).

   e. On 9 November, 1 or 2 SRBMs were launched at 15:31 from Sukchon (South Pyongan Province) towards the east and struck an uninhabited island off the coast of the North's South Hamgyong Province. SRBM KN-23 and KN-24 were likely launched.

   f. On 17 November, 1 SRBM was launched at 10:48, from Kangwon province towards the east or northeast and splashed down.

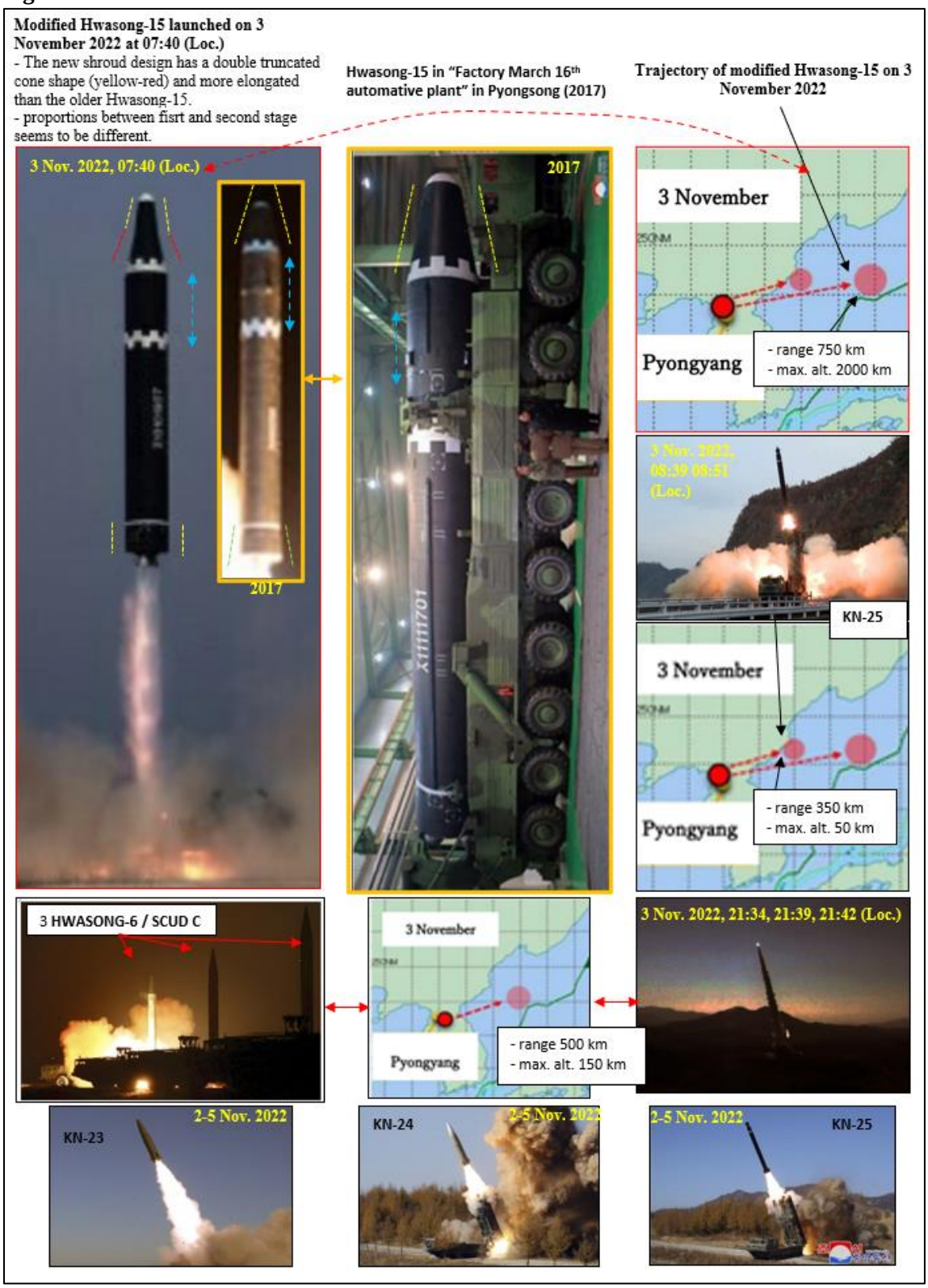
2. According to KCNA photographs [22] released on 7 November, the ICBM launched on 3 November appeared to be a new version of the Hwasong-15 whose number was 不10101907. Its shroud seemed more elongated, and the proportion between stages (2) appeared to be different from that of earlier Hwasong-15s. (See figure 24D) According to Member States the flight distance was around 750 km with a maximum altitude of around 2000 km. The flight time was 30 minutes, and the maximum speed of the missile was Mach 15. The possible reentry vehicle or debris splashed down at around 08:10. According to a Member State, a possible failure occurred after the second stage separation. Nevertheless, Japan issued evacuation alerts in central prefectures of Miyagi, Yamagata and Niigata at 07:50. (See figure 24D below)

[22] KCNA pictures https://kcnawatch.org/.

3. According to the DPRK this launch test was dedicated to *"…conducted important test-fire of* ***ballistic missile*** *to verify the movement reliability of a special functional warhead paralyzing the operation command system of the enemy."* (KCNA 7 Nov.2022). This statement could help to understand the conditions for second stage separation if there was no failure. This would involve either creating the conditions for a high-altitude nuclear explosion to induce the nuclear electromagnetic pulse (NEMP) or testing a third stage as a vehicle for possible MIRV.

4. The reported flight performance of the missiles tested would not be fully consistent with the statements and images published by the KCNA 7 November 2022. Member States have not yet confirmed the comparison with the Hwasong-15, and the images could have been manipulated in particular at the level of the shroud and warhead.

Figure 24D: The BM launches from 3 to 17 November 2022



Source: KCNA 7 November 2022 available at https://kcnawatch.org/ ; S/2018/171 Para. 10 Figure II launch Hwasong-15 on 29 November 2017

Annex 24E. 18 November 2022, 10:14 (local time): One launch of ICBM in an easterly direction from the Sunan International Airport. The DPRK claimed that "*the DPRK strategic forces test-fired a new-type ICBM on November 18*" and provided statements, photographs and videos in the following days referring to it as the *"new-type ICBM Hwasong-17"*.

1. On 18 November 2022, the DPRK conducted its 8th ICBM-class ballistic missile launch in 2022, identified as a "new type of ICBM Hwasong-17", according to Member States. In the following days, KCNA released a lot of information on this launch. As was the case for previous test launches, it was conducted without any forewarning and constituted a safety hazard for vessels and aircraft in the relevant areas. The missile was launched at around 10:14 (local time) from a 11-axle TEL in the Pyongyang Sunan International Airport towards the east. According to Member States the flight distance was around 1000 km with a maximum altitude of 6100 km. The flight time was 69 minutes, and the maximum speed of the missile was Mach 22. The possible reentry vehicle splashed down at around 11:23 in the Japan's exclusive zone (EEZ) (loc) about 200 km west of Oshima Island in the Hokkaido Prefecture. (See annex 25 and table 25)

2. According to KCNA information and a KCTV video[23] released afterwards, the new-type Hwasong-17 had the number "ㅈ 09151751" and its TEL the number "321"[24], after being removed from the aircraft hangar (located by the Panel at 39° 12′ 26″ N 125° 39′ 58″ E) under the scrutiny of Kim Jong Un accompanied by his daughter between sunrise and about 09:30[25], it moved to the launch point located by the Panel at 39° 13′ 18″ N 125° 40′ 28″ E, in the curve between the main southern runway and the northern runway, where the black traces of burnt gas on the tarmac was clearly visible after the launch. The launch sequence was watched by Kim Jong Un, his wife, daughter and other officials from a 57 m high hill located by the panel at 39° 13′ 21″ N 125° 39′ 35″ E, 1.3 km west of the launch pad. (See figure 24E-1 on the analysis of launch operation)

[23] KCTV footage from 08:02:40 to 08:09:29 on 10 November 2022 - *Source:* https://kcnawatch.org/kctv-archive/6378e15fccee0/ KCNA pictures https://kcnawatch.org/.

[24] The TEL No. 321 was already presented with Hwasong-17 No. ㅈ 03031203 according to 26 March 2022 footage and with Hwasong-17 number ㅈ 7220406 at the 10 October 2020 parade. see annex S/2022/668 Annex 23.2.1.

[25] The analysis of NKnews on the KCNA metadata (EXIF files) of the published photos showed that the ICBM was outside of the hangar after 09:28, see NKnews 23 November 2022 available at https://www.nknews.org/pro/what-metadata-reveals-about-north-koreas-latest-long-range-missile-test.

Figure 24E-1: Analysis of new type of ICBM Hwasong-17 launch operation

Source: Planet Labs Inc., 2 November 2022, 05:32 UTC, 17 November 2022, 02:02 UTC, and 18 November 2022, 02:01 UTC; Google Earth, 28 August 2022 (tarmac light colour 39°13'18.58"N 125°40'27.33"E); KCNA https://kcnawatch.org/; https://kcnawatch.org/kctv-archive/6378e15fccee0/; https://kcnawatch.org/; Google Earth, 22 March 2016 (Hangar).

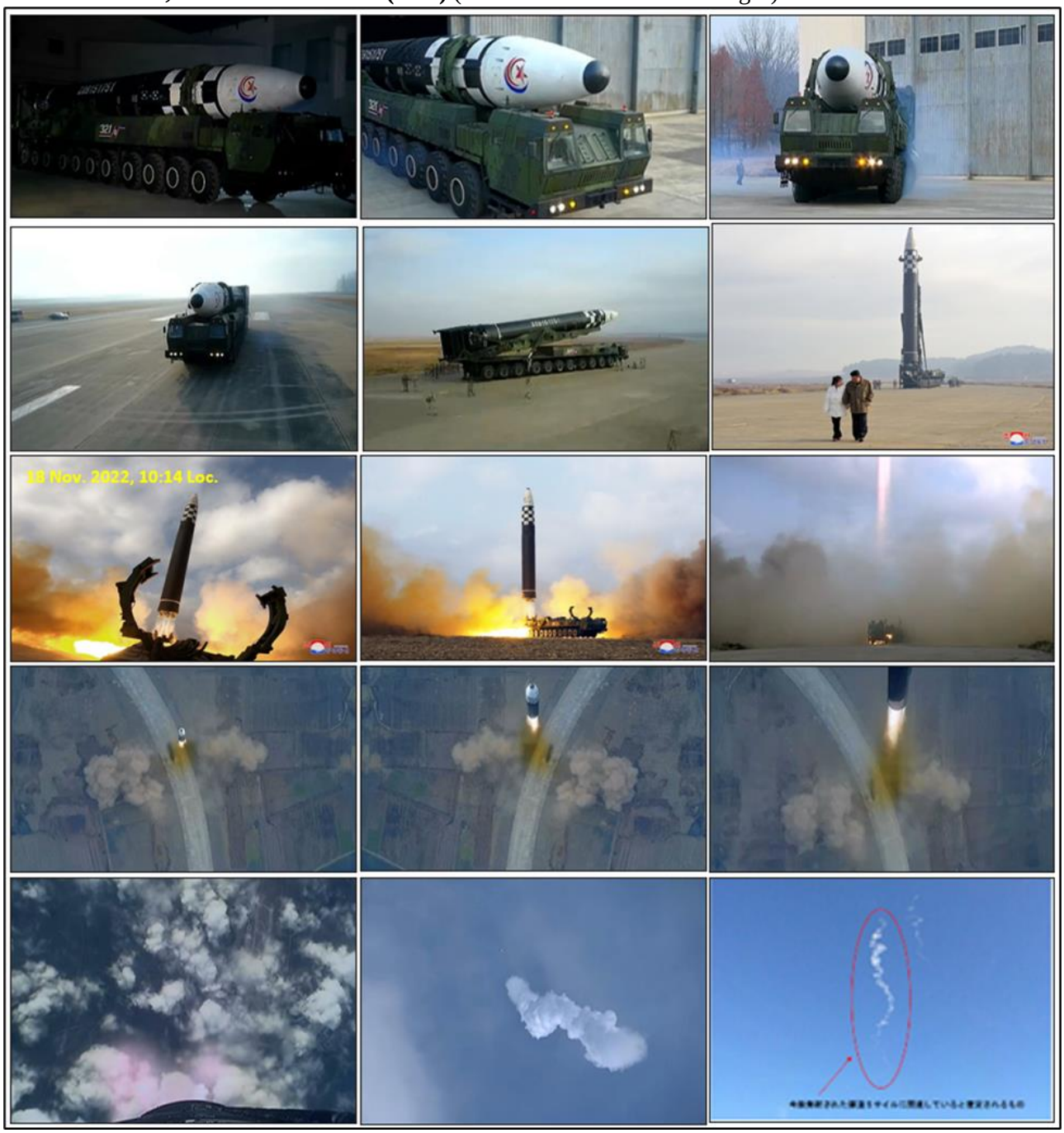
3. The Sil-li ballistic missile support facility (39° 10′ 53″ N 125° 39′ 50″ E) located 2 kilometres south-west of Pyongyang Sunan International Airport (see S/2022/668 Para.21 Annex 17 and S/2020/840 para. 16 annex 12), identified as the site where new Hwasong-17 ICBMs were likely assembled, stored and fueled in 2022, was logically involved in the preparation of this new-type Hwasong-17 ICBM, which could be an improved version of the Hwasong-17, a test of which failed on 16 March 2022.

4. The reported flight performance of the missiles tested is consistent with the statements and images published by the DPRK in KCTV, Rodong Sinmun and KCNA on 19 November and after[26]. Thus, the success of the test was possibly related to the improvement[27] of the Hwasong-17 series when the DPRK described it as "*The test-fire was aimed at checking the reliability of the weapon system and its operation.* (Rodong Sinmun 19 Nov. 2022) (see figure 24E-2 Hwasong-17 story).

[26] "*The missile, launched from the Pyongyang International Airport, flew **999.2** kilometers for **4,135 seconds** at an apogee of **6,040.9km** and landed in the international waters…" (*KCNA 19 November 2022).

[27] *"In detail one by one, from the appearance of the missile and the issue of selecting an engine, to the self-propelled issue of the launch vehicle and the preparation of the underground launch site, to the method of painting the missile."* (KCNA - Rodong Sinmun 27 Nov. 2022).

Figure 24E-2: A pictorial account of the new type of ICBM Hwasong-17 launch operation on 18 November 2022, from dawn to 10:14 (Loc.) (from KCTV and KCNA images)



Source: https://kcnawatch.org/kctv-archive/6378e15fccee0/ , https://kcnawatch.org/ and https://www.mod.go.jp/j/press/news/2022/11/18d.html

5. The DPRK has acknowledged this missile as its main intercontinental nuclear warhead delivery system, which it described in the following statement: "…s*ucceeded in developing and perfecting the new-type ICBM Hwasongpho*-17, *the world's strongest strategic weapon, and made a wonderful leap forward in the development of the technology of mounting nuclear warheads on ballistic missiles"* (Rodong Sinmun 27 Nov. 2022).

6. At the time of the test preparation (before 10:14 Loc.), Kim Jong Un was accompanied by his daughter to inspect the missile and then joined his wife with her to watch the launch from an observatory located 1.3 km west of the launch pad. The presence of Kim Jong Un's daughter next to her father at the launch test and at the subsequent post-launch celebration adds to the DPRK's message about the irreversible and essential nature of the ICBM and nuclear programmes (see figure 24E-3).

DPRK entities and individuals involved in the ballistic missile launches

7. The celebrations in the days following the launch featured a Hwasong-17 (No. ㅈ09151753 on its TEL no. 322[28]) according to the DPRK's statements and photographs, and was an opportunity to honour those who contribute "*to successful test-fire of New-type ICBM Hwasong-17",* such as **Kim Jong Sik (KPi.066),** deputy chief of the Munitions Industry Department of the Workers' Party of Korea and **General Jang Chang Ha (KPi.037)** the chief of the **Academy of National Defense Science(KPe.021),** *"and leading officials in the national defence scientific research sector and commanding officers of the Red Flag Company"* (Rodong Sinmun 19 Nov 2022) (see figure 24E-3).

[28] At the military parade 10 Oct.2020 the TEL with number 322 carried a Hwasong-17 numberㅈ21260405 (S/2022/668, annex 23.2).

Figure 24E-3: Photograph of the TEL No. 321 surrounded by the technical and operational team after the launch of the ICBM on 18 November and photo of another new-type ICBM Hwasong-17, No. ㅈ09151753 on the TEL No.322 presented at the event dedicated to honouring contributors of the new-type ICBM Hwasong-17 programme

Source: https://kcnawatch.org/#gallery-26

8. Others responsible for the BM programme were also promoted [29] such as:
- Col. General Kang Kyong Ho
- Lieut. General Choe Pyong Wan
- Maj. Generals Choe Chol Ung, Kim Sun Chol, Ha Jong Guk, Pang Hyon Chol, Kim Chang Rok, Kim Man Sop, Yu Chol U, Ri Kyong and Ri Yong Sok, and
- Jo Yong Won, Ri Il Hwan, Jon Hyon Chol, Ri Chung Gil

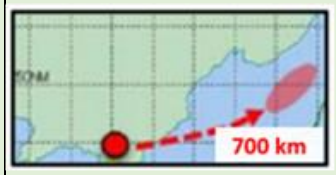
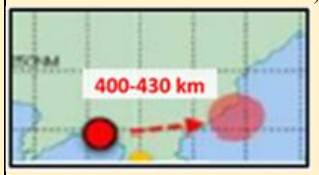
[29] KCNA Rodong sinmun_Order of Chairman of WPK Central Military Commission on 27 November 2022 available at https://kcnawatch.org/newstream/1669617249-429162022/order-of-chairman-of-wpk-central-military-commission/.

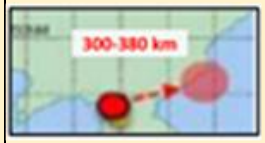
Annex 25: Launch tests from May 2019 to January 2023

Table 25: Summary of launches of BMs or missiles combining ballistic and guidance technology with liquid (LP) and solid fuel (SP) propellant engines by the Democratic People's Republic of Korea as at 27 January 2023. (In the table, pale yellow background for solid propellant engine BMs and pale green background for liquid propellant engine BMs; various official DPRK statements are in *italics*)

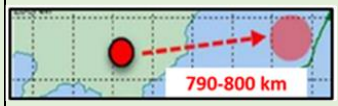
Tests (all) in the year	*Tests solid/ liquid since 2018*	*Tests solid/ liquid in the year*	*Date and time (local)*	*Reported type*	*Number of missiles*	*Reported launch location*	*Reported distance travelled (km)*	*Reported apogee (km)*	*Remark*	*Korean Central News Agency classification*
1	**47**	**1**	**2023**	**Solid fuel BMs fired <u>between 2018 and 1 Jan. 2023:</u>** **In 2023:**	**98~108** **1**					
	15	**0**	**2023**	**Liquid fuel BMs fired <u>between 2018 and 18 Dec. 2022</u>:** **In 2023: (0) IRBM + (0) ICBM + (0) SRBM:**	**18** **0**					
1	47	I	**1 Jan. 2023** 02:50	**SRBM KN-25** - SP *Super large rocket system (600mm)*	**1**	From Pyongyang Yongsong area West coast toward east	400 or 350	100	*- nuclear-capable multiple rocket launcher (MRL) able to strike anywhere in South Korea* *- 30 were recently deployed in the army* (KCNA 2 Jan. 2023)	*"At dawn of January 1, 2023, a long-range artillery sub-unit in the western area of the Korean People's Army fired one shell towards … with a delivered **super-large multiple rocket launcher** [*or *"…with a newly deployed super-large MRL"]"* (KCNA DPRK Today 2 Jan. 2023)

Tests (all) in the year	*Tests solid / liquid since 2018*	*Tests solid/ liquid in the year*	*Date and time (local)*	*Reported type*	*Number of missiles*	*Reported launch location*	*Reported distance travelled (km)*	*Reported apogee (km)*	*Remark*	*Korean Central News Agency classification*
40	**46**	**26**	**2022**	**Solid fuel BMs fired <u>between 2018 and 31 Dec. 2022:</u>** **In 2022:**	**97~107** **56~66**					
	15	**14**	**2022**	**Liquid fuel BMs fired <u>between 2018 and 18 Dec. 2022</u>:** **In 2022: IRBM (6) + ICBM (8) + SRBM (3):**	**18** **17**					
1st	**2nd**	**1st**	**05 Jan. 2022** 08:10 or 08:07	**MRBM** or **SRBM = HGV** - LP - *"Hypersonic glide vehicle warhead"* disclosed at the missile exhibition "Self-Defence 2021" on 11 October 2021, before the 5 January launch test. (KCNA) -Re-entry vehicle seems to be a manoeuvrable re-entry vehicle (**MaRV**) - 6-axle wheeled TEL	**1**	From an inland area in Jagang Province, eastward into waters off the east coast 	500 or more	50	-The shape of the warhead of the missiles tested on 28 September and on 5 January were different. It is judged to be one of the other types of missiles first unveiled in October. -The main body of the missile appeared to be made from a liquid propellant booster that resembled, but shorter than, the single-stage Intermediary Range Ballistic Missile (IRBM) Hwasong-12. - Max speed between mach 3 and 6 - Final verification but not serial production	*the hypersonic gliding warhead "The missile made a 120 km lateral movement from the initial launch azimuth" and "precisely hit a set target 700 km away,"* (KCNA, 7 Jan. 2022)

2nd	3rd	2nd	**11 Jan. 2022** 07:27 or 07:25	**- HSBM or MRBM or SRBM = HGV** - LP - *"Hypersonic glide vehicle warhead"* disclosed at the missile exhibition "Self-Defence 2021" on 11 October 2021, before the 11 January launch test. - Re-entry vehicle seems to be a **MaRV** - 6-axle wheeled TEL	**1**	From an inland area in Jagang Province, eastward into waters off the east coast 	700	60	- Max speed: Mach 10 (3400m/s). - Possible irregular trajectory including change to the direction of north - The shape of the warhead similar to the that of the BM tested on 5 January. - The main body of the missile appeared to be made from a liquid propellant booster that resembled, but shorter than, the single-stage IRBM Hwasong-12. - Final verification but not serial production	*"The hypersonic missile weapon system…* *…600 kilometres and 240-kilometre acute circular… hit the target in the waters 1,000 kilometres away"* (KCNA, 12 January 2022)
3rd	21st	1st	**14 Jan. 2022** 14:41 and 14:52	**SRBM (KN-23)** - SP - It appears to be the same type of SRBM **KN-23** recently tested twice as a railway-borne missile system on 15 Sept. 2021 and 14 Jan. 2022. It has been displayed at the missile exhibition "Self-Defence 2021" on 11 October 2021 - railway car	**2**	From the Uiju area (Possibly located in the rectangle S-W corner 40°13′10″N124°34′02″E, N-E corner 40°13′06″N124°33′57″E), north-eastward into waters off the east coast and impacting an uninhabited island (possible target location 40°38′50″N129°33′02″E) 	430 or 400	36 or 50	- New railway-borne missile system already tested on 15 Sept'2021 - Time between launches: 11 minutes - Max speed: mach 6 - Trajectories were comparable in range and manoeuvre to previous tests in 2019-2020, including a detected "pull-up manoeuvre". - The use of a railway-borne launcher gives DPRK a mode of transport for a variety of missiles which can be rapidly deploy and launch from anywhere on their rail network providing another option for concealing and launching its missile force.	*"Firing drill of railway-borne missile Regiment" or "Firing Drill for Inspection of Railway Mobile Missile Regiment"* (KCNA, 15 January 2022

4th	**22nd**	**2nd**	**17 Jan. 2022** 08:49 and 08:52 or 08:50 and 08:54	**- SRBM (KN-24)** - SP - It appears to be the same type of SRBM KN-24 tested on 21 March 2021 and that has been displayed at the missile exhibition "Self-Defence 2021" on 11 October 2021. It was also called "Hwasong-11 Na" or Hwasong-11 B" NKnews on 18 January 2022 - Track TEL	**2**	From the area of Pyongyang-Sunan airport area (Possibly located at 39°15′ 44″N125°40′34″E trace of burnt gas), north-eastward into waters off the east coast and impacting an uninhabited island (possible target location 40°38′ 50″N129°33′02″E") 	300 or 380	50 or 42	- Time between launches: 3 or 4 minutes - Max speed: mach 5 - The possible fired location if confirmed was very close to the location of the Hwasong-12 launch test site on 29 August 2017 (S/2019/171 para. 174 annex 84) - The track TEL chassis may be based on the DPRK Pokpung-ho battle tank chassis (derived from T62 and T72),	*"Two tactical guided missiles" "to confirm the weapons system's accuracy"* (KCNA, Jan 18, 2022)
5th	**23rd**	**3rd**	**27 Jan. 2022** 08:00 and 08:05	**- SRBM (KN-23)** - SP - displayed at the missile exhibition "Self-Defence 2021" on 11 October 2021 and tested several times since 4 May 2019 - 4-axle wheeled TEL	**2**	From the area of Hamhung (39°48′45″N127°39′50″E, same launch pad as the one used for the SRBM KN-24 launch test on 10 August 2019) eastward into waters off the east coast and impacting the uninhabited Al-som Island (40°38'50.49"N129°32'55.73"E)	190	20	- Level of operational testing - Time between launches: 5 minutes - Very depressed trajectory - Kim Jong Un was nearby Hamhung inspecting a site for the Ryonpho Vegetable Greenhouse Farm and a possible missile factory, the "February 11th Plant of the Ryongsong machine complex"[30]	*"Surface to surface tactical guided missile" "confirming the power of conventional warhead*" (Rodong Jan 28, 2022)

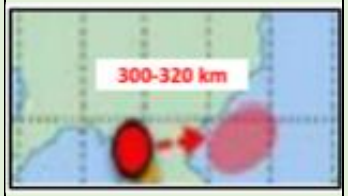
[30] SRBM KN-24 launch test on 10 August 2019 (39° 48′ 45″ N 127° 39′ 50″ E) - the Ryonpho Vegetable Greenhouse Farm (39°47'23.27"N 127°32'9.36"E) and the "February 11th Plant of the Ryongsong machine complex" (39° 55′ 10″ N 127° 39′ 09″ E)

6th	4th	3rd	**30 Jan. 2022** 07:52	- **IRBM Hwasong-12** - LP - Identified by MSs as an IRBM sharing characteristics with the Hwasong-12 last tested on 29 August and 15 September 2017 - 6-axle wheeled TEL	**1**	From same launch pad as for the Hwasong-14 launch on 28 July 2017, Muphyong-ri in Jonchon county (40°36′41″N126°25′33″E) eastward into waters off the east coast after a 30-minute flight  	800 or 790	2 000	- Launched in a lofted orbit and identified through KCNA pictures as the IRBM Hwasong-12 – 800 km is the longest flight of BMs since 2017.[31] - Re-entry vehicle speed: Mach 16[32] - The main engine still seems to be derived from RD-250 engine with 4 vernier engines. (See S/2018/171, paras. 14-15, figure 3) - It is in the stage of practical use and production whose last test has been described as "*operational trial of a Hwasong-12 production unit"* (KCNA Jan. 31, 2022)[33].	*"Test-fire of **Hwasong 12**-type Ground-to-ground Intermediate- and Long-range **Ballistic Missile** Held"* (Rodong Sinmun 31 Jan., 2022)

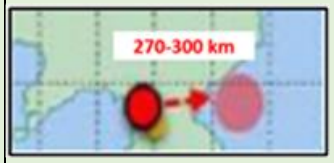
[31] Hwasong-12 (aka KN17) theoretical range could be up to 5 000 km. Lofted trajectories in May, August and September 2017 (last test) over the Japanese territory. KCNA reported that DPRK claims *"that the Hwasong-12 is meant to serve as a medium-long range strategic ballistic missile with a range of 3,000 – 4,000 km capable of reaching Guam." …" The military plans to attack Guam "through simultaneous fire of four Hwasong-12 intermediate-range strategic ballistic rocket*"." NKnews on 14 August 2017 available at https://www.nknews.org/2017/08/kim-jong-un-briefed-on-guam-attack-plan-at-strategic-force-command-kcna/?t=1654210722275

[32] Article "Hwasong-12 test signals troubling new phase in North Korea's missile programs" NKPRO on 31 January 2022 available at https://www.nknews.org/pro/hwasong-12-test-signals-troubling-new-phase-in-north-koreas-missile-programs/?t=1654208852886.

[33] "*It confirmed the accuracy, safety and operational effectiveness of the Hwasong-12 weapon system under production". (KCNA Pyongyang Times 31 Jan., 2022) Pyongyang's official Korean Central News Agency (KCNA) said the launch of the "Hwasong-12-type surface-to-surface intermediate- and **long-range ballistic missile**" was organised by the Academy of Defence Science (ADS), the Second Economic Committee, and other institutions. It added that the launch aimed to verify the Hwaseong-12's deployment and accuracy and was conducted by the "highest-angle launch system from the northwestern part of the country" towards the east of the Korean Peninsula.*

7th	**5th**	**4th**	**27 Feb. 2022** 07:52 or 07:51	**- new ICBM Hwasong-17** - LP - flying as a suborbital satellite launcher with the flight features of long-range BM - with the RD-250 liquid propellant engines for the first stage. - identified as ICBM-class by several MSs or ICBM-capable platform such as the super large BM "Hwasong-17" (see row "5 March" below) - ICBM Hwasong-17 confirmed by MS	**1**	From the Pyongyang Sunan international airport area (launch pad at 39°13'17"N125°40'17"E because of visible trace of burnt gas on the tarmac after the launch) toward the east into waters near the east coast of the DPRK 	300 or 320	600 or 620	- Lofted trajectory - If the images taken from space were genuine, the test launch was intended to test the functions of a reconnaissance satellite. According to MSs, such test was likely probable but, delivery rockets for satellite launches use technologies that are basically identical and compatible with those of ballistic missiles (see row "5 March") - It may have been launched for the purpose of verifying some function before conducting a launch test at the maximum range of the missile (see row 5 March")	- no KCNA's image of the launcher, - *"NADA and Academy of Defense Science conducted an important test Sunday under the plan of developing a* ***reconnaissance satellite****"*[34]

[34] "*Vertical and oblique photographing of a specific area on the ground" with cameras that will be "installed on the reconnaissance satellite."* (Rodong Sinmun and KCNA, 28 February 2022)

8th	6th	5th	**5 Mar. 2022** 08:52 or 08:47	**- new ICBM Hwasong-17** - LP - flying as a suborbital satellite launcher with the flight features of long-range BM - with the RD-250 liquid propellant engines for the first stage. - identified as ICBM class by several Member States or as ICBM-capable platform such as the super large BM "Hwasong-17" [35] Several MSs evaluated the BM as the Hwasong-17, and a MS assesses that this may have been launched for the purpose of verifying some function before conducting a launch test at the maximum range of the missile[36] - ICBM Hwasong-17 confirmed by MS	**1**	From the Pyongyang Sunan international airport area (launch pad at 39° 13′ 17″ N 125° 40′ 18″ E clearly visible trace of burnt gas on the tarmac after the launch) toward the east into waters near the east coast of the DPRK after a 40-minute flight. 	270 or 300	560 or 550	- Lofted trajectory - If the images taken from space were genuine, the test launch was intended to test the functions of a reconnaissance satellite. According to MSs, such test was likely probable but, delivery rockets for satellite launches use technologies that are basically identical and compatible with those of ballistic missiles.[37] - Kim Jong Un, Deputy Dpt. Director Kim Jong Sik (KPi.066), Dpt. Director Yu Jin of Party Central Committee officials visited the satellite control center (SCC) in the week of the 5 March launch (39°2'33.55"N125°42'35.02"E) probably on 9 March.[38] He visited the Sohae satellite launching ground on probably 10 March.[39]	- no KCNA's image of the launcher - *"NADA and Academy of Defence Science Conduct Another Important Test for Developing Reconnaissance Satellite"* [40]

[35] MSs evaluated the 28 February and 5 March missile as the new ICBM Hwasong-17 shown at the October 2020 Military parade and mounted on a 11-wheeled TEL (S/2022/840, para.17, and S/2021/777, annex 18.2). In particular, the thermal signature of the engines analysis (one, two or four nozzles) could differentiate Hwasong-17 from others.

[36] According to a MS, the 28 February and 5 March missiles have at least the same or longer range compared to ICBM-class missiles previously launched by DPRK (Hwasong-14 and 15), but further details are still under analysis. A MS assesses that the delivery system could have failed partially or that the test could have been aimed at testing a Post Boost Vehicle equipment, aimed at putting satellites into orbit or at developing MIRV capabilities.

[37] E.g. technologies for the separation of multi-stage propelling devices, attitude control and guidance control. MSs add that the space programme could also serve the improvement of DPRK's ICBM capabilities:
1. Suborbital flight tests are not common for a space programme and could point to a dual objective.
2. Recent launches could also have been used to test technologies useful for a MIRV capacity.
3. It is considered likely that the DPRK should soon transform one of its ICBMs (Hwasong-14, Hwasong-15 or Hwasong-17) which have shown propulsive maturity based on the RD-250 boosters into a space launch vehicle, consequently replacing its Unha SLV used in all its most recent space launches. As such, it would constitute yet another violation of UNSCRs.

[38] Rodong Sinmun, 10 March 2022, https://kcnawatch.org/newstream/1646883133-164884312/respected-comrade-kim-jong-un-inspects-national-aerospace-development-administration-nada/?t=1656438970198

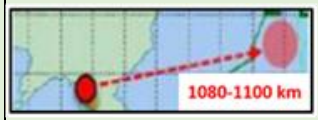
[39] KCNA, 11 March 2022, https://kcnawatch.org/newstream/1646992923-861239615/respected-comrade-kim-jong-un-inspects-sohae-satellite-launching-ground/?t=1656438872679.

[40] "*Through the test, the NADA confirmed the reliability of data transmission and reception system of the satellite, its control command system and various ground-based control systems"* (KCNA and Rodong Sinmun, 6 March 2022).

9th	**7th**	**6th**	**16 Mar. 2022** 09:30	**- new ICBM Hwasong-17** - LP - identified as ICBM-class by several MSs also as the super large BM "Hwasong-17" whose photos and video would be released after the ICBM launch on 24 March - 11-axle wheeled TEL - ICBM Hwasong-17 test failure confirmed by MS	**1**	From the Pyongyang Sunan international airport area (launch pad at 39°11′18″N125°40′00″E) same area as two ICBM system tests on 27 Feb. and 5 March possible destruction around 20km altitude	failed	failed	- ICBM launch test according to several MS**, failed after some seconds flight and exploded at an altitude of less than 20km**. 1st stage failure - BM's debris fell in or near Pyongyang posing a threat to population; last time a MRBM test has failed was in 2017 - Liquid propellant missile is also confirmed because of the typical color of the vapour seen over Pyongyang[41] - According to MSs and the Panel images analysis, this BM tested on 16 March 2022 is the ICBM Hwasong-17 that was presented by KCTV on 25 March as the ICBM tested on 24 March. Thus, the 25 March KCTV broadcast incorporated older footage of the launch sequences of the Hwasong-17. - The "Sil-li Ballistic Missile Support Facility", identified by the CSIS and the Panel (see S/2020/840 Para. 16) as being possibly related to the BM programme, is clearly presented as involved in the repeated ICBM testing on 27 February, 5 March, 16 March, 24 March, 4 May, and 25 May 2022. - First ICBM launch test without detaching it from the TEL. - Trucks activity detected after failure	No statement or information from DPRK (first no-statement in 2022)
-	-	-	***20 Mar. 2022*** *at 7:20*	***- MLRS*** *with solid propellant engine*	*4*	*From South Pyongan Province area toward west coast*	*?*	*?*	*- for about 1 hour*[42]	*No statement or information from DPRK*

[41] A NKnews article on 16 March 2022 reported that "*The images seen by NK News shows a red-tinted ball of smoke at the end of a zig-zagging rocket launch trail in the sky above Pyongyang. Smaller trails appear to extend straight down toward the ground"* available at https://www.nknews.org/2022/03/north-korea-tries-and-fails-to-launch-another-projectile-jcs/
Another NKnews article on 16 March 2022 reported that *"the coloring matches [a] dispersed liquid oxidizer, suggesting a liquid-fuel propellant was used. The projectile may have experienced a thruster failure…"reddish-orange smoke" is commonly associated with liquid fuel…*" NKnews 16 March 2022 available at https://www.nknews.org/2022/03/exclusive-north-korean-projectile-debris-fell-near-pyongyang-after-test-failure/?t=1655215602820. The orange and yellow colour is often associated with the combustion of liquid fuel propellants, (see S/2017/150 para. 36). However, specific ablative coatings inside an engine's combustion chamber can produce gases whose colours can also be reddish orange

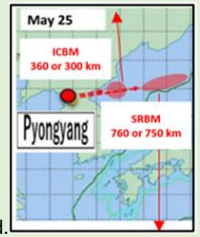
[42] Possible KN-09, 240 mm 300 mm multiple rocket launcher. This rocket test was questioned as a possible violation of the Sept. 2018 inter-Korean military agreement if the launch occurred near the border with South Korea (NKnews 20 Mar., 2022) and Reuters at https://www.reuters.com/business/aerospace-defense/nkorea-fires-multiple-rocket-launcher-south-says-2022-03-20/

10th	8th	7th	**24 Mar. 2022** 14:34 or 14:33	- **possible modified ICBM Hwasong-15** - LP - called by the DPRK "**Hwasong-17**" but rather an upgraded "Hwasong-15" with a lighter payload.[43] - 11-axle wheeled TEL (9-axle if Hwasong-15) - ICBM **Hwasong-15** confirmed by MS	**1**	From the Pyongyang Sunan International Airport area same area as the three ICBM system tests on 27 Feb., 5 and 16 March. On 24 March likely from 39° 11' 19" N 125° 40' 01" E, toward the east and splash down at around 15:44 after a 71-minute flight, inside Japan EEZ some 170 km west of Cape Tappi, Oshima Peninsula of Hokkaido. - According to MSs and Panel's analysis, on 25 March the DPRK presented photos and videos of an earlier Hwasong-17 test, such as those of 27 February, 5 March and 16 March but mentioning the 24 March test as the reference.  	1080 or 1100	6200 or 6000	- The data recorded and analysed by MSs are considered as the best to date and consistent with the ability of the ICBM to travel over 15,000 km. However, it is identified as modified Hwasong-15 rather than a Hwasong-17- the thermal signature analysis of this launch possibly identified two engine nozzles (Hwasong-15) instead a four-engine nozzle (Hwasong-17) as the photos and video released after the 24 March had shown. Must be confirmed. - According to a MS it appeared to be identical to those launched on 27 Feb. and 5 Mar. - To carry out this deception manoeuvre, the DPRK had to reduce the payload of the Hwasong-15 to achieve a trajectory comparable to that of the more powerful Hwasong-17. - Comparatively, the test of ICBM Hwasong-15 on 29 Nov. 2017 (53-min flight, lofted trajectory, range of 950 km and max altitude of 4 475km, see S/2018/171, tab.1, para.9) - the missile test was officially under the guidance of Kim Jong Un- (KCNA, 25 Mar., 2022	*"**Hwasongpho-17**, a new type of intercontinental **ballistic missile** of the DPRK strategic forces"* *Flight: 67minutes* *Altitude: 6248.5km* *Distance: 1090km* (KCNA, 25 March 2022)

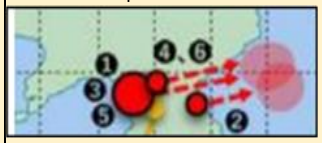
[43] ROK Ministry of Defense stated on 29 March 2022 "*Although the projectile fired on March 24 looks like the Hwasong-17 due to the increase in its top altitude and flight time, our assessment is that it is more similar to the Hwasong-15 than the Hwasong-17*." See also Yonhap News Agency, available at https://en.yna.co.kr/view/AEN20220329008052325?section=national/defense.

11th	**24th**	**4th**	**16 Apr. 2022** 17:50 and 18:11	**- new SRBM** - SP - resembled but smaller than KN-23 and KN-24 and as ground - based version it resembled the new, smaller SLBM launched on 19 October 2022. (Single-stage system) (S/2002/132 annex 20.2) - From a quadruple canister mounted on a small 3-axle wheeled TEL presented at the next military parade on 25 April 2022.	**2**	From possibly the Majon beach near the residence of Kim Jong Un at Chakto-dong, same as for SRBM launch tests on 27 January 2022 and 10 August 2019, 39° 48′ 45″ N 127° 39′ 50″ E), eastward into waters off the east coast and impacting the uninhabited Island as possible target at 110 km Nan-do Island 40° 18′ 50″ N 128° 45′ 44″ E 109 km from launchpad	110	25	- The first time the DPRK has presented an SRBM as a tactical nuclear weapon delivery system. - Max speed mach 4 - Flight time 60s - probably level of operational testing - Time between launches: 21 minutes - Also described as Close-Range ballistic Missile (CRBM, range <300km)) - Kim Jong Un was accompanied by Kim Jong Sik (KPi.066) [44]	*"New-type tactical guided weapon" … **strengthening the effectiveness of tactical nuclear operation."*** **(**Voice of Korea April 17, 2022)
12th	**9th**	**8th**	**04 May 2022** 12:03 or 12:02	**- ICBM** - LP - with liquid propellant engine. - possible **Hwasong-15 or 17** launched below its full capacity and on a standard rather than lofted trajectory - ICBM Hwasong-17 confirmed by MS	**1**	From the Pyongyang Sunan International Airport area same as the four previous ICBM system tests toward the east and splash down before 12:24 after a less than 21-minute flight - Location: Possibly from 39° 13′ 14″ N 125° 39′ 55″ E because of burnt gas trace at the north edge of the main runway. 	470 or 500	780 or 800	- Max speed about mach 11 around 13600 km/h - Medium-resolution satellite imagery showed what appears to be vehicles gathering on or around 30 April and 3 May 3 at Sunan's northern airfield around the same location vehicles were seen through satellite imagery after the failed 17 March test.	No statement or information from DPRK (second no-statement in 2022)

[44] Deputy Department Director of the Central Committee of the WPK and commanding personnel of the Ministry of National Defence of the DPRK and the commanders of the large combined units of the Korean People's Army, see Voice of Korea, 17 April 2022.

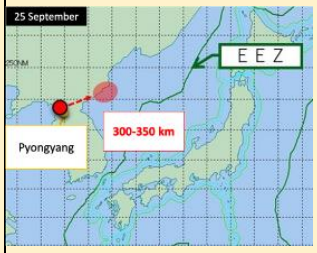
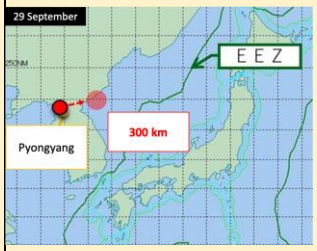
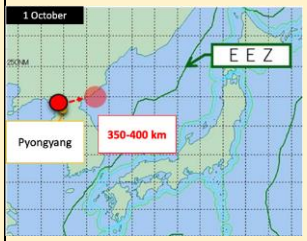
13th	**25th**	**5th**	**07 May 2022** 14:07 or 14:06 [05:06 UTC]	**- New SLBM/SRBM** - SP - Derived from KN-23 (or KN-24); similar to the new small SLBM tested on 19 October 2021 and presented at the Self-defense exhibition and at the military parade on 25 April 2022	**1**	From a submarine (8.24 Yongung SSBA) or a submersible test stand barge in the sea at large off the coast of Sinpo toward the east and splash down before 14:25 after a less than 18-minute flight. 	600	60 or 50	- Possibly launched from the 8.24 Yongung SSBA. - Irregular trajectory - 3rd SLBM test since 2018	No statement or information from the DPRK (third no-statement in 2022)
14th	**26th**	**6th.**	**12 May 2022** 18:29 or 18:28	**- SRBM** - SP - probably the **KN-25** (super large multiple rocket launcher)	**3**	From the Pyongyang Sunan international airport area 	360 or 350	90 or 100	- Max speed mach 5 - Level of operational testing - Time between launches: almost simultaneous - Possible depressed trajectory needs be confirmed	No statement or information from the DPRK (fourth no-statement in 2022)
15th	**10th**	**9th**	**25 May 2022** 06:00 or 05:59	**- ICBM** - LP - **Hwasong-17** ICBM confirmed by MS - 6th ICBM	**1**	From the Pyongyang Sunan International Airport area, Location: possibly from 39°13'14"N125°39'55"E because TEL shape was visible 30 minutes before launch time and the cleaning of burnt gas trace at this location was completed. 	360 or 300	540 or 550	- Series of tests point out the frequency and diversity of tests, first time that a liquid and a solid propellant BM are launched at the same time. - The simultaneous launch of several types of systems resembles an operational test to evaluate the operational combination of weapon systems. - Not intercontinental-range flight pattern as on Feb. 27 and March 5 launches possibly to test MIRV or the reconnaissance satellite or the first stage of an ICBM booster[45]	No statement or information from the DPRK (fifth no-statement in 2022)

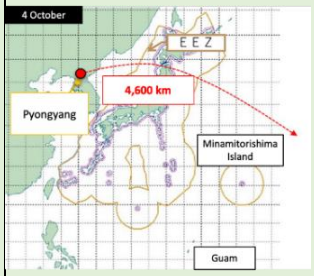
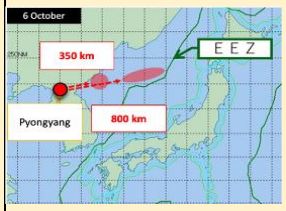
[45] According to MS and see also https://www.nknews.org/pro/why-north-korea-launches-long-range-missiles-on-medium-range-trajectories/?t=1670961118886

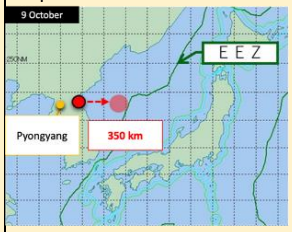
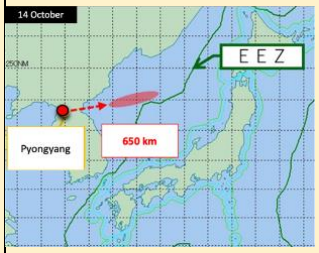
16th	**27th**	**7th**	**25 May 2022** 06:37 06-42	**- SRBM** - SP - likely new modified KN-23	**2**[46]	From the Pyongyang Sunan International Airport area, toward the east and splash down Burnt gas trace visible at Sil-li 39°10′52″N125°39′43″E after 28 May 2022 [30 Aug. 2022]	? and 760 or 750	20 and 60 or 50	- Vanished because of suspect failure or irregular orbit with possible depressed trajectory - 23rd ballistic missile in 2022[47], one of the most intensive test campaigns	No statement or information from the DPRK (sixth no-statement in 2022)
17th	**28th**	**8th**	**5 June 2022** 9:06 9:10 9:15 9:24 9:30 9:41	**- SRBM** - SP - 4 different SRBM types (probably KN-23, KN-24, KN-25 and new modified KN-23)	**6=** **1** **1** **1** **1** **1** **1**	From different locations: from the vicinity of east coast at 9:10, from west coast at 9:06, 9:15 and 9:30, from inland at 9:24, 9:41 (Sunan, Kaechon likely at 39° 45′ 11″ N 125° 54′ 02″ E almost the same location as the SRBM test on 10 Sep. 2019, Tongchang-ri, Hamhung), toward the east and splashdown  	110 to 670 or 350 300 400 350 400 300	25 to 90 or 50 50 50 100 50 100	- Possibly some include irregular trajectory - Max speed from M3-M6 - First time so many different missiles and ranges are combined at the same time - Operational training to fire SRBMs of different ranges and strike capabilities using the tactics of the former Soviet Union[48]	No statement or information from the DPRK (seventh no-statement in 2022)
?	**?**	**?**	**5 June 2022**	**- SRBM** to be confirmed	**2**	Same area	short	Very low	- Possible 2 other SRBMs detected	No statement

[46] On 24 May 2022, the DPRK launched three missiles: one ICBM and two SRBMs. https://home.treasury.gov/news/press-releases/jy0801 (27 May, 2022)
[47] Ibid. including **six ICBMs**
[48] Frequency and diversity: every 9 days a BM test but no report on the last 5 tests.

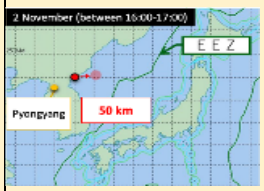
18th	**29th**	**9th**	**25 Sep. 2022** 06:53 or 06:52	- **SRBM** underwater launched of the small SLBM - SP - based on KN-23 SRBM and resemble the small SLBM presented at the military parade on 25 April 2022 and lastly tested on 7 May 2022 from a submarine 	**1**	From Taechon Reservoir (in North Pyongan Province toward the east and splashed down before 07:11 after a less than 18-minute flight. 	600 or 650	60 or 50	- Max speed M.5 - Irregular trajectory after ballistic trajectory likely KN-23 or KN-24 - Resumption of BM launch since 2 CM launches on 17 Aug 2022. - According to the metadata (EXIF file), the photo of the launch at the water level surface was taken by Kim Hyunok829 on 25 Sept. 2022, with a Canon EOS-1D X Mark II (424029000179) (NKnews, 23 Nov. 2022) - The aerial photo taken on 25 Sept. 2022, with a Canon EOS-1D X Mark II (364028000060) (NKnews, 23 Nov. 2022	*"**The operation of tactical nukes staged military drills** from **September 25** to **October 9**", "a **ballistic missile launching drill** under the simulation of loading **tactical nuclear warheads** at a **silo under a reservoir**"* (KCNA, Rodong Sinmun, 10 Oct. 2022)

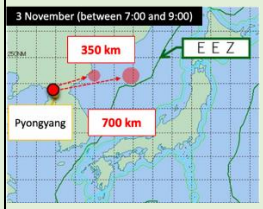
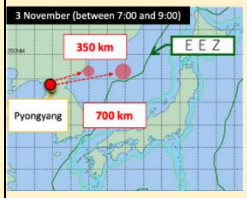
19th	**30th**	**10th**	**28 Sep. 2022** 18:10 and 18:17 or 18:20	**- SRBM KN-23 or modified** -SP 	**2**	From Sunan area toward the east and splashed down, possibly from either the Sariwon or Sakkanmol bases (janes) 	360 or 350 300	30 or 50 50	- Max speed M.6 - Irregular trajectory after ballistic trajectory. "pull-up" manoeuvers - Time between launches: 7 min	*"At the ballistic missile launching drill **simulating the loading of tactical nuclear warheads** which was staged on **September 28** for the purpose of neutralizing the airports in the operation zones of south Korea, the stability of overall system related with the operation of warheads was proved."* (KCNA, Rodong Sinmun, 10 Oct. 2022)
20th	**31st**	**11th**	**29 Sep. 2022** 20:48 or 20:47 and 20:57 or 20:53	**- SRBM KN-23 or modified** - SP 	**2**	From DPRK's Sunchon region in South Pyongan Province, toward the east 	350 or 300 300	50	- Max speed M.6 or M.5(?) - Irregular trajectory after ballistic trajectory - Time between launches: 6 min	*"**Various types** of **tactical ballistic missiles** that were launched on **September 29 and October 1** …"* (KCNA, Rodong Sinmun, 10 Oct. 2022)
21st	**32nd**	**12th**	**1 Oct.2022** 06:45 or 6:42 07:03 or 06:58	**- SRBM KN-23 or modified** - SP 	**2**	From the Sunan area toward the east 	350 or 400 and 350	30 or 50 and 30 or 50	- Max speed M.6 - Irregular trajectory after ballistic trajectory - Time between launches: 16 min	*"**Various types of tactical ballistic missiles** that were launched on **September 29 and October 1…"*** (KCNA, Rodong Sinmun, 10 Oct. 2022)

22nd	**11th**	**10th**	**4 Oct. 2022** 07:23	**- new IRBM** modified **Hwasong-12** - LP. - new type of IRBM not very different from Hwasong-12 without the 4 vernier engines and with a single manoeuvrable nozzle (see KCNA picture) 	**1**	From Mupyong-ri, Jagang Province area toward the east over Aomori Prefecture Japan from about 7:28 to 7:29 and splashed down at 07:44-46 about 3 200 km east of Japan. - 40°36'40.21"N 126°25'33.31"E 	4500 or 4600	970 or 1000	- Max speed M.17 - Flight Time: 21min - 5th launch of a IRBM since 14 May 2017 (possible Hwasong-12) because the recorded BM trajectory is equivalent of a range equal to or greater than that of an IRBM missile. - First time DPRK launched a missile over Japanese territory in five years - Longest range by any BM test over Japan - The Japanese government has issued a public alert - The absence of a vernier motors at the bottom of the missile and the fully encased nozzle suggest that the image may have been manipulated - The new stamp featured a phrase saying the North's *"new-type ground-to-ground IRBM **hit the target waters in the Pacific 4,500 kilometers away across the Japan** on Oct. 4 in accordance with the decision made by the Central Military Commission of the Workers' Party of Korea."* (Yonhap 14 Nov 2022 from North's Korea Stamp Corp)	- *"a decision to send more powerful and clear warning to the enemies on **October 4** and took a measure to hit the set water area in the Pacific 4 500 kilometers across the Japanese Islands with **new-type ground-to-ground intermediate-range ballistic missile"*** (KCNA, Rodong Sinmun 10 Oct. 2022)
23rd	**33rd**	**13th**	**6 Oct. 2022** 06:01 or 06:00 and 06:23 or 06:15	**- SRBM KN-23 and KN-25** - SP 	**2**	From Samsok area of Pyongyang toward the east and BM1 splashed down at 06:11 and BM2 at 06:32 	350 and 800	80 or 100 and 60 or 50	- BM1 max speed M.5 - BM2 max speed M.6 - TBL: 22min - BM2 possible irregular trajectory after ballistic trajectory	*"At dawn of **October 6, the striking drills** of super-**large multiple rocket launchers** and **tactical ballistic missiles"** …*

24th	**34th**	**14th**	**9 Oct. 2022** 01:48 or 01:47 and 01:58 or 01:53	**- SRBM KN-25** - SP 	**2**	From Muncheon in Kangwon Province toward the east - These ballistic missiles were very likely to have been launched from the port and harbor area 	350 and 350	90 or 100 and 90 or 100	- BM1 max speed M.5 - 7th test in the 2 last week - Time between launches: 10 minutes - Kim Jong Un guided at least 7 missile tests between 25 September and 9 October. - From Oct. 10 anniversary to U.S.-ROK Vigilant Storm - 5 missiles, 810 artillery shells, 10 MRLS and more jets (NKnews 14 Nov. 2022)	*"**The firing drill of the super-large multiple rocket launchers** was waged in simulating the strike of the enemies' main ports at dawn of **October 9"*** (KCNA, Rodong Sinmun 10 Oct. 2022)
			12 Oct. 2022	***LRCM***	***1***	*- the missile flew for about 2 hours and 50 minutes with a range of 2,000 km (KCNA)*	*2000*		*"a test fire for a long-range strategic cruise missile operationally deployed for the tactical nuclear operation unit of People's Army" (KCNA 13 Oct. 2022)*	
25th	**35th**	**15th**	**14 Oct. 2022** 01:49 or 01:52	**- SRBM KN-25 (?)** - SP 	**1**	From Sunan (suburbs of Pyongyang) toward the east 	650	50	- Possible irregular trajectory after ballistic trajectory - Artillery drill in parallel 130 rounds fired from 01:20 to 01:25 from Majong dong and 40 rounds from 02:57 to 03:07 from Kuup-ri (close to ML) and 390 rounds from eastern and western coasts into the inter-korean buffer zone, and 250 rounds on 17 Oct. - DPRK warplanes detected on 13 Oct. 2002 at the south of Tactical Action Line	No statement or information from the DPRK but on 13 Oct. KCNA, Rodong Sinmun reports 2 LRCM launches (2000 km) "*expanding nuclear weapons units capabilities*".
-	-	-	***24 Oct. 2022 05:14***	***MLRS***	***10***					

26th	**36th**	**16th**	**28 Oct. 2022** 11:59 and 12:18	**- SRBM** - SP	**2**	From Thongchon County (Tongjong-ho) toward the east in the vincinity of Alsom Island. The launch pad is about 60km from the inter-korean border. 	230	24	- BMs max speed M.5	No statement or information from the DPRK
27th	**37th**	**17th**	**2 Nov. 2022** 06:51	**SRBM** and unknown projectiles, possible antiaircraft missiles - SP 	**4** At least 3 BMs	From Jeongju and Pihyeon-gun (North Pyongan Province) near the west coast toward the west	-	-	- North Korea's military operation counter-response drill - At least 33 missiles, 180 artillery shells, and more jets. North Korea claims it launched 86 projectiles, including 46 "long-range MLRS." (NKnews 14 Nov. 2022) - 23 missiles were fired throughout the day - *"in the morning of the first day of the operations, missile units in North Phyongan Province fired **four tactical ballistic missiles loaded** with dispersion warheads and underground infiltration warheads at a desert island off the West Sea Barrage"* (KCNA. Report of General Staff of KPA 7 Nov. 2022**)**	- No statement or information from the DPRK but a global statement was released by the DPRK on 7 Nov. 2022: - *"and in the morning and afternoon the anti-aircraft missile units of the air force on the east and west coastal areas fired 23 ground-to-air missiles…"* (KCNA, 7 Nov. 2022)

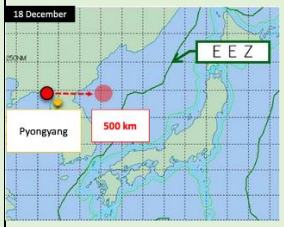
28th	**38th**	**18th**	**2 Nov. 2022** 08:51 or 08:50	**SRBM possible variant of KN-23** - SP - one was a **SA-**5 with a single stage liquid motor boosted by 4 jettisonable solid propellant boosters 	**3** At least 3 BMs	From Wonsan area (in Kangwon Province) near the east coast toward the east: <u>toward southeast Ulleungdo (BM2) landed 26km south of Northern Limit Line (NLL) (57km east of Sokcho and 167km northwest of Ulleung island)</u> 	190 or 150 and 200 and short	150 or 150 and 100 and 50	- Irregular trajectory - First time since the division of the Koreas that a BM landed in proximity to the territorial waters of the ROK just south of the NLL (possible malfunction of missile). An air raid warning in the Ulleungdo area 8:54 to 14:00 was issued. - *"The ROK military recovered an object on Nov. 6 presumed to be a remnant of a short-range ballistic missile (SRBM) that North Korea fired in its Nov. 2 provocation"* (ROK JCS Nov 2022) indeed it is **StA SA-5** (ROK image 6 Nov. 2022. *"The ROK defense ministry announced the results of an interagency analysis of the debris of a missile that North Korea fired southward on Nov. 2 past the Northern Limit Line (NLL) …"* (ROK via Yonhap 9 Nov. 2022)	- No statement or information from the DPRK but on 7 Nov. a global statement was released by the DPRK
29th	**39th**	**19th**	**2 Nov. 2022** 09:12	**Mix SRBM, LRCM and SA missiles** - SP	***>10***	From Nakwon, Jeongpyeong, Sinpo area (in South Hamgyong Province) toward the east From Oncheon (South Pyongan Province), Hwajin-ri (South Hwanghae Province) toward the West	-	-	- On the 2 Nov, ROK did not detect anything on DPRK's CM claims (ROK JCS 7 Nov. 2022) - The image of CM was a recycled image already published after April 2022 test from mansion beach in Majon. (NKnews 7 November 2022)	***"**the KPA fired **<u>two strategic cruise missiles</u>** with the shooting range of 590.5 km at the open sea around 80 km off the coast of Ulsan City of south Korea (35°29'51.6" latitude and 130°19'39.6" longitude) from North Hamgyong Province"* (KCNA 7 Nov. 2022)
30th	**40th**	**20th**	**2 Nov. 2022** 16:30 or 16:00 to 17:10 or 17:00	**Mix SA missiles (6) and possible suspected BM** - SP	***<6***	From Seondeok and Sinpo areas (eastern coast Japan) toward the east From Kwail and Oncheon area toward the west 	Very short	50	- 23 Missiles were fired into the sea on 2 November, the most missiles fired in a single day.	*"<u>the morning and afternoon</u> the anti-aircraft missile units of the air force <u>on the east and west coastal areas</u> fired 23 ground-to-air missiles"* (KCNA, 07 Nov 2022)

31st	12th	11th	3 Nov. 2022 07:40 or 07:39	New ICBM variant of Hwasong-15 - LP - according to KCNA picture: new ICM design with liquid propellant engine - ㅈ10101907 - shroud seems more elongated, and the proportion between stages (2) appeared to be different from that of Hwasong-15 	1	From Sunan area near the west coast toward the east, fell into the sea at 08:10. It disappeared from the radar over the sea before going over Japan 	760 or 750	1920 or 2000	- 7th ICBM in 2022. - Max speed: M.15 - Flight time: 30min - Possible failure after the second stage separation process before falling into the sea. (third stage ?) - Japan issued evacuation alerts in central prefectures of Miyagi, Yamagata and Niigata at 07:50 - Similar sequence as on 25 May involving two SRBMs and one ICBM - This modified Hwasong-15 seems to be related to the improvement of warhead as a third stage.	*"… the second day of the operations, the KPA conducted important test-fire of ballistic missile to verify the movement reliability of a special functional warhead paralyzing the operation command system of the enemy."* (KCNA 7 Nov.2022)
32nd	41st	21st	3 Nov. 2022 08:39 08:51 or 08:48	SRBM KN-25 OR KN-23 (similar) - SP - probably 2 of the "*five super-large multiple launch missiles and tactical ballistic missiles"* 	2 At least 3BMs	From Kaechon area (South Pyongan province) toward the east, splashed down for BM1 at 08:47 and the BM2 at 08:55 near the east coast 	330 or 350 330 or 350	70 or 50 70 or 50	- Max speed M.5 - Flight time: 8 min for BM1, 4 min for BM2 - DPRK is trying to keep pace	*"…and it fired five super-large multiple launch missiles and tactical ballistic missiles of various missions and 46 long-range multiple launch missiles …"* (KCNA 7 Nov. 2022) Pak Jong-chon, North Korea's top military official, who, in an issued statement, demanded the US and ROK to stop the Vigilant Storm exercises…"*a big mistake …aggressive provocation"* (KCNA, 3 Nov. 2022)
33rd	13th	12th	3 Nov. 2022 21:34 21:39 21:42	SRBM possible older Scud-type missile - LP - Hwasong-6/scud-C according to KCNA photos 	3	From Koksan (North Hwanghae province) toward the east 	490 or 500	130 or 150	- Max speed: M.6 - 29 missiles were launched since 2 November including 6 on 3 November - 80 rounds of artillery into inter-Korean buffer zone off the eastern coast	*"fired five super-large multiple launch missiles and tactical ballistic missiles of various missions and 46 long-range multiple launch missiles"* (KCNA, 7 Nov. 2022)

34th	42nd	22nd	5 Nov. 2022 11:32 to 11:59	SRBM KN-23 and KN-25 - SP 	4	- From Dongrim in North Pyongan Province toward west at uninhabited island off the West Sea Barrage in the Yellow Sea. (West of Nampo Bay)	130	20	- Max speed: M.5 - According to MS 7 Nov. report, at least 33 missiles were fired between 2 and 5 Nov. 2022 - On 4 Nov. 180 trails of DPRK warplanes detected	*"On the fourth day of the operations, the KPA fired again two tactical ballistic missiles loaded with dispersion warheads and two super-large multiple launch missiles at a desert island off the West Sea Barrage… at least 86 missiles were fired between 2 and 5 November 2022"* (KCNA, 7 Nov. 2022)
35th	43rd	23rd	9 Nov. 2022 15:31	SRBM possible KN-23 or KN-24 - SP 	1 or 2	- From Sukchon in South Pyongan Province toward east and struck uninhabited island off the coast of the South Hamgyong Province	290 or 250	30 or 50	- Max speed: M.6 - Very low altitude	
36th	44th	24th	17 Nov. 2022 10:48 or 10:47	SRBM - SP (?) 	1	- From Kangwon province toward northeast	240	47	- Max speed: M.4 - The statement of Minister Choe Son Hui may be related to the 18 Nov. launch..	Earlier statement (09:07) of Minister Choe Son Hui (MOFA): *"…the fiercer the DPRK's military counteraction will be, in direct proportion to it…"* (KCNA, 17 Nov. 2022)

37th	14th	13th	18 Nov. 2022 10:14 or 10:15	New type ICBM Hwasong-17 - LP - ヌ 09151751 – TEL no. 321 - BM length 25m diameter 2.8m - TEL 29m long, 4m wide - the F-15 confirmed in the air what is presumed to be related to the recently launched ballistic missile. https://www.mod.go.jp/j/press/news/2022/11/18d.html	1	From Sunan International Airport (launch pad at 39°13'18.05"N 125°40'27.49"E from 11-axle wheeled TEL no. 321), toward east and fell into the sea at 11:23. Within Japan's exclusive economic zone (EEZ)) about 200 km west of Oshima Island in Hokkaido Prefecture Kim Jong Sik KPi.066 Jang Chang Ha KPi.037	1000	6100 or 6000	- 8th ICBM in 2022. - Max speed: M.22 (27,166 km/h) - Flight time: 69min - Possible first successful launch of the Hwasong-17 - It is named by the DPRK as the new ICBM Hwasong-17 (Rodong Sinmun, 19 Nov. 2022) - Range estimation of over 15,000km, depending on the warhead weight , When calculated based on the flight trajectory, the mainland of the United States will be included in the range - The size and shape of the shroud is for multiple warheads and possible supported by a boost vehicle… - "the trajectory is quite similar" to the 24 March launch of a Hwasong-15 ICBM. - More than 50 missiles in Oct and Nov (NKnews) - Kim Jong Un guided the Hwasong-17 launch accompanied by his wife and daughter. - TEL 321 stored in the aircraft hangar at the west side of the main runway (39° 12′ 26″ N 125° 39′ 58″ E) - TEL 321 see annex S/2022/668 Annex 23.2.1, this TEL no. was already presented on Hwasong-17ヌ 03031203 according to 26 March 2022 footage and on Hwasong-17 number ヌ 7220406 at the 10 October 2020 parade. - *Jo Yong Won,* - *Ri Il Hwan,* - *Jon Hyon Chol,* - *Ri Chung Gil,*	"*The DPRK strategic forces test-fired a new-type ICBM on Nov. 18*" *"The test-fire was aimed at checking the reliability of the weapon system and its operation"* "*The new-type ICBM Hwasongpho-17, launched at the Pyongyang International Airport, travelled up to a maximum altitude of 6 040.9 km and flew a distance of 999.2 km for 4 135s [69'55''] before accurately landing on the preset area in open waters …"* *"The test-fire clearly proved the reliability of the new major strategic weapon system to be representative of the DPRK's strategic forces and its powerful combat performance as the strongest strategic weapon in the world"* *- "representative of the DPRK's strategic forces and its powerful combat performance as the strongest strategic weapon in the world"* *he urged the national defence scientific research sector to put more vigorous spurs to the development of Juche-based strategic weapons of Korean-style and the ICBM units and all the units for the operation of tactical nukes to intensify their training with high vigilance so as to perfectly discharge their important strategic duty in any situation and at any moment"* *"a crucial milestone in bolstering up the nuclear forces of the DPRK, together with his beloved daughter and wife",* (Rodong Sinmun, 19 Nov. 2022) "*Succeeded in developing and perfecting the new-type ICBM Hwasongpho-17, the world's strongest strategic weapon, and made a wonderful leap forward in the*

										- Kim Jong Sik KPi.066 (deputy chief of the MID of the WPK) and other senior officials of the WPK Central Committee watched the test-fire - General Jang Chang Ha KPi.037 (chief of the Academy of National Defense Science), *"leading officials in the national defence scientific research sector and commanding officers of the Red Flag Company"* (Rodong Sinmun 19 Nov 2022) - From the analysis of the unusual metadata (EXIF) of the Photo: [45 min between ICBM inspection and launch] (NKnews, 23 Nov. 2022) - the author's name *"Kim Un Hyok829"*. - "*it appears that much of Friday's photos and videos come from the Korean People's Army (KPA)"* (NKnews, 23 Nov. 2022) - ㅈ09151753 – TEL no. 322 presented on the 26 Nov. photo gathering the KJU, daughter and who made a contribution to the test-fire of the BM. At the military parade 10 Oct.2020 the TEL 322 carried a Hwasong-17 numberㅈ21260405 (S/2022/668, annex 23.2) Promoted: -Generals: Jang Chang Ha and Kim Jong Sik - Col. General: Kang Kyong Ho the same military rank as Ri Hong Sop KPi.004, was last known as the head of the nuclear weapons institute, while Kang was identified as deputy head of the institute - Lieut. Generals: Choe Pyong Wan (this promotion makes clear that he is	*development of the technology of mounting nuclear warheads on ballistic missiles"* (Rodong Sinmun 27 Nov. 2022) - *"its ultimate goal is to possess the world's most powerful strategic force, the absolute force unprecedented in the century… the world's strongest strategic weapon, and made a wonderful leap forward in the development of the technology of mounting nuclear warheads on ballistic missiles,"* (KCNA, 27 Nov. 2022) - *"The transporter erector launcher "clearly proved before the world that the DPRK is a full-fledged nuclear power capable of standing against the nuclear supremacy of the U.S. imperialists and fully demonstrated its might as the most powerful ICBM state,"* (Rodong Sinmun 27 Nov. 2022) - *"in detail one by one, from the appearance of the missile and the issue of selecting an engine, to the self-propelled issue of the launch vehicle and the preparation of the underground launch site, to the method of painting the missile."* (KCNA, Rodong Sinmun 27 Nov. 2022)

									involved in weapons research. (NKnews 29 Nov. 2022) -Maj. Generals: Choe Chol Ung, Kim Sun Chol, Ha Jong Guk, Pang Hyon Chol, Kim Chang Rok, Kim Man Sop, Yu Chol U, Ri Kyong and Ri Yong Sok	
38th	15th	14th	18 Dec. 2022 11:13 or 11:11 12:05 or 11:52	MRBM - LP - test possibly related to military reconnaissance satellites - resembles the Nodong Hwasong-7 	2	From Tongchang-ri (Sohae) toward northeast 	500 500	500 500	- According to KCNA's picture the BM resembles the Nodong Hwasong-7 (see S/2014/147 para. 34) - Satellite imagery released by the DPRK on this launch needs more analysis. (https://www.nknews.org/pro/south-korean-outlets-censor-north-korean-satellite-images-of-seoul-area/)	*"The National Aerospace Development Administration (NADA) of the DPRK conducted an important final-stage test for the development of reconnaissance satellite at the Sohae Satellite Launching Ground on December 18"* (KCNA 19 Dec. 2022) - *500 km from Sohae* (Rodong Sinmun 20 Dec. 2022) - *"The National Space Development Agency announced that it would finish preparing the first military reconnaissance satellite by April 2023"* (Rodong Sinmun, 19 Dec. 2022)

39th	45th	25th	23 Dec. 2022 16:32 or 16:31	SRBM	2	From Pyongyang Sunan airport area toward the east splashed down at 16:46 	250 or 300 and 350 or 300	50 and 50	- Possibly an irregular trajectory	- No statement or information from the DPRK
40th	46th	**26th**	31 Dec. 2022 08:00	SRBM KN-25 "*Super large rocket system"*	3	- from Hwanghae province	360		- Nuclear-capable multiple rocket launcher (MRL) able to strike anywhere in ROK - 30 were recently deployed in the army (KCNA 2 Jan. 2023)	*"The three shells of multiple rocket launchers precisely hit a target island …, demonstrating their combat performance"* (KCNA, DPRK Today, 2 Jan. 2023)

4	**20**	**3**	**2021**	**Solid fuel BMs fired <u>between 2018 and 19 Oct. 2021</u>: 41** **In 2021: 5**						
	1	**1**	**2021**	**Liquid fuel BMs fired <u>between 2018 and 28 Sep. 2021</u>: 1** **In 2021: 1**						
	18th	**1st**	**25 Mar.2021** 0706 and 0725 hours (MS) or 0704 and 0723 hours	**New SRBM (modified KN-23)** - SP - It appears to be the new SRBM, and TEL displayed during the military parade on 14 January 2021 and identified as a possible modification and enlargement of the previously displayed and tested KN-23 SRBM	2	Hamju south Hamgyong area Near Sondok (2 airfields Sondok and Yonpo (Ryonpo))	450 600	60 Less 100	- New 5 axle wheeled TEL (if 26 March 2021 KCNA pictures are genuine. See 14 Jan 2021 military parade (Panel) - TBL: 19 minutes (0706-0725) (MS) - Possible depressed with pull-up trajectory 18th SRBM launch test since 04 May 2019 (around 35 SRBM) (Panel) falling into waters outside Japan's Exclusive Economic Zone (MS)	*"New-type tactical guided missiles"* *or* *"new-type tactical guided projectile"*
	19th	**2nd**	**15 Sep. 2021** 12:34 and 12:39 or 12:32 and 12:37	**SRBM.** - SP - It appears to be either the previously displayed and tested SRBM **KN-23** tested as a railway-borne missile system that has been displayed at the missile exhibition "Self-Defence 2021" on 11 October 2021 or possibly the modified and enlarged version of KN-23	2	From a railcar at the entrance of a tunnel located at 39°16'31"N 126°48'17"E in Yangdok area of South Phyongan Province,[49] eastward into waters off the east coast but inside Japan's Exclusive Economic Zone.	800	60	- New railway-borne missile system - Time between launches: 5 minutes - The trajectories were the longest of the solid fuel ballistic missiles tested since 2019, with a "pull-up manoeuvre" detected. - If it was the KN-23 it showed increased range compared to previous tests, probably because of a reduced payload. - The use of a railway-borne launcher gives DPRK a mode of transport for a variety of missiles which they can rapidly deploy and launch from anywhere on their rail network providing another option for concealing and launching its missile force.	*"The Railway Mobile Missile Regiment"*[50] (KCNA, Voice of Korea 19 Sept 2021)

[49] According to a MS, the location could be at 39°16'2.04"N 126°47'17"E. This assessment of the coordinates is slightly different to the Panel's analysis of the KCNA video which gives an idea of the length of the tunnel and the curve of the track.

[50] "*The Railway Mobile Missile Regiment took part in the drill with a mission to move to the central mountainous area and strike the target area 800 kilometres away early on the morning of September 15*, KCNA, Voice of Korea, 19 September 2021.

	1st	**1st**	**28 Sep. 2021** 06:40 or 06:38	**MRBM HWASONG-8 "Hypersonic glide vehicle HGV"** - LP - disclosed at the missile exhibition "Self-Defence 2021" on 11 October 2021, after the 28 September launch test. (KCNA) -SRBM or MRBM -Missile total length is around 14.5 m for a body diameter of 1.4 m. - Re-entry vehicle length is around 4.7m for a rear diameter of around 0.9 m. - 6-axle wheeled TEL	1	From North's Mupyong-ri, Jagang province eastward into waters off the east coast	200	60	- The mention by DPRK of a "*missile fuel ampoule"* used in liquid propellant ballistic missiles enables the missile to be loaded with propellant at the factory (KCNA) - The main body of the missile appeared to be made from a liquid propellant booster that resembled, but shorter than, the single-stage Intermediary Range Ballistic Missile (IRBM) Hwasong-12. - The possible HGV resembled an already existing HGV[51]. It appears to be at an early stage of development stage of development that would require considerable time for actual deployment. -It's known to have flown at a speed of around Mach 3 at that time	*Academy of Defense Science conducted the first test fire of the hypersonic Hwasong-8 missile from Toyang-ri, Jagang Province, on Tuesday 28 Sep.(KCNA 29 Sep.2021)*[52]
	20th	**3rd**	**19 Oct. 2021** 10:17 or 10:15	**New SLBM/SRBM** - SP - It appears to be a new Short-range Submarine Launched Ballistic Missile that has been displayed at the missile exhibition "Self-Defence 2021" on 11 October 2021. Missile length, without tube adaptor, is around 6.8 m for a body diameter of 1 m	1	From a Gorae/Sinpo class submarine (or a submersible test stand barge) located in the area of Sinpo (South Hamgyong Province), eastward into waters off the east coast	600 or 430	60 or 50	New smaller SLBM, 2nd SLBM test since 2018 - A pull-up manoeuvre has been detected but with no significant horizontal movement. -Its design is smaller than the SLBM Pukguksong missile series and resembled those of the SRBM KN-23 and KN-24 as well as having similar flight characteristics. It could be fielded in multiple launch tubes from a larger	*"a new-type of submarine-launched ballistic missile (SLBM)". (KCNA, 20 Oct)*[53]

[51] This HGV is a solid propellant hypersonic missile showcased by a Member State at a military parade in 2019

[52] KCNA 29 Sep. 2021: *"the navigational control and stability of the missile in the active section as well as its technical specifications, including the guiding manoeuvrability and the gliding flight characteristics of the detached hypersonic gliding warhead". "The engine as well as of missile fuel ampoule that has been introduced for the first time" was "ascertained,"*

[53] Rodong Sinmun /ANDS 20 Oct 2021: The DPRK stated that it has *"successfully"* conducted a test-firing of a new-type of submarine-launched ballistic missile (SLBM) *"The new SLBM … will greatly contribute to our country's defense technology advancement and the Navy's underwater operational capabilities";*
KCNA 20 Oct: *"The Academy of National Defense Science conducted the test-launch from "8.24 Yongung" where its first SLBM was successfully launched five years ago to demonstrate the military muscle of the DPRK"… "It clarified that the new type SLBM, into which lots of advanced control guidance technologies including flank mobility and gliding skip mobility are introduced, will greatly contribute to putting the defense technology of the country on a high level and to enhancing the underwater operational capability of our navy*,"

									DPRK ROMEO-class submarine that increase an offshore strike capability. - The missile was reportedly launched from an experimental **Gorae/Sinpo-B class ballistic missile submarine called "8.24 Yongung**", whose launch tube may have been adapted for a smaller SLBM than Pukguksong type. - However, the missile may have been launched from a submersible test stand barge.	

4	**17**	**4**	**2020**	**Solid fuel BMs fired between 2018 and 29 Mar. 2020: 36** **In 2020: 11**						
	0	**0**	**2020**	**Liquid fuel BMs fired between 2018 and 2020: 0** **In 2020 0**						
	14th	**1st**	**02 Mar.2020** 1237 hours	**SRBM (KN-25)**; - SP - same as II and IV (24 Aug., 10 Sept., 31 Oct. and possibly 28 Nov. 2019)	2	Wonsan area	240	35	- Probably an operational training test integrated into a military exercise - Wheeled TEL with four launch tubes (if KCNA pictures are genuine; images resembled those from 28 Nov. 2019) - TBL: 20 seconds	*Multiple-launch rocket – long-range artillery*
	-	-	From 28 Feb. to 2 Mar 2020	**MLRS (KN-09)** 240 mm 300 mm - SP	unknown	14 km from eastern Wonsan area 39°9'19.66"N 127°36'26.85"E	–	–	- Operational training test for artillery and MLRS during "joint strike military drills" (see S/2020/840 annex 7, figure 7-1)	*Joint strike military drills*
	15th	**2nd**	**9 Mar.2020** 0736 hours	**SRBM (KN-25);** same as I and IV - SP	3 (or 2)	Sondok area	200	50	- Probably one KN-25 launch failed. Member States only counted two BMs - TBL: 20 seconds and 1 minute	*Front-line long-range artillery*
	-	-		**MLRS (KN-09)** 240 mm 300 mm - SP	2	Sondok area	–	–	- Possibly two KN-09 were also launched	*Front-line long-range artillery*
	16th	**3rd**	**21 Mar.2020** 0645 and 0650 hours	**SRBM (KN-24);** same as 10 and 16 August 2019 - SP	2	Pyongan area; near Sonchon according to a Member State	410	50	- Possible depressed with pull-up trajectory - TBL: 5 minutes	*Tactical guided weapon*
	17th	**4th**	**29 Mar.2020** 0610 hours	**SRBM (KN-25);** same as I and II - SP	2	Wonsan area	230	30	- Tracked TEL (if KCNA photographs are genuine; images showed a tracked 6-tube TEL instead of a wheeled 4-tube TEL) - TBL: 20 seconds	*Super-large multiple rocket*

13	**13**	**13**	**2019**	**Solid fuel BMs fired between 2018 and 28 Nov. 2019: In 2019:**	**25 25**					
	0	**0**	**2019**	**Liquid fuel BMs fired between 2018 and 2019: In 2019**	**0 0**					
	1st	**I.**	**4 May 2019** 0830 and 1050 hours	New SRBM (KN-23); same as II, III and VI - SP	2	Hodo Peninsula N 39°24′32.25″, E 127°31′53.63″	200-unknown (Possibly 240 to 400)	50-unknown (Possibly 40 to 60)	– One launch probably not fully successful – Four-axle wheeled TEL type 1[54] – TBL: 2h20	*Tactical guided weapons*
	-	-	4 May 2019	MLRS 240 mm 300 mm (KN-09) - SP	unknown		70-240		Rockets were tested	*Large-calibre long-range multiple rocket launchers*
	2nd	II.	**9 May. 2019** 1630 and 1650 hours	**New SRBM (KN-23)**; same as I, III and VI - SP	2	Kusong area N 40°01′47″, E 125°13′38″	420; 270	50; unknown Possibly 40	- Tracked TEL similar to T-72 tank[55] - TBL: 20 minutes	*Long-range strike means*
	3rd	III.	**25 Jul. 2019** 0530 and 0600 hours	**New SRBM (KN-23);** same as I, II and VI - SP	2	Hodo Peninsula N 39°24′31″, E 127°32′03″	430; 690	50; 50	- Wheeled TEL type 2[56] - TBL: 30 minutes	*New-type tactical guided weapon*
	4th	IV.	**31 Jul. 2019** 0510 and 0530 hours	**New SRBM (possibly KN-23)** or **new MLRS** (possibly 400 mm); same as V - SP	2	Wonsan/Kalma area	250; 250	30; (?)	- Tracked- TEL - TBL: 20 minutes	*New-type large-calibre multiple launch guided rocket system*
	5th	V.	**2 Aug. 2019** 0300 and 0320 hours	**New SRBM (possible KN-23)** or **new MLRS** (possibly 400 mm); same as IV - SP	2	Hamhung area (Possibly Yonghung area)	220; (?)	25; (?)	- KCNA pictures show blurry MRL image not verified as for this test; possibly tracked TEL - TBL: 20 minutes	*New-type large-calibre multiple launch guided rocket system*

[54] According to a MS, the transporter erector launcher parallels previous models of Iskander. Both transporter erector launchers used a WS200 chassis. In the assessment of another MS, "*the caterpillar version is just a prototype*" and the wheeled chassis that was used is new and could be derived from other MSs chassis. *"The organization or the design is inspired by Iskander TEL."*

[55] According to a MS, this tracked, or caterpillar transporter erector launcher version could be just a prototype.

[56] According to a MS, this wheeled transporter erector launcher type 2 could be a future operational version.

	6th	VI.	**6 Aug. 2019** 0520 and 0540 hours	**New SRBM (KN-23);** same as I, II and III - SP	2	Kwail airfield N 38°24′54.98″, E 125°1′43.00″	450; 450	37; 37	- Wheeled TEL type 2; the missile flew over DPRK territory from west to east - TBL: 20 minutes (See S/2020/151 annex 58.2)	*New-type tactical guided missiles*
	7th	VII.	**10 Aug. 2019** 0530 and 0550 hours	New tactical missile similar to **ATACMS (KN-24)**;[57] same as VIII - SP	2	Hamhung/ Hungnam N 39°48′44.32″, E 127°39′49.68″	400; 400 (Possibly 430)	48; 48	- Tracked TEL[58] (see S/2020/151 annex 58.3) - TBL: 20 minutes	*New weapon*
	8th	VIII.	**16 Aug. 2019** 0800 and 0820 hours	New tactical missile similar to **ATACMS (KN-24);** same as VII - SP	2	Tongchon area N 39°03′33″, E 127°46′44″	230; 230	30; 30	- Tracked TEL - TBL: 16 minutes (See S/2020/151 annex 58.4)	*New weapon*
	9th	IX.	**24 Aug. 2019** 0640 and 0700 hours	**New MLRS**[59] using “super-large” heavy rocket (600 mm, **KN-25**); same as X - SP	2	Sondok airfield N 39°44′37.05″, E 127°28′23.79″	380; 380	97; 97	- Eight-axle wheeled TEL[60] - TBL: 17 minutes (see S/2020/151 annex 58.5)	*Super-large multiple rocket launcher*
	10th	X.	**10 Sept. 2019** 0650 and 0710 hours	**New MLRS** using “super-large” heavy rocket (600 mm, **KN-25**); same as IX - SP	2	Kaechon airfield N 39°45′8.46″, E 125°53′59.06″	330; 330	50; 60	- One flight test failed[61] Eight-axle wheeled TEL; KCNA picture of 31 Oct. launch was in fact from 10 Sept. - TBL: 19 minutes (see S/2020/151 annex 58.6)	*Super-large multiple rocket launcher*
	11th	XI.	**2 Oct. 2019** 0710 hours	**New SLBM/MRBM**[62] **Pukguksong-3** - SP Estimated potential range 1,700 km (see S/2020/151 annex 58.7)	1	Wonsan - Yonghung Bay	450	910	1st SLBM test since 2018 Submerged barge	*New-type SLBM Pukguksong-3*

[57] The Panel notes that the system resembles such surface-to-surface missile systems as the Army Tactical Missile System or the King Dragon 300 (see S/2020/151, table 3 and annex 59).

[58] Built on the Pokpung-ho battle-tank chassis, which was designed in the DPRK and resembles the T-62

[59] Four launch tubes; ballistic missile trajectory not aerodynamic, but small canards attached. The rocket is a guided battlefield missile

[60] According to a MS, the eight-axle wheeled transporter erector launcher of KN-25 is based on the KN-23 chassis (stretched chassis) with an armoured cabin specifically designed in the DPRK.

[61] Several MSs stated that one flight test had failed and crashed inland, but that the other had headed towards Alsom Island; three out of four tubes had been used. One tube could have been defective (a Korean Central News Agency photograph shows that the upper cap was off but that the missile had not been fired, as the bottom cap was still in place).

[62] The submarine-launched ballistic missile is the naval adaptation of the Pukguksong-2 medium-range ballistic missile, but with a different re-entry vehicle and payload section.

	12th	XII.	**31 Oct. 2019**	**New MLRS**[63] using "super-large" heavy rocket (600 mm, **KN-25**) - SP	2	Sunchon airfield N 39°24′48″, E 125°53′18″	370; 370	90; 90	- Wheeled TEL - TBL: 3 minutes	*Super-large multiple rocket launcher*
	13th	XIII.	**28 Nov. 2019**	**New MLRS** using "super-large" heavy rocket (600 mm, **KN-25)** - SP	2	Ryonpo area of Sondok airfield or Ryonpo airfield	380; unknown (Possibly 380)	97; unknown (Possibly 50)	- Wheeled TEL - TBL: 30 seconds	*Super-large multiple rocket launcher*

S*ource:* Member States and the Panel. *Abbreviations*: Member State (MS), Korean Central News Agency (KCNA)

[63] The Korean Central News Agency picture of the 31 October 2019 launch is in fact a picture from 10 September 2019. What was fired on 31 October 2019 was a new large-calibre canister-launched short-range ballistic missile, according to a MS.

Annex 26: China's responses to the Panel

Permanent Representative of China's Letter to the Panel

New York, 19 January 2022

Respected Coordinator and experts,

I am writing to you to acknowledge the receipt of your previous letters regarding the requests to investigate suspected violations of the Security Council Resolutions on the DPRK and share with you China's feedback.

China has been strictly implementing the Resolutions and fully supports the work of the Panel. In this regard, relevant Chinese authorities have conducted thorough investigations on the issues raised by the Panel. You may find the details of the investigations in the document enclosed herewith. I hope these feedback could be reflected in the Panel final report in a faithful and comprehensive manner.

I would also like to take this opportunity to emphasize that China has made great efforts in implementing the Resolutions and sustained great losses. It is suggested that the Panel carry out its assessments and analysis in line with its mandate as specified in the related Resolutions, and refrain from including unverified information in the report.

Panel of Experts
Established pursuant to resolution 1874
New York

I look forward to continuing working with you to contribute to the implementation of the Security Council Resolutions and the political solution to the Peninsula issue.

Warm regards,

Zhang Jun
Ambassador Extraordinary and Plenipotentiary
Permanent Representative
of the People's Republic of China to the United Nations

The following are China's verbatim responses to the Panel's requests for information (RFI) in the reporting period. The Panel's outgoing correspondence (OC) numbers are used as reference throughout the main text of this report.

China's Feedback to the 1874 Panel of Experts

1. Refined petroleum products (OC.317)

China has always been strictly implementing the provisions of exporting refined petroleum products to the DPRK. After the adoption Security Council Resolution 2397, the Chinese side immediately published relevant notifications so as to ensure that the activities of Chinese enterprises and individuals are consistent with the resolutions. China has been notifying the 1718 Committee of the amount of China's exports of refined petroleum products to the DPRK. Chinese enterprises do not and will not carry out transactions with sanctioned individuals and entities.

China attaches great importance to protecting the information and privacy of trading parties involved in the international trade, which is an internationally accepted practice. Given the persistent leakage of the POE report and the lack of adequate information security measures, China will not be able to provide relevant information until its security is fully guaranteed.

China has previously provided a clear response on this issue and hope

the Panel would not send letter on same questions repeatedly.

2. Iron and textiles (OC.301**)**

The Chinese customs have taken a series of effective measures, including necessary inspection of inbound and outbound goods, to ensure full compliance with the Security Council Resolutions. Such measures have been duly implemented.

China has made several explanations to the Panel regarding its questions about the customs data. According to the data from China, goods imported from the DPRK under HS Codes of Chapter 50 were silk yarn and silk waste. These are raw materials, not textiles prohibited for import by the Security Council. Meanwhile, goods imported from the DPRK under HS Codes of Chapter 72 were not iron or iron ores. The Panel should accurately interpret the Resolution and refrain from mentioning in its report issues not related to the Resolution.

3. Alcoholic beverages (OC.300)

Alcoholic beverages are not on the list of items prohibited for export to the DPRK, and the Resolution didn’t authorize the Panel to interpret the scope of luxury goods. The Panel should accurately interpret the Resolution and act according to its mandate.

4. Money laundering activities (OC.254)

China has made thorough investigations according to the information provided by the Panel and found no evidence that Ri Chol Nam conducted activities in violation of Security Council Resolutions within Chinese borders. The authenticity and accuracy of the information provided could not be verified, and such information should not be included in the Panel report.

5.Phishing software (OC.226)

China has made thorough investigations according to the information provided by the Panel and found no evidence that Song Rim was involved in the selling of phishing software or in the operation of phishing call centers within Chinese borders.

6. Maritime activities

China attaches great importance to maritime irregularities related to the DPRK and cracks down on ship-to-ship smuggling according to its laws and regulations. The Chinese transportation, customs, marine police, and other relevant authorities have investigated the issues raised by the Panel. We found that some of the vessels mentioned by the Panel have no record of port calls in China in 2022, and the vessels recorded were loaded with livelihood goods, not items prohibited by the Security Council. The Panel should fulfill its mandate in a prudent and responsible manner by carefully

screening the information provided by individual countries, and refrain from including unconfirmed information in its report. Detailed findings are as follows:

(1) OC.315 *TAE YANG* entered Dalian port empty-loaded from Nampo port in July 2022 and left Dalian port loaded with rice, rubber, washing powder, and other livelihood goods in the same month.

ZAI ZHOU 2 entered Longkou port empty-loaded from Nampo port in July 2022 and December 2022, and left Longkou port loaded with tires, plastic pellets, furniture, and other groceries in the same months.

China found no activities in violation of the DPRK-related Security Council Resolutions by the abovementioned vessels, and they were not found in Ningbo waters.

(2) OC.313 *CHOL BONG SAN* entered Longkou port empty-loaded from Nampo port in June 2022, and left Longkou port loaded with soda ash, plastic film, and other livelihood goods in the same month. No activities in violation of the DPRK-related Security Council Resolutions were found.

(3) OC.314 There have been no records of port calls or information declarations in China for Vessels *ASIA HONOR* and *FLOURISHING*.

(4) OC.316 There have been no records of port calls and information declarations in China for Vessel *MI RIM 2*.

(5) OC163/OC191/OC312 *AN HAI 6* made several port calls in China in 2022 and the vessel was loaded with silk, furniture, and other livelihood goods. No prohibited items were founded. The disembarkation of its crew was a normal rotation.

(6) OC.305 Due to the lack of details in the information provided by the Panel relating to *TOMI HARU* and *TOYO HARU*, Chinese authorities were not able to conduct effective investigations. Considering that, the Panel should not include the above-mentioned information in the report.

(7) OC.306 China didn't find any evidence that *JIANG SHEN FU 6988* was involved in ship-to-ship smuggling. There have been no records of port calls or information declarations in China for *EVER GLORY*. The Panel should not include the above-mentioned information in the report.

(8) OC.307 China didn't find any evidence that *SHUN CHANG 78* was involved in ship-to-ship smuggling. The vessel has been in a status of cancellation since November 2021. The Panel should not include the above-mentioned information in the report.

(9) OC.310 China didn't find any evidence that *ZHEN YANG XIN* was involved in ship-to-ship smuggling. The Panel should not include the above-mentioned information in the report.

(10) OC.311 *TONG KANG* is in a status of cancellation and the

investigation by Chinese authorities is still ongoing. The Panel should not mention this vessel in the report.

(11) OC.309 The investigations on *JIANG AN 16* is still ongoing. The Panel should not include in the report the information mentioned in its letter to the Chinese Mission.

(12) OC.203 *KUM SAN BONG* and *KUM SAN BONG 3* transported glasses and other livelihood goods in 2022, and trucks were not found in their deliveries. No activities were found by the two vessels in Ningbo-Zhoushan waters.

(13) OC.205 China didn't find any evidence that *PENG LU 9* was involved in the smuggling of trucks.

(14) OC.185 The Niue-flagged vessel *ANNI* has only one record of leaving port call in China in 2022. It declared to leave Taizhou port for Yokohama port in June 2022 and was not seen in Chinese territorial waters ever since. China found no activities in violation of the DPRK-related Security Council Resolutions by the vessel.

(15) OC.208 The DPRK-flagged vessel *PU YANG 2* arrived at Yantai port from Nampo loaded with silicon iron in August 2022 and left Yantai port in the same month. It arrived at Longkou port empty-loaded from Nampo in September 2022 and left Longkou port loaded with groceries in

the same month. China found no activities in violation of the DPRK-related Security Council Resolutions by the vessel.

(15) OC.308 *MO RAN BON 2* and *SONGRIM* transported to and from Chinese and the DPRK ports loaded with glass, flour, white sugar, and other livelihood goods. China found no activities in violation of the DPRK-related Security Council Resolutions by these vessels, and is not aware of the renaming of these vessels.

(16) OC.190 China found no evidence that the DPRK-flagged vessels were modified in the shipyards within Chinese territory. China is concerned that allegations from the Panel were based on assumptions rather than facts, and urges the Panel to conduct its work based on mandate and evidence. Information based on assumption should not be included in the report.

(17) OC.319 China has been earnestly fulfilling its international obligations. The Chinese fishing authorities and Chinese coastal provinces have taken measures to ensure that Chinese fishery enterprises and Chinese fishermen comply with relevant Security Council Resolutions. Should the incidents raised by the Panel exist, they must be illegal activities. China’s position on such illegal activities is very clear, and necessary measures will be taken according to laws and regulations once the incidents are confirmed. However, information provided by the Panel is vague and lacks substantial

evidence, making it hard for Chinese authorities to conduct in-depth investigations.

Annex 27: Letter to the 1718 Committee of 52 Member States regarding the oil cap, their report and accompanying imagery

October 21, 2022

Dear Ambassador Juul,

On behalf of the Republic of Albania, Australia, Austria, Belgium, Bosnia and Herzegovina, the Republic of Bulgaria, Canada, Chile, Costa Rica, the Republic of Croatia, the Republic of Cyprus, the Czech Republic, Denmark, the Dominican Republic, Estonia, Finland, France, Georgia, the Federal Republic of Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, the Hashemite Kingdom of Jordan, State of Kuwait, the Republic of Latvia, Liechtenstein, Lithuania, Luxembourg, the Republic of Malta, the Federated States of Micronesia, Moldova, the Kingdom of the Netherlands, New Zealand, Norway, the Republic of Palau, Peru, the Republic of Poland, Portugal, the State of Qatar, the Republic of Korea, Romania, the Slovak Republic, the Republic of Slovenia, Spain, TUrkiye, Ukraine, the United Kingdom, and the United States, I have the honor to submit to the 1718 Committee a request for the Committee Secretary to take the actions described in operative paragraph 5 of resolution 2397 because the aggregate amount of refined petroleum products sold, supplied, or transferred to the DPRK in 2022 has exceeded the annual cap of 500,000 barrels. Attached, please find a report, sponsored by the above Member States, detailing observations of illicit North Korean refined petroleum imports, which exceed the 500,000 barrel refined petroleum cap set in UNSCR 2397. In total, we have documented 45 unreported deliveries of refined petroleum products to DPRK ports between January I and August 31, 2022. When aggregated, these deliveries represent 792,382.5 barrels of illicit imports. We are providing imagery as evidence for all of these cases.

Specifically, we request the following actions be taken:

- We request the 1718 Committee Secretary issue a public note verbale to all UN Member States that the aggregate amount of refined petroleum products sold, supplied, or transferred to the DPRK in 2022 has exceeded the cap set by the Security Council and inform Member States that they must immediately cease selling, supplying, or transferring refined petroleum products to the DPRK for the remainder of the year.
- We request the Chair to issue a Committee press release to inform the general public of this information.
- We further request this note verbale and press release include a call for all Member States to immediately exercise enhanced vigilance regarding the DPRK attempting to procure additional refined petroleum products and to prevent illicit ship-to-ship transfers of refined petroleum products to vessels owned, controlled, or acting on behalf of or working in cooperation with the DPRK.

- We further request the 1718 Committee Secretary update the website to include the illicit refined petroleum imports in our report and show that the aggregate amount of refined petroleum products sold, supplied, or transferred to the DPRK in 2022 has exceeded the cap set by the Security Council using the conversion rate and other information in the report.

We request the Chair circulate our report to the 1718 Committee and our proposals for Committee action by October 24, 2022 under the regular 5-day NOP process. We thank you in advance for your assistance.

(Signed)

[*Permanent Representatives of Albania, Australia, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Chile, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Jordan, Kuwait, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Micronesia, Moldova, Netherlands, New Zealand, Norway, Palau, Peru, Poland, Portugal, Qatar, the Republic of Korea, Romania, Slovakia, Slovenia, Spain, Türkiye, Ukraine, United Kingdom and United States of America to the United Nations]*

REPORT TO THE UN 1718 COMMITTEE: THE DPRK'S BREACH OF THE UNSCR 2397 REFINED PETROLEUM CAP

The Republic of Albania, Australia, Austria, Belgium, Bosnia and Herzegovina, the Republic of Bulgaria, Canada, Chile, Costa Rica, the Republic of Croatia, the Republic of Cyprus, the Czech Republic, Denmark, the Dominican Republic, Estonia, Finland, France, Georgia, the Federal Republic of Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, the Hashemite Kingdom of Jordan, State of Kuwait**,** the Republic of Latvia, Liechtenstein, Lithuania, Luxembourg, the Republic of Malta, the Federated States of Micronesia, Moldova, the Kingdom of the Netherlands, New Zealand, Norway, the Republic of Palau, Peru, the Republic of Poland, Portugal, the State of Qatar, the Republic of Korea, Romania, the Slovak Republic, the Republic of Slovenia, Spain, Türkiye, Ukraine, the United Kingdom, and the United States remain gravely concerned regarding large-scale evasion of restrictions the UN Security Council has imposed on the Democratic Republic of Korea's (DPRK) import of refined petroleum products. UN Security Council resolution (UNSCR) 2397, operative paragraph (OP) 5, limits the DPRK to importing no more than 500,000 barrels of refined petroleum products per year. Any Member State supplying, selling, or transferring refined petroleum products to the DPRK is required to submit reports to the UN 1718 Committee informing it of the transfers every 30 days in order to allow the Committee to maintain an accounting of the DPRK's imports.

Moreover, UNSCR 2375 OP 11 prohibits UN Member States from engaging in ship-to-ship (STS) transfers with any DPRK-flagged vessel of any goods or items that are being supplied, sold, or transferred to or from the DPRK. Nevertheless, DPRK-flagged vessels continue to conduct STS transfers on a regular basis as the DPRK's primary means of importing refined petroleum. The information in this report demonstrates that the DPRK has exceeded the UNSCR 2397 annual 500,000 barrel cap for 2022.

This submission further affirms previous submissions from 2018, 2019, 2020, and 2021 (see S/AC.49/2018/NOTE.213, S/AC.49/2019/NOTE.134, S/AC.49/2020/COMM.254, S/AC.49/2021/NOTE.105) and Panel of Experts reporting (see maritime sections of S/2018/171, S/2019/171, S/2019/691, S/2020/151, S/2020/840, S/2021/211, S/2021/777, and S/2022/132) that exhaustively demonstrated and detailed the illicit practices employed by the DPRK to circumvent UNSCR-mandated restrictions on its ability to import refined petroleum products. As a result, this report will not seek to repeat in detail the specific information the DPRK's evasive practices outlined in previous formal submissions to the UN 1718 Committee. These practices continue unabated, but the DPRK utilizes an ever-evolving fleet of vessels under its flag or its direct control to perpetrate pervasive and ongoing sanctions evasion.

This report demonstrates that the DPRK continues to conduct UN-prohibited STS transfers and imports of refined petroleum that are not reported to the 1718 Committee as required, and again this year has exceeded the UNSCR 2397 OP 5 refined petroleum products cap of 500,000 barrels per annum. This report supplies images and import volume data for vessels that continue to make deliveries of refined petroleum into DPRK ports and in the DPRK's territorial sea, without these deliveries being reported to the UN 1718 Committee. STS transfers of any cargo are explicitly prohibited by UNSCR 2375, so the relevant Member States involved in supplying refined petroleum products to DPRK tankers fail to report these volumes to avoid self-incrimination. As a result, the UN 1718 Committee's official accounting of the DPRK's imports vastly underrepresents the volume of refined petroleum products that actually enter the DPRK. The overarching purpose of UNSCR 2397's provision limiting the DPRK's ability to import refined petroleum products is to limit the DPRK's ability to develop weapons of mass destruction (WMD) and ballistic missiles, which are a

threat to international peace and security and are prohibited by numerous UNSCRs. The restriction on the DPRK's refined petroleum products imports is critical to ensuring that the DPRK chooses to halt these prohibited programs and completely denuclearize. If the DPRK is able to continue evading international sanctions, it has little incentive to make such choices. As long as the DPRK continues to import refined petroleum products in excess of the UN-mandated cap with limited accountability at the UN, UNSCR 2397 OP 5 will remain ineffectual – which also undermines both the DPRK UNSCRs as well as the UN 1718 Committee.

These deliveries have significantly contributed to a substantial breach of the 500,000 barrel annual cap set by UNSCR 2397. We estimate that, this year alone, the DPRK has imported over 792,000 barrels via 45 confirmed tanker deliveries as of August 31. Again in 2022, refined petroleum transfers to the DPRK utilized DPRK-flagged vessels, a change from previous years when foreign-flagged delivery vessels directly unloaded petroleum at DPRK ports. Due to COVID-19 restrictions, oil was acquired by DPRK-flagged ships from foreign flagged vessels via STS, and those laden DPRK-flagged ships then underwent quarantine measures outside of the lock-gates near DPRK ports prior to delivering their petroleum cargoes.

As discussed in previous submissions on the DPRK's breach of the import cap in 2018, 2019, 2020, and 2021, this report cannot provide an exact figure for each delivery of refined petroleum products to the DPRK, as that information is not readily available to any UN Member State other than the DPRK. This report instead calculates how much petroleum was acquired by the DPRK based on each vessel's dead weight tonnage, with estimates for each ship at three different levels of cargo storage capacity – 90 percent, 60 percent, and 30 percent of the vessels dead weight tonnage. It is highly likely that DPRK tankers deployed in search of precious and limited refined petroleum and fuel via STS transfers or engaging in direct deliveries would arrive in DPRK ports with as much of their cargo capacities full (i.e. 90 percent calculation). The expenditure of scarce resources and fuel consumption by the tanker itself, the risks of tanker disruption or interdiction, and the DPRK's dependence on importing refined petroleum would not justify the tanker in question returning to port with less than 90 percent of its cargo storage capacity filled.

We are providing images of 45 deliveries of refined petroleum products to DPRK ports, which, when aggregated, represent 792,383 barrels of illicit imports – constituting a clear breach of the cap imposed by UNSCR 2397 OP 5, based on the 90 percent metric. Even if each of these tankers delivered only 60 percent of their capacity in these 45 deliveries, which would be neither financially nor logistically sound, the estimated volume (528,255 barrels) would still represent a breach of the annual cap. Table 1 below documents each of these transfers and provides an associated volume. Table 2 below graphically depicts the DPRK's import of refined petroleum between January 1 and August 31, 2022.

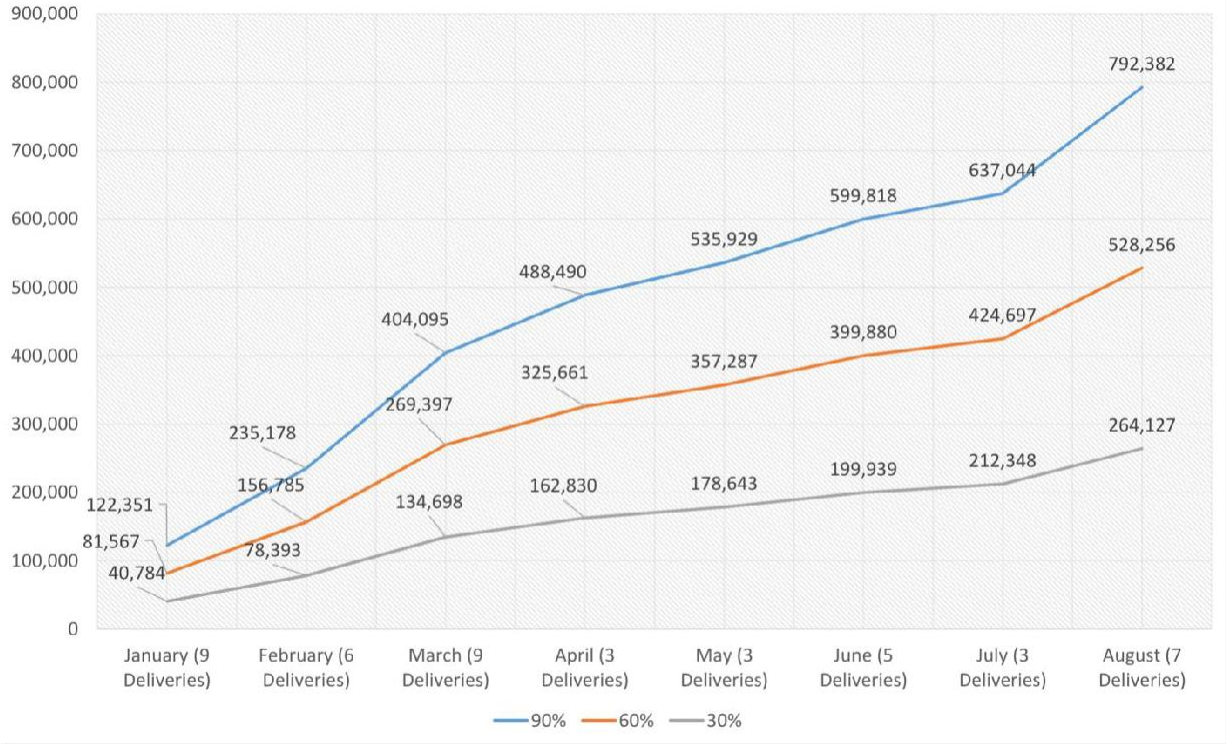
TABLE 1: DPRK-FLAGGED VESSELS THAT HAVE DISCHARGED IN 2022

Delivery Date	Vessel	IMO	FLAG	90% Laden	60% Laden	30% Laden
1/6/2022	CHIL BO SAN	8711021	DPRK	1,799.1	1,199.4	599.7
1/14/2022	YU SON	8691702	DPRK	3,058.2	2,038.8	1,019.4
1/14/2022	SAM MA 2	8106496	DPRK	1,557.9	1,038.6	519.3
1/14/2022	SONG WON	8613360	DPRK	1,890.9	1,260.6	630.3
1/14/2022	PO CHON	8848276	DPRK	3,184.2	2,122.8	1,061.4

1/14/2022	SAE BYOL	8916293	DPRK	1,035.0	690.0	345.0
1/19/2022	YU JONG 2	8604917	DPRK	1,085.4	723.6	361.8
1/29/2022	SONG WON	8613360	DPRK	1,890.9	1,260.6	630.3
1/29/2022	AN SAN 1	7303803	DPRK	2,702.7	1,801.8	900.9
2/6/2022	PU RYONG	8705539	DPRK	2,600.1	1,733.4	866.7
2/6/2022	SIN PHYONG 2	8817007	DPRK	1,894.5	1,263.0	631.5
2/10/2022	SIN PHYONG 5	8865121	DPRK	2,965.5	1,977.0	988.5
2/10/2022	YU SON	8691702	DPRK	3,058.2	2,038.8	1,019.4
2/10/2022	CHONG RYONG SAN	NO IMO	DPRK	1,591.2	1,060.8	530.4
2/20/2022	KWANG CHON 2	8910378	DPRK	1,043.1	695.4	347.7
3/3/2022	SONG WON	8613360	DPRK	1,890.9	1,260.6	630.3
3/3/2022	PU RYONG	8705539	DPRK	2,600.1	1,733.4	866.7
3/8/2022	YU SON	8691702	DPRK	3,058.2	2,038.8	1,019.4
3/11/2022	HENG XING	8669589	DPRK	2,925.0	1,950.0	975.0
3/11/2022	PU RYONG	8705539	DPRK	2,600.1	1,733.4	866.7
3/14/2022	SONG WON	8613360	DPRK	1,890.9	1,260.6	630.3
3/22/2022	SONG WON 2	8312497	DPRK	4,499.1	2,999.4	1,499.7
3/26/2022	YU SON	8691702	DPRK	3,058.2	2,038.8	1,019.4
3/31/2022	CHON MA SAN	8660313	DPRK	3,208.5	2,139.0	1,069.5
4/7/2022	PO CHON	8848276	DPRK	3,184.2	2,122.8	1,061.4
4/15/2022	SIN PHYONG 2	8817007	DPRK	1,894.5	1,263.0	631.5
4/23/2022	SIN PHYONG 5	8865121	DPRK	2,965.5	1,977.0	988.5
5/15/2022	PU RYONG	8705539	DPRK	2,600.1	1,733.4	866.7
5/22/2022	JI SONG 6	8898740	DPRK	1,125.0	750.0	375.0
5/31/2022	PU RYONG	8705539	DPRK	2,600.1	1,733.4	866.7
6/17/2022	SAM JONG 2	7408873	DPRK	2,256.3	1,504.2	752.1
6/17/2022	KUM UN SAN	8720436	DPRK	1,863.0	1,242.0	621.0
6/22/2022	KWANG CHON	8605026	DPRK	1,769.4	1,179.6	589.8
6/22/2022	SIN PHYONG 2	8817007	DPRK	1,894.5	1,263.0	631.5
6/25/2022	SIN PHYONG 1	8532413	DPRK	735.3	490.2	245.1
7/16/2022	NAM SAN 8	8122347	DPRK	2,835.0	1,890.0	945.0
7/22/2022	KWANG CHON 2	8910378	DPRK	1,043.1	695.4	347.7
7/22/2022	YU JONG 2	8604917	DPRK	1,085.4	723.6	361.8
8/4/2022	SAM JONG 1	8405311	DPRK	1,498.5	999.0	499.5
8/4/2022	SONG WON 2	8312497	DPRK	4,499.1	2,999.4	1,499.7

8/10/2022	HENG XING	8669589	Likely DPRK	2,925.0	1,950.0	975.0
8/12/2022	UN HUNG	9045962	DPRK	3,316.5	2,211.0	1,105.5
8/21/2022	WOL BONG SAN	7636638	DPRK	4,472.1	2,981.4	1,490.7
8/27/2022	SIN PHYONG 5	8865121	DPRK	2,965.5	1,977.0	988.5
8/27/2022	SIN PHYONG 9	8916293	DPRK	1,035.0	690.0	345.0
Subtotal (BBL)				**792,382.5**	**528,255.0**	**264,127.5**

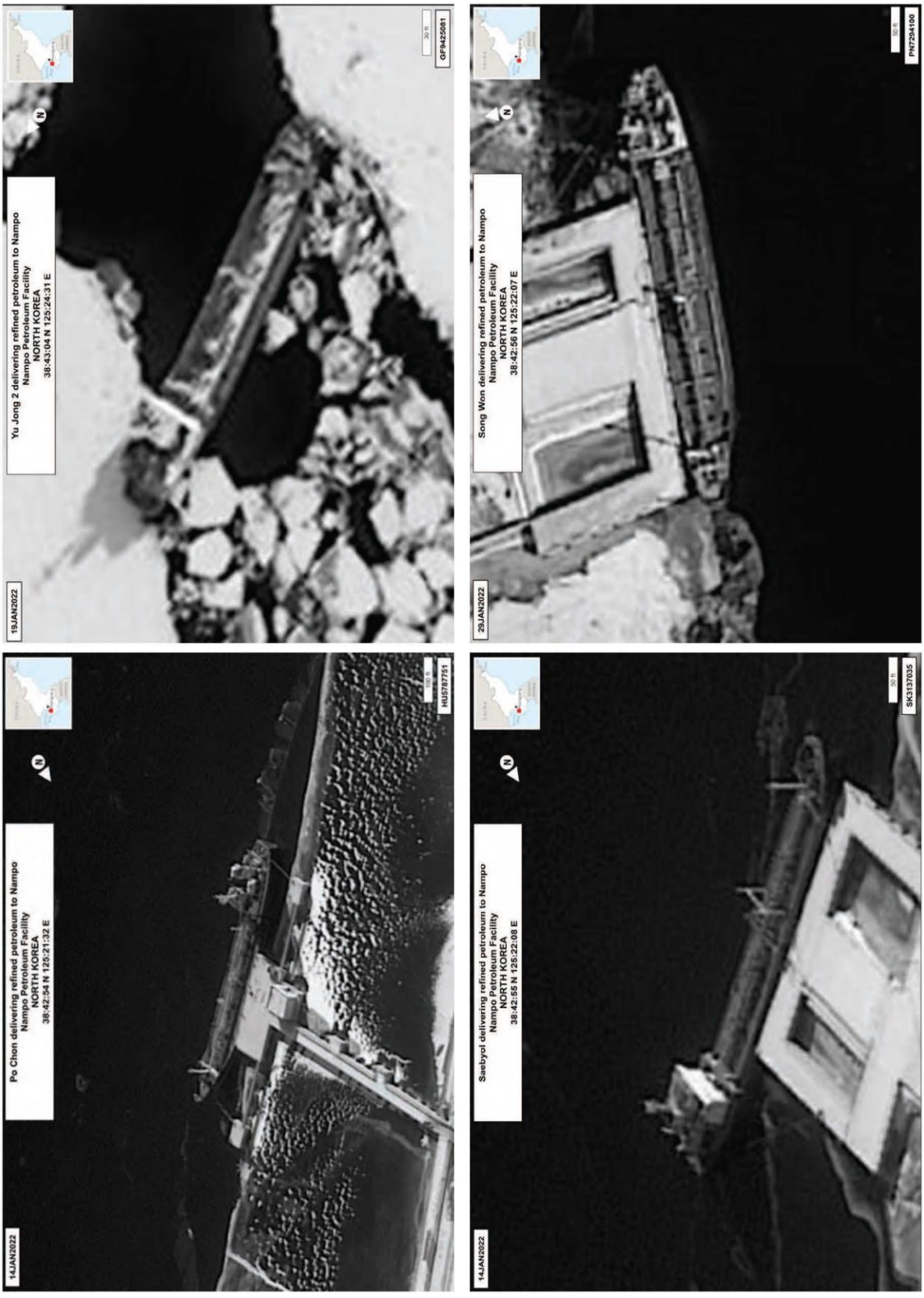
Table 2: DPRK Seaborne Petroleum Imports based on Percentage of Delivering Vessel's Deadweight Tonnage (BBLs)

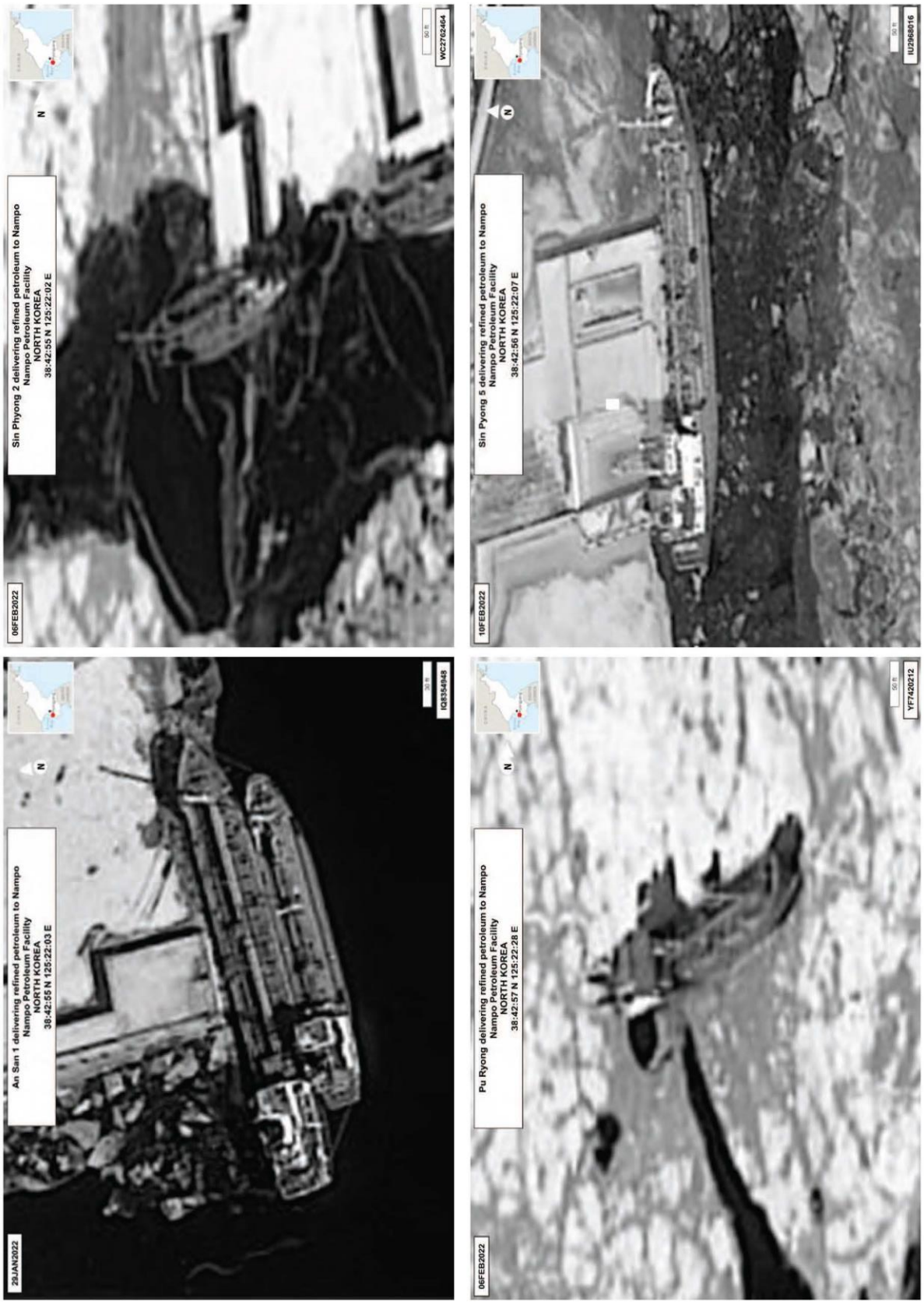


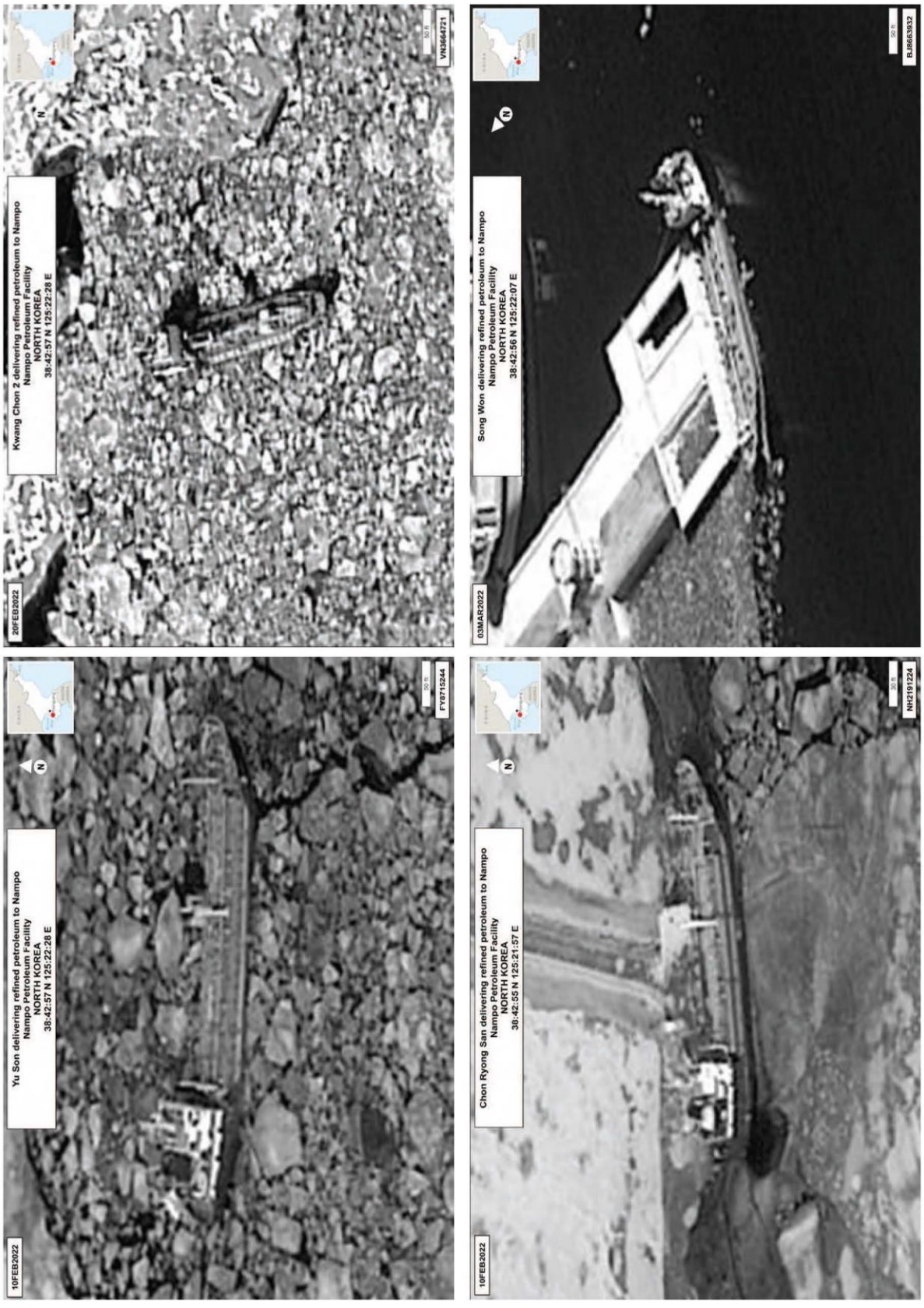
Given the information provided herein, we request that the 1718 Committee immediately make an official determination that the aggregate amount of refined petroleum products sold, supplied, or transferred to the DPRK in 2022 has exceeded the 500,000 barrel annual cap and inform Member States that they must immediately cease selling, supplying, or transferring refined petroleum products to the DPRK for the remainder of the year. Similarly, the Panel of Experts is requested to review this report's analysis and underlying information in order to make a determination in its next report on the volume of refined petroleum product imports to the DPRK and the associated implications for the implementation of UNSCR 2397's refined petroleum product import cap.

See Appendix 1 for more information on vessels that have discharged refined petroleum in 2022.

APPENDIX 1 - VESSELS THAT HAVE DISCHARGED REFINED PETROLEUM IN 2022


19JAN2022
Yu Jong 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:43:04 N 125:24:31 E
GF9425081
29JAN2022
Song Won delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:56 N 125:22:07 E
PN7294100
14JAN2022
Po Chon delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:54 N 125:21:32 E
HUS787751
14JAN2022
Saebyol delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:22:08 E
SK3137035


Sin Phyong 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:56 N 125:22:02 E
06FEB2022
WC27624G4
Sin Pyong 5 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:56 N 125:22:07 E
10FEB2022
IU2368516
An San 1 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:22:03 E
29JAN2022
IQ8354948
Pu Ryong delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:28 E
06FEB2022
YF7420212

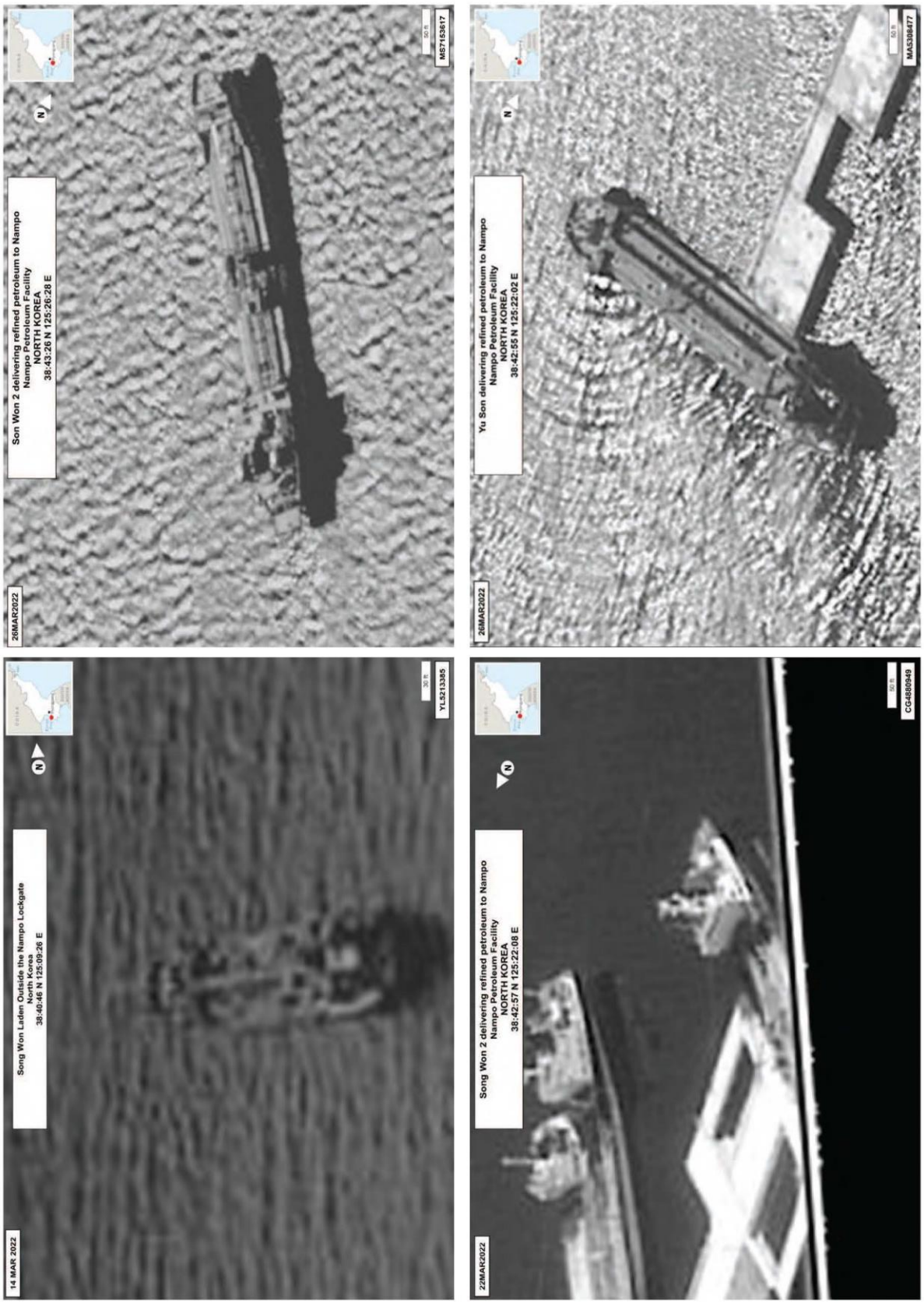

10FEB2022
Yu Son delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:28 E
FY8715244
20FEB2022
Kwang Chon 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:28 E
VN3664721
10FEB2022
Chon Ryong San delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:21:57 E
NH2191224
03MAR2022
Song Won delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:56 N 125:22:07 E
BJ8653332

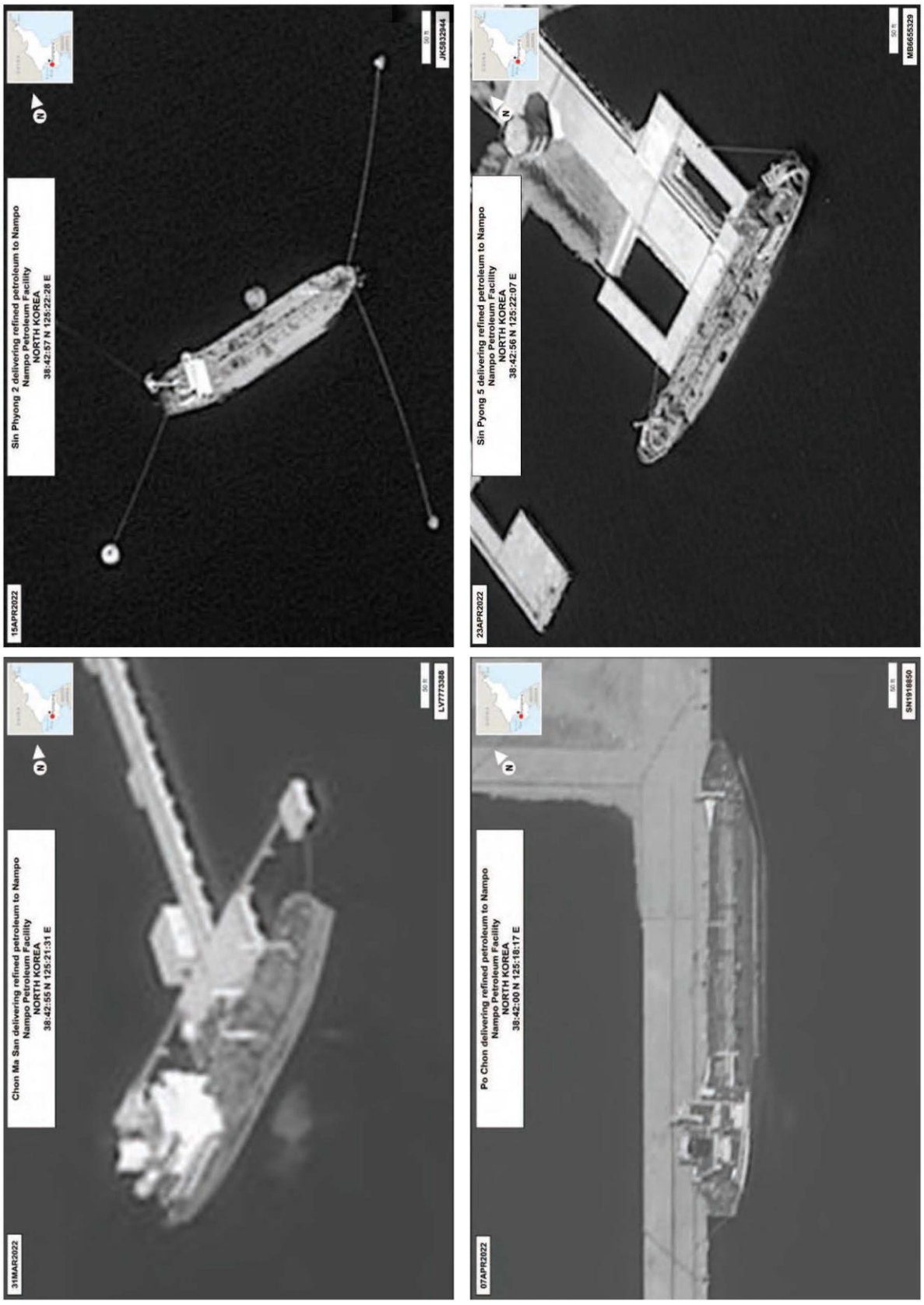
03MAR2022
Pu Ryong delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:58 N 125:22:29 E
N
50 ft
BS8728470

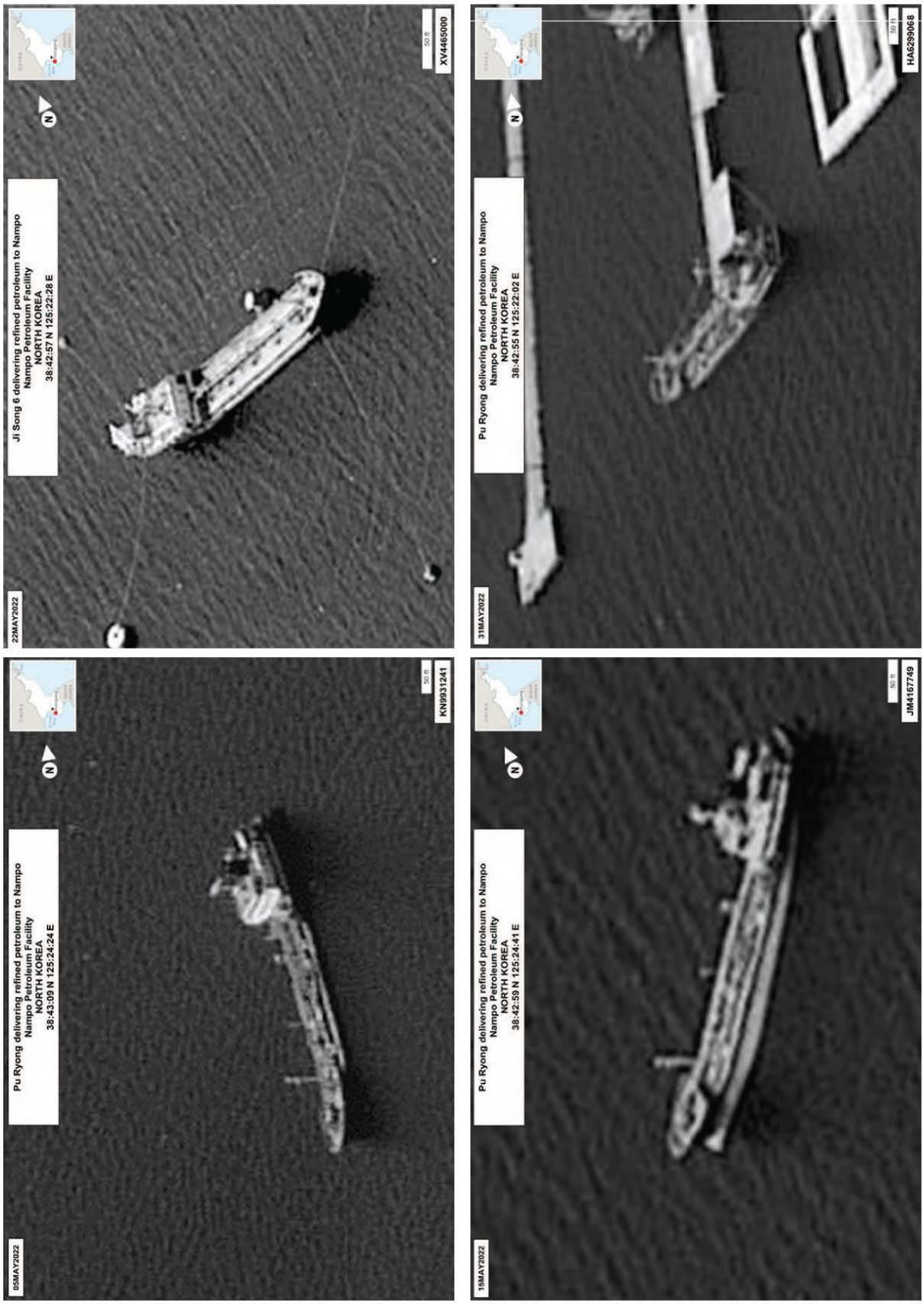
11MAR2022
Heng Xing delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 25:21:32 E
N
100 ft
YD4786050

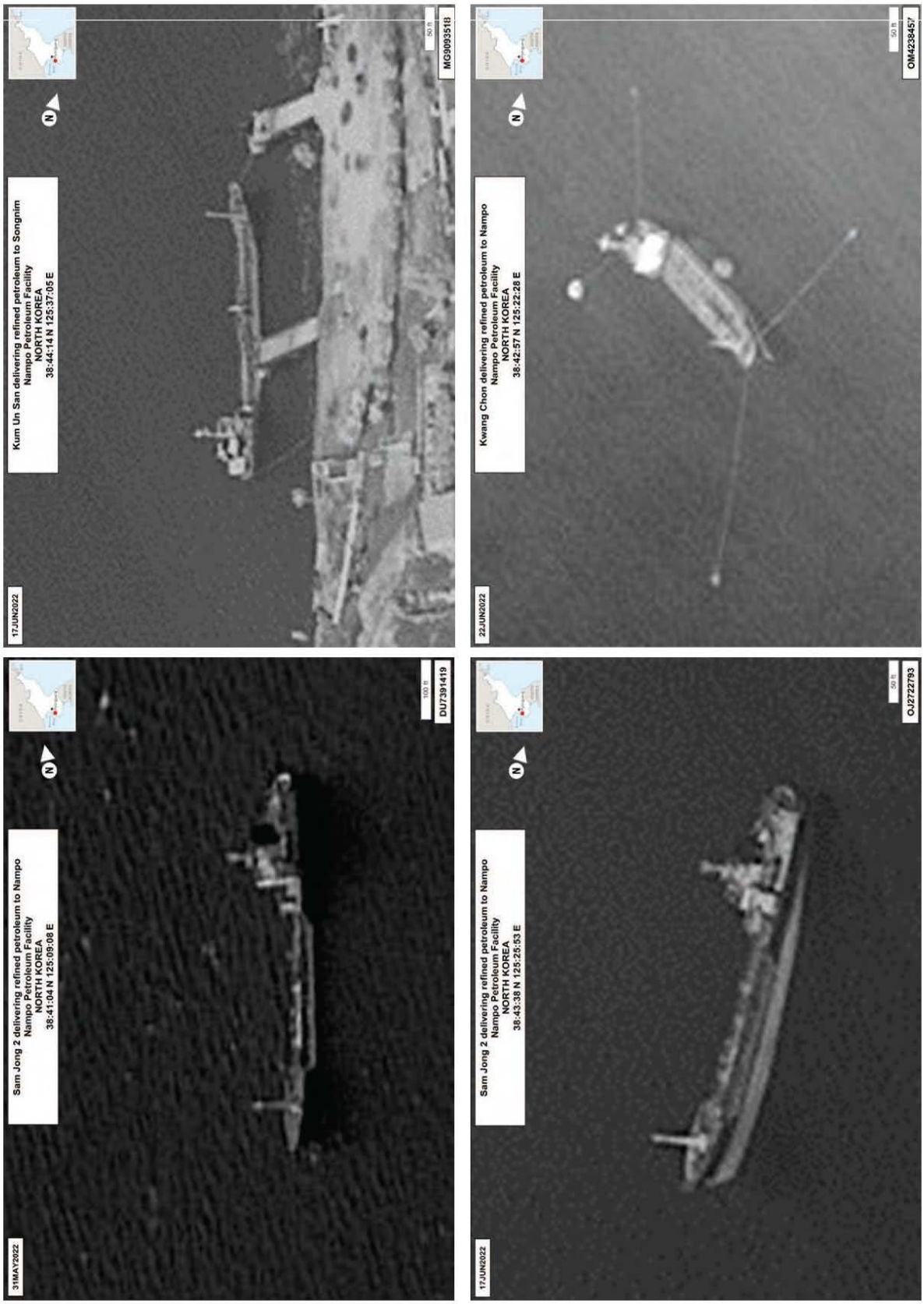
08MAR2022
Yu Son delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:00 N 125:18:18 E
N
50 ft
RX3813160

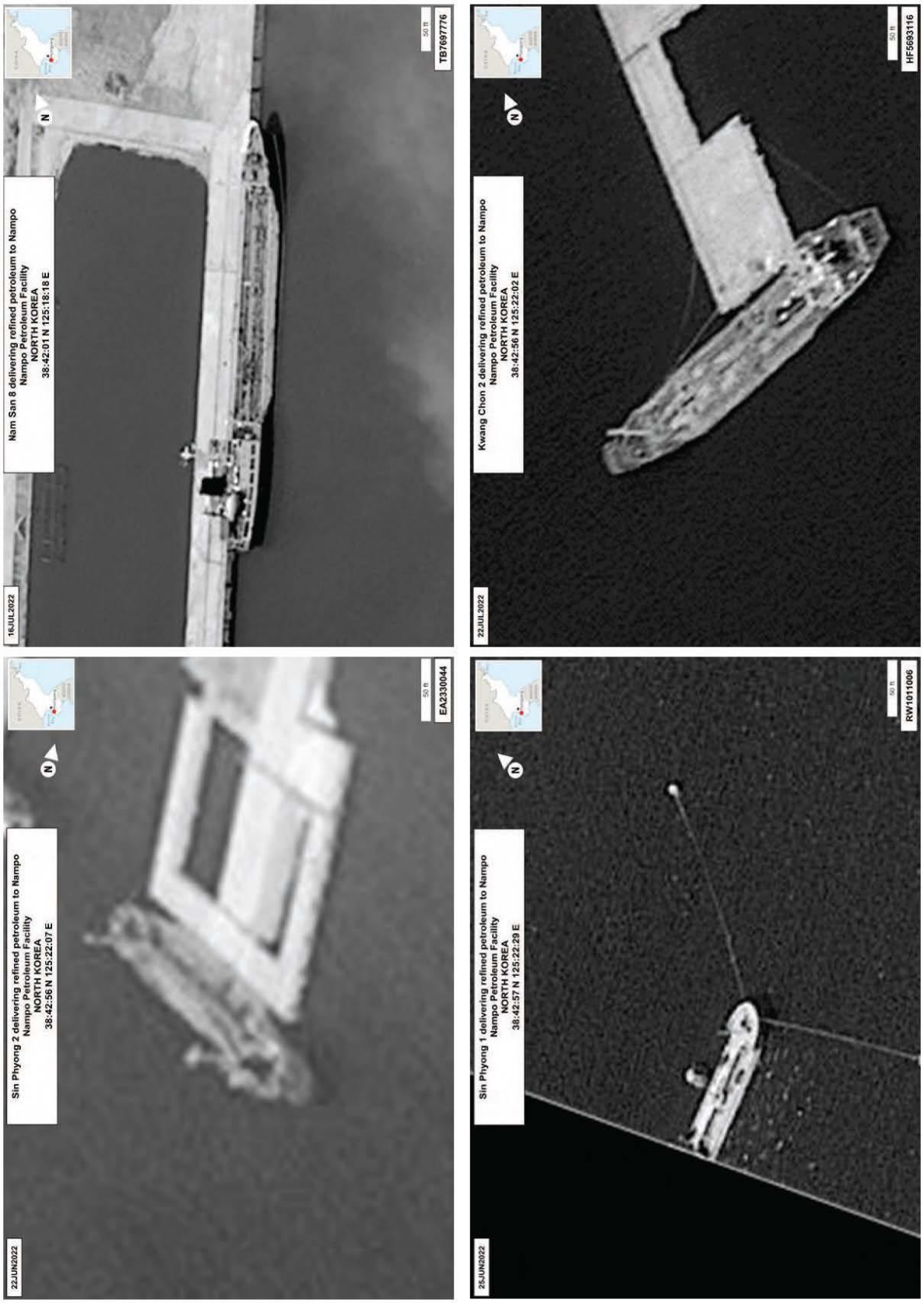
11MAR2022
Pu Ryong delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:22:02 E
N
50 ft
KO5711422

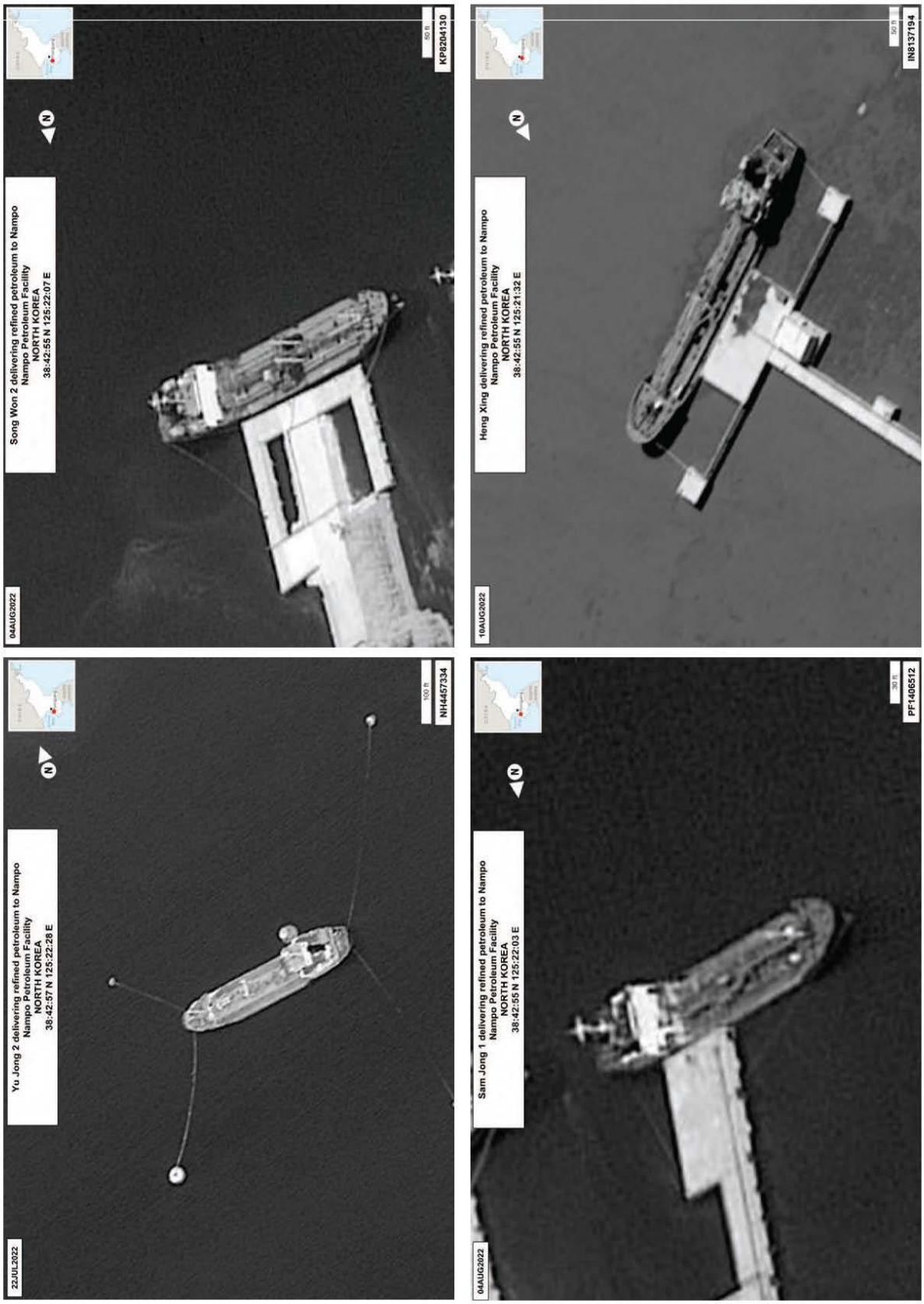

Son Won 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:43:26 N 125:26:28 E
26MAR2022
MS7153617
Yu Son delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:22:02 E
26MAR2022
MA5308477
Song Won Laden Outside the Nampo Lockgate
North Korea
38:40:46 N 125:09:26 E
14 MAR 2022
YL5213385
Song Won 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:08 E
22MAR2022
CG4886949

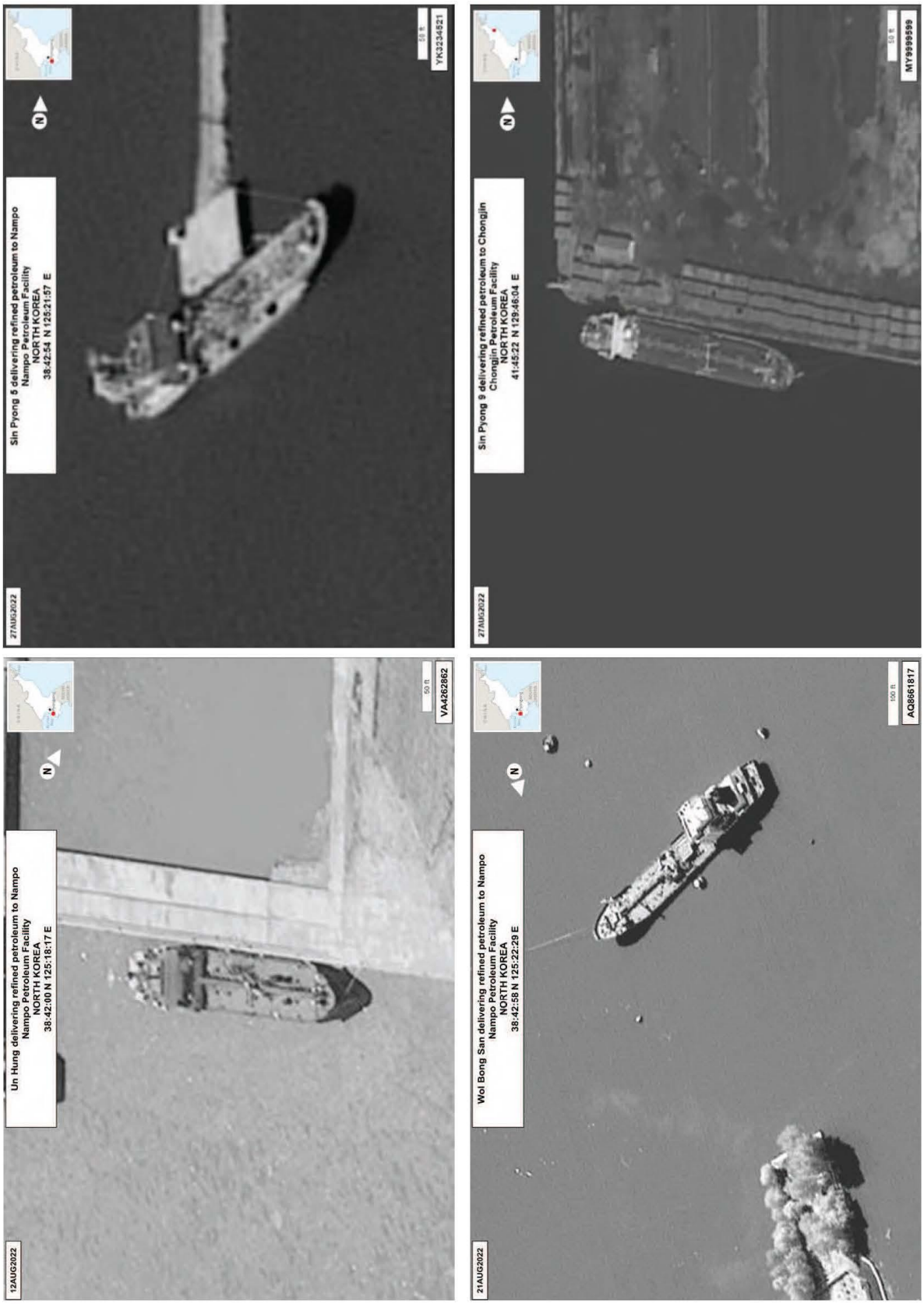

Sin Phyong 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:28 E
15APR2022
JK5832944
Sin Pyong 5 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:56 N 125:22:07 E
23APR2022
MB6655329
Chon Ma San delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:21:31 E
31MAR2022
LV7773308
Po Chon delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:00 N 125:18:17 E
07APR2022
SN1916850


Ji Song 6 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:28 E
22MAY2022
XV4465000
Pu Ryong delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:22:02 E
31MAY2022
HA6299068
Pu Ryong delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:43:09 N 125:24:24 E
05MAY2022
KN9931241
Pu Ryong delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:59 N 125:24:41 E
15MAY2022
JM4167749


Kum Un San delivering refined petroleum to Songnim
Nampo Petroleum Facility
NORTH KOREA
38:44:14 N 125:37:05 E
17JUN2022
MG9093518
Kwang Chon delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:28 E
22JUN2022
OM4238457
Sam Jong 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:41:04 N 125:09:08 E
31MAY2022
DU7391419
Sam Jong 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:43:38 N 125:25:53 E
17JUN2022
OJ2722793


16JUL2022
Nam San 8 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:01 N 125:18:18 E
N
50 ft
TB7697776
22JUL2022
Kwang Chon 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:56 N 125:22:02 E
N
50 ft
HF5693116
22JUN2022
Sin Phyong 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:56 N 125:22:07 E
N
50 ft
EA2330044
25JUN2022
Sin Phyong 1 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:29 E
N
50 ft
RW1011006


Song Won 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:22:07 E
04AUG2022
KP8204130
Heng Xing delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:21:32 E
10AUG2022
IN8137194
Yu Jong 2 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:57 N 125:22:28 E
22JUL2022
NH4457334
Sam Jong 1 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:55 N 125:22:03 E
04AUG2022
PF1406512


Sin Pyong 5 delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:54 N 125:21:57 E
27AUG2022
YK3234521
Sin Pyong 9 delivering refined petroleum to Chongjin
Chongjin Petroleum Facility
NORTH KOREA
41:45:22 N 129:46:04 E
27AUG2022
MY9999599
Un Hung delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:00 N 125:18:17 E
12AUG2022
VA4262862
Wol Bong San delivering refined petroleum to Nampo
Nampo Petroleum Facility
NORTH KOREA
38:42:58 N 125:22:29 E
21AUG2022
AQ8661817

Annex 28: Positions of China and the Russian Federation on the letter from 52 Member States regarding the oil cap

Communication dated 31 October 2022 from the delegation of China to the Committee

Dear colleagues,

The Committee should take actions on the basis of solid evidence and sufficient facts instead of estimation and assumption. It is neither scientific nor prudent for the report to draw such a conclusion that the annual limit of refined petroleum has been exceeded. Thus, China would like to put this proposal on hold.

Communication dated 31 October 2022 from the delegation of the Russian Federation to the Committee

Dear colleagues,

Russia took note of the proposal on refined petroleum cap.

We would like to recall the provisions of the Security Council's resolution 2397 (2017), which stipulates that the Committee notifies all Member States when an aggregate amount of refined petroleum products sold, supplied, or transferred to the DPRK of 75, 90 and 95 per cent of the aggregate yearly amounts of 500 000 barrels have been reached, and only in the latter case (95 per cent), such notification is accompanied by an information about the requirement to immediately cease further deliveries of refined petroleum products to the DPRK for the remainder of the year. In the absence of the aforementioned notification in the Committee, export of refined petroleum products to the DPRK does not contravene the requirements of the 1718 sanctions regime.

We understand the concerns expressed by the Member States in their letter. At the same time it is not possible to verify the accuracy of the provided information and its conclusions. Therefore Russia would like to put this proposal on hold.

Annex 29: The Panel's review of the report submitted by 52 Member States

1. In their report, the 52 Member States wrote "*the Panel of Experts is requested to review this report's analysis and underlying information in order to make a determination in its next report on the volume of refined petroleum product imports to the DPRK and the associated implications for the implementation of UNSCR 2397's refined petroleum product import cap*." The Panel has been able to agree to the following.[64]

2. The Panel has no independent data sources to corroborate the estimates made in the Member States' letter. DPRK tankers rarely employ AIS transmissions and are thus extremely difficult to track on maritime monitoring systems, and only DPRK could confirm the exact quantity and types of refined petroleum products delivered by each tanker.

3. Deadweight tonnage (DWT) is the total of the weights of a vessel's cargo, fuel, fresh water, ballast water, provisions, and crew. According to industry standards, a vessel's estimated maximum cargo capacity is approximately 90% of its DWT (as stated on the website of the International Maritime Organization), although a vessel which was deliberately stripped back and sailing dangerously might carry more than 90% of its DWT. There is no way to estimate precisely the number of barrels of unknown oil products carried as cargo by a tanker, and the precision in the Member States' calculations is arithmetical, rather than scientific. In its review and in table 29, the Panel has therefore rounded down the figures provided in the Member States' letter to the nearest 10000 barrels.

4. The Member States' estimates presume the carriage of "refined petroleum" to include diesel and/or fuel oil, as both of these products are recognized by government and industry to be within the category "refined petroleum". The estimates in the letter use a conversion rate of 7.5 barrels per metric ton, the average conversion rate of gasoline, kerosene, gas oil/diesel and residual fuel oil used by the United Nations.[65] The product basket rate used by the United Nations for unknown petroleum products is 7.98 barrels per metric ton; however this rate includes LPG.[66] The Member States' calculations do not consider LPG because the DPRK fleet consists primarily of tankers designed to carry less viscous (and not gaseous) cargoes; it does not have the specialized vessels required to carry LPG. Using the United Nations product basket rate including LPG, would increase the barrels per metric ton and would inaccurately inflate the estimated discharge amounts.

[64] One expert only agrees with the first three paragraphs of this annex and does not agree to the final sentence of the third paragraph. Another expert additionally disagrees with the fifth paragraph.

[65] https://www.un.org/securitycouncil/sanctions/1718/supply-sale-or-transfer-of-all-refined-petroleum

[66] Ibid.

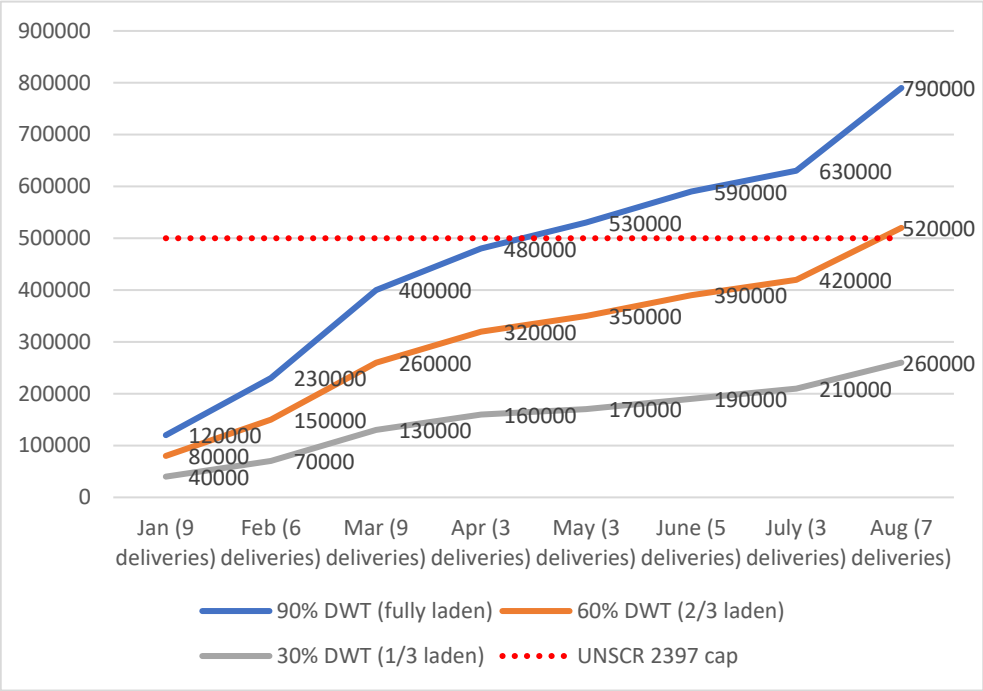
5. The Member States' estimates are based on observed deliveries in only the first eight months of the year. There could have been more unobserved deliveries of refined petroleum to Nampo in this period (at night, or under cloud cover), but not fewer. In addition, these estimates include only deliveries made to oil facilities at Nampo. DPRK has limited oil facilities at other ports to which further deliveries may have been made, and a think-tank collected imagery showing the SAEBYOL (IMO: 8916293) delivering petroleum products to oil facilities in Chongjin in late August 2022. The same think-tank has collected imagery (figure 29) detailing 9 further deliveries of petroleum products to Nampo between October-December 2022; if those tankers had been fully laden (90% DWT), the think-tank has estimated that more than 140,000 barrels of petroleum products could have been delivered in the period.

Figure 29: **Imagery of refined petroleum products to Nampo, October - December 2022** (no deliveries observed in September)

Source: Airbus Defence and Space, Planet Labs, Maxar Technologies, RUSI

6. Finally, because the Panel is currently unable to distinguish between licit deliveries of refined oil products reported to the 1718 Committee, and illicit deliveries, the amounts of oil products in table 2 of main text might either be part of the estimated deliveries in table 29 or they should be added to the estimates.

Table 29: 52 Member States' estimates of deliveries (rounded down to nearest 10,000 barrels) of refined oil products, Nampo, January-August 2022



Source: 52 Member States, the Panel.

Annex 30: Modifications to enable fuel smuggling

The Panel attaches an example of an instance of a vessel that appears to have been modified in a rudimentary manner to smuggle fuel.

Figure 30: Vessel with closeups showing likely concealed fuel tanks, East China Sea, October 2020*

*Redactions, the Panel.

Source: Member State.

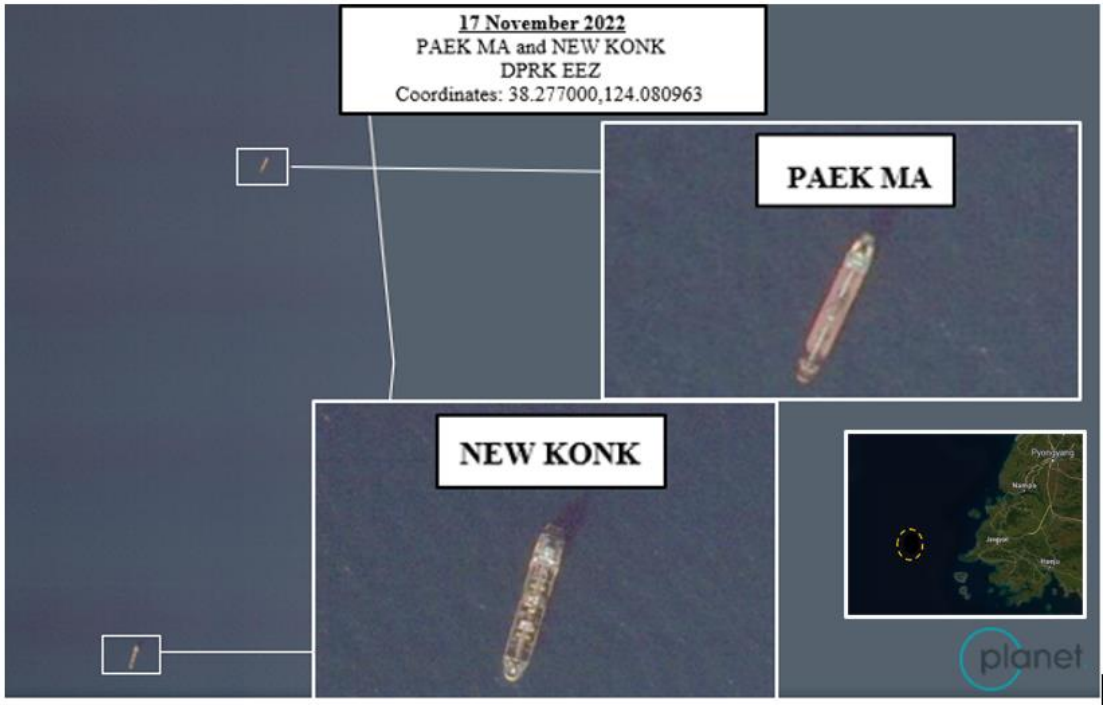
Annex 31: Suspected illicit refined petroleum transfers by NEW KONK and UNICA in DPRK EEZ, September - November 2022

In November 2022, two fraudulent known identifiers, the Belize-associated F.LONLINE (MMSI: 312162000) and Mongolia-associated LIFAN (MMSI: 457400047), began transmitting days apart sailing in Chinese territorial waters. Both identifiers were used by the direct delivery vessel NEW KONK, as previously reported by the Panel.

NEW KONK, transmitting as F.LONLINE[67], sailed out of Sansha Bay waters where it last transmitted in May 2022. The vessel then sailed through the Taiwan Strait before conducting dark activity[68] along the same latitude as Tainan port, over four days, between 4 and 9 November 2022. Two days later, 'LIFAN' began transmitting in the Wenzhou area, China, as it sailed north before dropping AIS transmission in the Hangzhou Bay area by 13 November 2022.

NEW KONK next appeared anchored in the DPRK's EEZ four days later and was observed on 17 November 2022 within approximately a mile of the DPRK-flagged PAEK MA (IMO: 9066978), a tanker documented by the Panel to have delivered refined petroleum at Nampo on multiple occasions (figure 31A), indicating possible transfers. This is a known location where the UNICA had in the past also anchored and conducted ship-to-ship transfers with other DPRK tankers, and more recently in September 2022 (figure 31B).

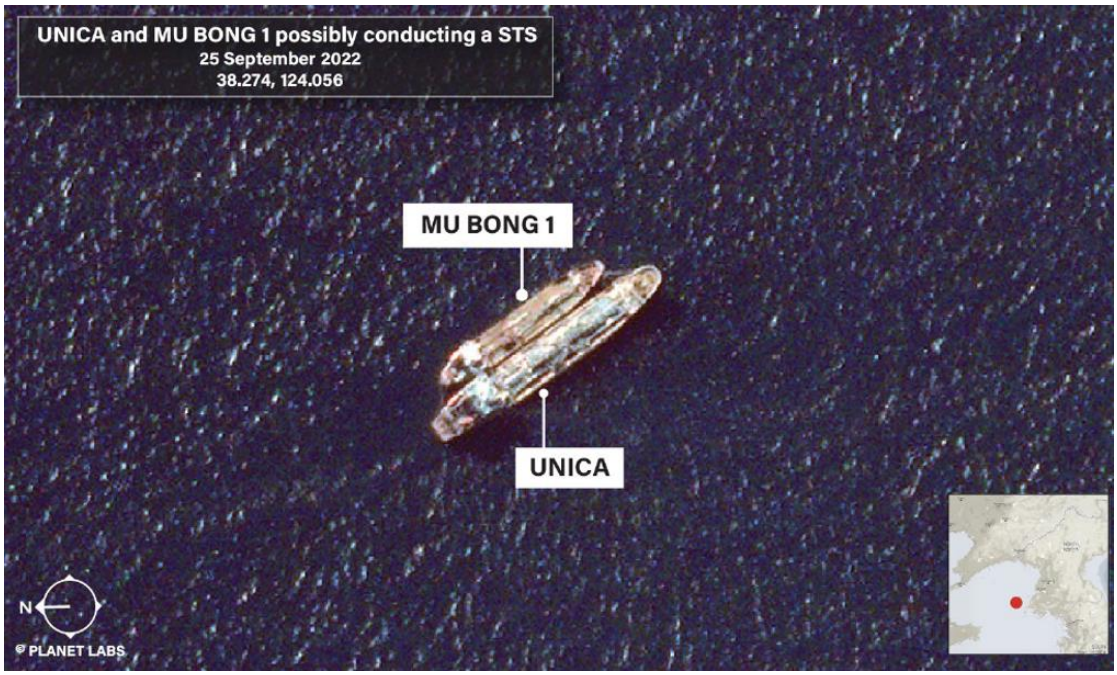
Figure 31A: NEW KONK and DPRK-flagged PAEK MA, at ship-to-ship transfer area, DPRK EEZ, 17 November 2022



Source: Planet Labs; inset map coordinates, Windward, annotated by the Panel.

[67] S/2022/132, paras. 45-46 and 59-63 and annex 39.
[68] This term refers to a period of unaccounted activity between two AIS transmissions.

Figure 31B: UNICA and DPRK-flagged MU BONG 1, at ship-to-ship transfer area, DPRK EEZ, 25 September 2022



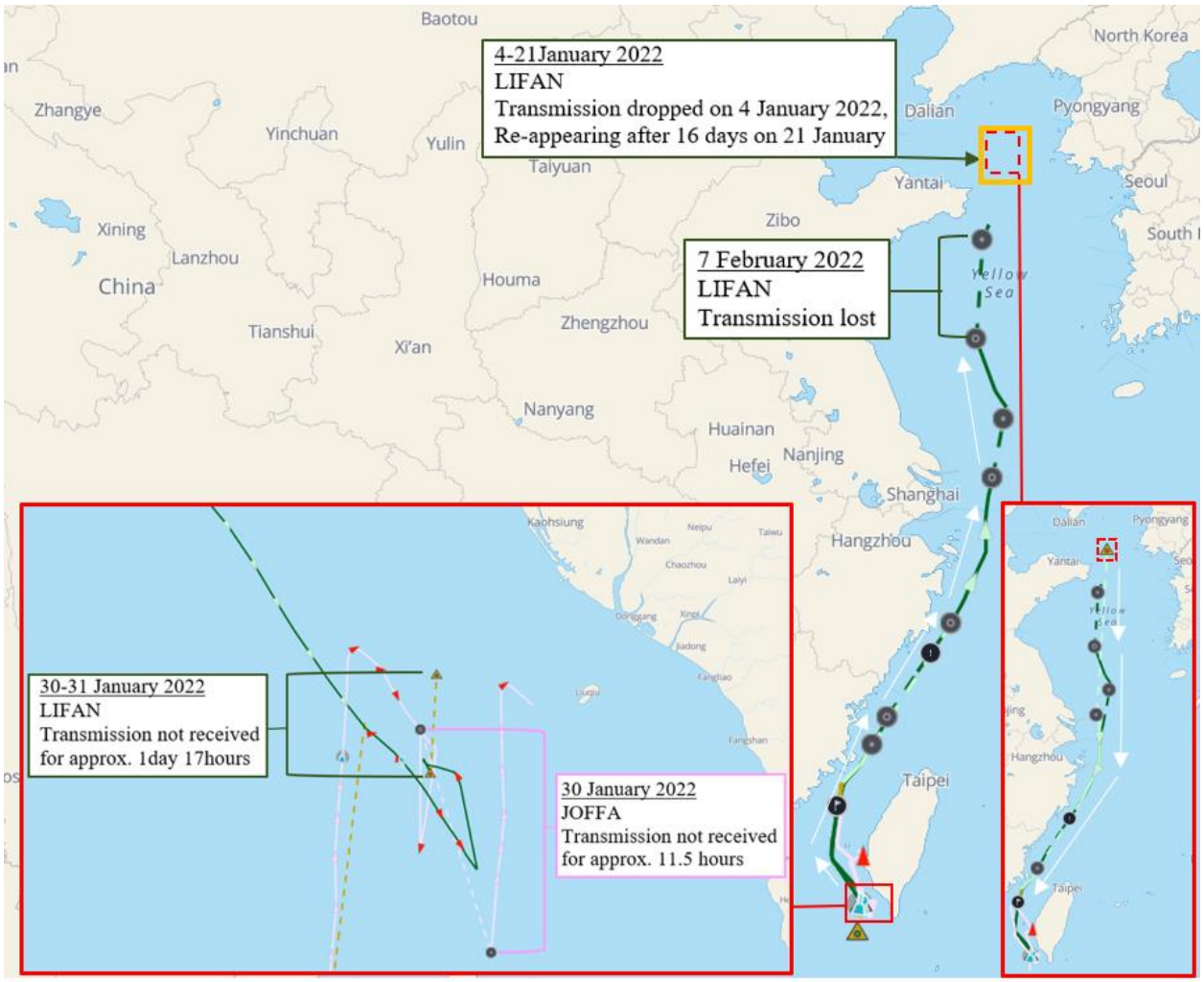
Source: Member State.

The modus operandi of NEW KONK and UNICA mirrors the same voyage pattern of suspect tankers the Panel had investigated - departure from Sansha Bay; ship-to-ship transfer conducted in the Taiwan Strait; ship-to-ship transfer with DPRK tankers in the Korea Bay, the latter transfers often conducted without AIS transmission. While the Panel had reported on the direct delivery vessel UNICA's (IMO: 8514306) near monthly transmissions in or near the DPRK EEZ for its suspected illicit oil delivery voyages, NEW KONK had made a few voyages to the DPRK EEZ in 2022, including in January 2022 as observed by the Panel (figure 31C).[69]

[69] NEW KONK was last observed by the Panel transmitting over several occasions in Korea Bay waters in the last quarter of 2021, and in January 2022. S/2022/668, para. 41 and annexes 28.1 and 32.6.

Figure 31C: NEW KONK in the DPRK EEZ, 2022

NEW KONK transmitting as LIFAN, January 2022[70]

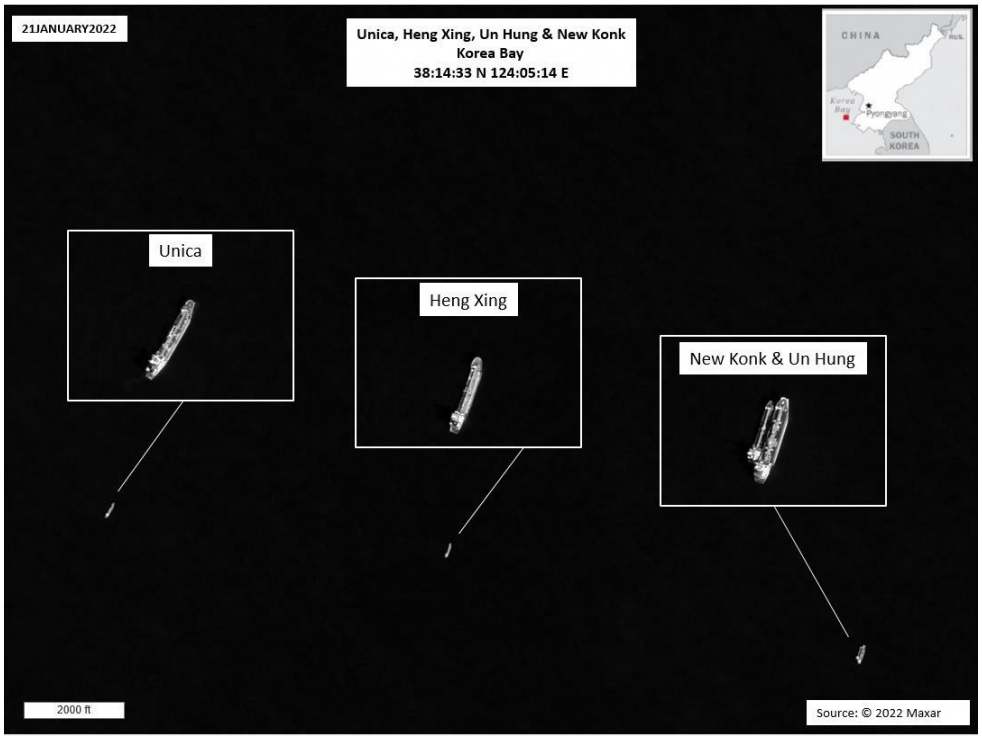


Source: Windward, annotated by the Panel.

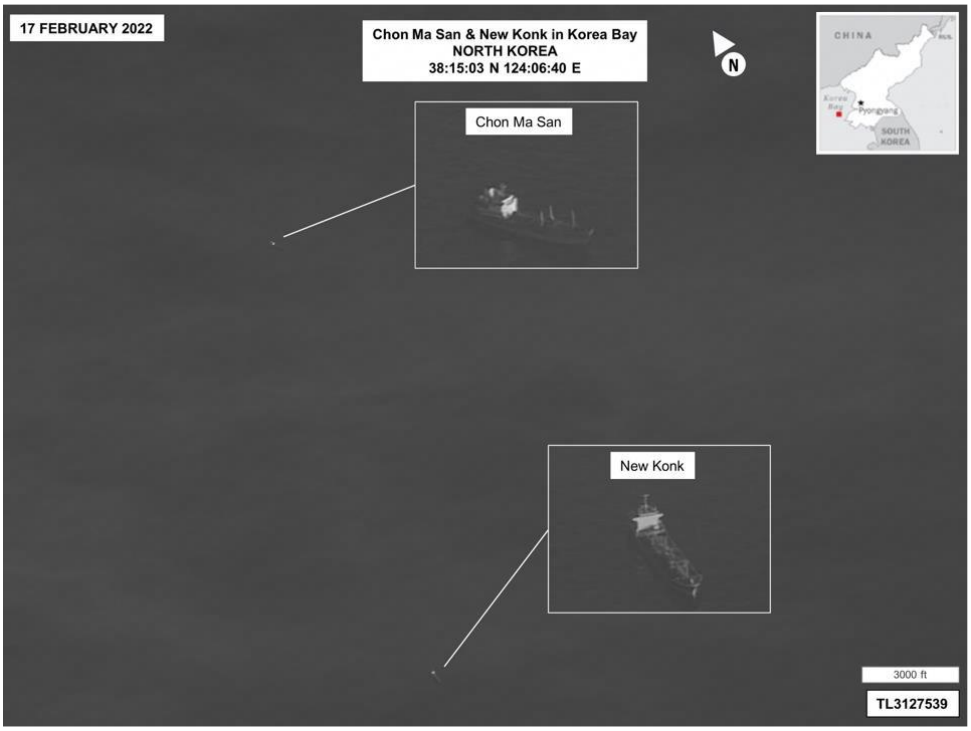
[70] S/2022/668, annex 34.

NEW KONK and UN HUNG, together with UNICA and HENG XING (see also annex 32) in the location where ship-to-ship transfers occur, DPRK EEZ

21 January 2022



17 February 2022



Source: Member State.

Several indicators suggest that NEW KONK, UNICA and other direct delivery vessels reported by the Panel to have previously delivered refined petroleum to the DPRK likely come under common coordination. For instance, NEW KONK's ship-to-ship transfer location was the same area where UNICA was previously captured on satellite imagery. The same MMSI: 457400047 used by NEW KONK when it was transmitting as LIFAN was also used by UNICA when it was sailing as HAISHUN 2. The Panel's investigations into the facilitators associated with various direct delivery vessels, including NEW KONK and UNICA, remain ongoing.[71]

Source: The Panel.

[71] S/2022/668, para. 62.

Annex 32: Direct delivery vessels transmitting on fraudulent identifiers

The following table updates the list[72] of fraudulent identifiers transmitted by direct delivery vessels investigated by the Panel. This list is by no means exhaustive and contains Panel observations on maritime tracking databases to date. These transmissions have also been separately corroborated in specific instances with observations made by monitoring assets of Member States as well as by satellite imagery.

Table 32: Direct delivery vessels transmitting on fraudulent identifiers

NAME	IMO NUMBER	TRANSMITTING AS	MMSI	LAST PSC INSPECTED**
DIAMOND 8	9132612	CHANGSHUN 8 SHUNLI	457222000 457111000	September 2017
NEW KONK	9036387	M0USON, F.LONLINE LIFAN HAIZHOU 168 FU YUAN YU 98	511444000 312162000 312360680 457400047 667001397 667001800	July 2018
SUBBLIC	8126082	HAI ZHOU 168	667001397	May 2004
UNICA	8514306	LITON HAISHUN2 TAIAN	457106000 457400047 457400047	No data

**PSC (Port State Control)

Source: The Panel.

[72] S/2022/132, para. 44.

Annex 33: Acquired ships sailing under DPRK flag, 2020-2022*

Table 33A: Officially registered ships sailing under DPRK's flag

	IMO number	Ship name	Type	DWT	Previously referenced in Panel reports
Year 2022					
1	8355786	RAK WON 1 (ex- AN HAI 6)	Cargo	5075	Current report
2	9054779	SA HYANG SAN 1 (ex- TOMI HARU)	Cargo	5000	Current report
3	9054767	SO BAEK SU (ex- TOYO HARU)	Cargo	5838	Current report
4	8357112	MO RAN BONG 2 (ex- LIN DA 8)	Cargo	5211	Current report
5	8594540	SONGRIM (ex- HUM WONSIN)	Cargo	3800	Current report
6	8594552	RAK NANG 2 (ex-SHUNCHANG 78)	Cargo	3062	Current report
7	9125308	CHOL BONG SAN 1 (ex- OCEAN SKY)	Tanker	5807	Yes (S/2022/668, S/2022/132)
Year 2021					
8	8356120	TAE DONG MUN 2 (ex- JIANG PENG 337)	Cargo	2790	Yes (S/2022/668)
Year 2020					
9	8865121	SIN PHYONG 5 (ex- WOO JEONG)	Tanker	3295	Yes (S/2022/668, S/2022/132, S/2021/777)
10	9016430	SU RYONG SAN (ex CJK OSAKA)	Cargo	4519	Yes (S/2022/668, S/2022/132)
11	8602763	TAE PHYONG 2 (ex- MIING ZHOU 6)	Cargo	26,013	Yes (S/2022/668, S/2022/132, S/2021/777, S/2021/211)
12	8651178	MU PHO (ex- DOUBLE LUCKY)	Cargo	2980	Yes (S/2022/668)
13	9045962	UN HUNG (ex – VIFINE)	Tanker	1978	Yes (S/2022/668, S/2022/132, S/2021/777, S/2020/151)
14	9340257	KANG HUNG (ex- SUN MIRACLE)	Cargo	3800	Yes (S/2022/668, S/2022/132)
15	9340271	RA SON 6 (ex- SUN HUNCHUN)	Cargo	3800	Yes (S/2022/668, S/2021/777)
16	7636638	XIN HAI (ex- WOL BONG SAN)	Tanker	4969	Yes (S/2022/668, S/2021/ 777, S/2021/211)
17	9011399	TAE DONG MUN (ex- POLE STAR 1)	Cargo	5137	Yes (S/2022/668, S/2021/211)

Year 2020					
	IMO number	Ship name	Type	DWT	Previously referenced in Panel reports
18	9162318	TO MYONG (ex- RI HONG)	Cargo	8773	Yes (S/2022/668, S/2022/132, S/2020/211, S/2020/840)
19	9018751	TAE PHYONG (ex- GREAT WENSHAN)	Cargo	26,369	Yes (S/2022/668, S/2021/211, S/2020/840)
20	9020003	PUK DAE BONG (ex- HUA FU)	Cargo	10,030	Yes (S/2022/668, S/2019/171)

*A number of these vessels investigated by the Panel had been reported sailing under their previous flags when conducting sanctionable activity. The table lists the official year in which the vessels were, often retroactively, re-flagged under the DPRK.
*Blue highlight indicates updated information in the present report.
Source: The Panel. Ship information obtained from S&P Global and IMO records.[73]

Vessels assumed acquired by the DPRK / under DPRK control

The table below is not exhaustive. The Panel continues to investigate other vessels suspected to have been acquired by the DPRK.

Table 33B: Vessels assumed to have been acquired by the DPRK / under DPRK control

Year 2022					
	IMO number	Ship name	Type	DWT	Previously referenced in Panel reports
21	8669589	HENG XING	Tanker	3250	Yes (S/2022/668) -Sailing de-flagged as of November 2021 -Appeared in DPRK in 2022
22	8356584	ANNI, transmitting as DPRK-flagged KYONG SONG 3	Cargo	5000	-Current report -Sailing de-flagged as of June 2022. -Transmitted on DPRK identifier as KYONG SONG 3 -Appeared in DPRK in 2022
23	8891297	SF BLOOM, transmitting as DPRK-flagged PU YANG 2	Container	3285	-Current report -Sailing de-flagged as of March 2022. -Transmitted on DPRK identifier as PU YANG 2 -Appeared in DPRK in 2022

*Blue Highlight indicates updated information in the present report.

Source: The Panel. Ship information obtained from S&P Global and IMO records[74]

[73] Accessed in December 2022.
[74] Ship flag status in December 2022.

Annex 34: Tankers acquired by the DPRK continuing to deliver illicit oil, June-August 2022

Table 34

IMO number	Ship name	DPRK Flag date	DWT	Date of refined petroleum offload at Nampo, DPRK
8817007	SIN PHYONG 2 (ex- TIANYOU)	August 2019	2105	22 June 2022 (*inter alia*)*
8910378	KWANG CHON 2 (ex- SEN LIN 01)	October 2019	1159	22 July 2022 (*inter alia*)*
8669589	HENG XING	De-flagged since November 2021	3250	10 August 2022 (*inter alia*)*
9045962	UN HUNG (ex- VIFINE)	August 2020	1978	12 August 2022 (*inter alia*)*
7636638	WOL BONG SAN (ex- XIN HAI)	March 2020	4969	21 August 2022
8865121	SIN PHYONG 5 (ex- WOO JEONG)	October 2020	3295	27 August 2022 (*inter alia*)*

*Denotes tankers reported by the Panel that also delivered refined petroleum on other prior occasions in 2022.

Source: Member State and the Panel. Ship information obtained from IMO records.

Annex 35A: AN HAI 6 nka DPRK-flagged RAK WON 1

The Panel continued to investigate the de-registered Niue cargo ship, AN HAI 6 (IMO: 8355786) that arrived outside Nampo lockgate, DPRK, by June 2022 and located at Nampo port by 11 August 2022. The vessel was officially flagged under the DPRK fleet in July 2022.[75] Investigations into the ship began when it transmitted on its Niue identifiers outside the Nampo Lockgate, DPRK, since mid-June 2022. The Panel began tracing the vessel's voyage history as well as determining its cargo and where that cargo was loaded, along with any associated suspected sanctions violation activities.

Ship voyage and Cargo

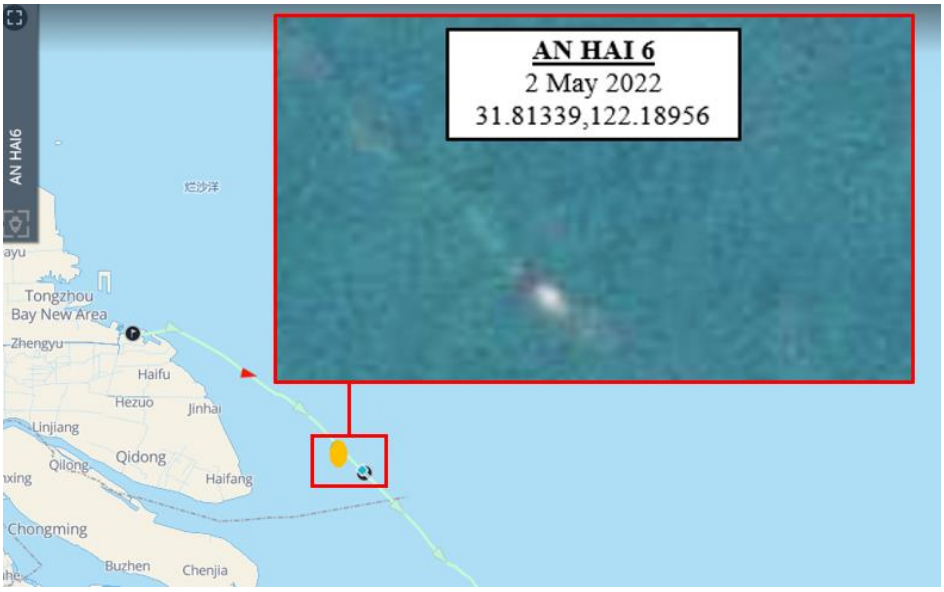
The International Maritime Organization's (IMO) website lists AN HAI 6 as flagged under Niue's ship registry from April to May 2022. The Panel's maritime tracking of AN HAI 6 showed it was recorded at: Qidong port area, China; outside Luoyuan Bay area, China; around the Busan port anchorage area, Republic of Korea (ROK); and in the DPRK's territorial waters. Prior to April 2022, Panel research indicated the vessel was at a shipyard in Taizhou (Haimen) area in 2022. AN HAI 6 was previously registered as a Chinese vessel sailing as China-flagged BI XIANG 66.[76]

Sailing as BI XIANG 66, the vessel made a port call at Taizhou, Zhejiang Province, around 16 March 2022 on a maritime database platform before dropping transmission shortly after. Around 29 April 2022, AN HAI 6 transmitted further north on its newly assigned IMO number, under the Niue flag at Tongzhou Bay New Area around 29 April 2022. Low resolution imagery on 2 May 2022 indicated cargo onboard the vessel as it sailed out of port (figure 35A-1). This was also the location where AN HAI 6 registered a draft change on a maritime database platform, indicating cargo had been loaded.

[75] There is often a lag time between the submission of ships being officially flagged under the DPRK and when it appears on the IMO's database. Therefore, IMO records would not necessarily reflect the ship as DPRK-flagged at the time of flagging, but only upon receipt of the official date of flagging from the relevant flag State.

[76] IMO records.

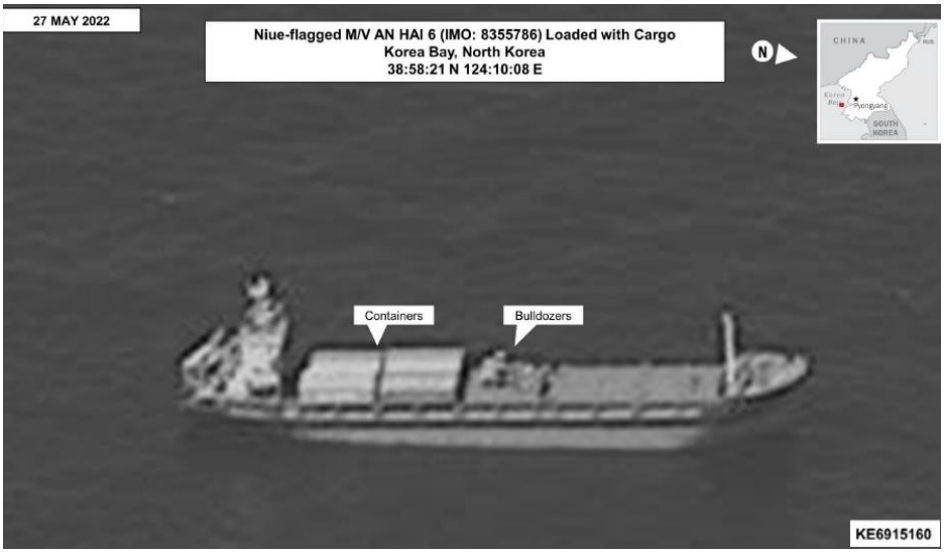
Figure 35A-1: AN HAI 6 departing Tongzhou Bay New Area, China, with undefined cargo onboard and a registered draft change of cargo loaded, 2 May 2022



Source: Windward; inset imagery, Planet Labs, annotated by the Panel.

According to information provided by ROK authorities, AN HAI 6 was at Busan port for a partial crew disembarkation, but no cargo was loaded or offloaded. This information corroborated documentation separately provided by Niue Ship Registry regarding the submitted voyage plan of a stopover at Busan port in its single delivery voyage, purportedly with Yokohama, Japan, as the delivery destination (annex 35B). Satellite imagery subsequently provided by a Member State indicated containers and bulldozers were part of the cargo onboard (figure 35A-2).

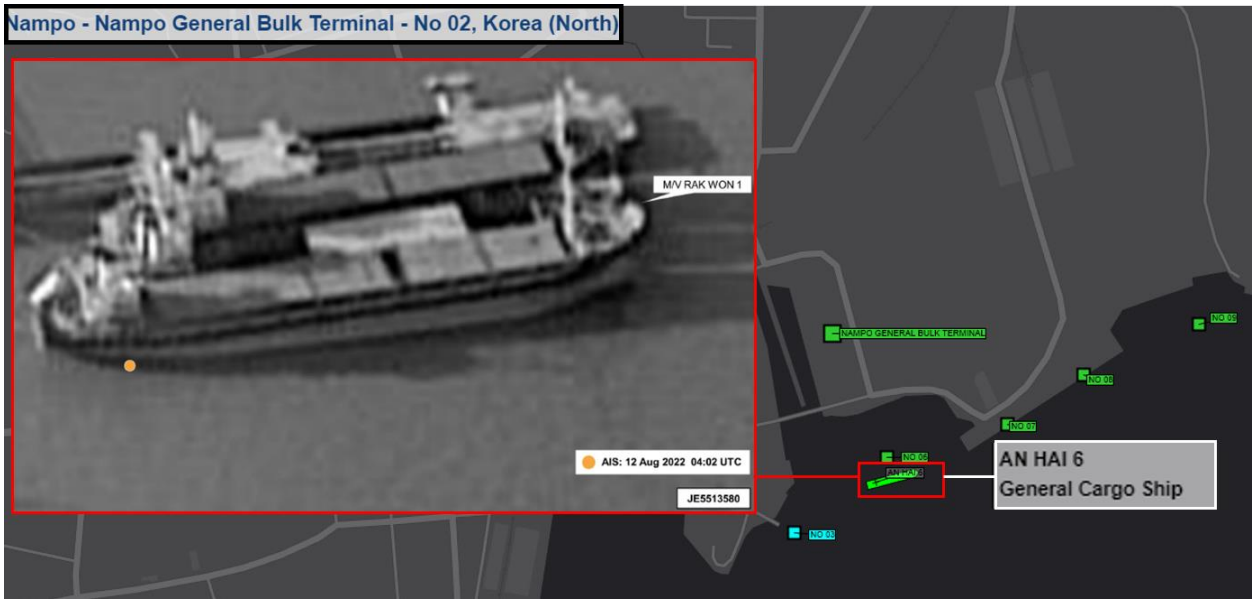
Figure 35A-2: AN HAI 6 with cargo on board, Korea Bay, 27 May 2022



Source: Member State.

By August 2022, the vessel, still transmitting as AN HAI 6, was berthed at Nampo's Bulk Terminal (figure 35A-3). The vessel began making port calls to Chinese ports one month later (figure 35A-4).

Figure 35A-3: AN HAI 6 aka RAK WON 1 transmitting at Nampo General Bulk Terminal, DPRK, 11-12 August 2022



Source: S&P Global's Seaweb, annotated by the Panel; inset imagery, Member State

Figure 35A-4: RAK WON 1 at Longkou port, in October and November 2022

Source: Windward, annotated by the Panel.

According to Niue Ship Registry, AN HAI 6 was registered "… *on 18 April 2022 for a single delivery voyage from Nantong, China to Yokohama, Japan with request for two stops at Ningde, China and Busan, Korea for bunkering and crew change respectively*" (annex 35B). The ship registry added that vessel was inspected at Nantong, China, and was de-registered when the registry stated they received notification on 23 May 2022 of the vessel's arrival at its destination in Japan; the latter information was misleading.

The Panel notes that AIS was kept on throughout for AN HAI 6 until it reached Korea Bay waters. Ship registries would have at their disposal tracking information provided by various service providers to ensure vessel monitoring. The fact that the AN HAI 6 sailed west and north, in a very different (opposite) direction following its departure from Busan indicated poor due diligence.

With regards its cargo, the ship registry indicated "*No awareness of any cargo onboard the vessel as NSR's single delivery voyage registration has a strict non-negotiable requirement that no cargo/passenger will be allowed in view of the relaxed requirement*". Elsewhere, the ship registry indicated "*No Ship Manager was appointed as this is only required on a voluntary basis for single delivery voyages registrations*".

The Panel also wrote to Palau, China, the Marshall Islands, and the associated entities and individuals as relevant parties to the ship and cargo, with a focus on the investigative time of interest (April to June 2022) prior to the ship's appearance in the DPRK.

Palau has yet to reply.

China replied "AN HAI 6 made several port calls in China in 2022 and the vessel was loaded with silk, furniture, and other livelihood goods. No prohibited items were founded".

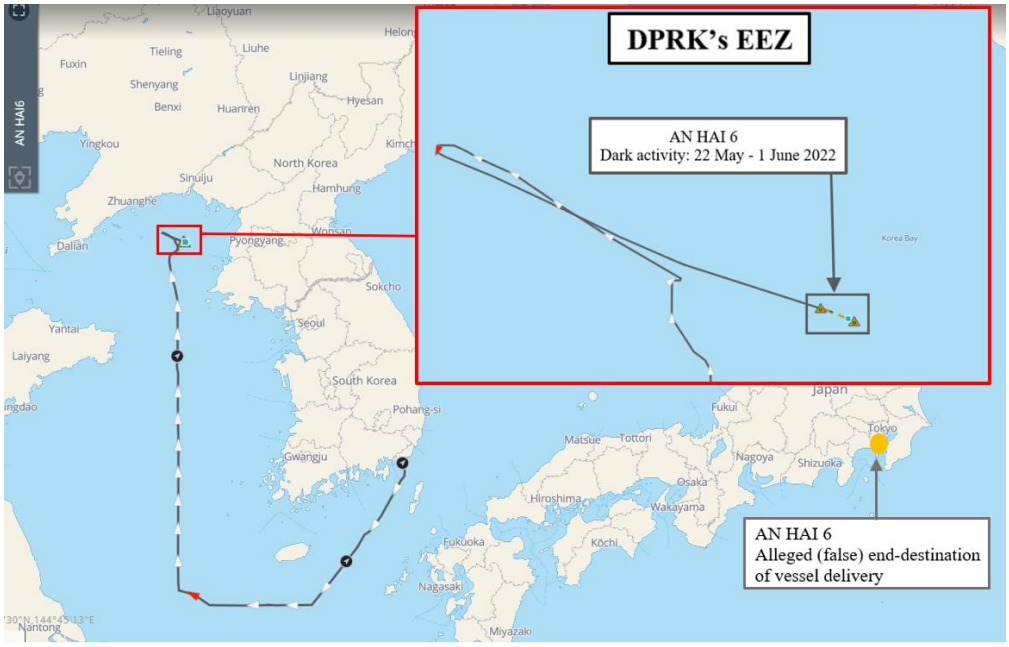
Crew transfers

Documentation obtained by the Panel from relevant counterparties showed the crew's ports of embarkation were at Nantong on or around 30 April 2022 and Taizhou on or around 31 April 2022. Half of the crew disembarked at Busan port. Panel investigations showed unaccounted AIS transmission of close to 10 days when the vessel was in the Korea Bay (figure 35A-5). The Panel's comparison of crew lists from separate sources showed discrepancies, indicating either of the list(s) may not have been fully accurate at one stage. AN HAI 6 was next recorded on maritime databases located outside of Nampo lockgate by June 2022. AN HAI 6 was officially registered by the DPRK under its fleet in July 2022.[77]

The Panel sought assistance from Chinese authorities on the remaining crew insofar as the crew may also be able to shed light on the ship's movement, cargo and ship pilotage between late May and June 2022 when the ship appeared outside Nampo lockgate. China replied "*The disembarkation of its crew was a normal rotation".*

[77] IMO records. Flag information was updated retroactively a few months later the IMO's website, typically upon receipt of the flag State's submission.

Figure 35A-5: AN HAI 6's voyage following partial crew disembarkation and dark activity in Korea Bay prior to appearing in the DPRK



Source: Windward, annotated by the Panel.

Shipyard

AN HAI 6 was at Taizhou (Haimen) Yuanshan Shipyard (hereafter "Taizhou Yuanshan Shipyard"), located at Zhejiang Province, between February and March 2022.[78] This was the same shipyard where another Niue-flagged ship ANNI (IMO: 8356584) was located in April 2022, along with a previously-investigated DPRK-acquired cargo ship SU RYONG SAN (IMO: 9016430), sailing then on its former name CJK OSAKA, which was anchored at the shipyard on or around 4 August 2020 before arrival in the DPRK.[79] The Panel requested detailed information from the shipyard (see also annex 37), which has yet to reply.

[78] Maritime database records.
[79] S/2022/132, para. 76 and annexes 51 and 61.

Associated entities and individuals

A Bill of Sale obtained by the Panel indicated that the ship, sailing as China-flagged BI XIANG 66, was transferred from its owners to Huludao Bixiang Shipping Co., Ltd, with both sharing the same address in Liaoning Province, China, prior to its onward sale to Pearl Marine Shipping (annex 35C). The Panel notes the practice of registering shell companies for purposes of transfer of ownership in name prior to a sale or purchase is not uncommon and adds to the complexity of tracing vessel ownership.

Marshall Islands assisted the Panel in its investigations with the relevant documentation. According to the Trust Company of the Marshall Islands, Inc. (TCMI), AN HAI 6 was registered to the Marshall Islands' incorporated Pearl Marine Shipping Co., Limited (hereafter "Pearl Marine Shipping"), a single ship-owner, with a 24-year-old Chinese national as its Director. The Qualified Intermediary registering on behalf of Pearl Marine Shipping lists and address in Fuzhou City, Fujian Province.[80] Pearl Marine Shipping has yet to reply on its vessel sale, cargo and ship activity.

The Panel retains an interest on individuals associated with Niue Ship Registry Pte Ltd, a Singapore-incorporated company operating on behalf of Niue Ship Registry. Investigations continue.

Source: The Panel.

[80] These intermediaries are typically service providers including: law firms, business formation services, and shipping firms

Annex 35B: AN HAI 6's Delivery Voyage Certificate

[redacted]

NIUE SHIP REGISTRY

PROVISIONAL CERTIFICATE OF REGISTRY (DELIVERY VOYAGE)

Merchant Shipping (Registration of Foreign Vessels) Act 2012

VESSEL PARTICULARS

Vessel Name: AN HAI 6	**Official Number:** N-1978	**IMO Number:** 8355786 **Call Sign:** E6YO2	**Port of Registry:** ALOFI
Vessel Type MULTI-PURPOSE VESSEL **Hull Material:** STEEL	**Year Keel Laid:** 2005 **Year Built:** 2005 **GT:** 2998 **NT:** 1679	**Dimensions (metres)** **Length (LOA):** 98.40 **(ITC):** 95.43 **Breadth:** 15.80 **Depth:** 7.40	**Builder Name:** HUANG YAN SHUISHUN SHIPBUILDING & REPAIR CO., LTD **Country Built:** CHINA
Previous Registry: CHINA		**Ex Name:** BI XIANG 66	

ENGINE PARTICULARS

Number of Engines:	Type of Engine:	Make & Model:	Total Power (kw):
1	DIESEL	ANTAI POWER/G8300ZC16BH	1765

VESSEL OWNER PARTICULARS

Name and Address of Registered Owner:	Owner IMO Number:	Shares:
PEARL MARINE SHIPPING CO., LIMITED TRUST COMPANY COMPLEX AJELTAKE ROAD, AJELTAKE ISLAND, MAJURO, MARSHALL ISLANDS, MH96960	-	100%

Remarks (if any):
The vessel shall only proceed on one single delivery voyage without cargo or passenger, from NANTONG, CHINA to YOKOHAMA, JAPAN VIA NINGDE, CHINA FOR BUNKERING AND BUSAN, SOUTH KOREA FOR CHANGING CREW (or any port of refuge).

Date of Provisional Registry: 18 April 2022
DATE OF EXPIRY: 18 July 2022

Issued at SINGAPORE on 18 April 2022

NIUE SHIP REGISTRY ALOFI

[redacted]

Deputy Registrar

Source: The Panel.

Annex 35C: Bill of Sale of AN HAI 6

Ownership transfers and sale: BI XIANG 66 owners to Huludao Bixiang Shipping Co., Ltd, to Pearl Marine Shipping Co., Ltd, January 2022

Prescribed by the Commissioners of Customs & Excise with the consent Of the Secretary Of State for Trade

Form No. 10A

X..S.79 A

BILL OF SALE (Body Corporate)

IMO Number	Name of Ship	Official number, Year and Port of Registry	Whether a Sailing, Steam or Motor Ship	Horse Power of Engines, if any
8355786	BI XIANG66	**030422000003, 2005, China**	Motor ship	1765 KW

	meters	cm	Number of Tons	
			Gross	Net
Length	98	40	2998	1679
Breadth	15	80		
Depth	7	00		

And as described in more detail in the Certificate of the Surveyor and/the Register Book.

We, (a) [redacted] hereinafter "the Transferor") having our registered office at Room 1903, unit 1, building 9-2, Haiyi North Road, Longgang District, Huludao City, Liaoning Province, China in consideration of the sum of **USD 1,340,000 (say United States Dollars one million three hundred and forty thousand only)** and other good and valuable consideration paid to us by (b)Huludao Bixiang Shipping Co., Ltd., Room 1903, unit 1, building 9-2, Haiyi North Road, Longgang District, Huludao City, Liaoning Province, China. (hereinafter the "Transferee") of the receipt whereof is hereby acknowledged, hereby transfer all shares, in the Ship above particularly described, and in her boats and appurtenances, to the Transferee.

Further, we, the Transferor for ourselves and our successors covenant with the Transferee and its (c) assigns, that we have power to transfer in manner aforesaid the premises hereinbefore expressed to be transferred, and that the same are free from all encumbrances, (d) charters, cargoes, stowaways, mortgages and maritime liens, claim or any other debts whatsoever.

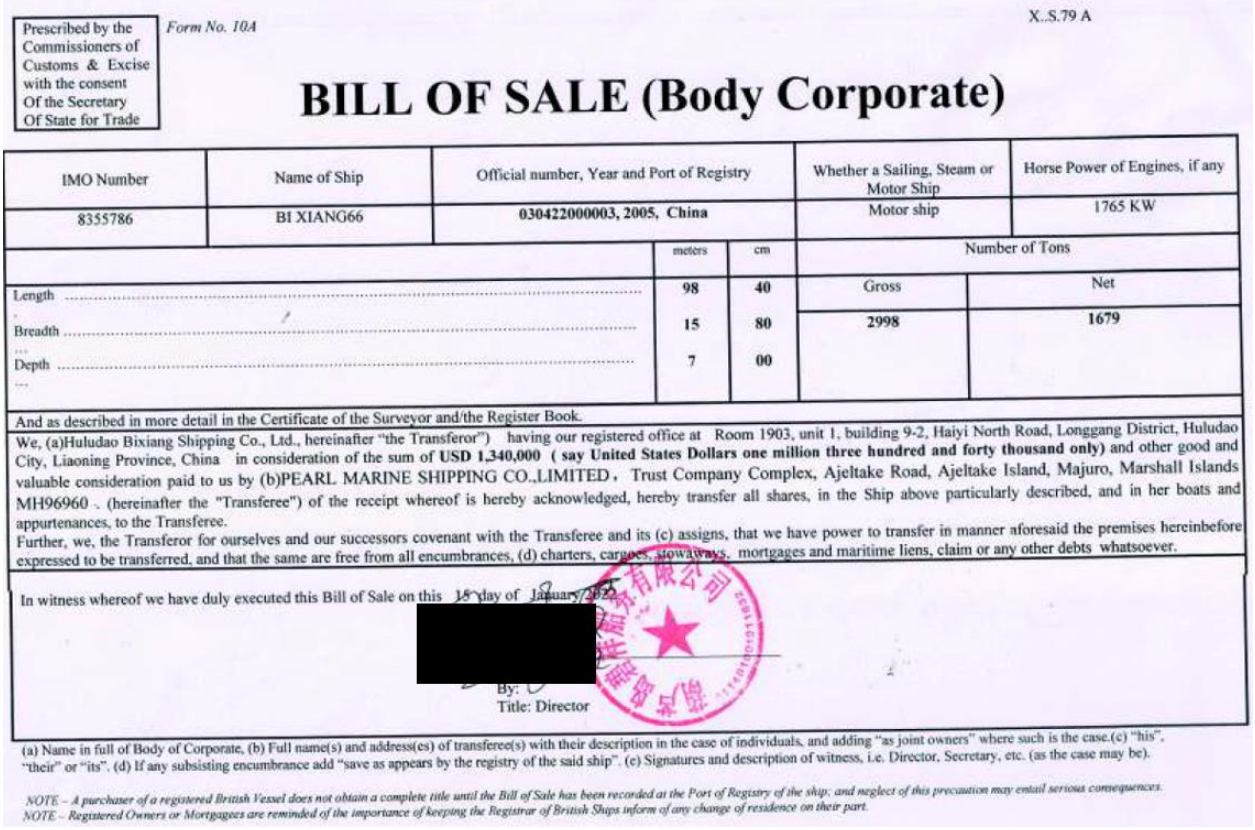
In witness whereof we have duly executed this Bill of Sale on this 15 day of January 2022 .

[redacted]

By: [redacted]
Title: Individual owners

(a) Name in full of Body of Corporate, (b) Full name(s) and address(es) of transferee(s) with their description in the case of individuals, and adding "as joint owners" where such is the case.(c) "his", "their" or "its". (d) If any subsisting encumbrance add "save as appears by the registry of the said ship". (e) Signatures and description of witness, i.e. Director, Secretary, etc. (as the case may be).

NOTE – A purchaser of a registered British Vessel does not obtain a complete title until the Bill of Sale has been recorded at the Port of Registry of the ship; and neglect of this precaution may entail serious consequences.
NOTE – Registered Owners or Mortgagees are reminded of the importance of keeping the Registrar of British Ships inform of any change of residence on their part.



Prescribed by the Commissioners of Customs & Excise with the consent Of the Secretary Of State for Trade

Form No. 10A

X..S.79 A

BILL OF SALE (Body Corporate)

IMO Number	Name of Ship	Official number, Year and Port of Registry	Whether a Sailing, Steam or Motor Ship	Horse Power of Engines, if any
8355786	BI XIANG66	**030422000003, 2005, China**	Motor ship	1765 KW

	meters	cm	Number of Tons	
			Gross	Net
Length	98	40		
Breadth	15	80	**2998**	**1679**
Depth	7	00		

And as described in more detail in the Certificate of the Surveyor and/the Register Book.

We, (a)Huludao Bixiang Shipping Co., Ltd., hereinafter "the Transferor") having our registered office at Room 1903, unit 1, building 9-2, Haiyi North Road, Longgang District, Huludao City, Liaoning Province, China in consideration of the sum of **USD 1,340,000 (say United States Dollars one million three hundred and forty thousand only)** and other good and valuable consideration paid to us by (b)PEARL MARINE SHIPPING CO.,LIMITED, Trust Company Complex, Ajeltake Road, Ajeltake Island, Majuro, Marshall Islands MH96960 , (hereinafter the "Transferee") of the receipt whereof is hereby acknowledged, hereby transfer all shares, in the Ship above particularly described, and in her boats and appurtenances, to the Transferee.

Further, we, the Transferor for ourselves and our successors covenant with the Transferee and its (c) assigns, that we have power to transfer in manner aforesaid the premises hereinbefore expressed to be transferred, and that the same are free from all encumbrances, (d) charters, cargoes, stowaways, mortgages and maritime liens, claim or any other debts whatsoever.

In witness whereof we have duly executed this Bill of Sale on this 15 day of January 2022

By: [redacted]

Title: Director

(a) Name in full of Body of Corporate, (b) Full name(s) and address(es) of transferee(s) with their description in the case of individuals, and adding "as joint owners" where such is the case.(c) "his", "their" or "its". (d) If any subsisting encumbrance add "save as appears by the registry of the said ship". (e) Signatures and description of witness, i.e. Director, Secretary, etc. (as the case may be).

NOTE – A purchaser of a registered British Vessel does not obtain a complete title until the Bill of Sale has been recorded at the Port of Registry of the ship; and neglect of this precaution may entail serious consequences.

NOTE – Registered Owners or Mortgagees are reminded of the importance of keeping the Registrar of British Ships inform of any change of residence on their part.

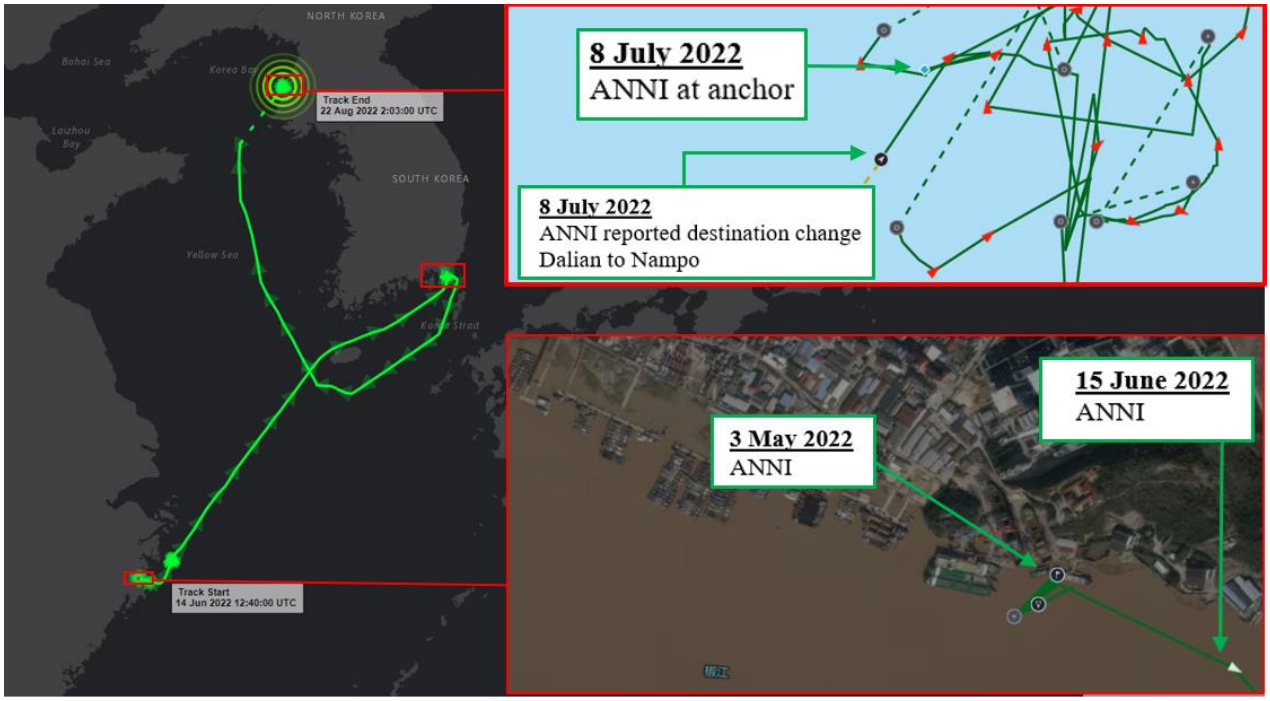
Source: The Panel.

Annex 36A: ANNI, aka DPRK-flagged KYONG SONG 3

Ship voyage and cargo

The then Palau-flagged ANNI (IMO: 8356584), a 13-year old cargo ship, closely mirrored AN HAI 6's transition to the DPRK's fleet (figure 36A-1). The vessel, under its previous registration as China-flagged RONG GANG 1, sailed a domestic route. RONG GANG 1 registered a port call at Taizhou Yuanshan Shipyard in Zhengjiang Province on 2 March 2022, the same location where ANNI's AIS transmission was located the following day. RONG GANG 1's last AIS transmission was 1 May 2022 in the same location. By mid-June, ANNI, transmitting under the Niue flag, sailed out of the shipyard, registering Ningde as its next destination,[81] followed by Busan. It then sailed the same route turning westwards towards the East China Sea before dropping transmission in the direction of Korea Bay. By 8 July 2022, ANNI was located outside Nampo, DPRK. Just a month prior, AN HAI 6 was located in the same waters.

Figure 36A-1: ANNI's international voyage route, May-August 2022



Source: S&P Global Seaweb, Windward, annotated by the Panel. Inset imagery Google Earth Pro (imagery provided only for location purposes, not at date of AIS transmission).

When ANNI was still at the shipyard, a draft change was recorded on a maritime database on 14 June 2022, indicating a possible loading of cargo. Satellite imagery subsequently provided by a Member State showed ANNI with closed cargo holds when it was located outside Nampo on 21 July 2022 (figure 36A-2). By 29 August 2022, ANNI began transmitting on maritime databases as the DPRK ship KYONG SONG 3, south-west of Cho-do island.

[81] The vessel did not appear to go into port.

Figure 36A-2: ANNI at West Sea Barrage, outside Nampo, DPRK, 21 July 2022

Source: Member State.

As with the case of AN HAI 6, ROK authorities confirmed ANNI was at Busan port for a partial crew disembarkation, with no cargo loaded or offloaded. Authorities replied that there was no documentation regarding the cargo that was submitted to maritime authorities as the vessel had entered port for crew change purposes. ANNI departed the same day it arrived, on 25 June 2022, with the destination of Yokohama, Japan. Niue Ship Registry provided the same information for ANNI's submitted voyage plan in its single delivery voyage.

According to Niue Ship Registry, ANNI was registered for a single delivery voyage on 29 April 2022 from Taizhou, China to Yokohama, Japan with two requested stops at Ningde and Busan for bunkering and crew change respectively. The ship registry stated that "*After receiving UNSC letter … dated 23 June 2022 regarding the vessel AN HAI 6 (IMO 8355786), and finding that the vessel shared a similar request for stops at Ningde, China and Busan, Korea on its delivery voyage to Yokohama, Japan, NSR took the initiative to close the vessel's registration on 27 June 2022 due to potential breach of UN sanctions*".

The Panel also wrote to the Marshall Islands, Palau, China and the associated entities and individuals as relevant parties to the ship and cargo.

Marshall Islands assisted the Panel in its investigations with the relevant documentation. As part of its reply, the Trust Company of the Marshall Islands, Inc. (TCMI) confirmed Wuzhou Shipping Co., Ltd (hereafter "Wuzhou Shipping") as the Marshall Islands incorporated non-resident domestic entity for

ANNI, with a Chinese national as its Director. The Qualified Intermediary who submitted the application for Wuzhou Shipping lists a mailing address in Hangzhou, Zhejiang Province, China. Wuzhou Shipping has yet to reply, including on its vessel sale, its cargo and ship activity.

Palau has yet to reply.

China replied *"The Niue-flagged vessel ANNI has only one record of leaving port call in China in 2022. It declared to leave Taizhou port for Yokohama port in June 2022 and was not seen in Chinese territorial waters ever since. China found no activities in violation of the DPRK-related Security Council Resolutions by the vessel".*

Crew transfers

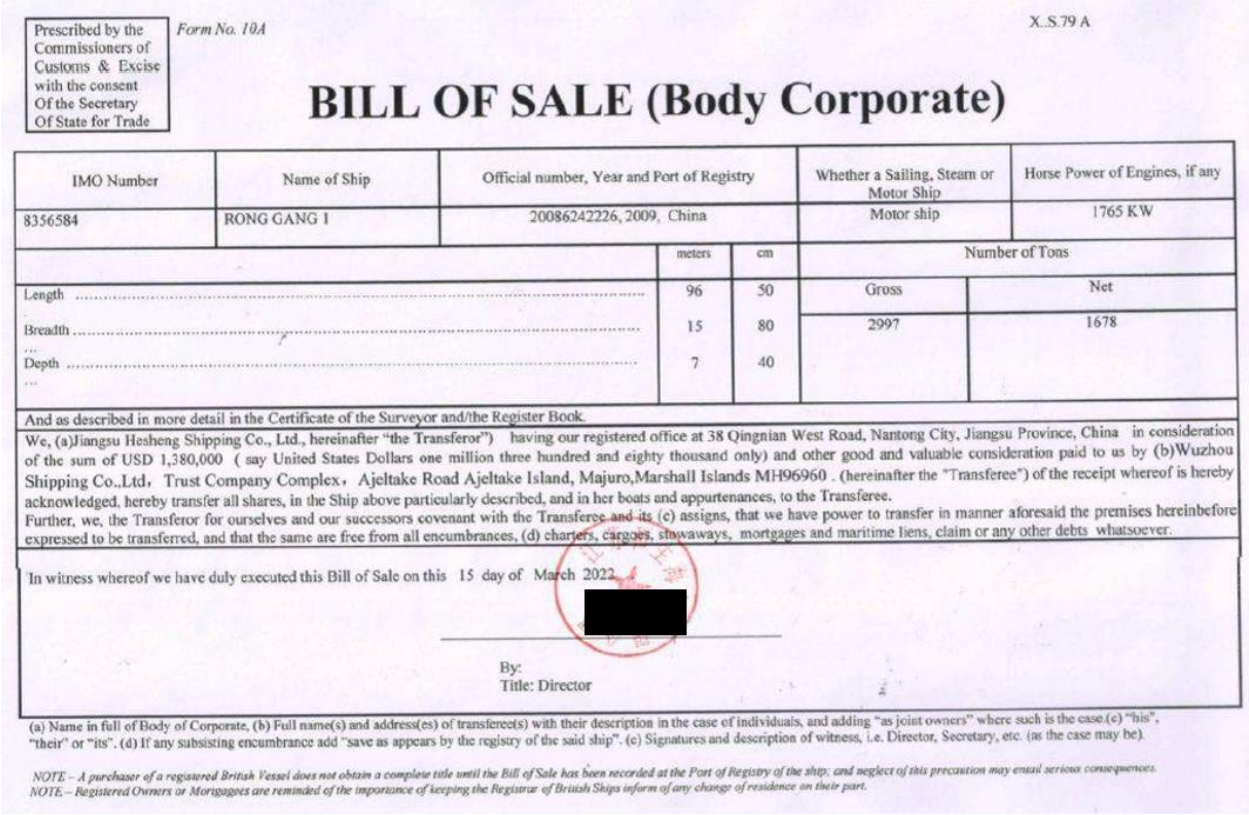
Similar to AN HAI 6, ANNI registered a gap in AIS transmission as the ship sailed north through the Yellow Sea, before it retransmitted outside Nampo by 8 July 2022.

Ship-to-ship transfer

Following its arrival in the DPRK, KYONG SONG 3 was observed on satellite imagery conducting ship-to-ship transfer with the China-flagged ZHENYANGXIN in DPRK waters on 1 September 2022, in further contravention of Security Council resolutions. See annex 44 for details.

Source: The Panel.

Annex 36B: Bill of Sale of ANNI



Prescribed by the Commissioners of Customs & Excise with the consent Of the Secretary Of State for Trade

Form No. 10A

X..S.79 A

BILL OF SALE (Body Corporate)

IMO Number	Name of Ship	Official number, Year and Port of Registry	Whether a Sailing, Steam or Motor Ship	Horse Power of Engines, if any
8356584	RONG GANG I	20086242226, 2009, China	Motor ship	1765 KW

	meters	cm	Number of Tons	
			Gross	Net
Length	96	50	2997	1678
Breadth	15	80		
Depth	7	40		

And as described in more detail in the Certificate of the Surveyor and/the Register Book.

We, (a)Jiangsu Hesheng Shipping Co., Ltd., hereinafter "the Transferor") having our registered office at 38 Qingnian West Road, Nantong City, Jiangsu Province, China in consideration of the sum of USD 1,380,000 (say United States Dollars one million three hundred and eighty thousand only) and other good and valuable consideration paid to us by (b)Wuzhou Shipping Co..Ltd, Trust Company Complex, Ajeltake Road Ajeltake Island, Majuro,Marshall Islands MH96960 . (hereinafter the "Transferee") of the receipt whereof is hereby acknowledged, hereby transfer all shares, in the Ship above particularly described, and in her boats and appurtenances, to the Transferee.
Further, we, the Transferor for ourselves and our successors covenant with the Transferee and its (c) assigns, that we have power to transfer in manner aforesaid the premises hereinbefore expressed to be transferred, and that the same are free from all encumbrances, (d) charters, cargoes, stowaways, mortgages and maritime liens, claim or any other debts whatsoever.

In witness whereof we have duly executed this Bill of Sale on this 15 day of March 2022.

[redacted]

By:
Title: Director

(a) Name in full of Body of Corporate, (b) Full name(s) and address(es) of transferee(s) with their description in the case of individuals, and adding "as joint owners" where such is the case.(c) "his", "their" or "its". (d) If any subsisting encumbrance add "save as appears by the registry of the said ship". (e) Signatures and description of witness, i.e. Director, Secretary, etc. (as the case may be).

NOTE – A purchaser of a registered British Vessel does not obtain a complete title until the Bill of Sale has been recorded at the Port of Registry of the ship; and neglect of this precaution may entail serious consequences.
NOTE – Registered Owners or Mortgagees are reminded of the importance of keeping the Registrar of British Ships inform of any change of residence on their part.

Source: The Panel.

Annex 37: Taizhou (Haimen) Yuanshan Shipyard

The following ships were located at Taizhou Yuanshan Shipping Project Limited Company (hereafter "Taizhou Yuanshan Shipyard"), at Zhejiang Province, China, in 2021-2022, before their acquisition by the DPRK.

AN HAI 6 (IMO: 8355786) nka DPRK-flagged RAK WON 1

Figure 37-1: AN HAI 6 sailing as BI XIANG 66 at Taizhou Yuanshan Shipyard, 8 March 2022

Source: Windward; inset imagery Planet Labs, annotated by the Panel.

ANNI (IMO: 8356584) aka DPRK-flagged KYONG SONG 3

ANNI then sailing as RONG GANG 1, was at Taizhou Yuanshan Shipyard between April and June 2022, sailing out by mid-June 2022 (figure 37-2). The vessel started transmitting as ANNI on its Niue-registered identity on 3 May 2022 at the same location.

Figure 37-2: ANNI sailing as RONG GANG 1 at Taizhou Yuanshan Shipyard, 8 April 2022

Source: AIS signal: S&P Global, Windward; satellite imagery, Planet Labs, annotated by the Panel.

CJK OSAKA, nka DPRK-flagged SU RYONG SAN

Another cargo ship, CJK OSAKA, investigated by the Panel in 2021, called at Taizhou Haimen Shipyard around August 2021 before arriving in DPRK. The vessel has since joined the DPRK fleet, sailing as SU RYONG SAN.

Figure 37-3: SU RYONG SAN sailing as CJK Osaka at Taizhou (Haimen) Yuanshan Shipyard, China, July - August 2020

Source: Windward, annotated by the Panel; inset imagery Google Earth Pro (Imagery provided only for location purposes, not at date of AIS transmission).

The Panel wrote to the legal representative and majority shareholder of Taizhou Yuanshan Shipyard,[82] seeking information on the vessels including the individuals and entities that requested work undertaken, nature of the works undertaken, cargo and crew information and possible commonality of associations of individuals connected to these vessels. Taizhou Yuanshan Shipyard has yet to reply.

Source: The Panel.

[82] A Mr. Ye ZL, according to public company documentation.

Annex 38: Rongcheng Yuantong Shipyard

The Panel has previously investigated multiple vessels that visited the same shipyards / ship repair facilities / docks both before and after their involvement in sanctions evasion. These shipyards were located along the Baima river in Fujian, China (used by the "direct delivery" tankers as well as vessels associated with identity laundering operations); and at a ship repair dock along the Chao Phraya river in Thailand (used by vessels that underwent complex vessel identity laundering operations).

The Panel's past reports have listed vessel modifications for sanctions evasion purposes, including: physical changes, modification of vessel type, and outfitting of equipment for obfuscation purposes such as the installation of second or multiple AIS transponders onboard vessels. Where shipyards perform such services for suspect vessels, they facilitate sanctions evasion. The Panel has focused on shipyard(s) that have hosted several ships connected to the DPRK, including through vessel acquisition, and vessels that have conducted sanctionable activities.

In investigating current and previous cargo ships that were acquired by the DPRK, the Panel noted Jiangjiabu Rongcheng Yuantong Ship Repairing Co., Ltd (hereafter "Rongcheng Yuantong Shipyard") located at Shidao, as a shipyard where several vessels were last located before they subsequently appeared in the DPRK. These included (see also figures 38-1 to 38-3):

(i) TOMI HARU (IMO: 9054779), nka DPRK-flagged SU RYONG SAN 1
(ii) TOYU HARU (IMO: 9054767), nka DPRK-flagged SO BAEK SU
(iii) SF BLOOM (IMO: 8891297), aka DPRK-transmitted PU YANG 2
(iv) OCEAN SKY (IMO: 9125308), nka DPRK-flagged CHOL BONG SAN 1

The above vessels were located at Rongcheng Yuantong Shipyard on various occasions and with varying durations between 2021 and 2022. For instance: prior to their appearance in DPRK territorial waters in mid-June 2022, both TOMI HARU and TOYO HARU were located at the shipyard in January 2022 before appearing in the DPRK in June and in April 2022 respectively; SF BLOOM was at the shipyard at least between December 2021 and January 2022. SF BLOOM was observed on satellite imagery in DPRK territorial waters by early March 2022; and OCEAN SKY transmitted at the shipyard over several months during the second half of 2021 before appearing under the DPRK fleet in April 2022. All these vessels were flagged / transferred to the DPRK thereafter, with TOMI HARU, TOYO HARU and SF BLOOM also conducting sanctionable activities (see relevant main text sections and annexes).

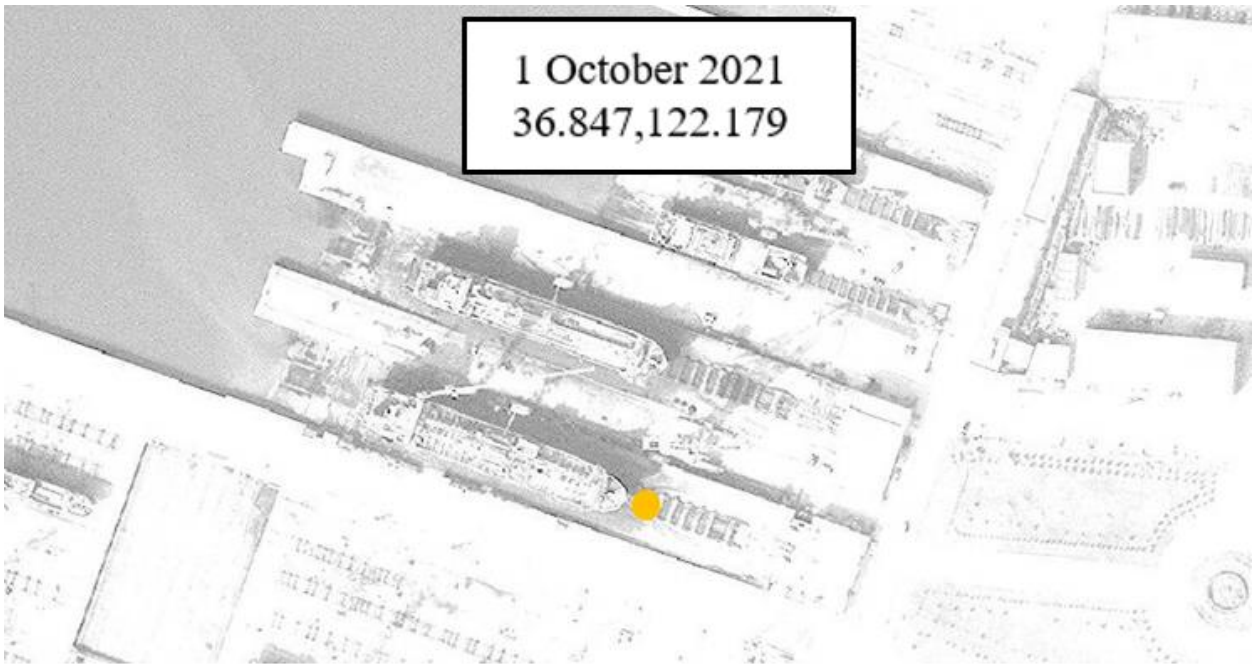
Figure 38-1: TOMI HARU and TOYO HARU, Rongcheng Yuantong Shipyard, 17 January 2022

Source: Member State.

Figure 38-2: SF BLOOM, Rongcheng Yuantong Shipyard, December 2021

Source: S&P Global's Seaweb; inset imagery, Maxar Technologies, annotated by the Panel.

Figure 38-3: OCEAN SKY, Rongcheng Yuantong Shipyard, 1 October 2021



Source: Maxar Technologies, annotated by the Panel.

The Panel sought information on the above-mentioned ships including, the individual(s) and/or entity(s) that requested work undertaken on the vessel; details of all works undertaken; relevant documentation, payment information for services rendered; and information of cargo and crew. The Panel also sought additional information on other foreign-flagged vessels suspected to have been acquired by the DPRK. Rongcheng Yuantong Shipyard has yet to reply.

Source: The Panel.

Annex 39: TOMI HARU, nka DPRK-flagged SA HYANG SAN 1

TOMI HARU (IMO: 9054779), a 30-year-old cargo ship, was flagged under the Palau Ship Registry from November 2016 to February 2022. It was registered as flagged under the DPRK on August 2022 as SA HYANG SAN 1,[83] although the ship was already in DPRK territorial waters by 19 June 2022 (figure 39) and had begun transmitting a DPRK-associated MMSI prior to its official flagging[84]. Its last port of call prior to appearing in DPRK waters was at a shipyard at Shidao (see annex 38) in January 2022.

Figure 39: TOMI HARU's voyage to the DPRK, January - June 2022

Source: Windward, annotated by the Panel; inset imagery, Planet Labs.

Ownership and management

The Panel's investigations have shown that sanctions evaders capitalize on the maritime industry's complex ownership and operator arrangements to prevent easy linkages. To do so, different paper companies are often set up with different nominee directors, while indirect linkages persist with the ownership and / or management. This appeared to be the case for the ownership and management of TOMI HARU. The Seychelles-incorporated SL International Shipping Co Ltd (hereafter "SL International") served as registered owner of TOMI HARU since December 2013, while it was sailing as LUCKY STAR 9.

[83] Ibid.
[84] INMARSAT data.

LUCKY STAR 9 visited DPRK ports between 2014 and 2015, prior to resolutions in 2016 and 2017 that prohibited the import and export of a wide swathe of sectoral goods. The Hong Kong incorporated Sunny International Shipping Co Ltd (hereafter "Sunny International"), served as the ship's operator from December 2013 till May 2019 when HongKong Yong Xiang Shipping Ltd (hereafter "HongKong Yong Xiang") took over. A Chinese national Mr. Feng ZW served as the previous founding director of Sunny International. Mr. Feng was also the owner of SL International till 2020 when he was replaced by another Chinese national, Mr. Gao HB, of HongKong Yong Xiang, as SL International's owner, the last listed ship manager[85] prior to TOMI HARU's transfer to the DPRK. Sunny International had also managed the DPRK-flagged KUM YA (IMO: 9004073) when it was sailing as then Cambodia-flagged LUCKY STAR 7, prior to its transfer to the DPRK in 2016.

The Panel wrote to the relevant Member States, entities and individuals, including Palau, China, Mr. Gao, Mr. Feng, and Rongcheng Yuantong Shipyard.

Palau has yet to reply.

China replied that *"Due to the lack of details in the information provided by the Panel relating to TOMI HARU and TOYO HARU, Chinese authorities were not able to conduct effective investigations. Considering that, the Panel should not include the above-mentioned information in the report".*

Rongcheng Yuantong shipyard has yet to reply.

Mr. Gao has yet to reply. Mr. Feng has yet to reply.

Investigations continue.

Source: The Panel.

[85] IMO records.

Annex 40: TOYO HARU nka DPRK-flagged SO BAEK SU

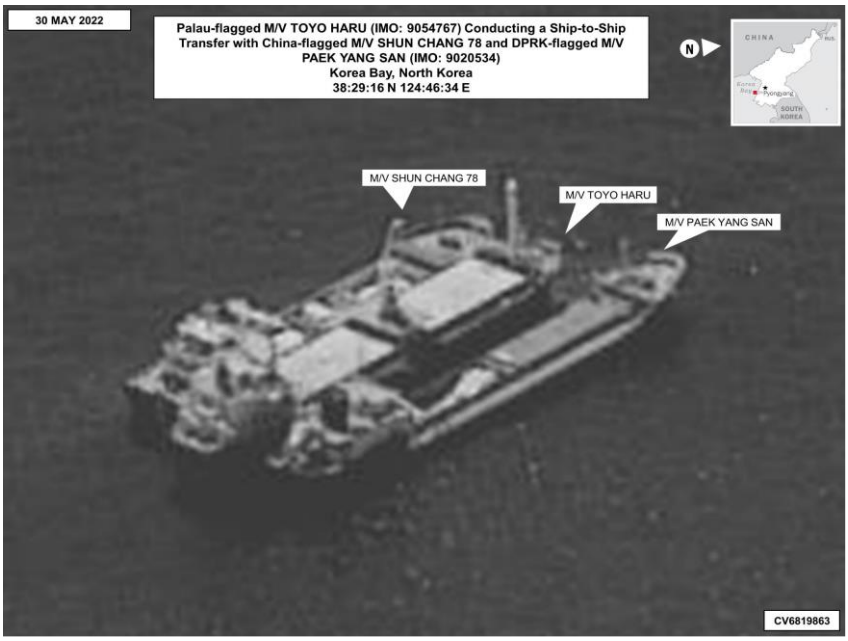
TOYO HARU (IMO: 9054767), a 31-year-old cargo ship, was flagged under the Palau Ship Registry from September 2015 to December 2021.[86] It was registered as flagged under the DPRK on October 2022 as SO BAEK SU,[87] although the ship was already in DPRK territorial waters in April and May 2022 conducting prohibited ship-to-ship transfers with DPRK vessels, as observed on satellite imagery (figures 40-1 and 40-2). Like TOYO HARU, its last port of call before dropping AIS signal in Korea Bay waters was at a shipyard at Shidao, China (see annex 38), in January 2022. AIS transmission recorded TOYO HARU at the said shipyard since 29 November 2021. Prior to that, it was at Luoyuan Bay harbor's outer anchorage area on 21 November.

Figure 40-1: TOYO HARU conducting ship-to-ship transfer with the DPRK-flagged EVER GLORY, facilitated by the China-flagged floating crane JIANG SHEN FU 6988, 3 April 2022

Source: Member State.

[86] IMO records.
[87] Ibid.

Figure 40-2: TOYO HARU conducting ship-to-ship transfer with the DPRK-flagged PAEK YANG SAN (IMO: 9020534) and then China-flagged SHUN CHANG 78 (IMO: 8594552), 30 May 2022



Source: Member State.

TOYO HARU was berthed at Nampo by 24 August 2022 (figure 40-3), all but confirming its acquisition by the DPRK despite only being officially flagged a few months later.

Figure 40-3: TOYO HARU berthed at Nampo port, 24 August 2022

Source: Member State.

Like the other acquired vessels the Panel investigated in this report, in addition to violating the relevant Security Council resolution on ship-to-ship transfers, the ship also sailed to Chinese ports following acquisition. SO BAEK SU's last location was at Dalian cargo vessel anchorage area, arriving by 26 December 2022.[88]

Ownership and Management

Like TOMI HARU (IMO: 9054779) (see preceding annex), TOYO HARU was managed by HongKong Yong Xiang Shipping Ltd. TOYO HARU and TOMI HARU also shared the same previous technical manager, the Hong Kong-incorporated Sunny International Shipping Co Ltd, when they sailed as LUCKY STAR 8 and LUCKY STAR 9 respectively.

Palau has yet to reply.

China replied that *"Due to the lack of details in the information provided by the Panel relating to TOMI HARU and TOYO HARU, Chinese authorities were not able to conduct effective investigations. Considering that, the Panel should not include the above-mentioned information in the report".*

Rongcheng Yuantong shipyard has yet to reply.

Mr. Gao has yet to reply. Mr. Feng has yet to reply.

Investigations continue.

Source: The Panel.

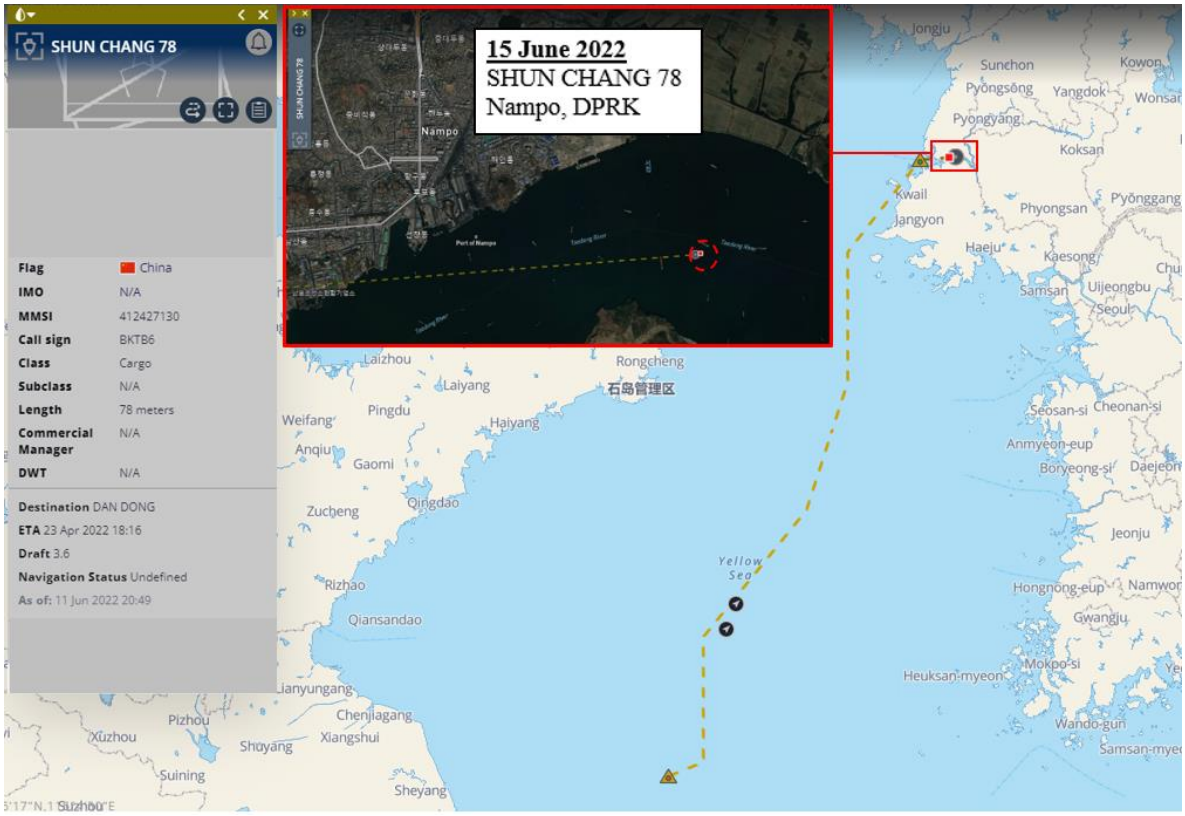
[88] Maritime database information as of 4 January 2023.

Annex 41: SHUN CHANG 78 / SUNCHANG 78, nka DPRK-flagged RAK NANG 2

The Panel first noted the China-flagged SHUN CHANG 78 / SUNCHANG 78's[89] (MMSI: 412427130) presence in DPRK territorial waters when it transmitted outside Nampo in mid-June 2022. It next transmitted along the Taean River at Nampo port in July, where it remained dry-docked, through August (figures 41-1 and 41-2). The DPRK officially flagged SHUN CHANG 78 in October, four months after its arrival at Nampo, when the vessel received an IMO number 8594552 in accordance with IMO procedures, sailing as RAK NANG 2.

Figure 41-1: SHUN CHANG 78's voyage, May - June 2022

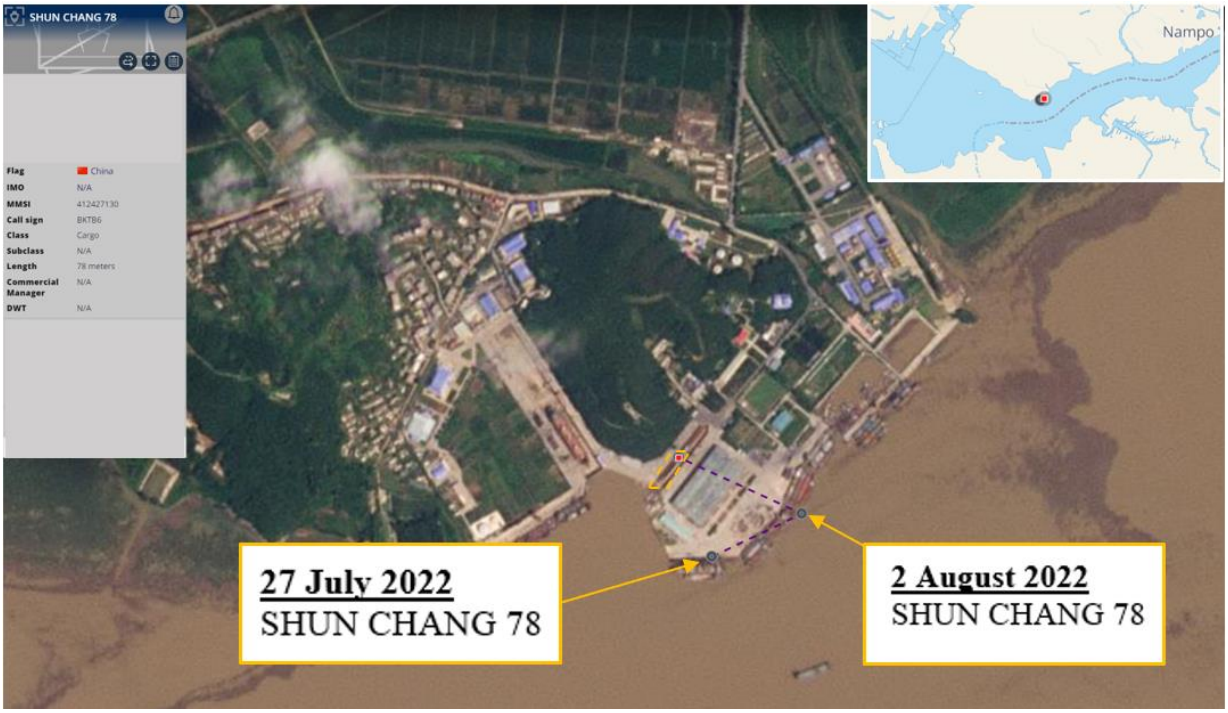
Maritime tracking showed SHUN CHANG 78, a 10-year old bulk carrier, sailing north through the Yellow Sea on 25 May 2022, prior to its arrival in the DPRK in June



Source: Windward, annotated by the Panel.

[89] These vessel names are used interchangeably.

Figure 41-2: SHUN CHANG 78's location, dry-docked at Nampo, July – August 2022

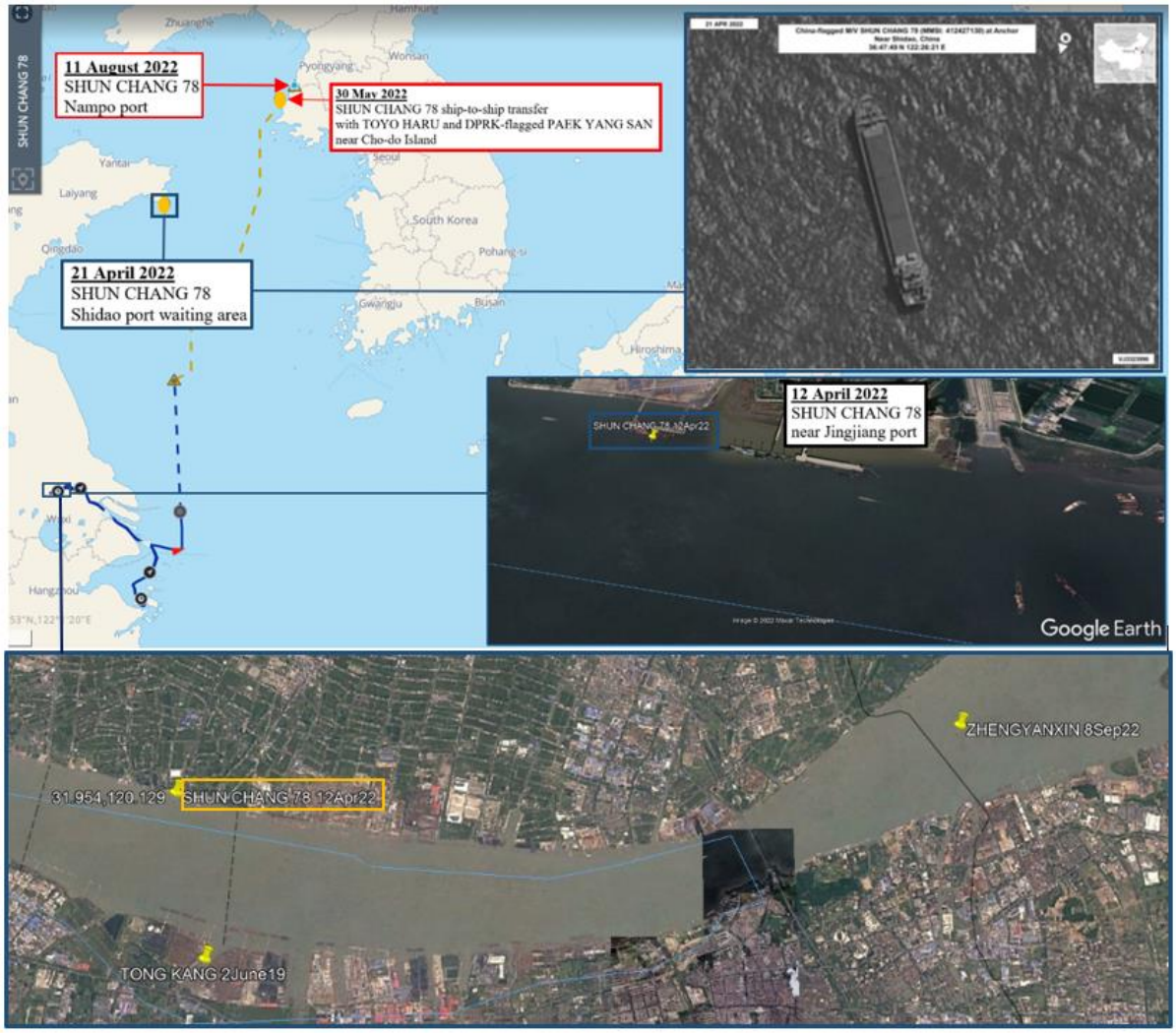


Source: AIS signal overlay, Windward; Satellite imagery, Planet Labs, annotated by the Panel.

Source: AIS signal overlay, Windward; Satellite imagery, Planet Labs, annotated by the Panel; inset imagery, Member State.

Prior to its arrival at Nampo, SHUN CHANG 78 was located along the same stretch of the Yangtze River in the Nantong area where other vessels[90] investigated in this report were also previously located. Port analysis indicate SHUN CHANG 78 was moored pier side at a loading area near Jingjiang port. Subsequent satellite imagery obtained from a Member State showed SHUN CHANG 78 also transited at Shidao's port waiting area on 21 April 2022 during the time when its AIS signal was dropped (figure 41-3). A Member State also provided satellite imagery of SHUN CHANG 78[91] conducting ship-to-ship transfer with the DPRK-flagged PAEK YANG SAN (IMO: 9020534) and with TOYO HARU near Cho-do Island on 30 May 2022. See also relevant sections of main text and its annexes for this ship-to-ship transfer.

Figure 41-3: SHUN CHANG 78's voyage, April to August 2022



Source: Windward; Google Earth Pro; inset monochromatic imagery, Member State, annotated by the Panel.

[90] TONG KANG (MMSI: 412326350) see also relevant main text and annexes relating to SF BLOOM (IMO: 8891297); and ZHENGYANGXIN (MMSI: 413272340)

[91] Prior to its flagging under the DPRK.

The Panel requested information from China on SHUN CHANG 78 including: confirmation on the vessel's ship registration; ship sale where applicable; customs and shipping documentation of any cargo onboard; beneficial ownership information; and last known AIS transmission prior to its departure from China. Given the lack of available information on the owners and managers of SHUN CHANG 78, the Panel sought China's assistance to convey a list detailed questions including on the vessel sale to the owners and managers.

The Panel notes that Security Council resolutions bans all ship-to-ship transfers with DPRK vessels as well as (new and used) vessel sale to and acquisition by the DPRK, which includes "*ships, boats and floating structures*".

China replied "*China didn't find any evidence that SHUN CHANG 78 was involved in ship-to-ship smuggling. The vessel has been in a status of cancellation since November 2021. The Panel should not include the above-mentioned information in the report*".

Source: The Panel.

Annex 42A: SF BLOOM, nka PU YANG 2 (IMO: 8891297)

SF BLOOM and another vessel cooperated to obfuscate the former's voyage to the DPRK between February and March 2022 while carrying illicit cargo. A few months later, SF BLOOM began transmitting as the DPRK-flagged PU YANG 2 at Nampo on 30 July 2022. Entities and individuals associated with ships from several cases the Panel previously investigated[92] reappear in the SF BLOOM case, indicating that these sanctions evasion networks remain active.

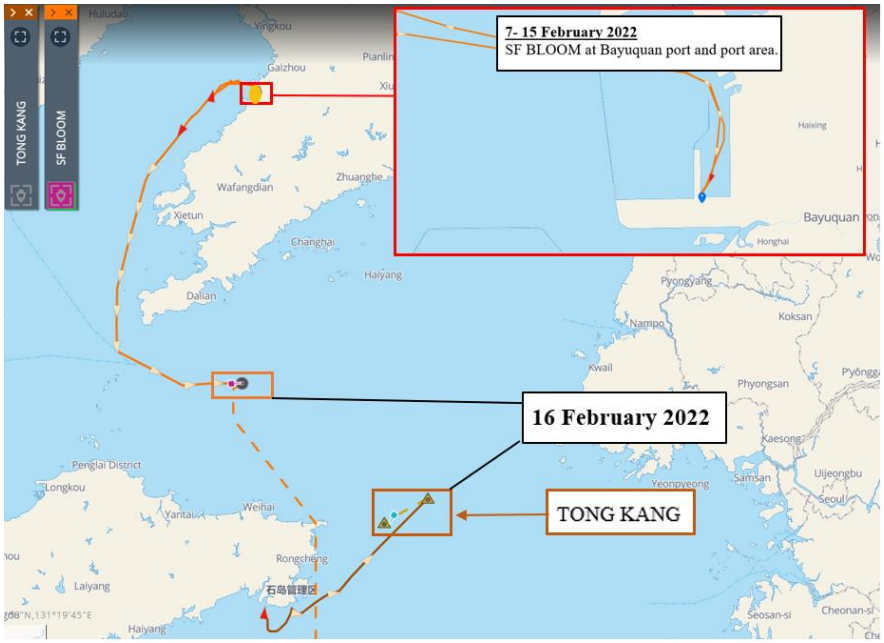
According to information received from Palau, the ship's then flag registry, SF BLOOM was de-registered on 11 March 2022 from its registry at the request of the owner on the basis of the vessel's sale and transfer to a new (unknown) flag (see annexes 42B-42D).

The Panel's investigations are summarized below:

Figure 42A-1: SF BLOOM and TONG KANG, February 2022

- SF BLOOM was at Bayuquan port between 7 and 15 February 2022 where it picked up large cylindrical cargo.
- SF BLOOM sailed towards Korea Bay waters where it dropped AIS transmission on 16 February 2022 as it headed in an easterly direction.
- TONG KANG was in the vicinity on the same date.

SF BLOOM and TONG KANG's voyage in February 2022



Source: Windward, annotated by the Panel.

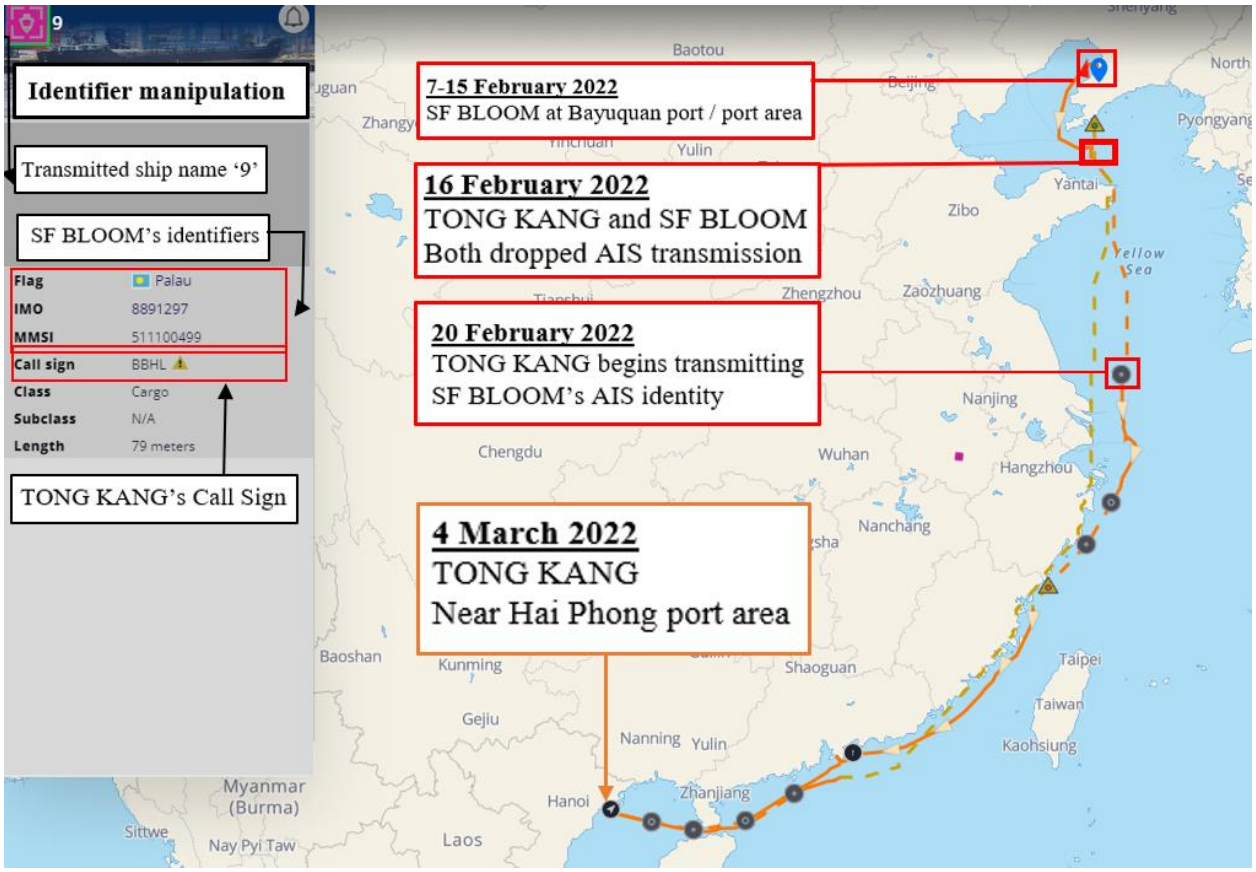
[92] S/2021/777, para. 81 and annex 40, in association with ENTERPRISE (IMO: 9153331), a DPRK acquired ship.

February - April 2022 voyage : TONG KANG and SF BLOOM

TONG KANG

- Panel investigations found that TONG KANG, a ship of similar length as SF BLOOM, manipulated its AIS identifiers to mimic SF BLOOM's digital signature.
- TONG KANG's spoofing of SF BLOOM's AIS identity gave the appearance on maritime platforms that SF BLOOM had sailed from Bayuquan to Hai Phong, Vietnam, rather than to its actual destination, the DPRK.
- While spoofing SF BLOOM's identifiers, TONG KANG also transmitted on a fraudulent ship name "9" on 20 February 2022, while sailing south out of the Yellow Sea, reaching Hai Phong waters by 4 March.

Figure 42A-2: TONG KANG transmitting on SF BLOOM's identifiers and a fraudulent ship name "9", February – March 2022



Source: Windward, annotated by the Panel.

February – April 2022: SF BLOOM's actual location

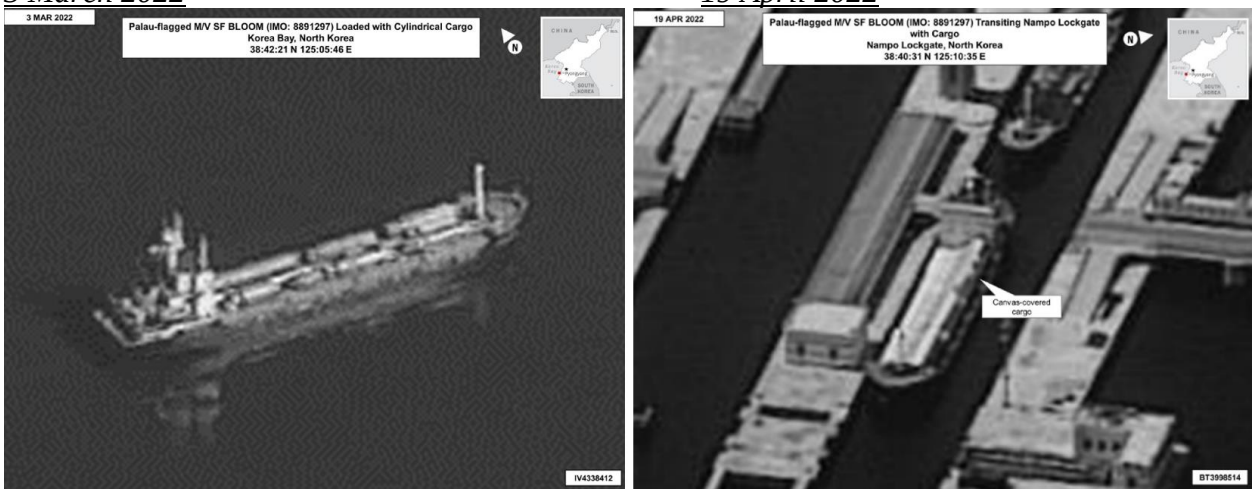
- Meanwhile, the actual SF BLOOM, loaded with cylindrical cargo, sailed without AIS signal towards the DPRK, reaching its waters by 23 February 2022 (figure 3a).
- Satellite imagery provided by a Member State showed SF BLOOM on 3 March 2022 anchored in DPRK waters with the same cargo it loaded at Bayuquan, China.
- After appearing to have undergone a quarantine period, SF BLOOM entered Nampo port through the lockgate on 19 April, three weeks after it was observed in DPRK waters (figure 42A-4).

Figure 42A-3: SF BLOOM on 23 February 2022, Nampo Lockgate, DPRK

Source: Maxar Technologies

Figure 42A-4: SF BLOOM on 3 March, 19 April and 15 May 2022, Nampo, DPRK

3 March 2022 *19 April 2022*



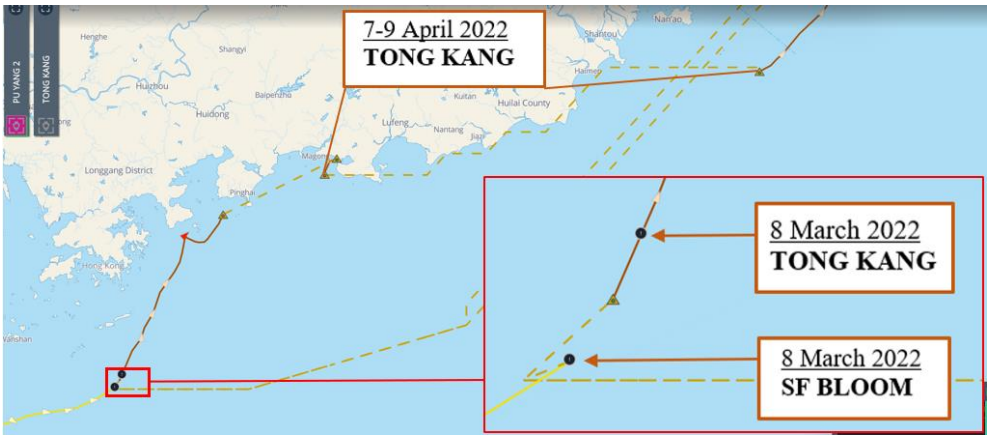
15 May 2022

Source: Member State.

TONG KANG, March – April 2022

- TONG KANG, transmitting as 'SF BLOOM' following its visit outside Hai Phong port area, Viet Nam, resumed transmitting on its legitimate identity on 8 March 2022 as it sailed north toward Zhoushan, China, though still transmitting SF BLOOM's IMO number intermittently. No maritime platforms reviewed by the Panel have recorded TONG KANG's transmissions since 20 April where the vessel last transmitted in the Hangzhou Bay area.

Figure 42A-5: TONG KANG switching back to its identifiers in Chinese waters, 8 March 2022

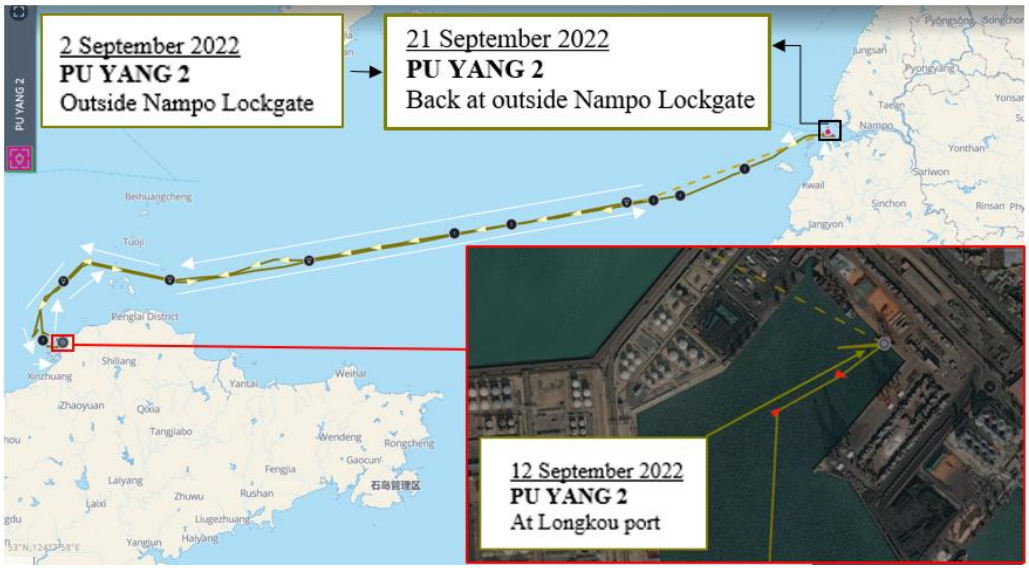


Source: Windward, annotated by the Panel.

PU YANG 2 (formerly SF BLOOM), August - November 2022

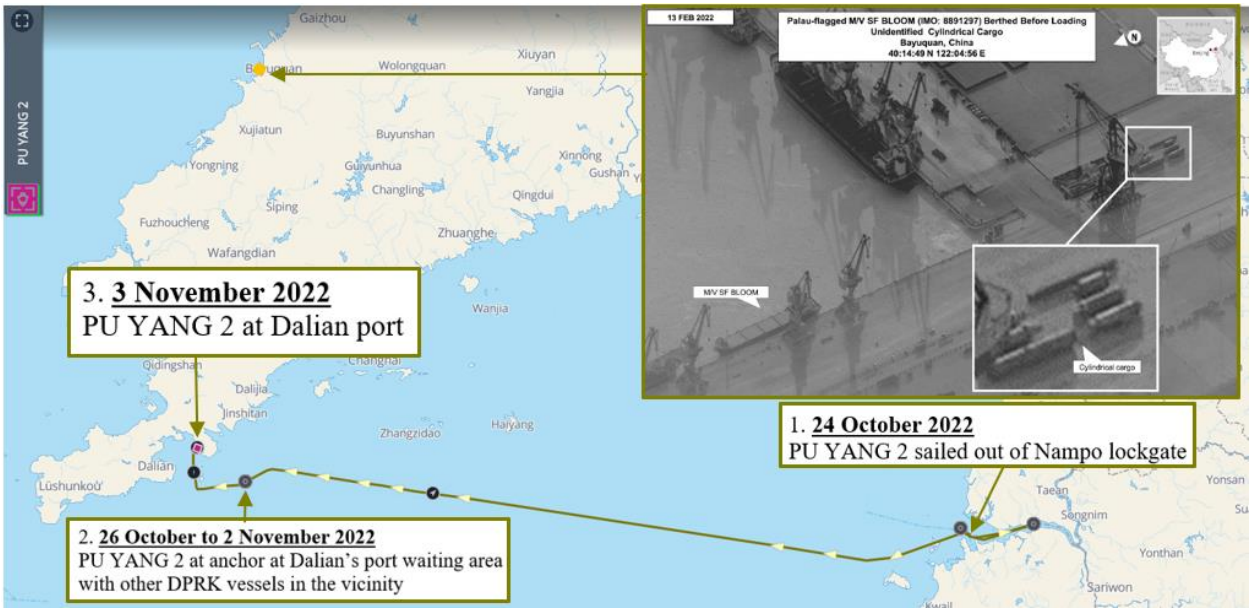
After entering the DPRK's fleet, PU YANG 2 began calling at Chinese ports including Dalian and Longkou. For example, in September 2022, the vessel made a round trip from Nampo to Longkou port and back again, transmitting AIS signal for the most part of its journey.

Figure 42A-6: PU YANG 2's port / port area calls, September 2022



Source: Windward, annotated by the Panel.

Figure 42A-7: PU YANG 2's port / port area calls, October – November 2022



Source: Windward, annotated by the Panel; inset imagery, Member State.

Ownership and Management

SF BLOOM's current and previous owners and operators have been tied to several DPRK sanctions evasion cases previously investigated by the Panel (see relevant section in this report's main text). The Panel wrote to the relevant Member States, entities and individuals, including Palau, China, Vietnam, Sino Ever Treasure Ltd, and Hong Chuan International Logistics Co Ltd.

The Panel sought information from Palau including: de-registration information, ship voyage and AIS details, crew list and vessel ownership, management and sale information while under its flag. Palau has yet to reply.

The Panel sought information from Viet Nam including: TONG KANG's activities in Hai Phong waters and identifier validation and other pre-arrival information submitted by the ship. Viet Nam replied that "Regarding *the request of the PoE to provide information about the vessel named TONG KANG (MMSI: 412326350), the Vietnamese authorities are working closely with each other to check and verify related information. We will keep the PoE informed as soon as we receive official information from our capital*".

The Panel sought information from China including: customs, shipping information, ordering customers and exports details of cargo loaded on SF BLOOM at Bayuquan port in February 2022; as well as information with regards vessel registration status, beneficial ownership information, and AIS tracks for TONG KANG. China replied that *"TONG KANG is in a status of cancellation and the investigation by Chinese authorities is still ongoing. The Panel should not mention this vessel in the report."* China also replied: *The DPRK-flagged vessel PU YANG 2 arrived at Yantai port from Nampo loaded with silicon iron in August 2022 and left Yantai port in the same month. It arrived at Longkou port empty-loaded from Nampo in September 2022 and left Longkou port loaded with groceries in the same month. China found no activities in violation of the DPRK-related Security Council Resolutions by the vessel".*

For Sino Ever Treasure and Hong Chuan International, the Panel requested information on SF BLOOM including: beneficial ownership details, due diligence process on its counterparties, end-user verification, account of the ship's activities and associated entities of interest linked to their businesses. Sino Ever Treasure has yet to reply. Hong Chuan International has yet to reply.

Source: The Panel.

Annex 42B: SF BLOOM (aka PU YANG 2)'s onward sale

Certificate and application for closure of ship registry for SF BLOOM, 10-11 March 2022

CERTIFICATE | CERTIFICADO | 证书 | СЕРТИФИКАТ | ΠΙΣΤΟΠΟΙΗΤΙΚΟ | CERTIFICAT

REPUBLIC OF PALAU
CERTIFICATE OF CLOSURE OF REGISTRY

Vessel Name: SF BLOOM

IMO No or ID No:	8891297	Port of Registry:	MALAKAL HARBOR
Call Sign:	T8A3653	Official No:	P046261
MMSI No:	511 100 499	Vessel Type:	MULTI-PURPOSE CARGO SHIP

Ownership Details:

Name:	Residence:	IMO No:
SINO EVER TREASURE LIMITED	UNIT A, 3/F, CHEONG SUN TOWER, 116-118 WING LOK STREET, SHEUNG WAN, 116002, HONG KONG, HONG KONG SPECIAL ADMINISTRATIVE REGION OF THE PRC	6238411

I hereby certify that the registration of the above-mentioned ship as a ship navigating under the Republic of Palau Flag was terminated on the date given below and an entry was made in the merchant ship register to this effect.

The reason for de-registration is: VESSEL SOLD / UNKNOWN NEW FLAG

Issued On: 11/03/2022

Issued At: [redacted]

Issued By: [redacted]

Certificate No:

Deputy Registrar:

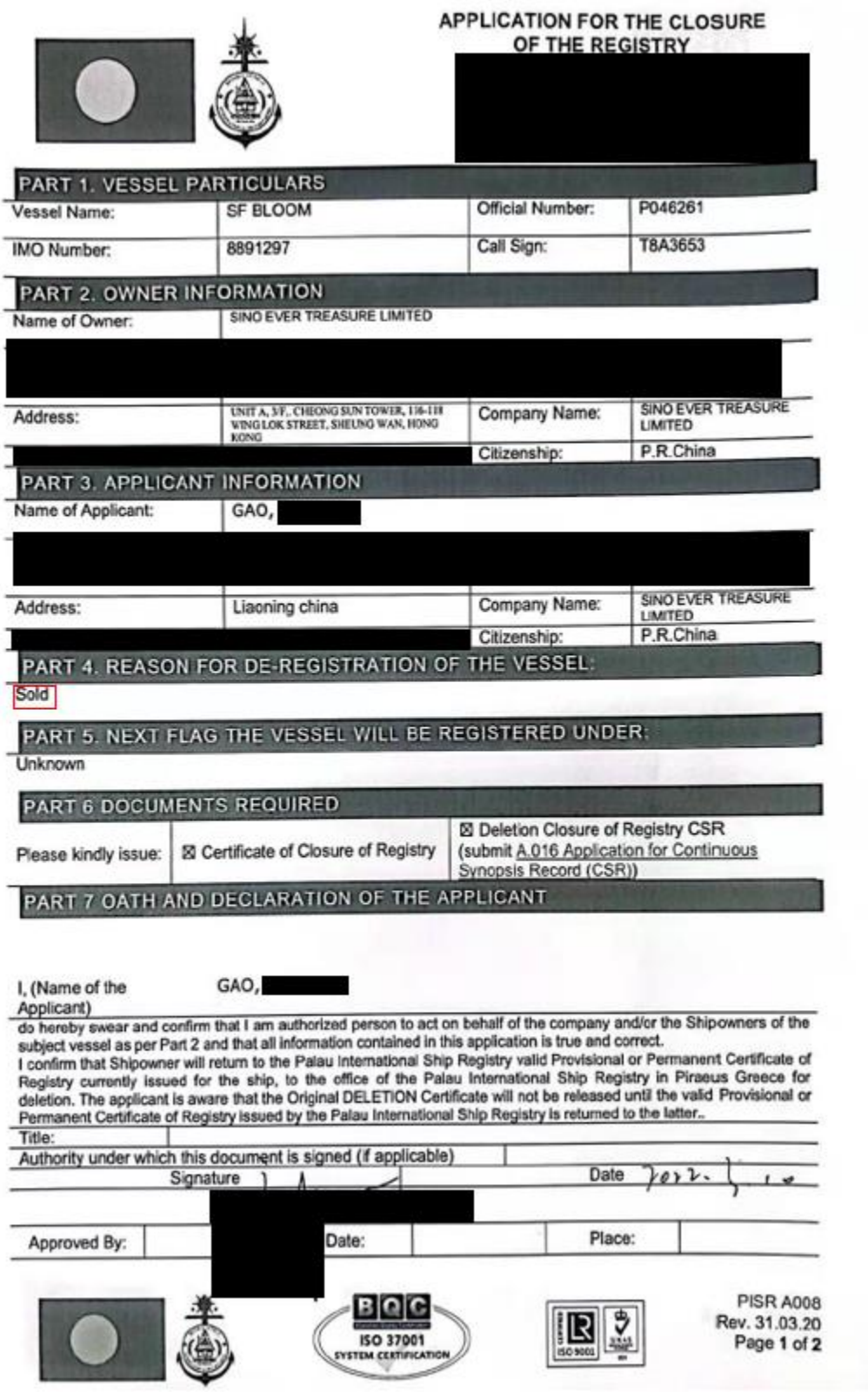
Electronic Signature

Scan to verify this document or visit www.palaureg.com

[redacted]

PISR C-199
Rev. 08.09.20

Palau International Ship Registry
www.palaureg.com



APPLICATION FOR THE CLOSURE OF THE REGISTRY

[redacted]

PART 1. VESSEL PARTICULARS

Vessel Name:	SF BLOOM	Official Number:	P046261
IMO Number:	8891297	Call Sign:	T8A3653

PART 2. OWNER INFORMATION

Name of Owner:	SINO EVER TREASURE LIMITED		
[redacted]			
Address:	UNIT A, 3/F., CHEONG SUN TOWER, 116-118 WING LOK STREET, SHEUNG WAN, HONG KONG	Company Name:	SINO EVER TREASURE LIMITED
[redacted]		Citizenship:	P.R.China

PART 3. APPLICANT INFORMATION

Name of Applicant:	GAO, [redacted]		
[redacted]			
Address:	Liaoning china	Company Name:	SINO EVER TREASURE LIMITED
[redacted]		Citizenship:	P.R.China

PART 4. REASON FOR DE-REGISTRATION OF THE VESSEL:

Sold

PART 5. NEXT FLAG THE VESSEL WILL BE REGISTERED UNDER:

Unknown

PART 6 DOCUMENTS REQUIRED

Please kindly issue:	☒ Certificate of Closure of Registry	☒ Deletion Closure of Registry CSR (submit A.016 Application for Continuous Synopsis Record (CSR))

PART 7 OATH AND DECLARATION OF THE APPLICANT

I, (Name of the Applicant) GAO, [redacted]

do hereby swear and confirm that I am authorized person to act on behalf of the company and/or the Shipowners of the subject vessel as per Part 2 and that all information contained in this application is true and correct.
I confirm that Shipowner will return to the Palau International Ship Registry valid Provisional or Permanent Certificate of Registry currently issued for the ship, to the office of the Palau International Ship Registry in Piraeus Greece for deletion. The applicant is aware that the Original DELETION Certificate will not be released until the valid Provisional or Permanent Certificate of Registry issued by the Palau International Ship Registry is returned to the latter..

Title:

Authority under which this document is signed (if applicable)

Signature [redacted] Date 2022. 1. 10

Approved By:	[redacted]	Date:		Place:	

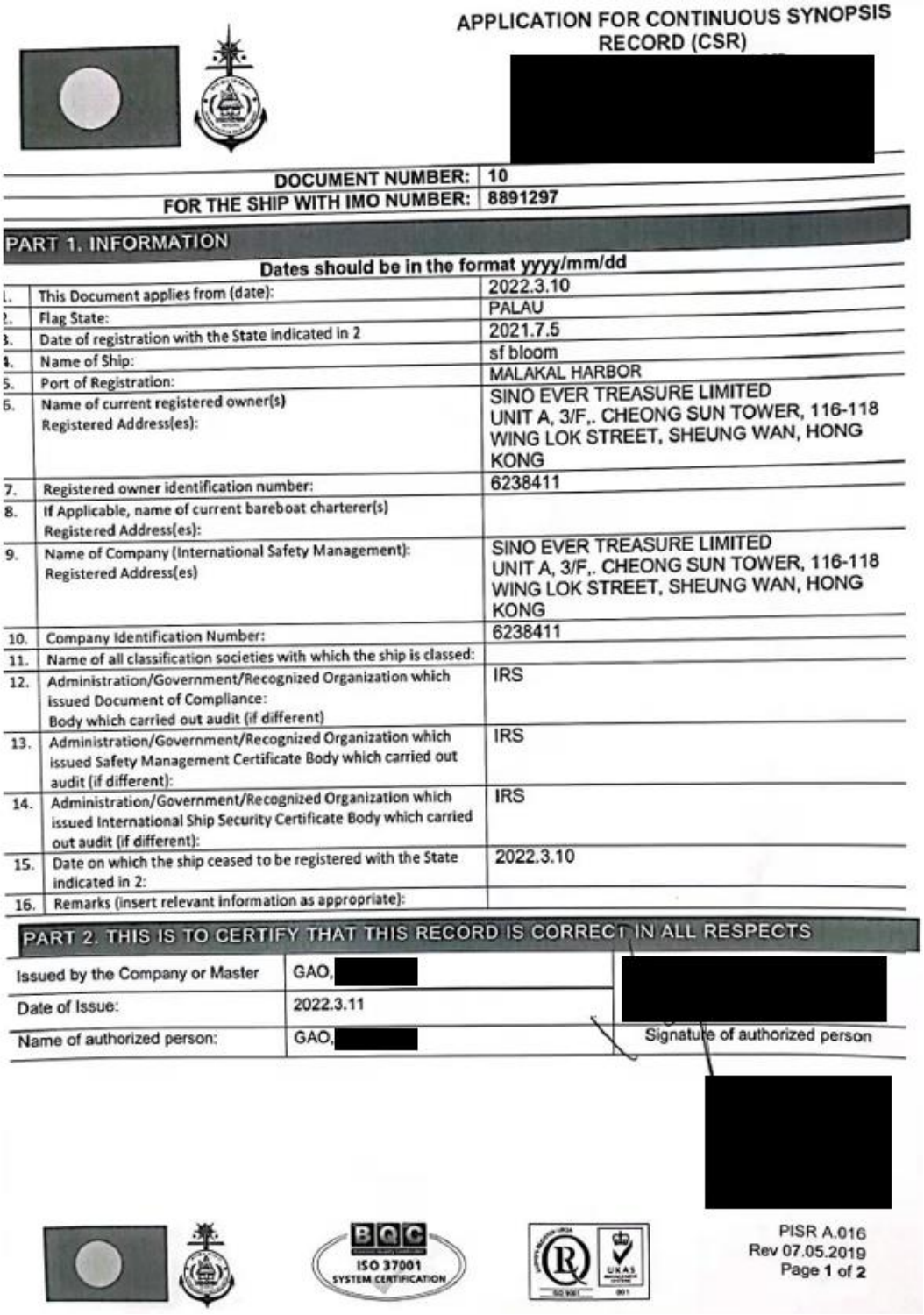
ISO 37001 SYSTEM CERTIFICATION

PISR A008
Rev. 31.03.20
Page 1 of 2

Source: The Panel; annotations and redactions by the Panel

Annex 42C: SF BLOOM (aka PU YANG 2)'s Continuous Synopsis Record (CSR)

Application for CSR record for SF BLOOM following request for ship registry closure due to vessel sale, 11 March 2022



APPLICATION FOR CONTINUOUS SYNOPSIS RECORD (CSR)

[redacted]

DOCUMENT NUMBER:	10
FOR THE SHIP WITH IMO NUMBER:	8891297

PART 1. INFORMATION

Dates should be in the format yyyy/mm/dd

1.	This Document applies from (date):	2022.3.10
2.	Flag State:	PALAU
3.	Date of registration with the State indicated in 2	2021.7.5
4.	Name of Ship:	sf bloom
5.	Port of Registration:	MALAKAL HARBOR
6.	Name of current registered owner(s) Registered Address(es):	SINO EVER TREASURE LIMITED UNIT A, 3/F,. CHEONG SUN TOWER, 116-118 WING LOK STREET, SHEUNG WAN, HONG KONG
7.	Registered owner identification number:	6238411
8.	If Applicable, name of current bareboat charterer(s) Registered Address(es):	
9.	Name of Company (International Safety Management): Registered Address(es)	SINO EVER TREASURE LIMITED UNIT A, 3/F,. CHEONG SUN TOWER, 116-118 WING LOK STREET, SHEUNG WAN, HONG KONG
10.	Company Identification Number:	6238411
11.	Name of all classification societies with which the ship is classed:	
12.	Administration/Government/Recognized Organization which issued Document of Compliance: Body which carried out audit (if different)	IRS
13.	Administration/Government/Recognized Organization which issued Safety Management Certificate Body which carried out audit (if different):	IRS
14.	Administration/Government/Recognized Organization which issued International Ship Security Certificate Body which carried out audit (if different):	IRS
15.	Date on which the ship ceased to be registered with the State indicated in 2:	2022.3.10
16.	Remarks (insert relevant information as appropriate):	

PART 2. THIS IS TO CERTIFY THAT THIS RECORD IS CORRECT IN ALL RESPECTS

Issued by the Company or Master	GAO, [redacted]
Date of Issue:	2022.3.11
Name of authorized person:	GAO, [redacted]

[redacted]

Signature of authorized person

[redacted]

ISO 37001 SYSTEM CERTIFICATION

PISR A.016
Rev 07.05.2019
Page 1 of 2

Source: The Panel; annotations and redactions by the Panel

Annex 42D: SF BLOOM (aka PU YANG 2)'s management

The technical management company of SF BLOOM that prior managed SF BLOOM. Hong Chuan International Logistics Co Ltd (hereafter "Hong Chuan International") was also the ship manager since 2012 under the Tanzania (Zanzibar) and Cambodian flags. Hong Chuan International shared a similar name in its email address to the former ship manager, the Dalian, Liaoning-based Dalian Taiyuan International Shipping Agency Co Ltd, when the ship was sailing as DOUBLE HAPPINESS 1 from 2012 to 2014.

GOVERNMENT OF ZANZIBAR

CONTINUOUS SYNOPSIS RECORD (CSR)

Document number **8** for the ship with IMO Number **8891297**

	Information	
1	This document applies from (date):	**2021-06-26**
2	Flag State:	**Tanzania**
3	Date of registration with the State indicated in 2:	**2016-06-16**
4	Name of ship	**TOWIN**
5	Port of registration:	**Zanzibar**
6	Name of current registered owner(s): Registered address(es):	**PARK RICH SHIPPING LIMITED** **1/F, LAND LOT NO 42, TONG SHEUNG TSUEN, TAI PO LAM CHUEN, NEW TERRITORIES, Hong Kong**
7	Registered owner(s) identification number:	**6089461**
8	If applicable, name of current registered bareboat charterer(s): Registered address(es):	**N/A**
9	Name of Company (International Safety Management): Registered address(es): Address(es) of its Safety Management activities (if different):	**HONG CHUAN INTERNATIONAL LOGISTICS COMPANY LTD** **11F-3, # 168, TAH TUNG ST. WESTERN DISTRICT, TAICHUNG CITY, [redacted]**
10	The Company identification number:	**5679614**
11	Name(s) of all classification societies with which the ship is classed:	**COSMOS MARINE BUREAU INC**
12	Administration / Government / Recognised Organisation which issued the Document of Compliance: Body which carried out the audit (if different):	**COSMOS MARINE BUREAU INC.** **COSMOS MARINE BUREAU INC.**
13	Administration / Government / Recognised Organisation which issued the Safety Management Certificate: Body which carried out the audit (if different):	**COSMOS MARINE BUREAU INC.**
14	Administration / Government / Recognised Organisation which issued the International Ship Security Certificate: Body which carried out the audit (if different):	**COSMOS MARINE BUREAU INC.**
15	Date on which the ship ceased to be registered with the State indicated in 2:	**2021-06-26**
16	Remarks:	**Transfer at owner's request to known flag:**

This is to certify that this record is correct in all respects.

Issued by the Administration of the **Government of Zanzibar**.

Issued at **Zanzibar** on **2021-06-26**

[redacted] Registrar of ships

This document was received by the ship and attached to the ship's CSR file on the following date: .....

Source: The Panel; annotations and redactions by the Panel.

Annex 43A: Detained designated vessel PETREL 8 (IMO: 9562233)

Ownership and management

Li Quan Shipping Co Ltd (hereafter "Li Quan Shipping) was PETREL 8's registered owner and manager[93] since January 2017. While under its management, the vessel was designated by the UN.[94] The Director of Li Quan Shipping is a Ms. Wei TT. Primary source documentation[95] related to the PETREL 8's recent vessel sale of 2021 showed Wei as the company's Director and shareholder. Wei's name has also appeared in association with previous investigations conducted by the Panel. The following ships with DPRK connections featured in the Panel's reports have been associated with Wei:

(A) PETREL 8 (IMO: 9562233), de-flagged
(B) SAMZIN 8 (nka SAM JIN 8) (IMO: 8810578) DPRK-flagged
(C) NORTHERN LUCK (IMO: 9061227) DPRK-flagged

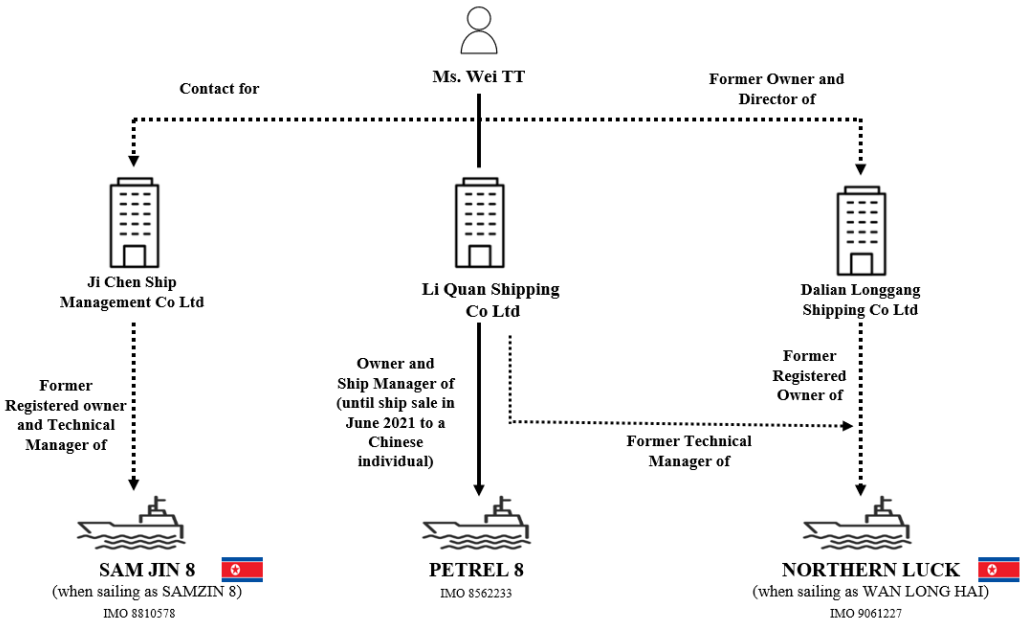
In addition to PETREL 8, SAMZIN 8 was investigated by the Panel for having exported DPRK-origin coal in 2020 at Ningbo-Zhoushan waters. The Hong Kong-incorporated Ji Chen Ship Management Co. Ltd was the last recorded entity[96] serving as SAM JIN 8's ship operator and technical manager, prior to its flagging in August 2019 as the DPRK vessel SAM JIN 8. SAMZIN 8 was sailing as unknown-flagged since April 2017, while corporate registry records show Ji Cheng Ship was dissolved in January 2018.[97] Wei was listed as the contact for Ji Chen Ship.[98]

Ji Chen Ship was also the previous registered owner and manager of two other ships that were flagged under the DPRK:

- KUM SONG 7 (IMO: 8739396) when it was sailing as ZHONG LIAN 9 prior to its transfer to the DPRK in July 2016, and
- KUM SONG 3 (IMO: 8661850) when it was sailing as LONG GANG 7 prior to its transfer to an unknown entity in December 2016 before being flagged under the DPRK fleet in 2017.

[93] IMO records.
[94] The Panel reported PETREL 8 as exporting DPRK-original coal to Bayuquan port. See S/2018/171, para. 51 and annex 5-2.
[95] Obtained by the Panel from a relevant party as part of its investigations.
[96] IMO records.
[97] Corporate registry records.
[98] Information held on file.

NORTHERN LUCK has been featured in Panel reports for having exported DPRK-origin coal. Li Quan Shipping transferred ownership and management of NORTHERN LUCK (when it was sailing as WAN LONG HAI) to DPRK entities in August 2016. Dalian Longgang Shipping Co Ltd, associated with Wei,[99] remained listed as the registered owner of NORTHERN LUCK following the transfer.[100]



Source: The Panel.

Investigations continue.

[99] Dalian Longgang Shipping Co Ltd and Long Gang Shipping Co Ltd share the same address. Information kept on file.

[100] IMO records. Dalian Longgang Shipping is listed on a maritime database as a subsidiary / associated company of the Hong Kong-incorporated Long Gang Shipping Co Ltd.

Annex 43B: Deletion Certificate of PETREL 8 (IMO: 9562233) following vessel auction, 5 November 2021

The Panel notes that PETREL 8 was listed under IMO records as unknown-flagged as of October 2017 by Comoros, following the vessel's designation.

UNION DES COMORES
ADMINISTRATION MARITIME

UNION OF COMOROS
MARITIME ADMINISTRATION

DELETION CERTIFICATE
CERTIFICAT DE RADIATION

Cert.No. 21/DEL/1300233/0 268

The National Agency of Maritime Affair of the Union of Comoros hereby certifies that the ship mentioned below was registered under the ownership of:
L'Agence Nationale des Affaires Maritime de l'Union des Comores certifie par la présente que le navire mentionné ci-dessous a été enregistré comme étant propriété de ::

Name *Nom*	**LI QUAN SHIPPING CO., LIMITED**
Address *Adresse*	**HONGKONG**

In accordance with Article 41.3 of the Merchant Shipping Act, 2001 regarding the International Ship Registry, this ship has been deleted from the Comoros ship registry. At the time of the deletion, the ship was free of all registered encumbrances, mortgages and maritime liens or any other debts or claims whatsoever.
Conformément à l'article 41.3 de l'Ordonnance relative à la Marine Marchande et à L'immatriculation Des Navires, 2001, ce navire a été radié du registre international des navires de l'Union des Comores. Au moment de la radiation, le navire était libre de toute servitude, hypothèque, et privilège maritime, et quitte de toute autre créance ou réclamation.

Name of Ship *Nom du Navire*	Official Number *Numéro Officiel*	Port of Registry *Port d'Immatriculation*
PETREL 8	13 00 233	MORONI
Type of Ship *Type de Navire*	**Gross Tonnage** *Tonnage Brut*	**IMO Number** *Numéro OMI*
BULK CARRIER	7078	9562233

Issued in *Délivré à* Moroni **On** *le* 05th **Day of** *Jour de* November **Year** *de l'an* 2021

Maritime Affairs Department
Direction des Affaires Maritimes

[redacted]
Registrar

Form No. DEL/01_00 Date of issuance: 01/2019

Source: The Panel.

Annex 43C: Single Delivery Voyage conditions of carriage for PETREL 8

ISClass

Certificate No.
LL-22DAL2208SDV_EXP

INTERNATIONAL
LOAD LINE EXEMPTION CERTIFICATE

Issued under the provisions of the
INTERNATIONAL CONVENTION ON LOAD LINES, 1966,
as modified by the Protocol of 1988 relating thereto
under the authority of the Government of

NIUE

by **INTERNATIONAL SHIP CLASSIFICATION**

Particulars of ship

Name of Ship	Distinctive Number or Letters	Port of Registry	Length (L) as defined in article 2(8) (in metres)	IMO Number
PETREL 8	E6YS2	ALOFI	126.58	9562233

THIS IS TO CERTIFY:

That the ship is exempted from the provisions of the Convention, under the authority conferred by article ☐ 6(2) / ☒ **6(4) [2] of the Convention referred to above.**

The provisions of the Convention from which the ship is exempted under article 6(2) are:

The voyage for which exemption is granted under article 6(4) is:

From: **NINGDE, CHINA**

To: **JAKARTA, INDONESIA**

Conditions, if any, on which the Exemption Certificate is granted under either ☐ article 6(2) or ☒ article 6(4):

Remarks:
This vessel shall only proceed on one single delivery voyage without any passenger or cargo from Ningde, China to Jakarta, Indonesia (or any port of refuge)

This certificate is valid until 18 AUGUST 2022.

Issued at NINGDE, CHINA on 18 MAY 2022.

[redacted]

Signature, name and stamp of authorized official issuing the certificate

[1] *In accordance with IMO ship identification number scheme adopted by the Organization by resolution A.600 (15).*
[2] *Delete as appropriate*

http://www.isclass.com
Email:info@isclass.com

ISCLASS/ILLC EXEMPTION/MAR 2014 /REV.4

Note: ISClass assumes no responsibilities and shall not be liable for any loss, damage, directly or indirectly caused by the information in this document.

Page 1 of 1

Digindai dengan CamScanner

Source: The Panel.

Annex 43D: Port clearance certificate for departure of PETREL 8

国 际 航 行 船 舶 出 口 岸 许 可 证

No. 220802020015439231

存根	船 名	海燕8	国 籍	纽埃
	驶往港	雅加达	驶离时间	2022-06-11 10:30

签 发 人 [redacted]

2022 年 06 月 11 日

No. 220802020015439231

中 华 人 民 共 和 国

国 际 航 行 船 舶 出 口 岸 许 可 证

THE PEOPLE'S REPUBLIC OF CHINA PORT CLEARANCE

船 名 Name of Ship	海燕8 PETREL 8	国 籍 Nationality	纽埃 Niue
驶往港 Next Port	雅加达 Jakarta	驶离时间 Time of Departure	2022-06-11 10:30

签 章: 白马港海事处

Issued by:

时 间:

Date and time: 2022-06-11 10:30:00

备注

Remarks

1、本证自签发时起24小时内有效。

This clearance remains valid within 24 hours from the time issued.

2、本证涂改无效

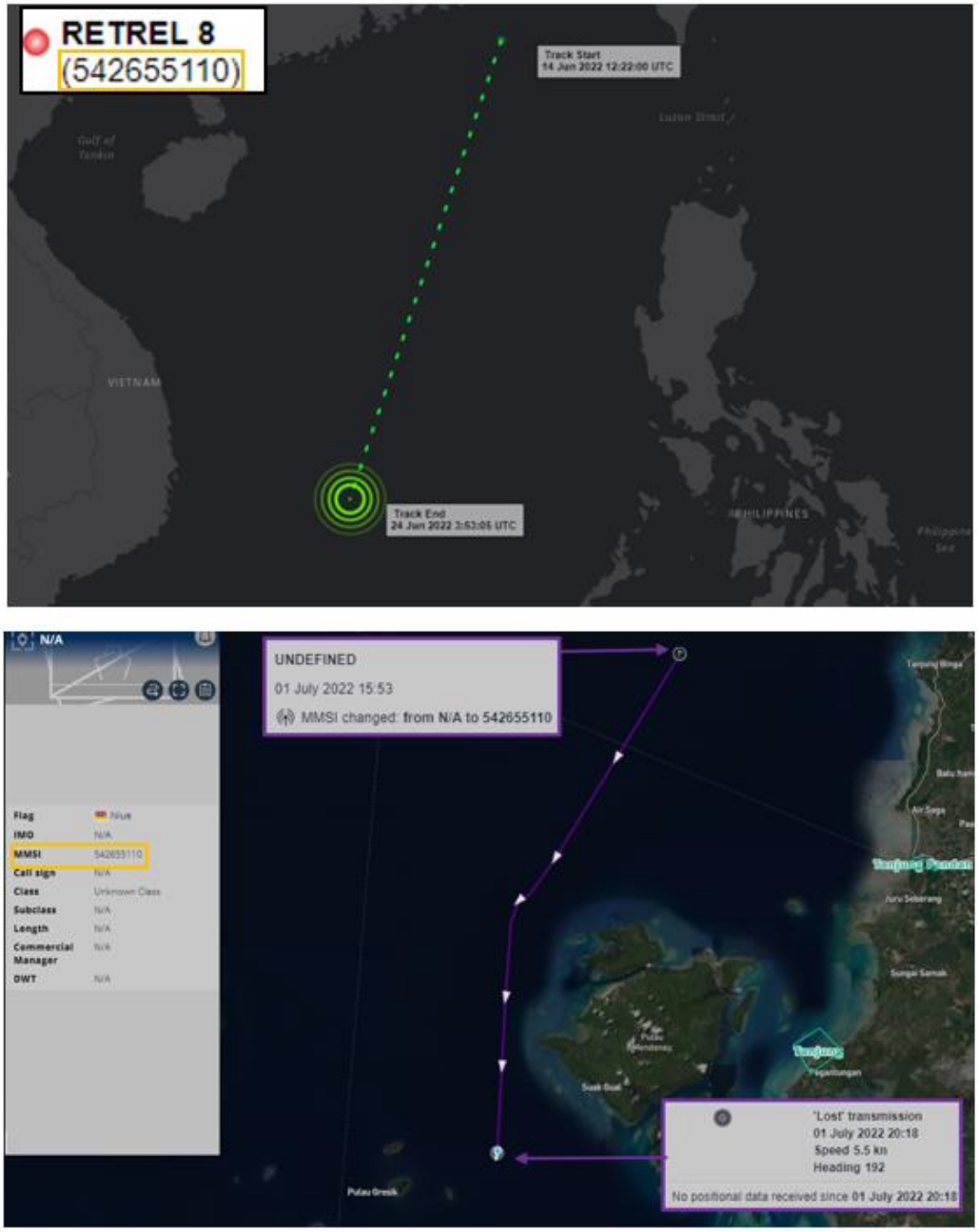
Correction will render this clearance invalid.

Source: The Panel.

Annex 43E: Ship voyage of PETREL 8

PETREL 8 was sailing dark following its departure from China in June 2022, re-transmitting on its Niue-associated MMSI as it entered Indonesian territorial waters on 1 July 2022. The ship also briefly transmitted as 'RETREL 8' while sailing in the high seas.

Figure 43E: PETREL 8's transmissions, sailing as 'RETREL 8' on its Niue-assigned MMSI, June-July 2022



Source: (top) S&P Global's Seaweb; (bottom) Windward.

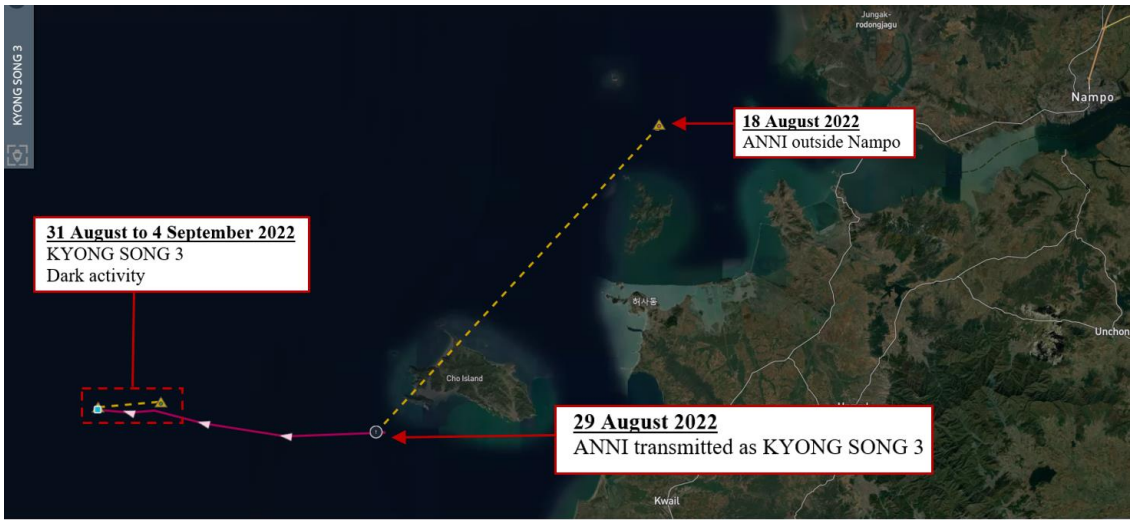
Annex 43F: Photograph of PETREL 8 at anchor, Indonesian waters, 7 August 2022

Source: Social media.

Annex 44: China-flagged ZHENYANGXIN (MMSI: 413272340) in ship-to-ship transfer with KYONG SONG 3 (formerly ANNI)

Following its transfer to the DPRK, ANNI sailing as DPRK-flagged KYONG SONG 3, conducted a ship-to-ship transfer on 1 September 2022[101] (see also annex 36 for details). Maritime databases showed the vessel with over four days of dark activity west of Cho-do Island, sailing as KYONG SONG 3 (figure 44-1). Subsequent satellite imagery provided by a Member State showed KYONG SONG 3 engaged in ship-to-ship transfer with the China-flagged ZHENYANGXIN on 1 September 2022 (figure 44-2). Security Council resolutions ban any facilitation or engagement of ship-to-ship transfers with DPRK vessels of any goods or items that are supplied, sold or transferred to or from the DPRK.

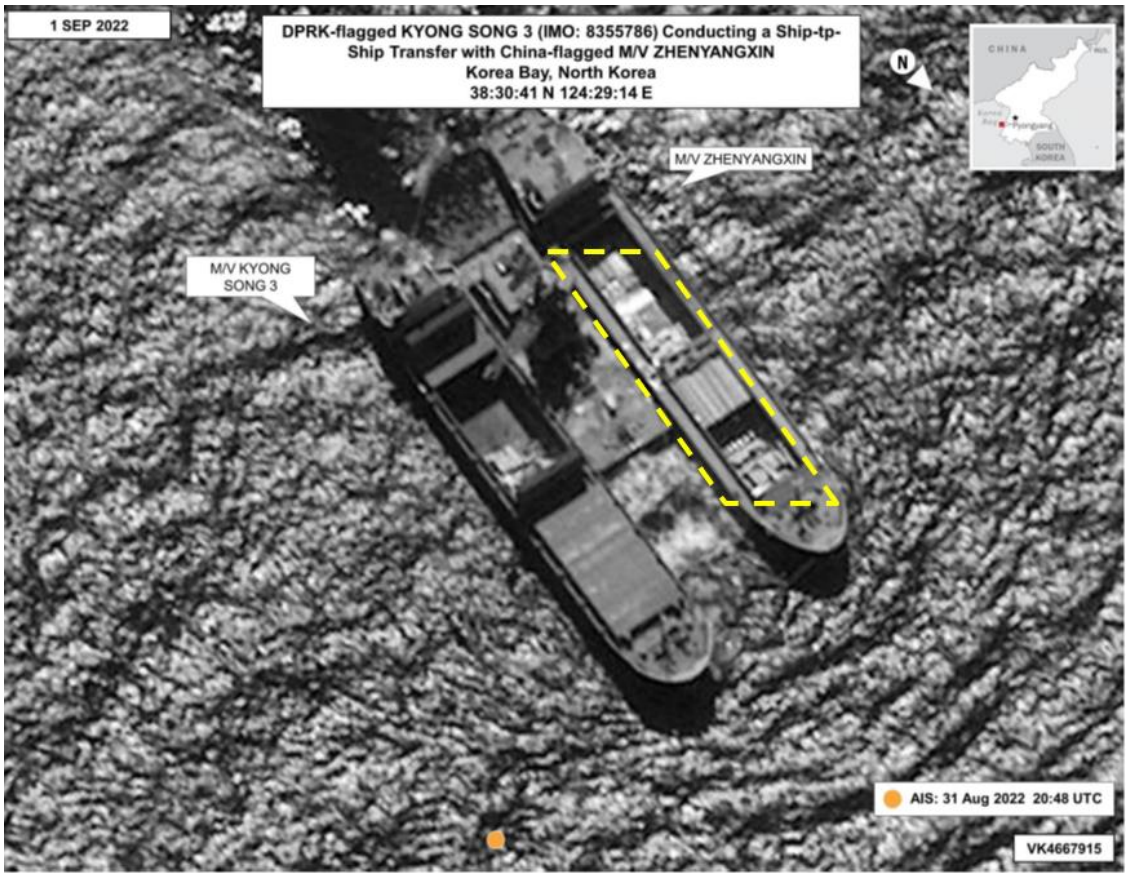
Figure 44-1: ANNI as KYONG SONG 3, outside Nampo, DPRK, August-September 2022



Source: Windward, annotated by the Panel.

[101] IMO records.

Figure 44-2: Satellite imagery of ship-to-ship transfer west of Cho-do Island between ZHENYANGXIN and KYONG SONG 3 showing cargo on board the latter, 1 September 2022



Source: Member State.

The Panel's research into ZHENYANGXIN indicates the vessel is a China-flagged cargo ship with MMSI number: 413272340. ZHENYANGXIN registered over 13 days' lack of an AIS transmission during the time when it was recorded on satellite imagery in DPRK waters. Satellite imagery showed the vessel conducting a ship-to-ship transfer with KYONG SONG 3, facilitated by a floating crane. ZHENYANGXIN had different items onboard (figure 44-2). The vessel has continued to call at a number of Chinese ports / port areas following this ship-to-ship transfer. Prior to its appearance in the DPRK, ZHENYANGXIN made a port call at Lianyungang port.[102]

The Panel requested information from Chinese authorities on ZHENYANGXIN, including confirmation of its identifiers, location of the ship where it registered unaccounted AIS signal during the material time where it was in DPRK waters engaged in ship-to-ship transfer, ownership information of the vessel, customs documentation and information of cargo onboard the ship before it departed China.

[102] Maritime database AIS tracking.

Given that lack of available information on the owners and managers of ZHENYANGXIN, the Panel also sought Chinese authorities' assistance to convey requested information to the vessel's owner(s) that would explain the presence of the ship in DPRK waters or verifiable evidence that show otherwise, shipping and customs documentation carried on board the ship, relevant transaction and transfer information including payment information, the ordering customer(s) and exports of the cargo on board the vessel.

China replied *"China didn't find any evidence that ZHEN YANG XIN was involved in ship-to-ship smuggling. The Panel should not include the above-mentioned information in the report"*.

Source: The Panel.

Annex 45: JIANG SHEN FU 6899 (MMSI: 413860946)

The Panel first noted the presence of the China-flagged JIANG SHEN FU 6988 in June 2022 when tracking AN HAI 6 (IMO: 8355786) outside Nampo Lockgate (figure 45-1). Maritime databases contained limited information on the vessel, with a reported length of 43 meters. Subsequent satellite imagery provided by a Member State showed the vessel to be a floating crane.

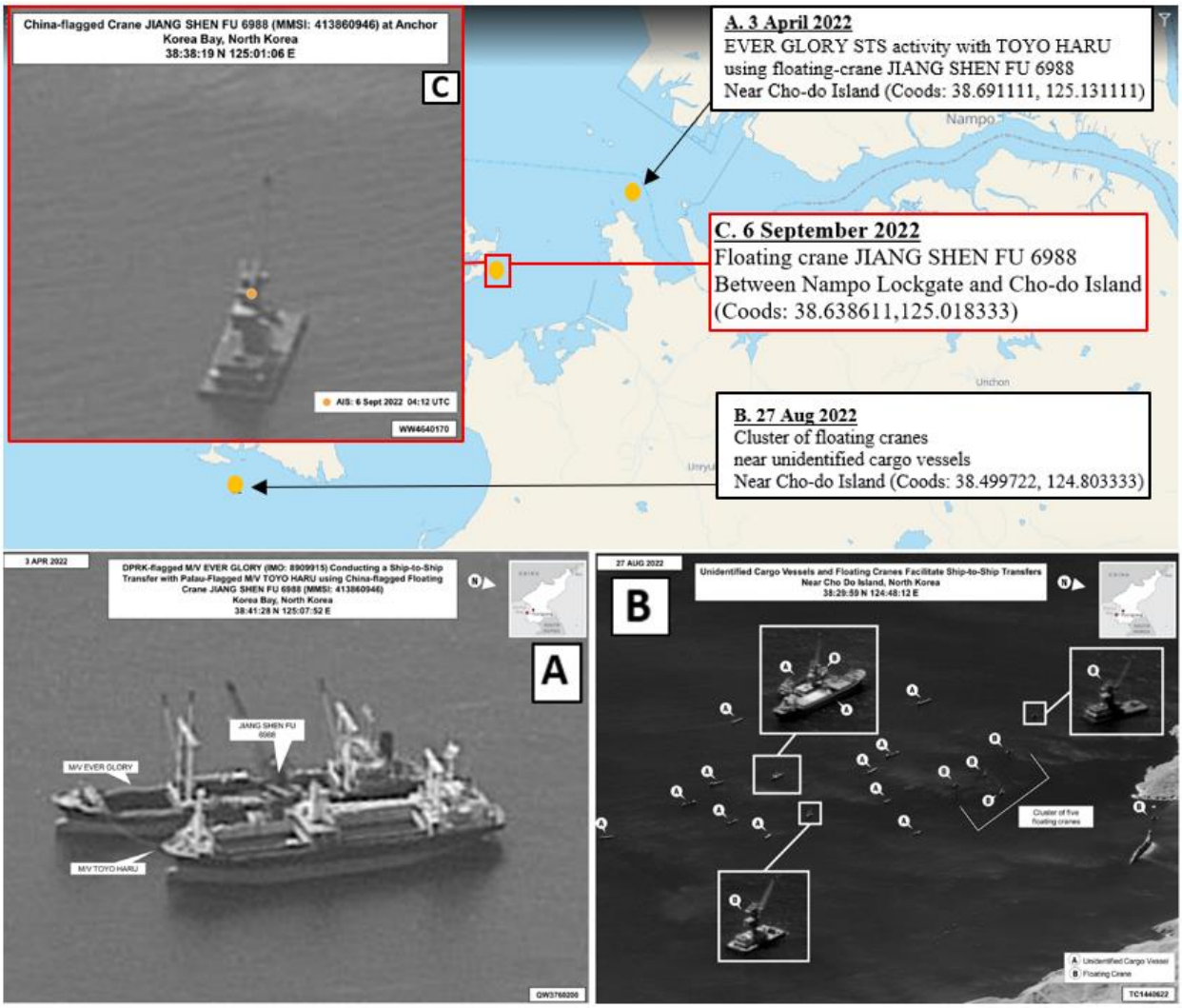
Figure 45-1: JIANG SHEN FU 6988 outside Nampo Lockgate, June 2022

Source: Marine Traffic; Redaction, Panel.
*Investigations are still underway on another vessel that transmitted on a Chinese-associated MMSI. The vessel's name has been redacted on the map.

The Panel's tracking of JIANG SHEN FU 6988 indicated the vessel previously sailed on Chinese domestic routes, operating primarily in the Nantong area. The vessel last transmitted in Chinese territorial waters in early 2021.[103] By 2022, JIANG SHEN FU 6988 was operating in DPRK territorial waters, including facilitating transfers involving a DPRK vessel (figure 45-2).

[103] Windward.

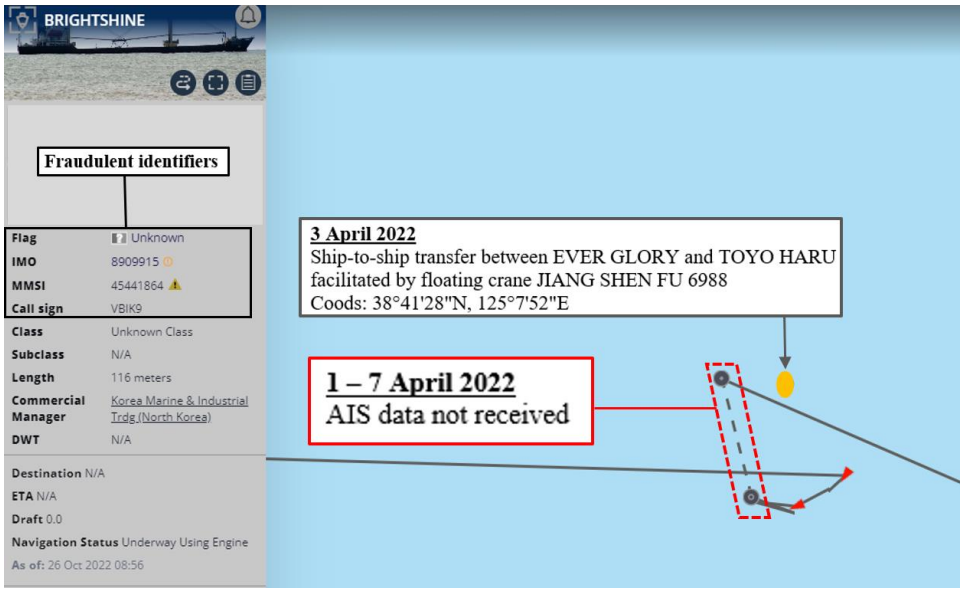
Figure 45-2: Floating crane JIANG SHEN FU 6988 operating in DPRK territorial waters, 2022



Source: Member State; map annotation by the Panel.

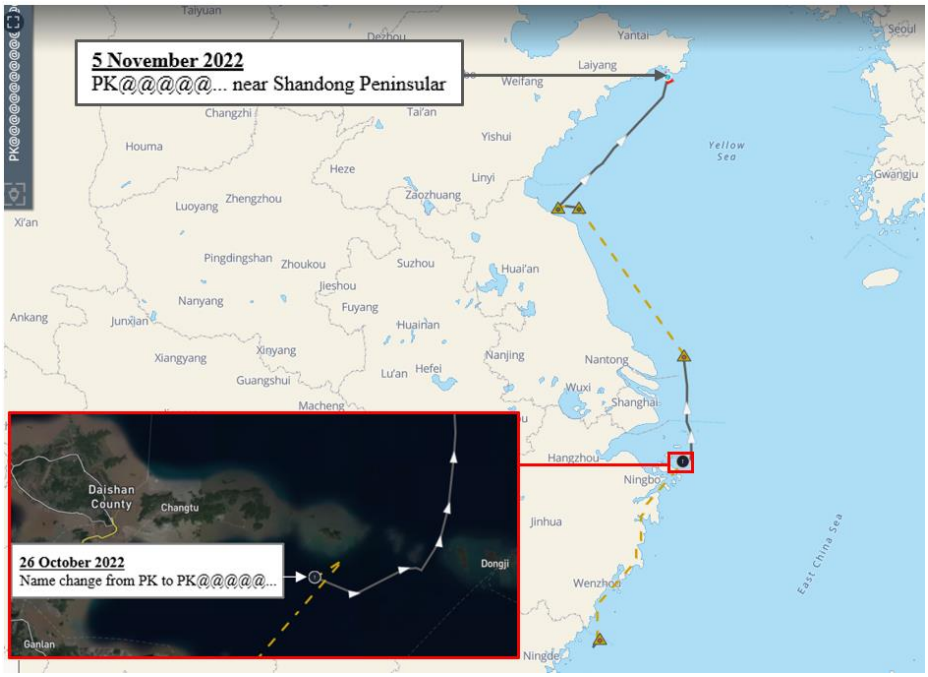
Panel tracking information showed that when EVER GLORY conducted its ship-to-ship transfer on 3 April 2022 in the West Sea Barrage area, a DPRK vessel transmitting fraudulent identifiers as BRIGHTSHINE and PK@@@ was located in the vicinity. The same fraudulent transmissions were recorded in October and November transmitting in Ningbo-Zhoushan waters and near Shidao respectively (figures 45-3 and 45-4). This vessel also transmitted at other Chinese port areas in 2022 where DPRK vessels had been present. EVER GLORY ceased transmitting on its assigned identifiers in 2017.

Figure 45-3: DPRK vessel fraudulently transmitting as 'BRIGHTSHINE' / PK@@@@@ at vicinity where EVER GLORY conducted ship-to-ship transfer with TOYO HARU and JIANG SHEN FU 6988, April 2022



Source: Windward, annotated by the Panel.

Figure 45-4: DPRK vessel fraudulently transmitting as 'PK / PK@@@@@ (MMSI: 45441864) transmitting at Ningbo-Zhoushan and near Shidao, October - November 2022



Source: Windward, annotated by the Panel.

The Panel asked Chinese authorities for confirmation of the vessel's ship registration, dimensions and last known AIS transmission as well as information of the owners / operators / charterers of the floating crane. The Panel was also asked if the individual(s) and / or entity(s) that owned / operated and / or chartered JIANG SHEN FU 6988 also owned other floating cranes that had unaccounted AIS transmissions over a significant period. The Panel has yet to ascertain whether JIANG SHEN FU 6988 has been acquired by the DPRK and transmitted on its old identifiers. However, given the activity and location of the floating crane, it has most likely come under DPRK control.

The Panel notes that Security Council resolutions bans all ship-to-ship transfers with DPRK vessels as well as (new and used) vessel sale to and acquisition by the DPRK, which includes "*ships, boats and floating structures*".

China replied "*China didn't find any evidence that JIANG SHEN FU 6988 was involved in ship-to-ship smuggling. There have been no records of port calls or information declarations in China for EVER GLORY. The Panel should not include the above-mentioned information in the report".*

Source: The Panel.

Annex 46: Export of transportation vehicles to the DPRK

The Panel received satellite imagery from a Member State showed two DPRK-flagged cargo ships, KUM SAN BONG (IMO: 8810384) and KUM SAN BONG 3 (IMO: 8518962), and the China-flagged PENG LU 9 (MMIS: 412454160), all anchored inside Nampo Lockgate in May 2022, laden with trucks and other unidentified items. According to the Member State, these vessels were last observed in Chinese territorial waters prior to their appearance in the DPRK.

DPRK-flagged KUM SAN BONG

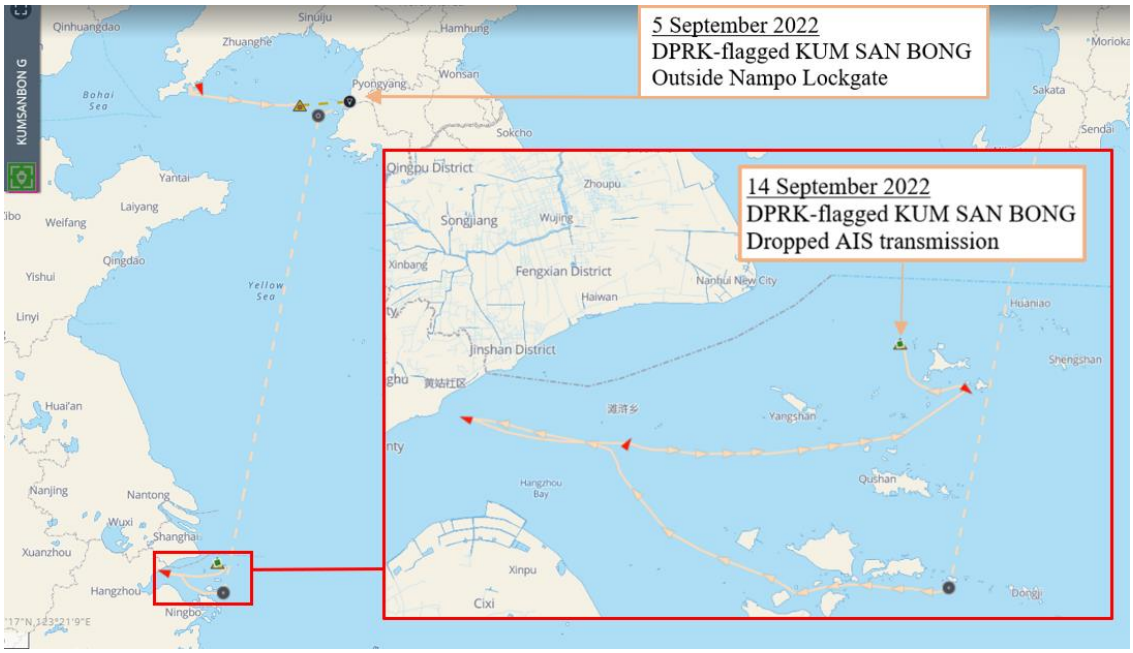
May 2022

The DPRK-flagged KUM SAN BONG was located inside the Nampo Lockgate on 1 May 2022 laden with what was reported to be at least four trucks (figure 46-1). According to a Member State, KUM SAN BONG was at anchor in the Ningbo-Zhoushan area prior to its arrival at Nampo. Panel ship tracking showed the ship traveling dark during this period. KUM SAN BONG has transmitted AIS signal and called at several Chinese port/port areas since then. For instance, on 5 September 2022, KUM SAN BONG transmitted outside the Nampo Lockgate before re-transmitting in Hangzhou Bay waters a week later. (figure 46-2).

Figure 46-1: KUM SAN BONG laden with trucks, with remaining hatch closed, Nampo, 1 May 2022

Source: Member State.

Figure 46-2: DPRK-flagged KUM SAN BONG's voyage, September 2022



Source: Windward, annotated by the Panel.

DPRK-flagged KUM SAN BONG 3

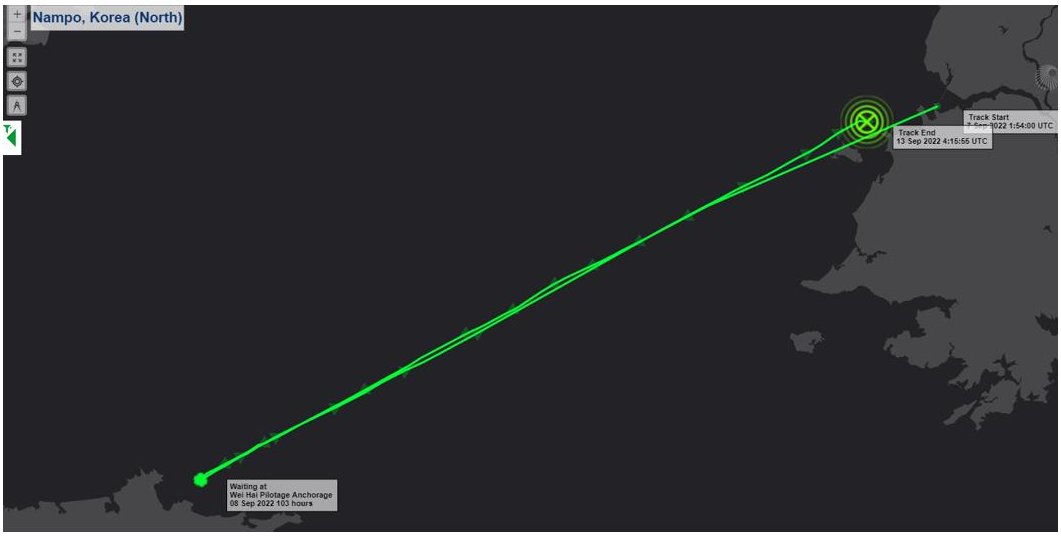
Like KUM SAN BONG, the DPRK-flagged KUM SAN BONG 3 was located inside the Nampo Lockgate in May 2022. It was observed on satellite imagery on 17 May with trucks, with what appeared to be covered holds at either end. A Member State information indicated KUM SAN BONG 3 was likewise at anchor in the Ningbo-Zhoushan area prior to its arrival at Nampo. Panel ship tracking showed the ship traveling dark during this period. Since then, like KUM SAN BONG, the KUM SAN BONG 3 has transmitted AIS signal and called at several Chinese port/port areas.[104] For instance, the vessel was located at Weihai waters on 8 September 2022, a day after having departed Nampo. The vessel returned to DPRK waters by 13 September 2022 (figure 46-4).

[104] AIS tracking on maritime databases.

Figure 46-3: KUM SAN BONG 3 laden with trucks, with unidentified covered items, Nampo, 17 May 2022

Source: Member State.

Figure 46-4: DPRK-flagged KUM SAN BONG 3's voyage, September 2022



Source: S&P Global's Seaweb.

The Panel sought the relevant Chinese authorities' assistance into the trucks and other cargo(es) loaded onto the KUM SAN BONG and KUM SAN BONG 3 prior to the ships' arrival in the DPRK in May 2022. As both vessels have continued to visit Chinese ports and/or port areas since May 2022, the competent Chinese maritime authorities would have information concerning the ships' past voyages.

China replied "*KUM SAN BONG and KUM SAN BONG 3 transported glasses and other livelihood goods in 2022, and trucks were not found in their deliveries. No activities were found by the two vessels in Ningbo-Zhoushan waters".*

Associated entities:

Panel investigations into the history of the vessels' ownership and management indicated the two vessels shared common Hong Kong-incorporated entities, including during and around the times when both vessels were flagged out between DPRK ownerships. Sanctions evaders often set up shell or front companies to layer and mask their connections. The Panel has yet to determine whether the same individuals (or associates) behind the ships previously may have continued to be associated with the export of the suspected trucks / prohibited cargo(es) or involved in its transportation.

China-flagged PENG LU 9

PENG LU 9 was located inside the Nampo Lockgate in May 2022. It was observed on satellite imagery on 16 May, a day earlier than KUM SAN BONG 3, likewise laden with trucks (figure 46-5).

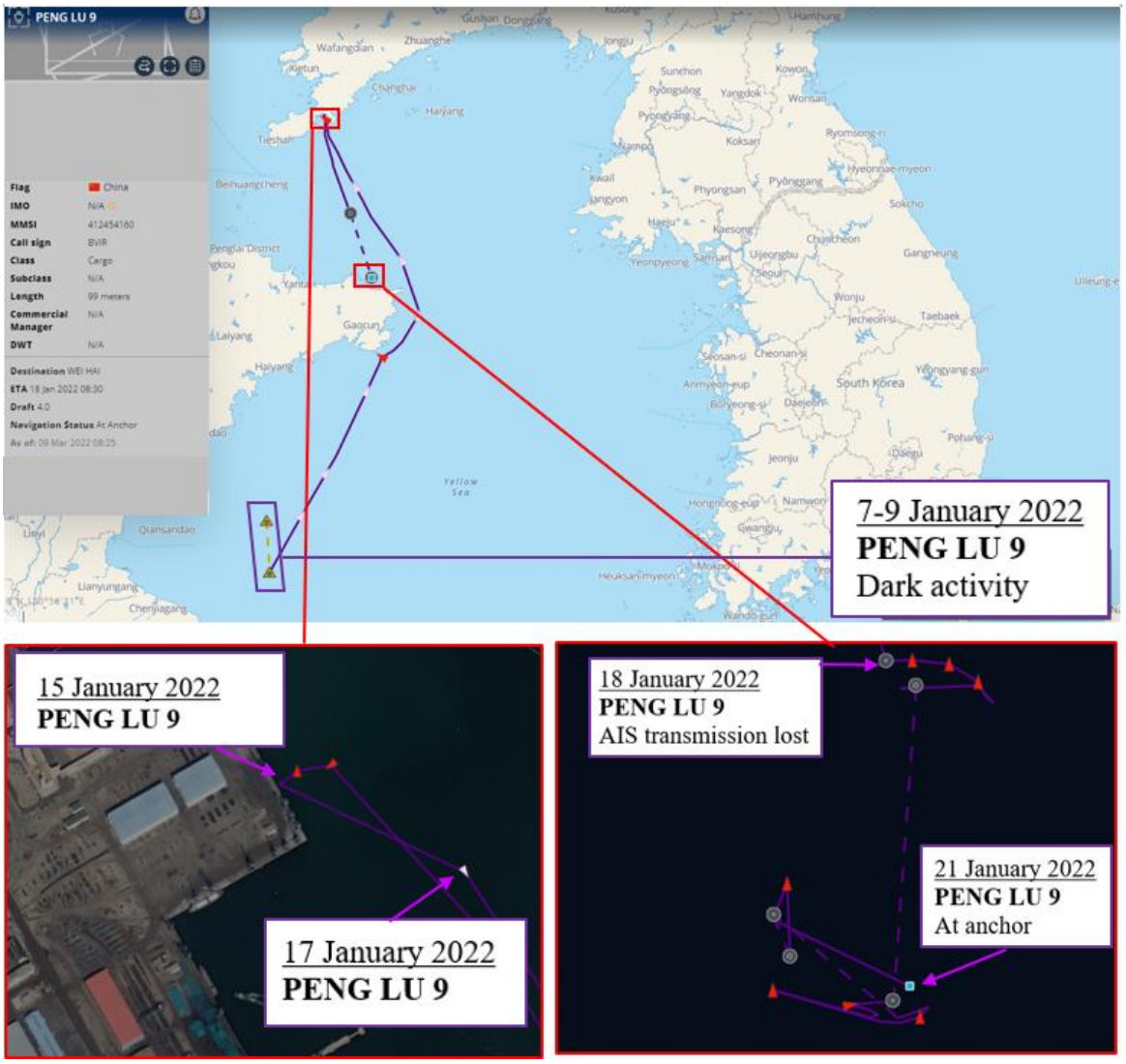
Panel research showed PENG LU 9 transmitting as a 99m long Chinese cargo ship without an IMO number. Prior to its appearance in Nampo, the vessel had sailed on Chinese domestic coastal routes, including Haiyan and Dalian ports in January 2022 (figure 46-6). PENG LU 9 last recorded an AIS transmission at the port anchorage area at Weihai in the same month. The vessel has not transmitted since September 2022.[105]

[105] Based on commercial maritime tracking information as of December 2022.

Figure 46-5: PENG LU 9 laden with trucks and unidentified items, Nampo, 16 May 2022

Source: Member State.

Figure 46-6: PENG LU 9's (MMSI: 412454160) voyage where the vessel last transmitted AIS signal, January 2022



Source: Windward, annotated by the Panel.

The Panel sought information from Chinese authorities concerning PENG LU 9's: ship registration status; voyage and its cargo prior to May 2022; as well as PENG LU 9's ownership management, shipping and customs documentation. Given the similarity of cargo carried onboard, the same timing that KUM SAN BONG, KUM SAN BONG 3 and PENG LU 9 appeared in the DPRK, and lack of AIS transmission on commercial databases of PENG LU 9 since January 2022, the Panel also sought Chinese authorities' information on any link between the three vessels associated with their cargo and their procurement.

China replied *"China didn't find any evidence that PENG LU 9 was involved in the smuggling of trucks*".

Annex 47: Export of DPRK-origin coal via ship-to-ship transfer

The Panel's reports since 2019 have referenced the presence of DPRK vessels exporting their coal cargo via ship-to-ship transfers in Chinese territorial waters, particularly in Ningbo-Zhoushan. These vessels, tracked by the Panel, continue to travel without AIS signal for the most part of their illicit journey to export coal, and resume transmission only at their subsequent stop-overs at Chinese ports surrounding the Bohai Sea *enroute* back home, where, typically, humanitarian cargo is loaded at port.[106] In several instances, DPRK vessels have not transmitted AIS signal at all and information of their illicit activity can only be observed via high resolution satellite imagery.

The DPRK-flagged vessels TAE YANG (IMO: 8306929) (annex 48) and ZAI ZHOU 2 (IMO: 8774047) (annex 49) that had previously exported DPRK-origin coal in Chinese territorial waters continued their illicit activity. These vessels:

- transmitted AIS signals only during their last voyage leg between Chinese ports surrounding the Bohai Sea and at Nampo in 2022;
- dropped AIS signal after both vessels loaded coal at Nampo port, as they sailed dark to export their coal cargo in Ningbo-Zhoushan waters.

The DPRK-flagged ASIA HONOR previously reported as having exported coal at Ningbo-Zhoushan waters on at least two occasions[107] and known to transmit on a fraudulent identity, continued to do so in mid-2022. Details are at annex 50. DPRK-flagged CHOL BONG SAN (IMO: 8713457) likewise exported bagged cargo assessed by a Member State to be coal,[108] in the same waters. Details are at annex 51.

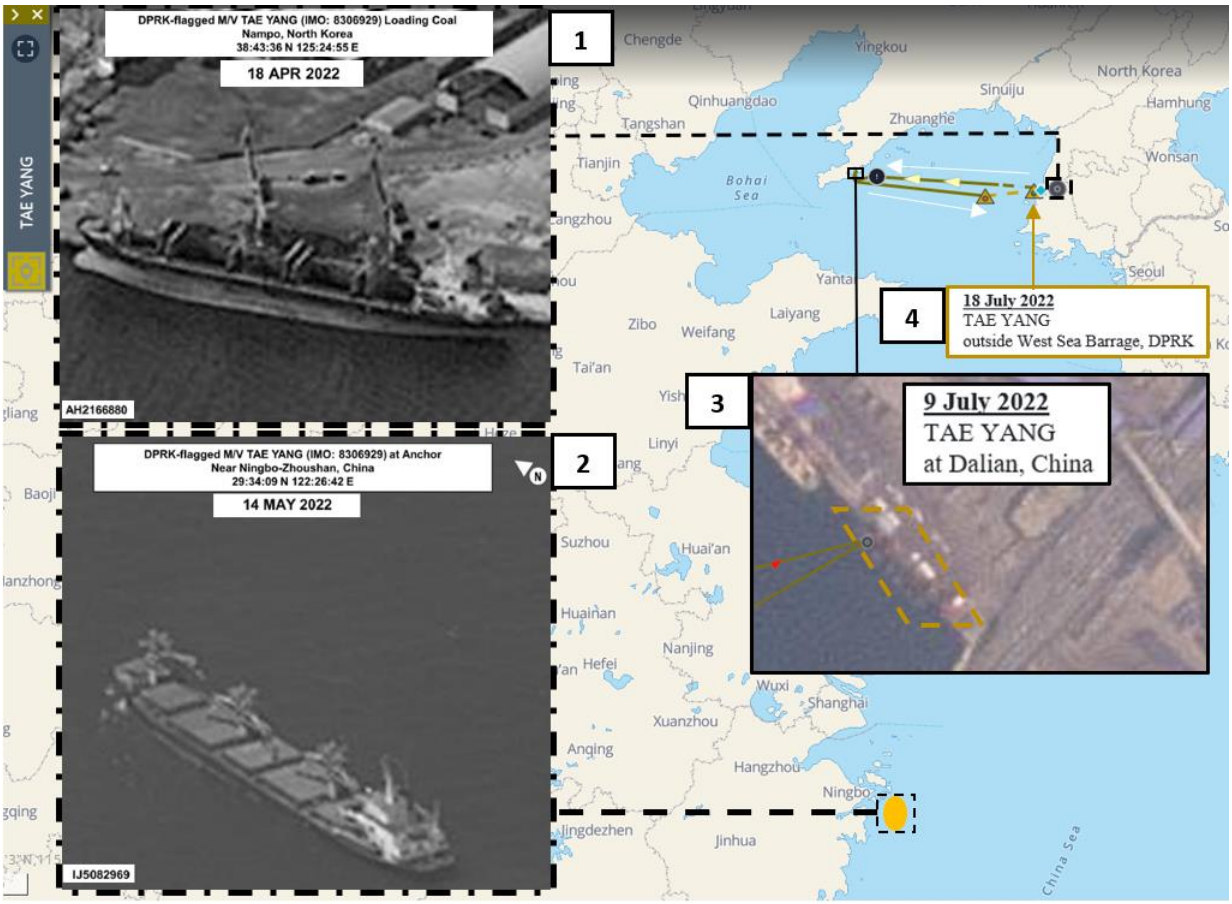
Source: The Panel.

[106] S/2021/777, paras. 100-104 and annex 46.
[107] S/2022/132, paras. 86-87, and S/2021/211, para. 62 and annex 34.
[108] Loaded at Songnim, a known coal-loading terminal in the DPRK.

Annex 48: Voyage of DPRK-flagged vessel TAE YANG (IMO: 8306929) exporting illicit coal

In April 2022, TAE YANG loaded coal at Nampo port and was located at Ningbo-Zhoushan waters by mid-May, traveling without AIS signal. The vessel resumed AIS transmission after eight weeks when it arrived at Dalian port with cargo holds open and empty. AIS was kept on its return journey to Nampo (see figure 48).

Figure 48: DPRK-flagged TAE YANG's voyage, April - July 2022



Source: Windward; (*right*) satellite imagery: Planet Labs, annotated by the Panel; (*left*) satellite imagery: Member State.
*Dotted lines denote no AIS transmissions recorded.

Having illicitly exported coal in an earlier part of their voyage, TAE YANG is subject to paragraph 9 of resolution 2397 (2017) that stipulates the seizure, inspection and impoundment of any vessel at port where there were reasonable grounds of its involvement in sanctioned activities.

The Panel continued to seek the assistance of China on the DPRK vessels' export of coal in Ningbo-Zhoushan waters, including information on cargo offloaded by DPRK vessels through ship-to-ship transfer in those waters, the receiving vessels' identifiers, entities and individuals that own, operate and procure any of the cargo from the DPRK vessels, and the relevant shipping documentation and financial transactions. All the vessels were reported by a Member State to be laden with coal, where they remained for a period of time when in the Ningbo-Zhoushan area.

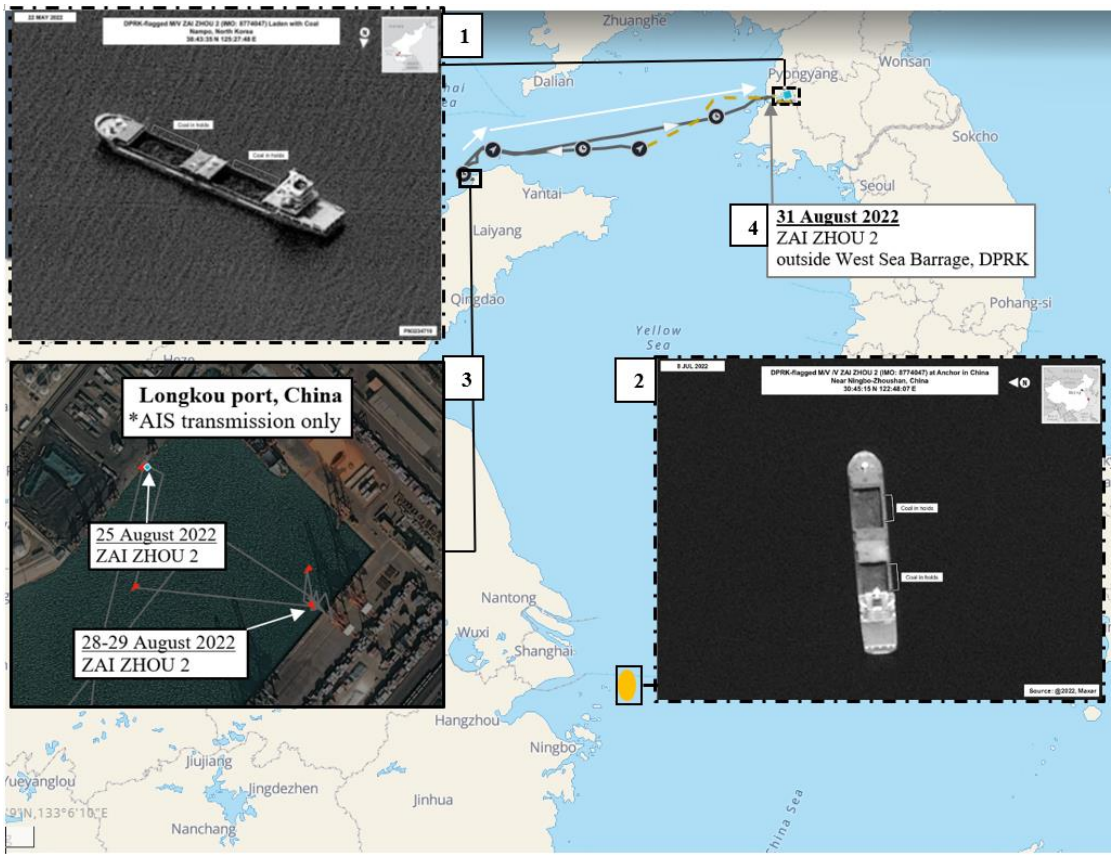
China replied that "*TAE YANG entered Dalian port empty-loaded from Nampo port in July 2022 and left Dalian port loaded with rice, rubber, washing powder, and other livelihood goods in the same month*."

Source: The Panel.

Annex 49: Voyage of DPRK-flagged vessel ZAI ZHOU 2 (IMO: 8306929) exporting illicit coal

In May 2022, the DPRK-flagged ZAI ZHOU 2 loaded coal at Nampo and travelled without AIS signal, reaching Ningbo-Zhoushan waters by July, showing laden coal cargo on satellite imagery. The vessel departed Ningbo-Zhoushan area for Longkou port after off-loading its coal cargo, based on Member State information. ZAI ZHOU 2 transmitted AIS signal only at Longkou port where it loaded bagged cargo for a return trip to Nampo (see figure 49-1).

Figure 49-1: DPRK-flagged ZAI ZHOU 2's (IMO: 8774047) voyage, May - August 2022



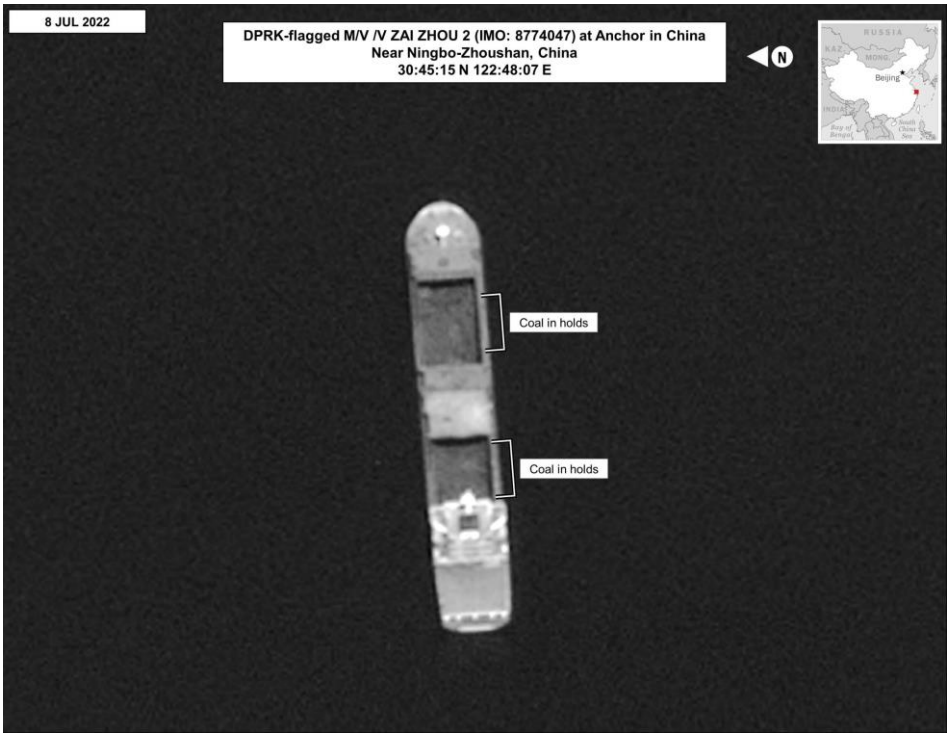
Source: Map and colored satellite imagery (shown only for location purposes and not reflective on actual AIS transmission date): Windward; monochromatic satellite imagery: Member State.

*Dotted lines denote no AIS transmissions recorded.

Figure 49-2: ZAI ZHOU 2 laden with coal, Nampo, 22 May 2022

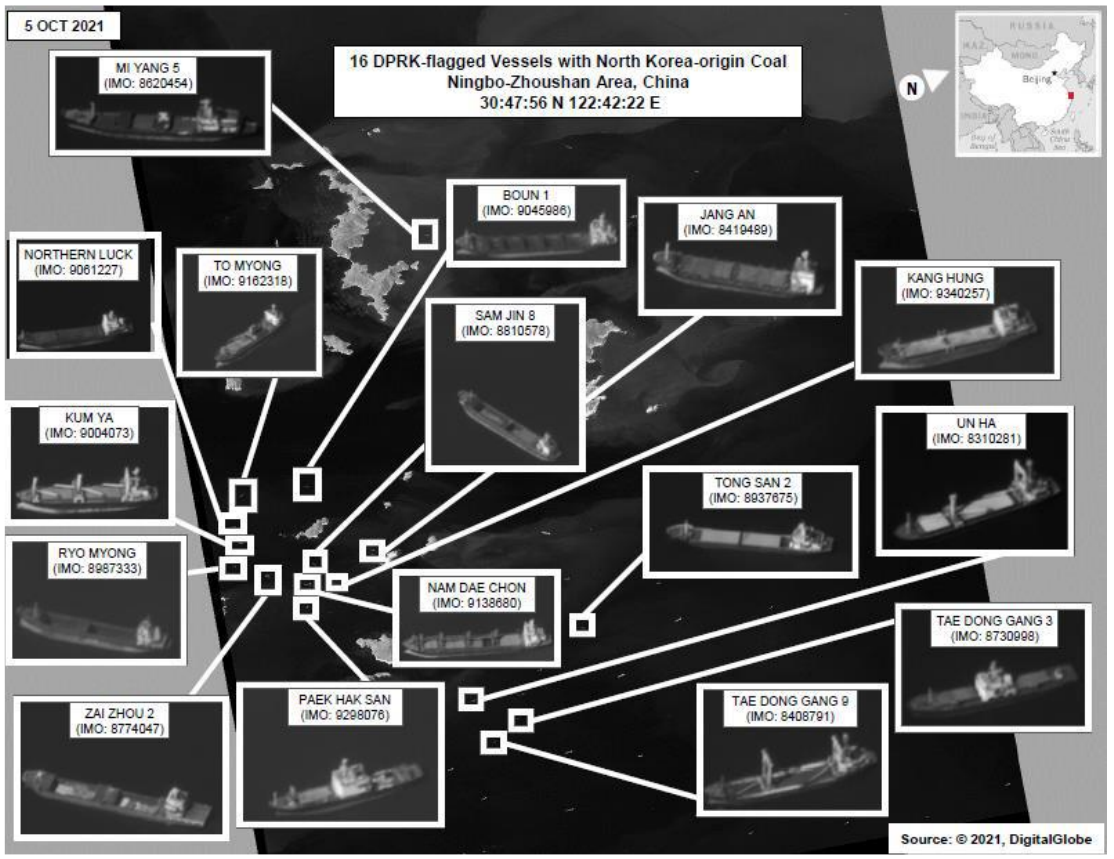
Source: Member State.

Figure 49-3: ZAI ZHOU 2 laden with coal in holds, Ningbo-Zhoushan area, 8 July 2022



Source: Member State

Figure 49-4: ZAI ZHOU 2 exporting DPRK-origin coal in the past, 5 October 2021[109]



Source: Member State.

[109] S/2022/132, paras.83-85 and annex 56.

Having illicitly exported coal in an earlier part of its voyage, ZAI ZHOU 2 is subject to paragraph 9 of resolution 2397 (2017) that stipulates the seizure, inspection and impoundment of any vessel at port where there were reasonable grounds of its involvement in sanctioned activities.

The Panel continued to seek the assistance of China on the DPRK vessels' export of coal in Ningbo-Zhoushan waters, including information on cargo offloaded by DPRK vessels through ship-to-ship transfer in those waters, the receiving vessels' identifiers, entities and individuals that own, operate and procure any of the cargo from the DPRK vessels, and the relevant shipping documentation and financial transactions. All the vessels were reported by a Member State to be laden with coal, where they remained for a period of time when in the Ningbo-Zhoushan area.

China replied "*ZAI ZHOU 2 entered Longkou port empty-loaded from Nampo port in July 2022 and December 2022, and left Longkou port loaded with tires, plastic pellets, furniture, and other groceries in the same months. China found no activities in violation of the DPRK-related Security Council Resolutions by the abovementioned vessels, and they were not found in Ningbo waters*."

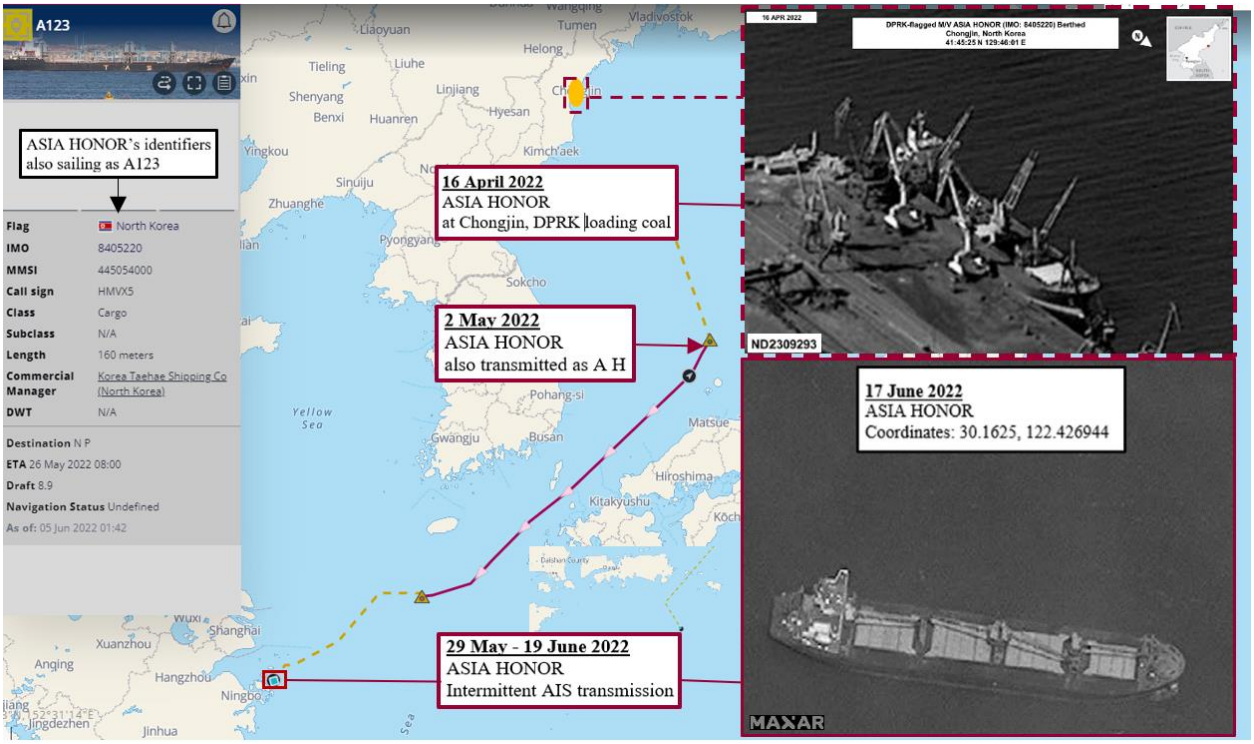
Source: The Panel.

Annex 50: Illicit coal export carried on board DPRK-flagged ASIA HONOR (IMO: 8405220)

Maritime databases showed ASIA HONOR's (IMO: 8405220) transmission on 2 May 2022 as A123 and as A H for the duration of its voyage southwest between the Republic of Korea and Japan. It retransmitted on 29 May 2022 in Ningbo-Zhoushan waters where it also remained for part of August 2022. In April when the ASIA HONOR had not transmitted an AIS signal, it was observed on satellite imagery by a Member State loading coal at Chongjin port, DPRK. It remained laden on 17 August at Ningbo-Zhoushan waters as observed on a commercial satellite imagery platform. By 20 August, it was underway in the Korea Bay, arriving outside Nampo lockgate three days later, unladen (figure 50-1). In 2021 and 2020, the Panel reported ASIA HONOR conducting similar voyages from Chongjin to export its illicit coal. ASIA HONOR had also exported coal on other occasions at least since 2019 (figure 50-2).

Figure 50-1: DPRK-flagged ASIA HONOR's voyage, April – August 2022

April - June 2022



Source: Windward; (*top*) satellite imagery: Member State; (*bottom*) satellite imagery: Maxar Technologies, with annotations by the Panel.

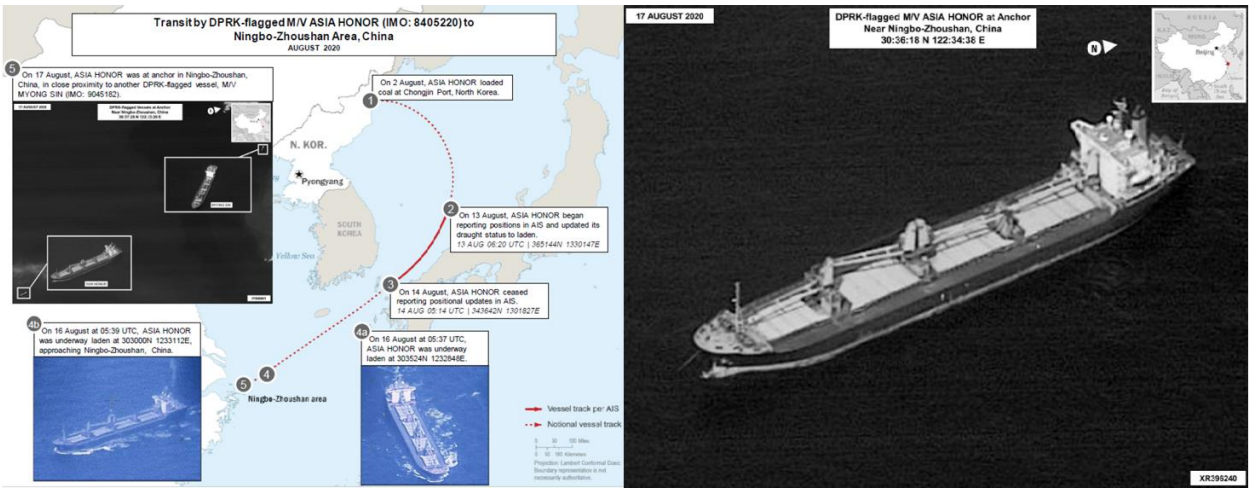
August 2022: Nampo Lockgate, DPRK

Source: Member State.

Figure 50-2: ASIA HONOR'S previous exports of coal

May – June 2021

August 2020[110]



February – March 2019[111]

Source: Member State.

[110] S/2021/211.
[111] S/2019/691.

Associated entities

Panel analysis of the management entities show common association common behind several DPRK-flagged vessels. For instance, ASIA HONOR which was last managed and operated by HongXiang Marine Hong Kong Ltd[112] (hereafter "HongXiang Marine"), an entity sanctioned by the United States Department of the Treasury in February 2018,[113] was also the last known entity (with exception of NEW DAWN) that managed the following vessels before they were flagged under the DPRK in 2018, and where the Panel had since documented their exports of coal to waters in Ningbo-Zhoushan:

(i) FLOURISHING (IMO: 8421315)
(ii) HORIZON STAR (IMO: 9017123)
(iii) NEW DAWN (IMO: 9135494)
(iv) ORIENTAL TREASURE (IMO: 9115028)
(v) TAE DONG MUN nka POLE STAR 1
(vi) PAEK MA (IMO: 9066978)

NEW DAWN was sold by HongXiang Marine to another company, Win Trade Worldwide Ltd (hereafter "Win Trade") in April 2017 based on IMO records. Panel research however indicated that Win Trade was previously listed as the ship owner and register in 2011, indicating possible linkages throughout the various ownership changes recorded. Win Trade was also the listed as registered owner of ASIA HONOR as of 2010 until its flagging by the DPRK in November 2018 (IMO records).

The Panel continued to seek the assistance of China on the DPRK vessels' export of coal in Ningbo-Zhoushan waters, including information on cargo offloaded by DPRK vessels through ship-to-ship transfer in those waters, the receiving vessels' identifiers, entities and individuals that own, operate and procure any of the cargo from the DPRK vessels, and the relevant shipping documentation and financial transactions. All the vessels were reported by a Member State to be laden with coal while they remained for a period of time in the Ningbo-Zhoushan area.

China replied "*There have been no records of port calls or information declarations in China for Vessels ASIA HONOR and FLOURISHING."*

Source: The Panel.

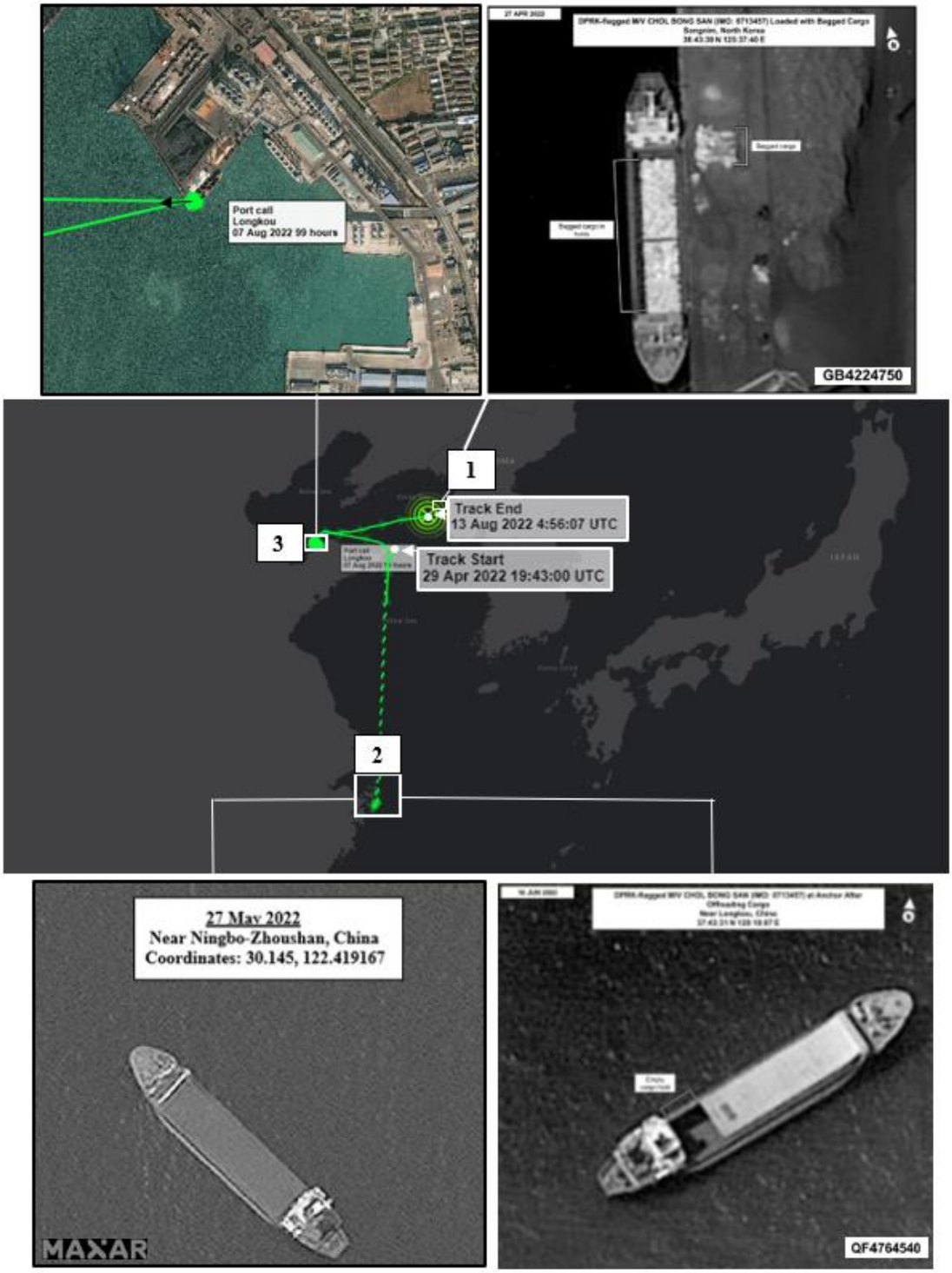
[112] Struck off in June 2018 on the Hong Kong company registry.
[113] https://home.treasury.gov/news/press-releases/sm0297

Annex 51: Coal export carried on board DPRK-flagged CHOL BONG SAN (IMO: 8713457)

Prior to the export of suspected bagged coal cargo in 2022, the Panel's ship tracking showed CHOL BONG SAN as having sailed a similar route in 2020 when it transmitted at Nampo in July 2020 before next transmitting two months later in Ningbo-Zhoushan waters in mid-September 2020. The vessel proceeded to sail northwards towards the Shandong Peninsula where it dropped transmission on 19 September 2020. Its next recorded transmission on a commercial maritime platform was eighteen months later in April 2022 (see figure 51-1).

Figure 51-1: CHOL BONG SAN's voyage, April - August 2022

Songnim - Ningbo-Zhoushan – Longkou - Nampo



Source: S&P Global's Seaweb, Windward; imagery, Google Earth Pro, Member State, Maxar Technologies, annotated by the Panel.

According to the Member State which provided the Panel with satellite imagery, CHOL BONG SAN had loaded bagged cargo assessed likely to be coal, at Songnim,[114] DPRK, before undertaking its coal export to Ningbo-Zhoushan waters between May and June 2022. Panel analysis of the sailing route fits the pattern of other DPRK ships the Panel has tracked that exported coal. CHOL BONG SAN's location in May 2022 also showed it was at the Maji Shan anchorage area, Ningbo-Zhoushan, a previously reported anchorage area where DPRK vessels exporting coal were known to have anchored and exported their coal.[115] The vessel arrived at Ningbo-Zhoushan by 5 May 2022 laden and off-loaded its cargo by mid-June 2022 in the same waters. It was sitting high when it entered Longkou port with its rear cargo hold empty (figure 51-2).

Figure 51-2: CHOL BONG SAN laden, Ningbo-Zhoushan, May-June 2022

Source: Member State.

[114] A known coal-loading terminal in the DPRK.
[115] S/2021/777, para.90, figures XIII and XIV, and annex 44.

CHOL BONG SAN returned to Chinese waters by 19 December 2022 at Quanshandao near Lanshan and was next recorded on maritime database transmitting at Laizhou port south of Longkou by 30 December 2022.

The Panel continued to seek the assistance of China on the DPRK vessels' export of coal in Ningbo-Zhoushan waters, including information on cargo offloaded by DPRK vessels through ship-to-ship transfers in those waters, the receiving vessels' identifiers, entities and individuals that own, operate and procure any of the cargo from the DPRK vessels, and the relevant shipping documentation and financial transactions. All the vessels were reported by a Member State to be laden with coal while they remained for a period of time in the Ningbo-Zhoushan area.

China replied "*CHOL BONG SAN entered Longkou port empty-loaded from Nampo port in June 2022, and left Longkou port loaded with soda ash, plastic film, and other livelihood goods in the same month. No activities in violation of the DPRK-related Security Council Resolutions were found"*.

Source: The Panel.

Annex 52: Vessel disguise – MI RIM 2 as “SONG GWAN” / “SG”

The Panel had observed a vessel ‘SG’ on maritime databases briefly transmitting in the DPRK’s EEZ as well as at the West Sea Barrage in 2021 and 2022. In October 2022, the Panel received information from a Member State providing photographs that showed a cargo vessel with ‘SG’ painted in its hull but transmitting MI RIM 2’s IMO number 9361407. Maritime databases showed the vessel transmitting the name ‘SONG GWAN’ had also previously transmitted as ‘SG’.

The Panel notes that as with other designated vessels, MI RIM 2 had stopped transmitting on its assigned identifiers. MI RIM 2 was designated on 21 June 2017 and subject to an asset freeze as a vessel controlled by the DPRK designated entity, Ocean Maritime Management Company (OMM).

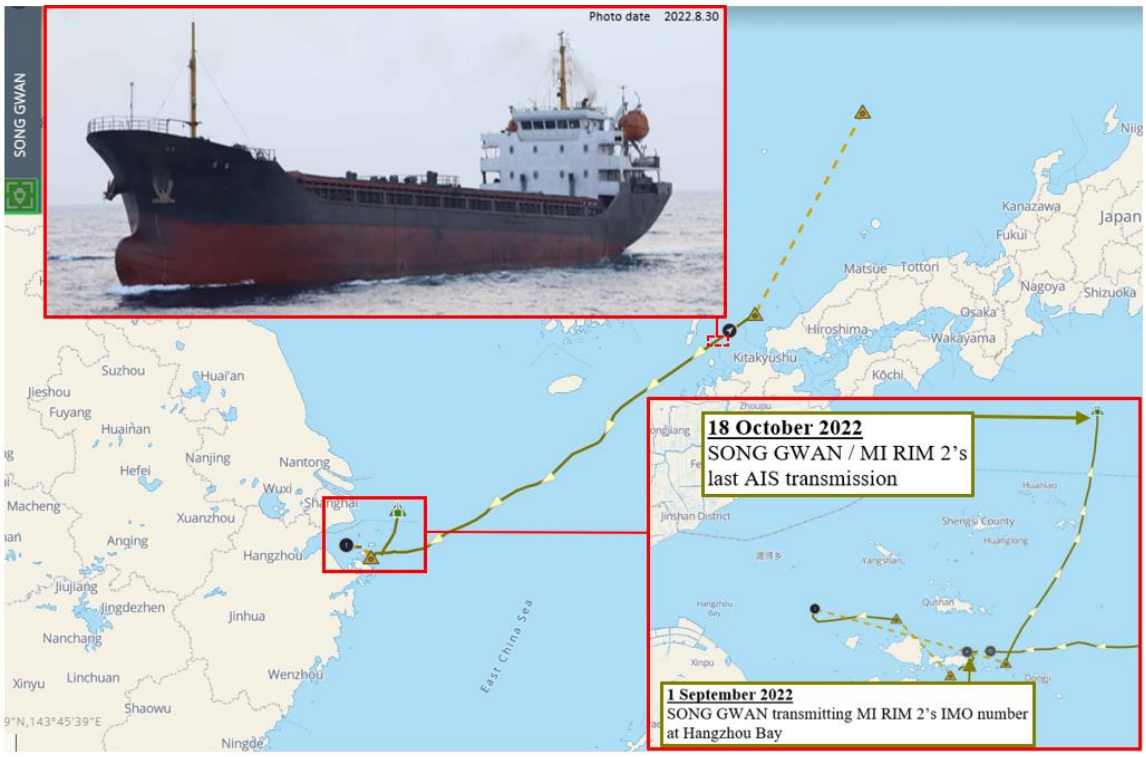
The Panel’s tracking information showed the vessel sailing into Ningbo-Zhoushan waters before dropping transmission for over six weeks. The Panel wrote to China seeking assistance on the activities of ‘SONG GWAN’ along with any ship-to-ship transfers conducted when it was its territorial waters at Ningbo-Zhoushan.

China replied “*There have been no records of port calls and information declarations in China for Vessel MI RIM 2”.*

In December 2022, MI RIM 2, still sailing as SONG GWAN and on a different voyage, dropped transmission for about two weeks before re-transmitting at the same latitude as the Nantong area, China. It sailed back in the same direction towards the DPRK’s east coast, dropping transmission for a day around the same area where it was last photographed in August 2022.

Figure 52: Designated MI RIM 2's voyage sailing as SONG GWAN / SG

August - October 2022



December 2022

Source: Windward, annotated by the Panel; inset photograph, Member State.

Annex 53: Information on a Member State's interview of crew members onboard trawlers fishing in DPRK waters

A Member State provided the Panel with the information below, which includes four interview results with the crew members onboard Chinese trawlers involved in fishing in DPRK waters between June and July 2021.

1) List of vessels

辽丹渔25697 (Liao Dan Yu 25697)

昌海渔2116 (Chang Hai Yu 2116)

辽丹渔36013 (Liao Dan Yu 36013)

辽丹渔23365 (Liao Dan Yu 23365)

2) Interview results (Member State's translation)

辽丹渔25697 (Liao Dan Yu 25697)

Interview result	
Date	24-Jun-2021
Location	34°44.9'N 129°12.7'E
Name of the boat	辽丹渔25697 (Liao Dan Yu 25697) (displayed on both sides of the bridge, explained during hearing) (The boat's name on the bow has been concealed.)
Nationality	China (holding ROK flag)
Tonnage of the boat	269 tonnes (as answered)
Home port	南排河(Port of registry indicated on stern) 丹东(Dandong, as answered)
Port of departure	丹东(Dandong)
Date of departure	20-Apr-2021
Date of return	27-Jun-2021 or 28-Jun-2021
AIS information /MMSI number	-
Type of fishing	Trawl (Two large ships pulling bottom trawl)
Fishing grounds	Waters of North Pacific (around N50°10.0' E148°12.0')
Duration of fishing	-

Number of the crew	13 (all Chinese)
Company name	丹东北几海有限公司(Dan Dong Bei Ji Hai Co.)
Number of consorts	4 (Two of the four consorts were captured by North Korea.)
Operation in North Korean waters	We stayed in North Korean waters, but did not operate there.
Permit in North Korean waters	No
Method of obtaining permit	-
Location and price of permit	-
Purchasing fishing rights from North Korea is a violation of UN resolutions.	I am well aware of it.
Other answers from the boat	Q: Are you coming from North Korean waters? A: We are returning to China from North Pacific Ocean. On the way, we were waiting in the sea area of N38°37.0′ E132°32.0′as instructed by the company. On or about June 10, two of our colleague ships were intercepted and captured by a North Korean official vessel while sailing in North Korean waters. The reason for the seizure was that the vessels were suspected of carrying the novel coronavirus into North Korean waters. The colleague ships are still detained and have not been heard from. As a result of this incident, we have been on standby at the above location as instructed by the company. Q: Why are you returning to China? A: There is a crew member who has gone mentally ill, so we are bringing him home. When we asked a question about the North Korean waters, he raised the topic of the Pacific waters and dodged the answer to our question.

Source: Member State.

昌海渔2116 (Chang Hai Yu 2116)

Interview result	
Date	25-Jun-2021
Location	34°46.2'N 129°20.2'E
Name of the boat	昌海渔2116 (Chang Hai Yu 2116)(as answered) (The ship's name displayed on the bow:●●●●●307)
Nationality	China
Tonnage of the boat	48 tonnes (as answered)
Home port	羊口 海口(海南省)(Haikou,Hainan)(as answered)
Port of departure	海口(Haikou)
Date of departure	6-May-2021
Date of return	The ship will return to port as it is not possible to operate in Russian or North Korean waters. The scheduled return date is unknown.
AIS information /MMSI number	-
Type of fishing	Trawl (Two large ships pulling bottom trawl)
Fishing grounds	waters of Russia (around N42°02' E131°36') or waters of North Korea
Duration of fishing	May to November or December, but there is no specific period.
Number of the crew	14 (all Chinese)
Company name	(Private ownership)
Number of consorts	1
Operation in North Korean waters	No
Permit in North Korean waters	No
Method of obtaining permit	Details unknown, but obtained through an intermediary.
Location and price of permit	-
Purchasing fishing rights from North Korea is a violation of UN resolutions.	I don't know.

Other answers from the boat	Q: Why are you returning to China? A: The price of fishing permits in North Korean and Russian waters has skyrocketed, and because of the low catch, it is unprofitable. Last year the price of a fishing permit in North Korean waters was 700,000-800,000 yuan, but this year the price has risen to 3 million yuan. I' ve heard that the price for a fishing permit in Russian waters this year is 1.7 million yuan. Q: Why is there a difference between the name of the ship on the hull and the name of the ship we heard? A: The number 307 on the hull is the number given to us by the intermediary. Q: How can you obtain a fishing permit for North Korean waters? A: Through the radio, the intermediary tells us the price in Chinese, and if you negotiate and agree with the price, we transfer the amount in Renminbi and then the permit will be issued. There are no paper permits.

Source: Member State.

辽丹渔36013 (Liao Dan Yu 36013)

Interview result	
Date	18-July-2021
Location	38°29.8'N 132°11.0'E
Name of the boat	辽丹渔36013 (Liao Dan Yu 36013)
Nationality	China (The Chinese flag was flown on the bow of the ship.)
Tonnage of the boat	100 tonnes (as answered), Presumption: 200 tonnes
Home port	南排河(Port of registry indicated on stern) 丹东(Dandong, as answered)
Port of departure	丹东(Dandong)
Date of departure	4-Jun-2021
Date of return	Unknown
AIS information /MMSI number	-
Type of fishing	Trawl (Two large ships pulling bottom trawl)
Fishing grounds	waters of North Korea
Duration of fishing	Scheduled from receipt of permission until the end of December
Number of the crew	13 (all Chinese)
Company name	(Private management)
Number of consorts	Our consort is on their way to pick up supplies.
Other answers from the boat	Q: Do you have a Permit to operate in North Korean waters? A: No, we are drifting to get one, will get one in a week Q: Is there a quota for fishing permits? A: No limit. Q: Where do you receive the permits? A: Not sure. Q: Are the surrounding Chinese fishing boats also waiting for permits? A: I don't know about the other boats.

Source: Member State.

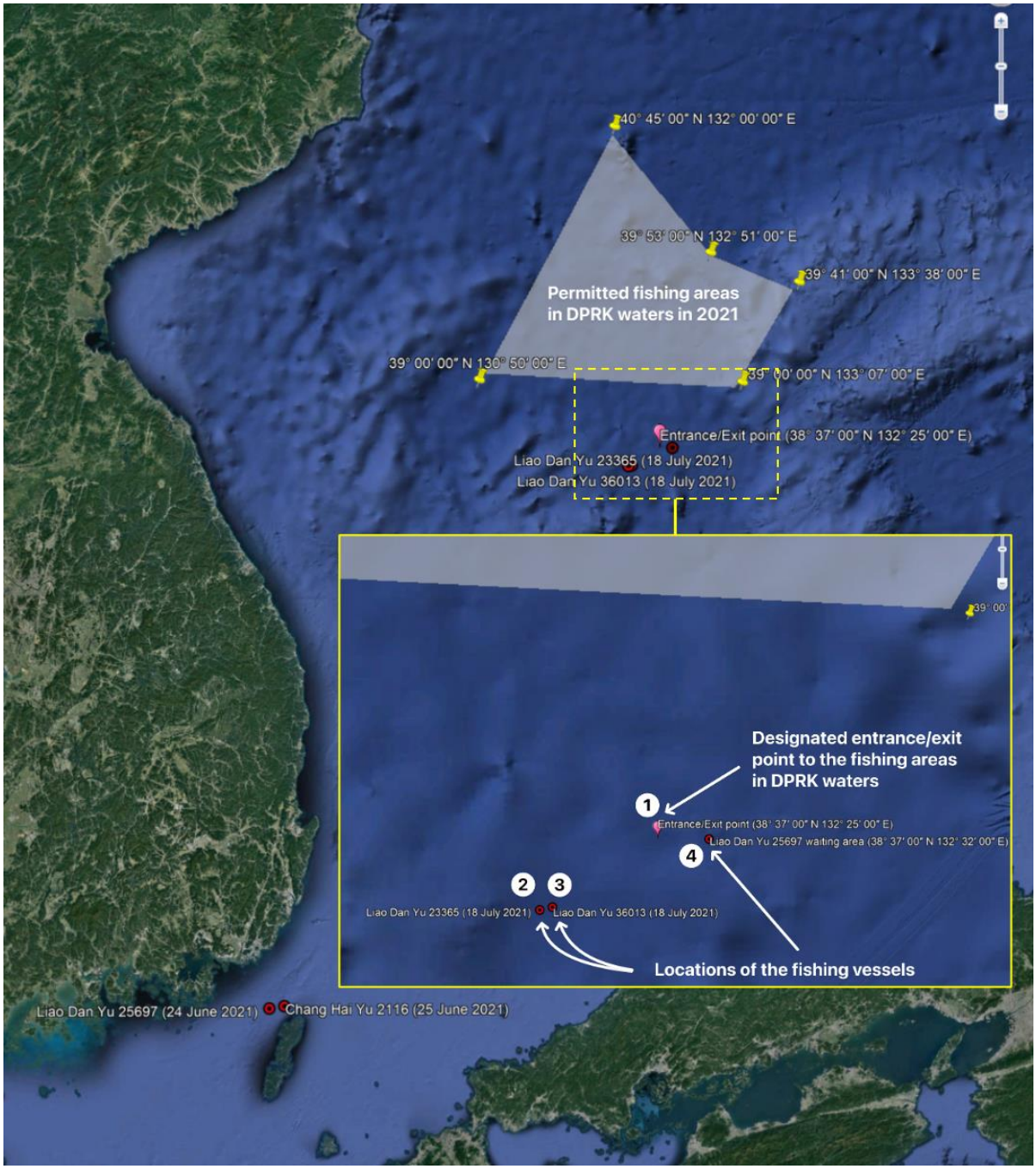
辽丹渔23365 (Liao Dan Yu 23365)

Interview result	
Date	18-July-2021
Location	38°29.5'N 132°9.3'E
Name of the boat	辽丹渔23365 (Liao Dan Yu 23365)
Nationality	China
Tonnage of the boat	90 tonnes (as answered), Presumption: 200 tonnes
Home port	丹东(Dandong, as answered) 皂埠(Port of registry indicated on stern)
Port of departure	丹东(Dandong)
Date of departure	20-Apr-2021
Date of return	Unknown
AIS information /MMSI number	-
Type of fishing	Trawl (Two large ships pulling bottom trawl)
Fishing grounds	Unknown
Duration of fishing	From receipt of permission until the end of December
Number of the crew	14 (all Chinese)
Company name	-
Reason for drifting	Waiting for North Korean permits to be issued
Display of the National Flag	Chinese flag was flown on the bow of the ship.
Other answers from the boat	Q: Is there a limit on the fishing quota for permits? A: There is a time limit of until the end of December, but there is no limit on the amount or species of fish caught. Q: Where do you receive the permits? A: I don't know the details, but it is in the north. Q: When are the permits scheduled to be issued? A: I heard that we will get it in three days. Q:From whom did you hear that? A: I heard it from my family. Q: Are the Chinese fishing boats around us also waiting for permits? A: Probably so.

Source: Member State.

3) Permitted fishing areas in the DPRK waters in 2021 and vessels locations

The Panel notes that permitted fishing areas in the DPRK waters in 2021 are white-colored area (see below). According to another Member State, the designated entrance/exit point to the permitted fishing areas of the DPRK in 2021 is ❶, the locations of the fishing vessels interviews by Member State were ❷, ❸ and ❹.



Source: Member States and Google Earth Pro.

Annex 54: Russian Federation's reply to the Panel's enquiry on trade with the DPRK

В связи с запросом группы экспертов ОС. сообщаем следующее.

Российские таможенные органы осуществляют надлежащий контроль за применением ограничительных мер, установленных резолюциями СБ. Согласно сведениям из таможенных информационных ресурсов, в 2022 году из России в КНДР поставлялись живые животные (лошади), пищевые продукты, мука, фармацевтическая продукция. Из Китая поставлялись музыкальные инструменты, страной происхождения которых является КНДР.

(unofficial translation)

In connection with the request of the Panel of Experts, we report the following.

The Russian customs authorities exercise appropriate control over the application of restrictive measures established by the Security Council resolutions. According to information provided from customs information resources, in 2022, live animals (horses), food products, flour, pharmaceutical products were delivered from Russia to the DPRK. Musical instruments, whose country of origin was the DPRK, were delivered from China.

Annex 55: Additional replies from Member States on trade statistics in the Panel's previous report (S/2022/668, annex 45)

Zambia

Permanent Mission of The Republic of Zambia To The United Nations
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E-mail: zambia@un.int

Ref No. ZM/NY/Q/104/7/4

No. 110/2022

The Permanent Mission of the Republic of Zambia to the United Nations presents its compliments to the United Nations Security Council Panel of Experts Established Pursuant to Resolution 1874 (2009) and has the honour to refer to Reports dated between January and September, 2021 and also Report dated 3 June, 2022, respectively, in which it was reported by the Panel of Experts that Zambia had engaged in trade with the DPRK.

The Permanent Mission of Zambia wishes to inform you that the Zambia Revenue Authority (ZRA) has advised that the reported trade between Zambia and the DPRK is inaccurate. The reasons for the inaccuracy arose from wrongful data capture. Owing to this realization, the ZRA has since implemented a system-based control to ensure that the North Korea country code is not wrongly used for future transactions. The Panel of Experts may wish to refer to the attached documents, for ease of reference.

The Permanent Mission of the Republic of Zambia to the United Nations avails itself of this opportunity to renew to the United Nations Security Council Panel of Experts Established Pursuant to Resolution 1874 (2009), the assurances of its highest consideration.

22nd August, 2022, New York, NY

[redacted]
Coordinator of the Panel of Experts established
Pursuant to Security Council Resolution 1874 (2009)
United Nations Headquarters
New York, NY 10017

[redacted]

MISSION OF ZAMBIA TO THE UNITED NATIONS • NEW YORK •

Honduras

MISIÓN PERMANENTE DE HONDURAS ANTE
NACIONES UNIDAS EN NUEVA YORK
GOBIERNO DE LA REPÚBLICA

Secretaría de Relaciones Exteriores y Cooperación Internacional
Gobierno de la República

REF: MHONU/PE1874CS/099/2022

La Misión Permanente de Honduras ante Naciones Unidas saluda atentamente al Panel de Expertos establecido de conformidad a la resolución 1874 (2009) del Consejo de Seguridad y tiene el honor de referirse a la comunicación S/AC.49/2022/PE/OC.160, mediante la cual se solicita respuesta del Estado de Honduras sobre ciertos puntos sobre la implementación de las medidas impuestas a la República Popular Democrática de Corea (RPDC), por resoluciones del Consejo de Seguridad, sobre incidentes de incumplimiento a las mismas.

Al respecto, en seguimiento a la Nota No. REF: MHONU/PE1874CS/060/202 de fecha 2 de agosto de 2022, la Misión Permanente de Honduras ante Naciones Unidas tiene a bien remitir al Panel de Expertos un informe elaborado por las instancias nacionales competentes, conforme a los ítems enumerados en la tabla 1 de la Carta S/AC.49/2022/PE/OC.160. Es importante destacar, que la Secretaría de Relaciones Exteriores y Cooperación Internacional de Honduras está coordinando esfuerzos con las instituciones nacionales pertinentes para el cumplimiento efectivo de las resoluciones emitidas por el Consejo de Seguridad de las Naciones Unidas.

El Estado de Honduras reitera su compromiso y cooperación con el Panel de Expertos, asimismo desea que la información adjunta sea manejada con total confidencialidad, por lo que se solicita que sea del uso exclusivo del Consejo de Seguridad de las Naciones Unidas y el Comité 1718.

En cuanto a la presentación del Informe Nacional con las medidas de aplicación de las resoluciones del Consejo de Seguridad de las Naciones Unidas sobre la República Popular Democrática de Corea, se informa que la Secretaría de Relaciones Exteriores y Cooperación Internacional de Honduras está en proceso de recabo de información, una vez este compilado se remitirá por esta vía.

La Misión Permanente de Honduras ante Naciones Unidas aprovecha la oportunidad para expresar al Panel de Expertos establecido de conformidad a la resolución 1874 (2009) del Consejo de Seguridad, las seguridades de su más alta y distinguida consideración.

PERMANENT MISSION OF HONDURAS
UNITED NATIONS NEW YORK

Nueva York, 18 de octubre de 2022

Al
Panel de Expertos
establecido de conformidad a la resolución 1874 (2009)
Consejo de Seguridad
Naciones Unidas
Nueva York, Nueva York

Secretaría de Relaciones Exteriores y Cooperación Internacional
Gobierno de la República

MUY IMPORTANTE

HONDURAS
GOBIERNO DE LA REPÚBLICA

Respuesta del Estado de Honduras a la Carta S/A.49/2022/PE/OC.160 de fecha 23 de junio de 2022

Conforme a los ítems enumerados en la Tabla 1 de la Carta S/A.49/2022/PE/OC.160 de fecha 23 de junio de 2022, el Estado de Honduras brinda respuesta a los puntos específicos:

1. La Administración Aduanera de Honduras registró tres (3) declaraciones de mercancías de productos pertenecientes al capítulo 72 del Arancel Centroamericano de Importación, con origen de la República Popular Democrática de Corea y con procedencia de El Salvador y México, con un valor FOB total declarado de USD $47,626.25 y declaradas en las posiciones arancelarias: 7210.61.10.00.01 (El Salvador) y 7216.33.00.00.00 (México), en el período comprendido de octubre 2021 a marzo 2022;

2. La Administración Aduanera de Honduras realizó la validación de los controles aplicados a las importaciones de las mercancías proveniente de la República Popular Democrática de Corea, determinando que no se aplicó el control de rigor para las importaciones proveniente de la República Popular Democrática de Corea debido a que en la DISPOSICIÓN ADMINISTRATIVA ADUANAS-DNOA-91-2020 no se encuentra incluido las mercancías del capítulo 72: FUNDICIÓN, HIERRO Y ACERO del Arancel Centroamericano de Importación;

3. La Administración Aduanera de Honduras de forma inmediata procedió a lo siguiente:
   a) Revisión y actualización de la DISPOSICIÓN ADMINISTRATIVA ADUANAS-DNOA-91-2020, a fin de incluir las medidas sectoriales contenidas en la Resolución 2371(2017) y las demás resoluciones del Consejo de Seguridad de las Naciones Unidas sobre la República Popular Democrática de Corea, tomando en cuenta los cambios realizados mediante la DISPOSICIÓN ADMINISTRATIVA NO. ADUANAS-DNOA-010-2022 (RESOLUCIÓN NO. 450-2021 (COMIECO-EX) Y TABLAS DE CORRELACIÓN DE SEXTA A SEPTIMA ENMIENDA)

Bulevar Kuwait, contiguo a la
Corte Suprema de Justicia (CSJ),
Tegucigalpa, Honduras.
Tel.: (504) 2236-0200/0300

www.sreci.hn

Secretaría de Relaciones Exteriores y Cooperación Internacional
Gobierno de la República

HONDURAS
GOBIERNO DE LA REPÚBLICA

b) Actualización de la medida de control en el sistema informático – Módulo de Gestión de Riesgo – de la Administración Aduanera de Honduras, a fin de garantizar la correcta aplicación de las Resoluciones emitidas por el Consejo de Seguridad de las Naciones Unidas sobre la República Popular Democrática de Corea
c) Intercambio de comunicación con la Dirección General de Aduanas de la República de El Salvador con el fin de obtener las Declaraciones de Mercancías de Exportación de los productos nacionalizados en la Aduana El Poy, y así poder cotejar la información declarada en El Salvador con la declarada en Honduras.

Se comunica al Panel de Expertos que la Secretaría de Relaciones Exteriores y Cooperación Internacional de Honduras está coordinando esfuerzos con las Instituciones Nacionales pertinentes para el cumplimiento efectivo de las resoluciones emitidas por el Consejo de Seguridad de las Naciones Unidas.

El Estado de Honduras reitera su compromiso y cooperación con el Panel de Expertos, asimismo desea que la información previamente transmitida sea manejada con total confidencialidad, por lo que se solicita que sea del uso exclusivo del Consejo de Seguridad de las Naciones Unidas y el Comité 1718.-

Respecto a la presentación del Informe Nacional con las medidas de aplicación de las resoluciones del Consejo de Seguridad de las Naciones Unida sobre la República Popular Democrática de Corea, la Secretaría de Relaciones Exteriores y Cooperación Internacional de Honduras está en proceso de recabo de información, una vez este compilado se remitirá por esta vía.

Bulevar Kuwait, contiguo a la
Corte Suprema de Justicia (CSJ),
Tegucigalpa, Honduras.
Tel.: (504) 2236-0200/0300

www.sreci.hn

Translated from Spanish

Very important

Republic of Honduras

Ministry of Foreign Affairs and International Cooperation

Response of the Government of Honduras to letter S/A.49/2022/PE/OC.160 dated 23 June 2022

The Government of Honduras would like to provide the following response to specific points included in table 1 of letter S/A.49/2022/PE/OC.160 dated 23 June 2022:

1. The Customs Administration of Honduras recorded three declarations of goods falling under chapter 72 of the Central American Import Tariff with the Democratic People's Republic of Korea as the country of origin and El Salvador and Mexico as the countries of provenance, with a total declared FOB value of 47,626.25 USD and declared under Harmonized System (HS) codes 7210.61.10.00.01 (El Salvador) and 7216.33.00.00.00 (Mexico), for the period from October 2021 to March 2022.

2. The Customs Administration of Honduras validated the controls applied to the imports of goods originating from the Democratic People's Republic of Korea, determining that the strict control did not apply for the imports from the Democratic People's Republic of Korea because goods under chapter 72 of the Central American Import Tariff (foundry, iron and steel) are not included in customs administrative decision DNOA-91-2020.

3. The Customs Administration of Honduras immediately took the following measures:

(a) Revised and updated customs administrative decision DNOA-91-2020 to include the sectoral measures contained in resolution 2371(2017) and the other Security Council resolutions on the Democratic People's Republic of Korea, taking into consideration the changes introduced through customs administrative decision DNOA-010-2022 (Decision No. 450-2021 (COMIECO-EX) and correlation tables six to seven amended).

(b) Updated the control measure in the risk management module of the computer system of the Customs Administration of Honduras, in order to ensure the proper implementation of the Security Council resolutions on the Democratic People's Republic of Korea.

(c) Communicated with the General Directorate of Customs of the Republic of El Salvador in order to obtain the declaration of export goods for the products nationalized at the El Poy Customs, and thus to be able to compare the information declared in El Salvador with that declared in Honduras.

The Government of Honduras would like to inform the Panel of Experts that the Ministry of Foreign Affairs and International Cooperation of Honduras is coordinating efforts with the relevant national institutions for the effective implementation of the Security Council resolutions.

The Government of Honduras reiterates its commitment and cooperation with the Panel of Experts and its desire that the information previously transmitted be handled with total confidentiality, and therefore requests that such information be used exclusively by the Security Council and the Security Council Committee established pursuant to resolution 1718 (2006).

With regard to the presentation of the national report on measures taken to implement the Security Council resolutions on the Democratic People's Republic of Korea, the Ministry of Foreign Affairs and International Cooperation of Honduras is in the process of gathering information; once the information is compiled, it will be submitted through this channel.

Annex 56: List of HS Codes the Panel applies to monitor the sectoral ban

Below is the list of HS codes assigned for each category of goods under sectoral ban by relevant UN Security Council resolutions. This list supersedes S/2018/171, annex 4, as amended by S/2018/171/Corr.1. This list does not include items banned by previous resolutions such as arms embargo, dual-use items and luxury goods. See https://www.un.org/securitycouncil/sanctions/1718/prohibited-items for the complete list of prohibited goods.

a. Items prohibited from being exported to the DPRK

Item	HS Codes	Description	Resolutions
Condensates and natural gas liquids	**2709**	Oils; petroleum oils and oils obtained from bituminous minerals	Para. 13 of 2375 (2017)
	2711	Petroleum gases and other gaseous hydrocarbons	
Industrial machinery	**84**	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	Para. 7 of 2397 (2017)
	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers, parts and accessories of such articles	
Transportation vehicles[116]	**86**	Railway, tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signaling equipment of all kinds	Para. 7 of 2397 (2017)
	87	Vehicles; other than railway or tramway rolling stock, and parts and accessories thereof	
	88	Aircraft, spacecraft and parts thereof [117]	
	89	Ships, boats and floating structures	
Iron, steel and other metals	**72-83**		Para. 7 of 2397 (2017)
	72	Iron and steel	
	73	Articles of iron or steel	
	74	Copper and articles thereof	
	75	Nickel and articles thereof	
	76	Aluminum and articles thereof	
	78	Lead and articles thereof	
	79	Zinc and articles thereof	
	80	Tin and articles thereof	
	81	Other base metals; cermets; articles thereof	
	82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	
	83	Miscellaneous articles of base metal	

[116] Pursuant to paragraph 30 of resolution 2321 (2016) and paragraph 14 of resolution 2397 (2017), States shall prevent the direct or indirect supply, sale or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their territories, of new helicopters, new and used vessels, except as approved in advance by the Committee on a case-by-case basis.

[117] Shall not apply with respect to the provision of spare parts needed to maintain the safe operation of DPRK commercial civilian passenger aircraft (currently consisting of the following aircraft models and types: An-24R/RV, An-148-100B, Il-18D, Il-62M, Tu-134B-3, Tu-154B, Tu-204-100B, and Tu-204-300).

b. Items prohibited from being imported from the DPRK

Item	HS Codes	Description	Resolutions
Coal	**2701**	Coal; briquettes, ovoids and similar solid fuels manufactured from coal	Para. 8 of 2371 (2017)
Iron Ore	**2601**	Iron ores and concentrates, including roasted iron pyrites	
Iron	**72**	Iron and steel (**7201-7229**)	
Iron and Steel products	**73**	Articles of Iron and steel (**7301-7326)**	
Gold	**261690**	Gold ores and concentrates	Para. 30 of 2270 (2016)
	7108	Gold (incl. put plated), unwrought, semi-manufactured forms or powder	
	710811	Gold powder, unwrought	
	710812	Gold in other unwrought forms	
	710813	Gold in other semi-manufactured forms	
	710820	Monetary gold	
Titanium	**2614**	Titanium ores and concentrates	
Vanadium	**2615**	Vanadium ores and concentrates	
Rare Earth Minerals	**2612**	Uranium or thorium ores and concentrates [**261210** and **261220**]	
	2617	Ores and concentrates, [Nesoi code **261790** - Other Ores and Concentrates]	
	2805	Alkali metals etc., rare-earth metals etc., mercury	
	2844	Radioactive chemical elements and isotopes etc.	
Copper	**74**	Copper and articles thereof (**7401-7419**)	Para. 28 of 2321 (2016)
	2603	Copper ores and concentrates	
Zinc	**79**	Zinc and articles thereof (**7901-7907**)	
	2608	Zinc ores and concentrates	
Nickel	**75**	Nickel and articles thereof (**7501-7508)**	
	2604	Nickel ores and concentrates	
Silver	**2616100** **7106, 7107**	Silver ores and concentrates Silver unwrought or semi manufactured forms, or in powdered forms; base metals clad with silver, not further worked than semi-manufactured	
	7114	Articles of goldsmiths or silversmiths' wares or parts thereof, of silver, whether or not plated or clad with other precious metal	
Seafood (including fish, crustaceans, mollusks, and other aquatic invertebrates in all forms)	**3**	Fish and crustaceans, mollusks and other aquatic invertebrates (**0301-0308)**	Para. 9 of 2371 (2017)
	1603	Extracts and juices of meat, fish or crustaceans, mollusks or other aquatic invertebrates)	
	1604	Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs	
	1605	Crustaceans, mollusks and other aquatic invertebrates, prepared or preserved	
Lead	**78**	Lead and articles thereof (**7801-7806**)	Para. 10 of 2371 (2017)
Lead ore	**2607**	Lead ores and concentrates	

Textiles (including but not limited to fabrics and partially or fully completed apparel products)	**50-63**		Para. 16 of 2375 (2017)
	50	Silk, including yarns and woven fabrics thereof	
	51	Wool, fine or coarse animal hair, including yarns and woven fabrics thereof; horsehair yarn and woven fabric	
	52	Cotton, including yarns and woven fabrics thereof	
	53	Vegetable textile fibres nesoi; yarns and woven fabrics of vegetable textile fibres nesoi and paper	
	54	Manmade filaments, including yarns and woven fabrics thereof	
	55	Manmade staple fibres, including yarns and woven fabrics thereof	
	56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	
	57	Carpets and other textile floor covering	
	58	Fabrics; special woven fabrics, tufted textile fabrics, lace, tapestries, trimmings, embroidery	
	59	Textile fabrics; impregnated, coated, covered or laminated; textile articles of a kind suitable for industrial use;	
	60	Knitted or crocheted fabrics	
	61	Apparel and clothing accessories; knitted or crocheted;	
	62	Apparel and clothing accessories; *not* knitted or crocheted;	
	63	Textiles, made up articles; sets; worn clothing and worn textile articles; rags	
Agricultural products	**07**	Vegetables and certain roots and tubers; edible	Para. 6 of resolution 2397 (2017)
	08	Fruit and nuts, edible; peel of citrus fruit or melons	
	12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit, industrial or medicinal plants; straw and fodder	
Machinery	**84**	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	Para. 6 of resolution 2397 (2017)
Electrical equipment	**85**	Electrical machinery and equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers, parts and accessories of such articles	
Earth and stone including magnesite and magnesia	**25**	Salt; sulphur; earths, stone; plastering materials, lime and cement	
Wood	**44**	Wood and articles of wood; wood charcoal	
Vessels	**89**	Ships, boats and floating structures	

c. For paragraphs 4 and 5 of resolution 2397 (2017), the Panel uses the following HS codes. The Panel notes that annual caps are placed for the two items below.

- HS 2709: crude oil [cap: 4 million barrels or 525,000 tons]
- HS 2710, HS 2712 and HS 2713: refined petroleum products [cap: 500,000 barrels]

Source: The Panel.

Annex 57: Comparison table of International Trade Statistics and replies provided by Members States on trade with the DPRK

** Note: DPRK Trade Statistics and Member State's reply cover the six-month period of April-September 2022/ Highlighted are restricted commodities.

As of 30 January 2023
* Unit : Thousand US$

No.	Member State(MS)	Trade Volume w/ DPRK		Restricted HS Code Trade w/ DPRK		MS Reply
		Export to	Import from	Export to	Import from	
1	Barbados	0	1,234		980 (HS Code 84) 129 (HS Code 85) 50 (HS Code 72) 17 (HS Code 54) 5 (HS Code 89)	
2	Belgium, Kingdom of	0	82			(Not Restricted)
3	Bosnia and Herzegovina	0	11		6 (HS Code 84)	
4	Brazil, Federative Republic of	0	54			(Not Restricted)
5	Bulgaria, Republic of	0	1			(Not Restricted)
6	Canada	343	127	71 (HS Code 76) 30 (HS Code 85) 3 (HS Code 84) 2 (HS Code 82)	8 (HS Code 85)	
7	China, PRC	352,774	58,482	4,149 (HS Code 2710) 1,848 (HS Code 2713) 7 (HS Code 2712)	13,576 (HS Code 72) 5,051 (HS Code 50)	Silk(HS Code 50) are raw materials, not textiles while goods imported from the DPRK under HS Code 72 are not iron or iron ores
8	Croatia, Republic of	0	5			(Not Restricted)
9	Denmark, Kingdom of	0	32			(Not Restricted)
10	Ecuador	0	553		459 (HS Code 03)	Importer wrongly registered DPRK as the country of origin in the customs declaration / No trade with the DPRK
11	El Salvador	0	36		4 (HS Code 84)	
12	Finland		15			(Not Restricted)
13	Hungary	1	0			(Not Restricted)
14	Indonesia, Republic of	0	306		77 (HS Code 84) 72 (HS Code 85) 13 (HS Code 73)	
15	Italy	173	73			(Not Restricted)
16	Japan	0	3			(Not Restricted)
17	Madagascar, Republic of	0	6		1 (HS Code 84)	

No.	Member State(MS)	Trade Volume w/ DPRK		Restricted HS Code Trade w/ DPRK		MS Reply
		Export to	Import from	Export to	Import from	
18	Netherlands, Kingdom of the	485	31		12 (HS Code 73) 3 (HS Code 85)	
19	Nigeria	0	923		351 (HS Code 03) 2 (HS Code 30)	
20	Peru	2	9			(Not Restricted)
21	Poland, Republic of	267	4			(Not Restricted)
22	South Africa, Republic of	16	227		108 (HS Code 54) 71 (HS Code 85) 12 (HS Code 38) 11 (HS Code 84) 3 (HS Code 60) 2 (HS Code 63)	
23	Spain, Kingdom of	194	3		2 (HS Code 85) 1 (HS Code 84)	
24	Thailand, Kingdom of	20	10		7 (HS Code 85) 2 (HS Code 84)	
25	Uganda, Republic of	985	2,385		159 (HS Code 84) 52 (HS Code 55)	
26	United Kingdom	0	430		258 (HS Code 84)	imports from ROK, country code was incorrectly submitted
27	United States	0	29			(Not Restricted)

Source: ITC Trade Map, accessed on 27 January 2023, annotated by the Panel.

Annex 58: Replies from Member States

China

Iron and textiles (OC.301)

The Chinese customs have taken a series of effective measures, including necessary inspection of inbound and outbound goods, to ensure full compliance with the Security Council Resolutions. Such measures have been duly implemented.

China has made several explanations to the Panel regarding its questions about the customs data. According to the data from China, goods imported from the DPRK under HS Codes of Chapter 50 were silk yarn and silk waste. These are raw materials, not textiles prohibited for import by the Security Council. Meanwhile, goods imported from the DPRK under HS Codes of Chapter 72 were not iron or iron ores. The Panel should accurately interpret the Resolution and refrain from mentioning in its report issues not related to the Resolution.

United Kingdom

Reply - Outgoing Communication #332 from the Panel of Experts established pursuant to United Nations Security Council Resolution 1874 (2009) to the United Kingdom of Great Britain and Northern Ireland

I'm writing in response to your communication #332 of 1 December 2022.

Colleagues in Her Majesty's Revenue and Customs (HMRC) have reviewed the shipments that you identified and have found that all three lines have been confirmed to be imports from **South Korea (KR),** via the US, Germany and Romania; in each case the country code was incorrectly submitted. The relevant trade statistics have now been amended.

On behalf of the Permanent Mission of the United Kingdom of Great Britain and Northern Ireland to the United Nations, I'd like to express our continued appreciation for the work of the Panel of Experts in their work to support the 1718 Committee.

Annex 59: Comparison of radio communications systems used by the Ethiopian Military with products advertised by Glocom

According to the analysis by an outside expert consulted by the Panel, the communications equipment pictured below is likely to be radio communications systems advertised by Glocom on its website. The Panel has corroborated this observation.

Source: https://www.fanabc.com/archives/164987 (annotated by the Panel).

① **GR-310 VHF/UHF SATCOM Manpack Radio**

② **GA-10A Officer Handset**

③ **Tactical Headset (A8100-TH1)**

④ **GA-310-AT-04 Manpack SATCOM antenna**

1. GR-310 VHF/UHF SATCOM Manpack Radio

Source: Glocom, https://glocom-corp.com/index.php/product/detail?p=gr-310.

① Terminal connectors

② Terminal connectors

③ Display/Control panel and buttons

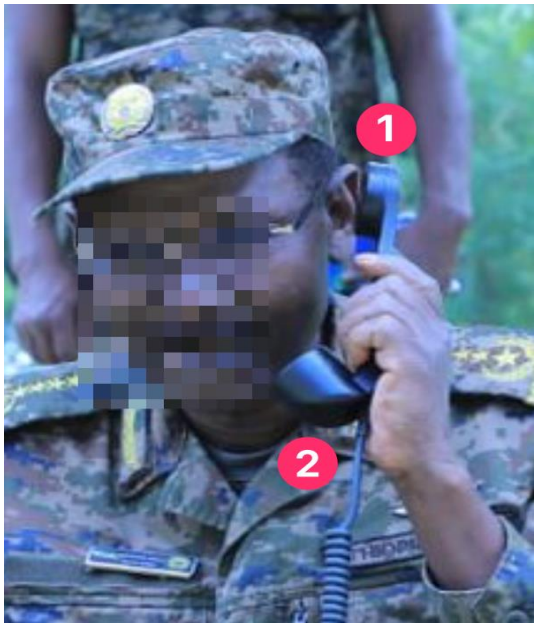
④ Handles

⑤ Connector to antenna

⑥ Knob

⑦ Side cover with specific design

2. **GA-10A Officer Handset**



This handset is introduced as optional equipment to GR-310.
Source: Glocom, https://glocom-corp.com/index.php/product/detail?p=gr-310.

① Shape of earpiece

② Shape of mouthpiece and cable connection

3. Tactical Headset (A8100-TH11)

Source: Glocom, https://glocom-corp.com/index.php/product/detail?p=gr-8100hv.

① Microphone

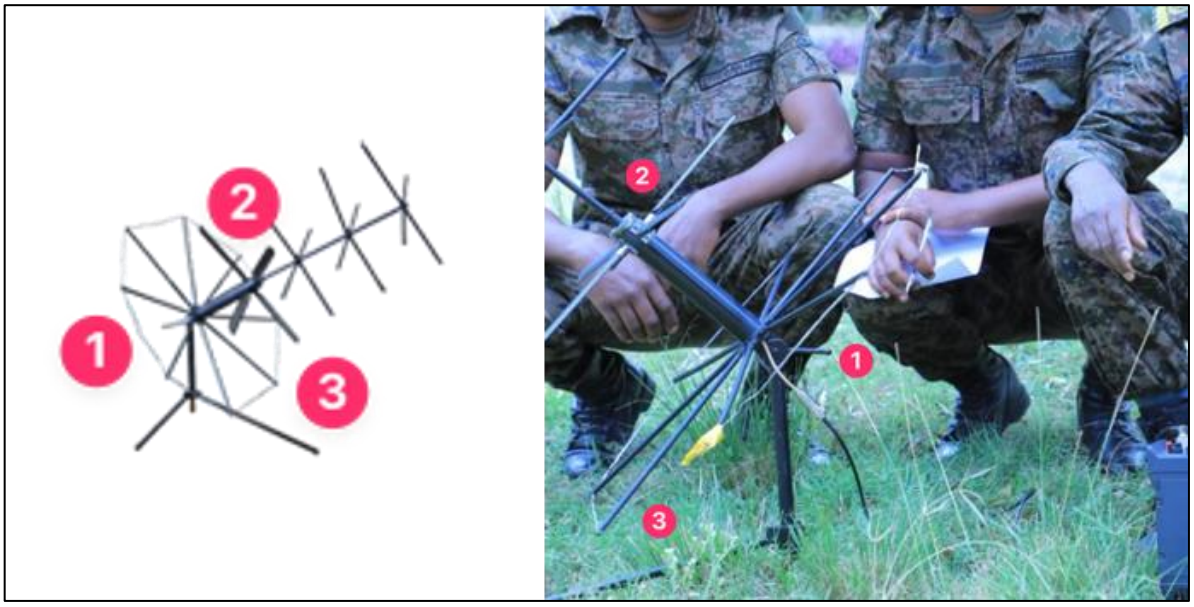
② Earphone

③ Hair band

④ Microphone

⑤ Transmitter

4. GA-310-AT-04 Manpack SATCOM antenna



Source: Glocom, https://glocom-corp.com/index.php/product/detail?p=gr-8100hv.

① Possible handle to adjust the position of antenna

② Blade-shape antenna

③ Octagon-shape antenna

Annex 60: Product label of HS Codes 9301, 9304, 9305 and 9306

HS Code	Product Label
9301	Military weapons, incl. sub-machine guns (excluding revolvers and pistols of heading 9302 and cutting and thrusting weapons of heading 9307)
9303	Other arms and similar devices which operate by the firing of an explosive charge (for example, sporting shot-guns and rifles, muzzle-loading firearms, very pistols and other devices designed to project only signal flares, pistols and revolvers for firing blank ammunition, captive bolt humane killers, line-throwing guns)
9304	Spring, air or gas guns and pistols, truncheons and other non-firearms (excluding swords, cutlasses, bayonettes, and similar arms of heading 9307)
9305	Parts and accessories of arms (military weapons, pistols, revolvers, shotguns, rifles etc.) of headings 9301 To 9304
9306	Bombs, grenades, torpedoes, mines, missiles, cartridges and other ammunition and projectiles and parts thereof, incl. buckshot, shot and cartridge wads

Annex 61: Reply from Cyprus

Dear Mr. [redacted]

We are referring to your attached letter of 9 November 2022 addressed to our Permanent Representative to the United Nations in New York, His Excellency Mr. Andreas Hadjichrysanthou, regarding transactions you have identified in the UN's Commodity Trade (Comtrade) Statistics Database that may be considered to fall within the category of 'arms and related materiel' sent from Cyprus to DPRK between 2017 and 2018, and have the honour to share the below information.

The Republic of Cyprus' Customs and Excise Department (Ministry of Finance) has confirmed that certain exports towards the Republic of Korea (KR) for the years 2017 and 2018 were wrongly listed under code KP (Democratic People's Republic of Korea). This has also been verified by our Trade Service (Ministry of Energy, Commerce and Industry).

More specifically, the wrong listings concerned four exports by the same company, PHILIPPOS CONSTANTINIDES TRADING CO. LTD, authorized by the Department of Commerce under licenses CY 093/17, CY 493/17, CY 232/18 and CY 407/18.

Please see the below summary for each of this export licenses and also note that more information, such as contact details of involved entities and technical specifications of the goods, is included in the attached document 'Customs documents and credit invoices – South Korea exports wrongfully listed for DPRK'.

CY 093/17
Goods exported: One Beretta shotgun – DT11 12GA 71CM
Purpose: shooting competition
Value: EUR 5200
Date of license: 7 March 2017 (attachment '2017-CY-093-17')
Date of invoice: 9 March 2017

CY 493/17
Goods exported: One Beretta shotgun - 12GA model DT11 SKEET
Purpose: for use by an athlete
Value: EUR 5500
Date of license: 23 November 2017 (attachment '2017-CY-493-17')
Date of invoice: 7 December 2017

CY 232/18
Goods exported: One Beretta shotgun – 12GA model DT11 SKEET – Black edition
Purpose: for use in shooting competition
Value: EUR 6700
Date of license: 13 July 2018 (attachment '2018-CY-232-18')
Date of invoice: 17 July 2018

CY 407/18
Goods exported: Two Beretta shotguns - 12GA model DT11 SKEET

One Beretta shotgun - 12GA model DT11 TRAP
Purpose: for use in shooting competition
Value: EUR 16300 (16000 according to invoice)
Date of license: 13 December 2018 (attachment ‘2018-CY-407-18’)
Date of invoice: 28 January 2019

We remain at your disposal for any further clarifications.

Best regards,

Charilaos PALMAS
Security Policy Department
tel.: +357 22 [redacted] | **cell:** +357 96 [redacted] | **email:** [redacted]

Presidential Palace Avenue, 1447, Nicosia, Cyprus

www.mfa.gov.cy

@CyprusMFA

Annex 62: Reply from El Salvador

Dear Mr. [redacted]

Coordinator of the Panel of Experts established pursuant to SCR 1874(2002)

I hope you are doing well. The Panel of Experts requested information about a transaction allegedly sent to El Salvador by the DPRK in 2017 and I am following up on that request.

Please find attached the response from the General Directorate of Customs of the Ministry of Finance of El Salvador. As explained in the note, a transaction was registered on April 06, 2017 in which the declarant stated the merchandise origin was the Democratic People's Republic of Korea. The merchandise was subjected to further physical inspection in accordance with the applicable resolutions of the UNSR of the DPRK. As the supporting documentation indicated, the merchandise was not a product of the DPRK, but rather of the Republic of Korea (ROK). The importer was sanctioned with a penalty for providing inaccurate information regarding the origin of the merchandise. Detailed supporting documentation is provided in the annexes (22 pages).

I would appreciate confirmation that this message has been received, so our national institutions can be notified. In case further information is needed, feel free to contact me.

Best wishes for a very joyous holiday season to you and all the members of the Panel.

Very respectfully,

GOBIERNO DE EL SALVADOR

Julia Rodríguez
Minister Counsellor

Phone: 212 [redacted] Ext.: [redacted]
E-mail: [redacted]@rree.gob.sv

Permanent Mission of El Salvador to the United Nations, New York, USA.
46 Park Avenue, New York, New York 10016.
www.rree.gob.sv

Annex 63: Reply from Trinidad and Tobago

PERMANENT MISSION OF THE REPUBLIC OF TRINIDAD AND TOBAGO
TO THE UNITED NATIONS, NEW YORK
633 Third Avenue, 12th Floor, New York, N.Y. 10017
Tel: 212-697-7620; Fax: 212-682-3580; Email: tto@un.int

INT: 2/4/8

8 December 2022

Mr [redacted]
Coordinator of the Panel of Experts established pursuant to
Security Council Resolution 1874 (2009)

Dear Mr [redacted]

I should like to refer to your letter dated 9 November 2022 requesting the assistance of the Government of Trinidad and Tobago in providing information concerning identified transactions of items which may be considered to fall within the category of "arms and related materiel" sent from the Democratic People's Republic of Korea (DPRK) to Trinidad and Tobago in 2015.

In this connection, based on a review of invoices, as well as conversations with the respective importers, the Government of Trinidad and Tobago wishes to advise that the DPRK was erroneously selected by each importer as the country of origin. This error can occur since the options presented for country selection are based on the official country names as opposed to their common names.

Furthermore, the analysis conducted by the Government of Trinidad and Tobago revealed that the import trends demonstrate that trade is typically conducted with South Korea, and not the Democratic Republic of Korea.

In this regard, please see the enclosed invoice pertaining to the shipment referenced in the aforementioned correspondence from the Panel of Experts, which show the country of origin as the Republic of Korea (South Korea) as follows:

a) **HS Code 9304** - Spring, air or gas guns and pistols, truncheons and other non-firearms (excluding swords, cutlasses, bayonettes and similar arms of heading 9307), valued at USD35,973 or EUR30,387;
b) **HS Code 9305** - Parts and accessories of arms (military weapons, pistols, revolvers, shotguns, rifles etc. of headings 9301 to 9304), valued at USD1,089 or EUR690; and
c) **HS Code 9306** - Bombs, grenades, torpedoes, mines, missiles, cartridges and other ammunition and projectiles and parts thereof, incl. buckshot, shot and cartridge wads, valued at USD1,598 or EUR1,350.

Given that the enclosed invoice contains sensitive information as a result of negotiations between the supplier and importer, the Government of Trinidad and Tobago requests that the information provided is treated with the highest standards of confidentiality and should be used solely for the information of the Security Council and the 1718 Committee.

I avail myself of this opportunity to reaffirm the support of the Government of Trinidad and Tobago to the work of the Security Council and the effective implementation of the United Nations Security Council resolution 1874 (2009), and convey to you the assurances of my highest consideration.

Dennis Francis
Ambassador/Permanent Representative

Annex 64: US official statements

❶ 6 September 2022

U.S. State Department deputy spokesperson Vedant Patel told a news briefing on Tuesday that Russia "is in the process of purchasing millions of rockets and artillery shells from North Korea for use in Ukraine."
However, White House national security spokesperson John Kirby said a short time later there were "no indications that that purchase has been completed and certainly no indications that those weapons are being used inside of Ukraine."
Calling it a "potential purchase," Kirby told a briefing: "Our sense is it could include literally millions of rounds, rockets and artillery shells from North Korea. That's what our information gives us - it could be on that scale."

https://www.reuters.com/world/russia-is-buying-artillery-ammunition-nkorea-report-2022-09-06/

❷ 2 November 2022

“In September, the (Democratic People’s Republic of Korea) publicly denied that it intended to provide ammunition to Russia,” the National Security Council coordinator for strategic communications John Kirby said in a statement to CNN.
“However, our information indicates that the DPRK is covertly supplying Russia’s war in Ukraine with a significant number of artillery shells, while obfuscating the real destination of the arms shipments by trying to make it appear as though they are being sent to countries in the Middle East or North Africa.”

https://www.cnn.com/2022/11/02/politics/north-korea-russia-ammunition/index.html

❸ 22 December 2022

Statement by Ambassador Linda Thomas-Greenfield

United States Mission to the United Nations
Office of Press and Public Diplomacy
For Immediate Release
December 22, 2022

Statement by Ambassador Linda Thomas-Greenfield on Russia's use of Weapons Illegally Acquired from the DPRK and Iran in its Brutal War Against Ukraine

It is despicable that Russia, a permanent member of the UN Security Council, is now using weapons procured from the DPRK and Iran – in violation of UN Security Council resolutions – to pursue its war of aggression against Ukraine.

The United States can confirm that the DPRK has completed an initial arms delivery to the Russian private military company known as Wagner, which paid for the equipment and currently has thousands of troops deployed to Ukraine. Last month the DPRK delivered infantry rockets and missiles into Russia for use by Wagner. In part because of our sanctions and export controls, Wagner is searching around the world for arms suppliers to support its military operations in Ukraine. We assess that the amount of materiel delivered to Wagner will not change battlefield dynamics in Ukraine, but we are concerned that the DPRK is planning to deliver more military equipment to Wagner.

For years, the Kremlin has used the Wagner Group to support its dangerous and destabilizing foreign policy while attempting to maintain deniability in the Middle East, Africa, and Ukraine. Wagner's purchase of weapons from the DPRK to wreak destruction in Ukraine also contributes to instability on the Korean peninsula by giving the DPRK funds it can use to further develop its prohibited weapons of mass destruction and ballistic missile programs. These transfers occur as Pyongyang has launched an unprecedented number of ballistic missiles this year – a serious violation of multiple Security Council resolutions for which the Security Council must hold the DPRK accountable. Russia is not only defending the DPRK as it engages in unlawful and threatening behavior, Russia is now a partner to such behavior.

The United States intends to raise the DPRK's and Russia's violations of UN Security Council resolutions in future meetings of the Security Council and will share information of this violation with the Council's 1718 Sanctions Committee. We also continue to call on the UN Secretariat to send a team to Ukraine to investigate Russia's and Iran's violations of UN Security Council Resolution 2231, Annex B, especially given Russia's renewed use this month of Iranian drones against Ukraine's infrastructure.

https://usun.usmission.gov/statement-by-ambassador-linda-thomas-greenfield-on-russias-use-of-weapons-illegally-acquired-from-the-dprk-and-iran-in-its-brutal-war-against-ukraine/

❹ 20 January 2023

MR. KIRBY (NSC Coordinator for Strategic Communications):

I also want to discuss a little bit North Korea's ongoing support for Russia's military operations against Ukraine by providing arms and ammunition to Wagner.

In part because of our sanctions and export controls, Russia is searching for arms from foreign countries, including through Wagner.

In recent weeks, we have seen North Korea — sorry — we have seen North Korean officials falsely deny that they have provided arms to Wagner.

As we have said publicly, North Korea delivered infantry rockets and missiles into Russia for use by Wagner toward the end of last year.

So, today we are releasing imagery of this initial delivery. This imagery shows that on November 18th, five Russian railcars traveled from Russia to North Korea. On the next day, November 19th, North Korea loaded those railcars with — railcars with shipping containers, and the train returned to Russia.

Now, while we assess that the amount of material delivered to Wagner has not changed battlefield dynamics in Ukraine, we do expect that it will continue to receive North Korean weapons systems.

We obviously condemn North Korea's actions, and we urge North Korea to cease these deliveries to Wagner immediately.

https://www.whitehouse.gov/briefing-room/press-briefings/2023/01/20/press-briefing-by-press-secretary-karine-jean-pierre-and-nsc-coordinator-for-strategic-communications-john-kirby-8/

Annex 65: DPRK statements

❶ 8 November 2022

조선어 / **English** / 中国语 / Русский / Español / 日本語

Press Statement of Vice Director for Military Foreign Affairs of DPRK Ministry of National Defence

Pyongyang, November 8 (KCNA) -- The vice director for Military Foreign Affairs of the Ministry of National Defence of the Democratic People's Republic of Korea issued the following press statement on Monday:

Recently, the U.S. is persistently spreading a groundless "rumor of arms dealings" between the DPRK and Russia in a bid to make it a fait accompli at any cost.

The vice-director general of the General Bureau of Equipment of the Ministry of National Defence of the DPRK had already denounced the U.S. for its "rumor of arms dealings" as a plot-breeding story against the DPRK.

We regard such moves of the U.S. as part of its hostile attempt to tarnish the image of the DPRK in the international arena by invoking the illegal "sanctions resolution" of the UNSC against the DPRK.

We once again make clear that we have never had "arms dealings" with Russia and that we have no plan to do so in the future.

The U.S. should not pull up the DPRK without any reason. -0-

www.kcna.kp (Juche111.11.8.)

http://www.kcna.kp/en/article/q/655a3c30289d0b5e7228f799f83e0bd9.kcmsf

❷ 23 December 2022

Statement of Spokesperson for DPRK Foreign Ministry

Date: 23/12/2022 | Source: KCNA.co.jp (En) | Read original version at source

Pyongyang, December 23 (KCNA) -- A spokesperson for the Foreign Ministry of the Democratic People's Republic of Korea (DPRK) issued the following press statement on Friday: The U.S. is now trying to cook up a "presidential statement" of the United Nations Security Council (UNSC) condemning the DPRK's exercise of the right to self-defence. The DPRK has already and clearly warned that such foolish attempt of the U.S. may entail a very undesirable consequence. It will be defiance of the DPRK's sovereignty and a grave interference in its affairs to adopt any document taking issue with the DPRK's legitimate right to self-defence by abusing the name of the UN, whether it is "presidential statement" or anything else. To usurp the right to self-defence, the core of national sovereignty, is the gravest challenge to a sovereign state, as it means that it would not recognize the sovereignty of the DPRK, and a very dangerous act that the DPRK has to counter with action. The DPRK is closely watching the reckless moves of the U.S. which is making uninterrupted irresponsible provocations.

http://kcna.co.jp/item/2022/202212/news23/20221223-10ee.html

Annex 66: Russian Federation statement (9 November 2022)

Briefing by Foreign Ministry Spokeswoman Maria Zakharova, Moscow, November 9, 2022

Question: More fake news has been planted, this time through statements by US officials about the alleged delivery of North Korean artillery munitions for their use in the special military operation in Ukraine. How would you comment on this?

Maria Zakharova: We have taken note of the statements made by some US officials, including NSC Coordinator for Strategic Communications John Kirby, who said that the United States has information that indicates North Korea is covertly supplying Russia with artillery shells for their use in Ukraine. US State Department Spokesman Ned Price has mentioned Washington's plans to impose additional sanctions against Pyongyang in this connection. As usual, they have not provided reliable proof of these allegations. The thing is that there isn't any because everything US officials say is nothing other than more lies, fake news and speculation that they spread in the West about Russia. They just wanted to adopt new sanctions, and they have found a pretext.

https://www.mid.ru/ru/press_service/spokesman/briefings/1837618/?lang=en

Annex 67: Wagner Group (22 December 2022)

Founder of the Wagner private military group Yevgeny Prigozhin

«К сожалению, господин Кирби делает достаточно много заявлений, основанных на домыслах. Всем известно, что Северная Корея уже давно не поставляет никаких вооружений в Российскую Федерацию. И таких попыток даже не делалось. Поэтому поставки оружия из КНДР - не что иное, как сплетни и домыслы...»

(Unofficial translation)

“Unfortunately, Mr. Kirby makes quite a lot of statements based on speculation. Everyone knows that North Korea has not supplied any weapons to the Russian Federation for a long time. And such attempts were not even made. Therefore, the supply of weapons from the DPRK is nothing but gossip and speculation.”

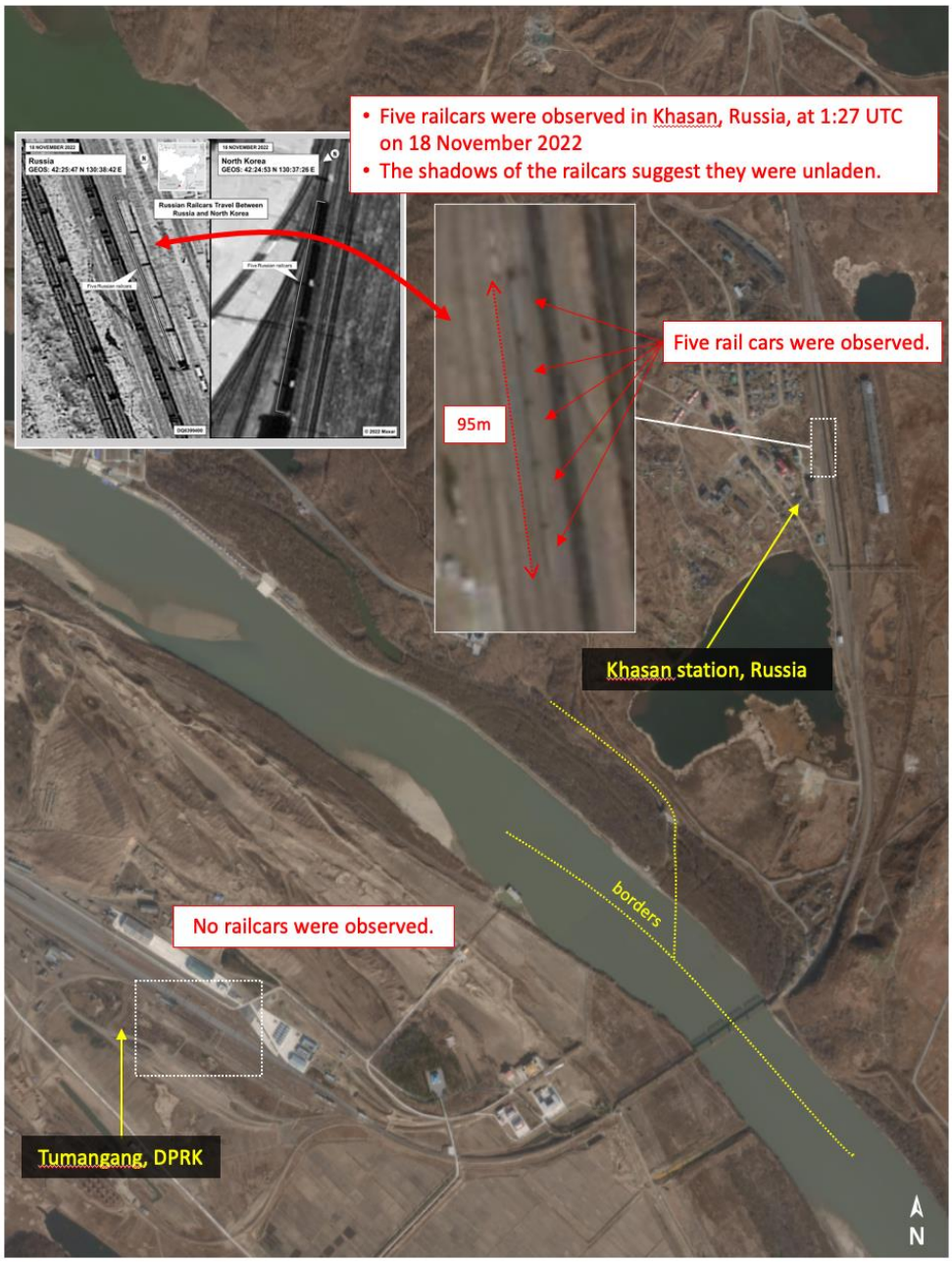
Source : https://t.me/concordgroup_official/194

Annex 68: The Panel's imagery analysis

The Panel observed on satellite imagery the presence of a train at stations in the Russian Federation and then in DPRK on 18 November 2022. The Panel cannot confirm the claim that the train was used to transport ammunition.[118]

Image 1

Five railcars (total length approx. 95m) were observed near Khasan station in Russian side on 18 November 2022 at 1:27 UTC. (between 42°25'53"N130°38'41"E - 42°25'51"N130°38'42"E)

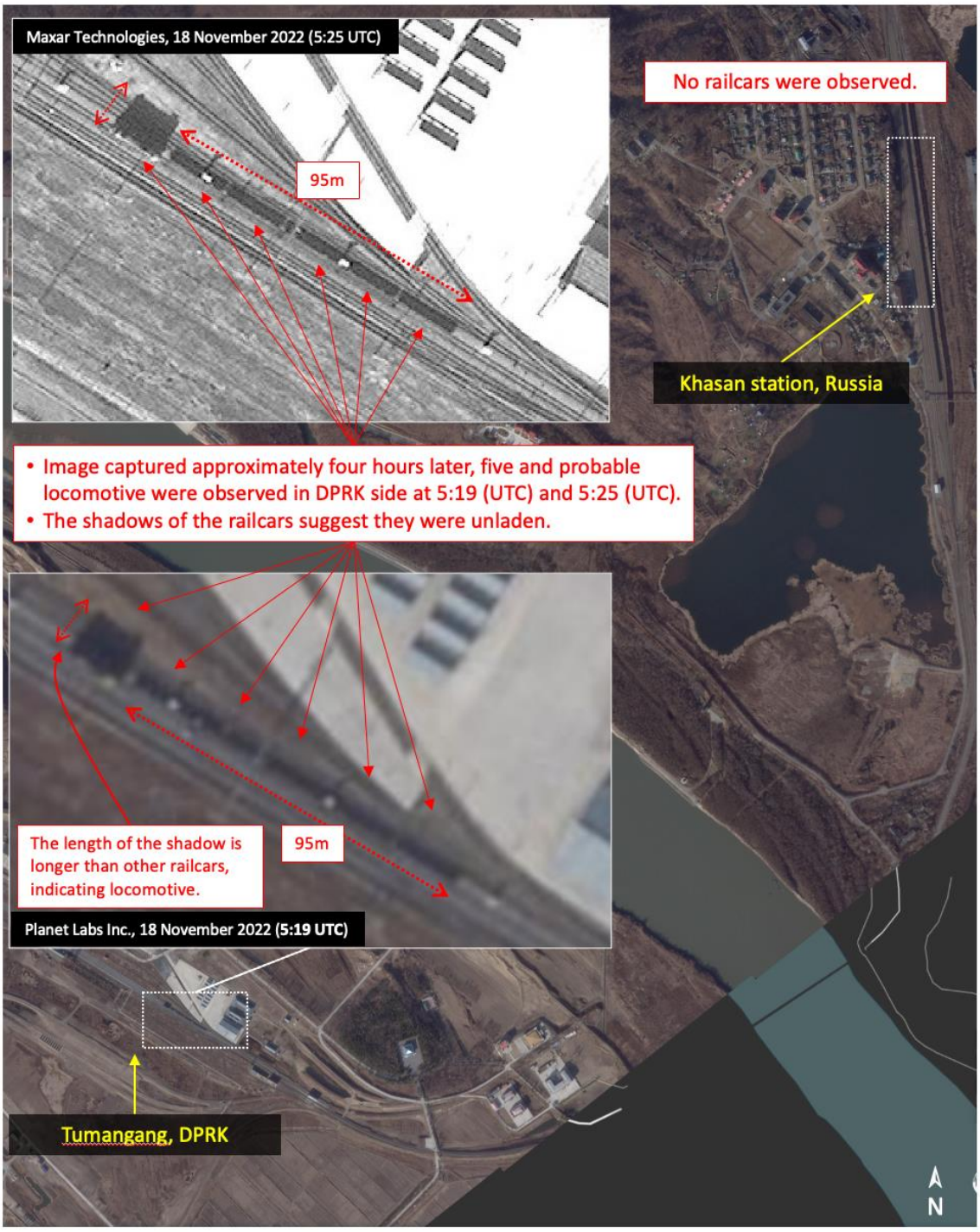


Source: Planet Labs Inc; (inset imagery) US Government, annotated by the Panel.

[118] Two experts are convinced it is premature to include any assessments by the Panel before exercising due diligence in collecting evidence and conducting investigation according to the Panel's standard.

Image 2

Five railcars (total length approx. 95m) and probable locomotive (at the western end of train) were observed at Tumangang, DPRK, at 5:19 (UTC) and 5:25 (UTC) (four hours later than image 1)
(between 42°24′54″N130°37′24″E - 42°24′53″N130°37′29″E)



Source: Planet Labs Inc; annotated by the Panel.

Annex 69: Media images suggesting the presence of luxury goods in DPRK

The following pictures are taken from media articles which appear to show the presence of luxury goods in DPRK shops. The Panel is investigating the routes by which these goods arrive in DPRK and the possible related sanctions evasion.

Source: https://www.nknews.org/pro/new-north-korean-luxury-department-store-opens-in-capital-after-years-of-delays/; https://www.nknews.org/pro/new-photos-give-first-look-inside-renovated-japanese-luxury-store-in-pyongyang/; https://www.nknews.org/pro/expanding-japan-linked-mall-online-shop-in-pyongyang-targets-modern-tastes/; https://www.nknews.org/pro/new-photos-give-first-look-inside-renovated-japanese-luxury-store-in-pyongyang/; https://www.nknews.org/pro/expanding-japan-linked-mall-online-shop-in-pyongyang-targets-modern-tastes/

Annex 70: Reply from Japan

PERMANENT MISSION OF JAPAN
TO THE UNITED NATIONS
NEW YORK

6 January 2023

[redacted]

The Government of Japan highly values the work of the Panel of Experts established pursuant to United Nations Security Council Resolution (UNSCR) 1874 (hereinafter "the Panel") as well as that of the Security Council Committee established pursuant to UNSCR 1718 (hereinafter "the 1718 Committee"), and reaffirms its commitment to cooperate with the Panel to ensure the full and strict implementation of all relevant UNSCRs against North Korea.

Upon instructions from the capital, I have the honour to share Japan's response, as attached, to your letter dated 8 November 2022 (Reference: S/AC.49/2022/PE/OC.246) with respect to information on Ms. Rim Mi Young.

[redacted].

The Government of Japan reaffirms its commitment to continue working closely with the Panel and the 1718 Committee. Should the Panel have any inquiries, please contact the Permanent Mission of Japan to the United Nations.

Please accept the assurance of my highest esteem.

Kimihiro ISHIKANE
Ambassador Extraordinary & Plenipotentiary
Permanent Representative of Japan to the United Nations

[redacted]
Coordinator of the Panel of Experts
established pursuant to Security Council Resolution 1874 (2009)

1. [redacted].

2. In any case, Japan's Foreign Exchange and Foreign Trade Act (FEFTA) prohibits the export to North Korea of all goods, not just those prohibited by relevant Security Council resolutions, and we will continue to thoroughly enforce such measures, including border control. Since the introduction of these measures, we have been asking for understanding and cooperation of related entities to ensure that the full ban on exports to North Korea is enforced. Since the autonomous measures against North Korea were initiated in 2006, we have been issuing reminders and requests for cooperation to industry associations (about 1,000 organizations) and local customs offices every one to two years (at a time when the measures under Article 10 of FEFTA are extended. At first, every six months, more recently every two years). In addition, training on trade management, including sanctions against North Korea, is conducted annually, with participation of customs officials and police officers.

3. The Government of Japan has also implemented measures which strongly restrict the flow of funds from Japan to North Korea, including steady implementation of the relevant Security Council resolutions which prohibit transfer of any financial or other assets or resources to or from North Korea that contribute to North Korea's nuclear-related and other prohibited activities, as well as Japan's own measures including the prohibition of payment to North Korea. If a payment was made by a resident of Japan to a resident of North Korea, it would constitute a violation of FEFTA.

4. The Government of Japan will continue to thoroughly implement such measures.

Annex 71: Media images of imported alcoholic beverages

Source: NK News.

Annex 72: Imports of alcoholic beverages by DPRK from China (April-September 2022)

Month	HS Code	Commodity	Trading partner	Quantity (Litre)	Supplimentary Quantity	Supplimentary Unit	US dollar
202207	22041000	Sparkling wine of fresh grapes	Korea,DPR	1680	1680	Kilogram	2,961
202207	22042100	Othr wine&grape must with fermentation prvntd by alchl, containers¡Ü2L	Korea,DPR	2016	2016	Kilogram	9,059
202207	22042200	Othr wine&grape must with fermentation rvntd by alchl, 2L£¼containers¡Ü10L	Korea,DPR	14400	13824	Kilogram	21,654
202207	22082000	Spirits from distilled grape wine or marc	Korea,DPR	3690	3365	Kilogram	8,722
202207	22083000	Whiskies	Korea,DPR	7213	6496	Kilogram	28,034
202207	22086000	Vodka	Korea,DPR	8481	7633	Kilogram	23,012
202208	22030000	Beer made from malt	Korea,DPR	83351	84363	Kilogram	121,012
202208	22042100	Othr wine&grape must with fermentation rvntd by alchl, containers¡Ü2L	Korea,DPR	43958	43037	Kilogram	132,365
202208	22082000	Spirits from distilled grape wine or marc	Korea,DPR	64846	61199	Kilogram	1,230,932
202208	22083000	Whiskies	Korea,DPR	37732	35527	Kilogram	608,553
202208	22084000	Rum&other spirits by distilling fermented ugarcane products	Korea,DPR	180	164	Kilogram	1,915
202208	22085000	Gin&Geneva	Korea,DPR	180	164	Kilogram	1,631
202209	22042100	Othr wine&grape must with fermentation prvntd by alchl, containers¡Ü2L	Korea,DPR	25107	24911	Kilogram	197,095
202209	22060090	Other fermented beverages£»mixtures of fermented beverages and non-alcoholic beverages, nes	Korea,DPR	15924	15946	Kilogram	79,529
202209	22082000	Spirits from distilled grape wine or marc	Korea,DPR	14848	13763	Kilogram	151,689
202209	22083000	Whiskies	Korea,DPR	22878	21481	Kilogram	412,149
202209	22085000	Gin&Geneva	Korea,DPR	2520	2298	Kilogram	3,363
202209	22086000	Vodka	Korea,DPR	38811	35922	Kilogram	185,167
202209	22087000	Liqueurs and cordials	Korea,DPR	89	81	Kilogram	1,900
202209	22089010	Tequila, Mezcal	Korea,DPR	36	33	Kilogram	444

Source: General Administration of Customs, PRC

Annex 73-1: Letter from the Permanent Mission of Japan

PERMANENT MISSION OF JAPAN
TO THE UNITED NATIONS
NEW YORK

22 July 2022

[redacted]

The Government of Japan highly values the work of the Panel of Experts established pursuant to United Nations Security Council Resolution (UNSCR) 1874 (hereinafter "the Panel") as well as that of the Security Council Committee established pursuant to UNSCR 1718 (hereinafter "the 1718 Committee"), and reaffirms its commitment to cooperate with the Panel to ensure the full and strict implementation of all relevant UNSCRs against North Korea.

Upon instructions from the capital, I have the honour to share Japan's response, as attached, to your letter dated 9 June 2022 (Reference: S/AC.49/2022/PE/OC.106) with respect to information on the sales of Canon and Nikon cameras in Japan.

The Government of Japan reaffirms its commitment to continue working closely with the Panel and the 1718 Committee. Should the Panel have any inquiries, please contact the Permanent Mission of Japan to the United Nations.

Please accept the assurance of my highest esteem.

Kimihiro ISHIKANE
Ambassador Extraordinary & Plenipotentiary
Permanent Representative of Japan to the United Nations

[redacted]
Coordinator of the Panel of Experts
established pursuant to Security Council Resolution 1874 (2009)

Japan's response regarding the information on the sales of Canon and Nikon cameras in Japan

1 Japan's Foreign Exchange and Foreign Trade Act prohibits the export to North Korea of all goods, not just those prohibited by Security Council sanctions, and we will continue to thoroughly enforce such measures, including border control. Since the introduction of these measures, we have been asking for the understanding and cooperation of related entities to ensure that the full ban on exports to North Korea is enforced. Since the economic sanctions against North Korea were initiated in 2006, we have been issuing reminders and requests for cooperation to industry associations (about 1,000 organizations) and local customs offices every one to two years (every extension of its own sanctions under Article 10 of the Foreign Exchange and Foreign Trade Act. At first, every six months, more recently every two years). In addition, trade management training, including North Korean sanctions, is conducted annually, with customs officials and police officers participating.

2 We are aware that both Canon and Nikon have thorough distribution controls and have responded to the Panel's inquiry in extremely good faith. With respect to the sale of consumer products, such as the subject of the inquiry, there is nothing unnatural about the situation in which a manufacturer is unable to trace the distribution of products beyond the retailer. The issue of the transfer of samples or inspection equipment, which the Panel's letter describes as "operations that may be illegal" is whether the products were properly handled after being delivered to the disposal companies in China or Malaysia. Thus we understand those occurred outside of Japan.

3 In any case, as stated above, the Government of Japan will thoroughly enforce the ban on exports to North Korea of all goods, not only prohibited goods under Security Council sanctions, in accordance with Japan's domestic laws.

Annex 73-2: Reply from the Permanent Mission of China (concerning cameras)

> “The investigation requirement of the letter is beyond the mandate of related resolutions. The DPRK-related Security Council resolutions do not include camera in the list of prohibited luxury goods, nor do they give mandate to the panel to explain the scope of luxury goods. The information from the media is far from accurate”.

Annex 73-3: Letter from the Permanent Mission of Singapore

PERMANENT MISSION OF THE REPUBLIC OF SINGAPORE
UNITED NATIONS | NEW YORK

12 August 2022

[redacted]
Coordinator
Panel of Experts
established pursuant to United Nations Security Council Resolution 1874 (2009)

Dear [redacted]

I refer to your letter (S/AC.49/2022/PE/OC.108) dated 9 June 2022 which requested assistance from the authorities of the Republic of Singapore in a possible investigation of the alleged transfer of a Japanese Nikon camera obtained by the Democratic People's Republic of Korea (DPRK) through wholesale or retail channels in Singapore, as well as relevant information on any such investigation. The Panel of Experts established pursuant to Security Council Resolution 1874 (2009) had provided information that the camera was sold to a Singapore company, Alan Photo, on 18 July 2012.

Our authorities' checks have not uncovered any evidence that Alan Photo had directly or indirectly supplied, sold or transferred the camera to the DPRK. Alan Photo has also declared that the company does not have dealings with the DPRK.

Singapore reiterates our commitment to upholding our international obligations under the United Nations Security Council Resolutions (UNSCRs). We regularly update our legislation to give full effect to the relevant UNSCRs on the DPRK, including in relation to the supply, sale or transfer of luxury goods to the DPRK. In addition, Singapore has suspended trade with the DPRK since November 2017. All commercial imports, exports, transhipment, or transit of goods from or destined for the DPRK are prohibited.

Please let me know if you require any further information. Singapore will continue to be of assistance to the Panel where possible. Thank you.

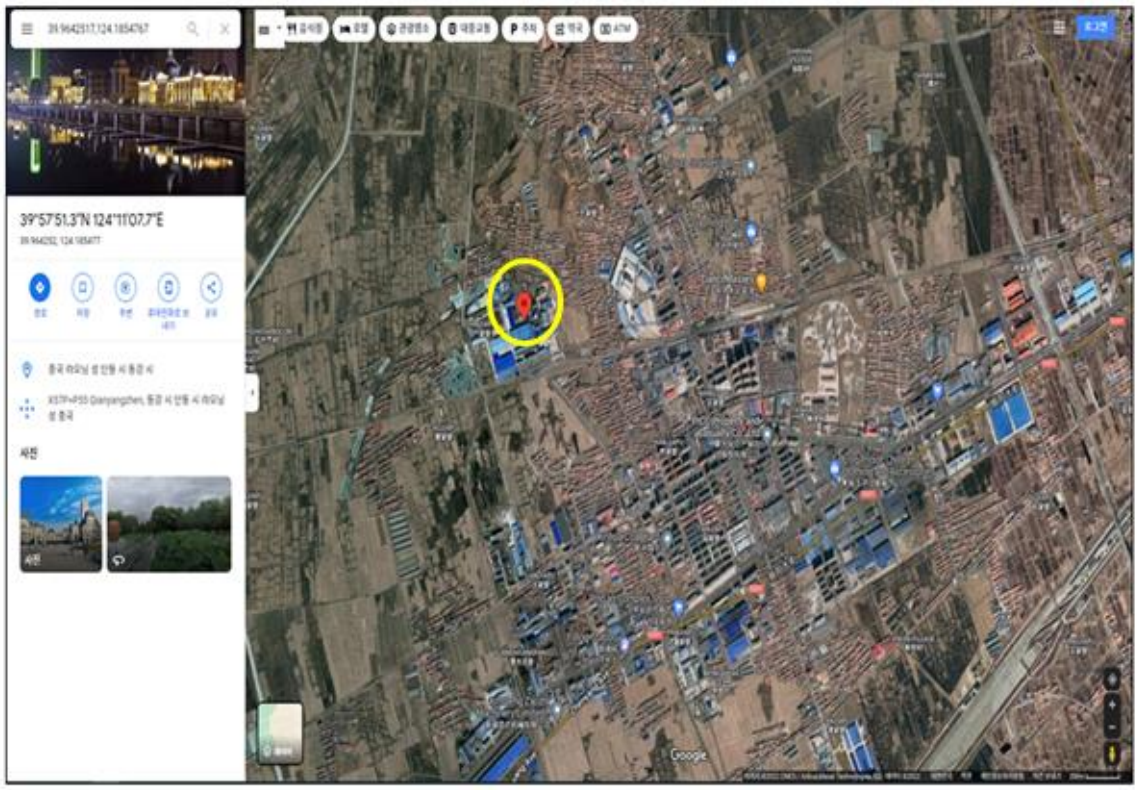
Yours sincerely,

MARK SEAH
Chargé d'Affaires a.i.

318 East 48th Street, New York, NY 10017, United States of America | T +1 (212) 826 0840 F +1 (212) 826 2964 | mfa.gov.sg/newyork

Annex 74: Additional information on Song Rim

Location of Song Rim's office in Dandong, China



- Coordinates**:** 39°57′ 51.3″ N 124° 11′07.7”E

Source: Member State, annotated by the Panel.

Annex 75: Information on Chinese associates of Song Rim

① Wu ZhuJing (吳洙景)

- o DOB : Mar. 20, 1974
- o Occupation : Representative of Dandong Hongshengan Clothing Co., Ltd. (丹东宏盛安服装有限公司)
- o Phone No. : [redacted]
- o WeChat ID : [redacted]
- o Major activities
  - Posted online ads on a website for advertising DPRK-made software
  - Suspected of brokering the illicit trade of voice phishing applications for Song Rim, and delivered development payments to Song

Online ad for DPRK-made software posted by Wu ZhuJing

컴퓨터,핸드폰 프로그램,게임을 제작합니다

위챗(微信)에 공유

불조심 | 2022.05.26 16:43:28 댓글: 0 | 조회: 657 | 추천: 0

지역 中国 辽宁 丹东 분류 서버/사이트 제작·양도 주소복사 https://life.moyiza.kr/bizinfo/4372685

분류	서버/사이트 제작·양도
지역	中国 辽宁 丹东
전화번호	15174187510
회사명	단동춘경상무유한공사

안녕하세요 ,
저희회사는 요녕성 단동에 위치한 무역회사입니다 .
평양에 컴퓨터 관련 인재들을 모아서 컴퓨터 프로그램,핸드폰 프로그램
을 제작합니다 ,
품목은 코딩:환경업무프로그램 ,경영업무프로그램 ,각종 게임,

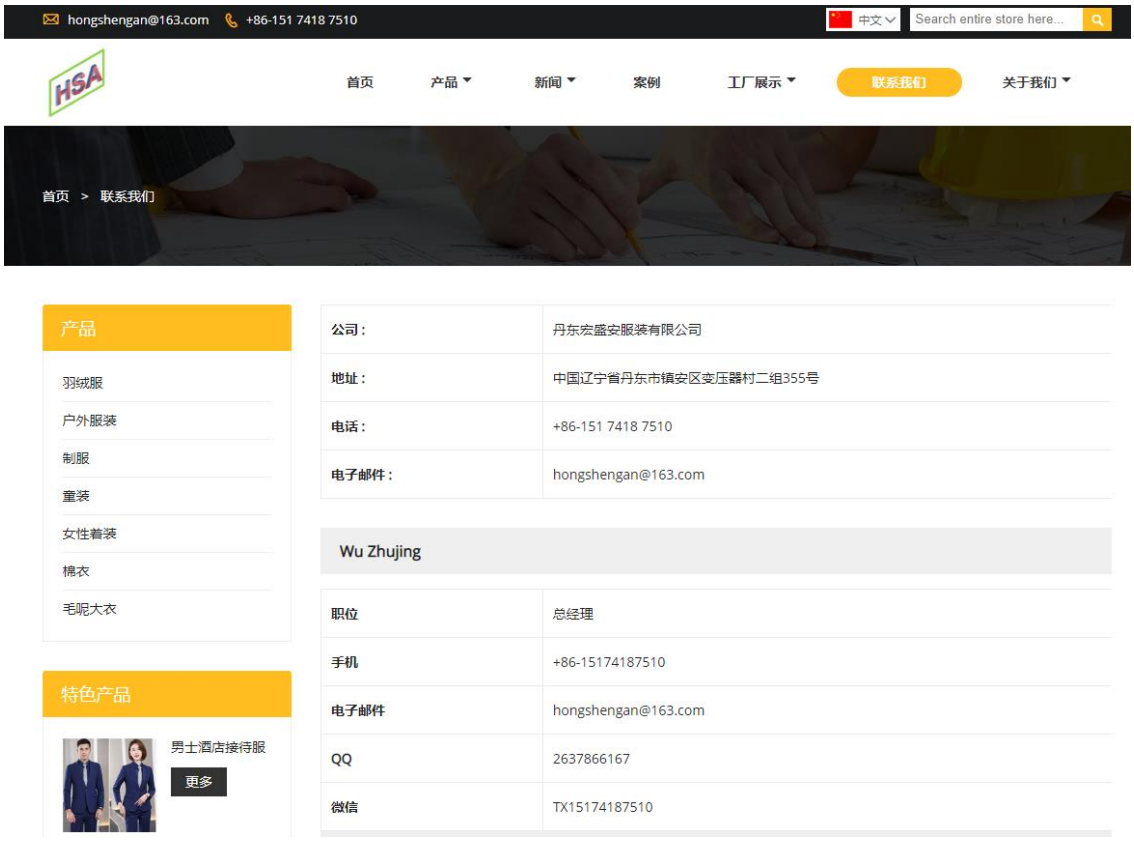
다매체:handamin,letas,flash,moho,story.

이상 프로그램이나 게임제작이 필요하신분은 아래 연락처로 연락 주세요 .

핸드폰:15174187510
wechat:tx15174187510

Source :
https://life.moyiza.kr/bizinfo/4372685?_gl=1*vbuu6y*_ga*MjEzMDk1Nzg2My4xNjY2ODI1MTM0*_ga_XYRM2KYNVS*MTY2NjgyNTEzNC4xLjAuMTY2NjgyNTEzNC42MC4wLjA

Website of Dandong Hongshengan Clothing Co., Ltd.



Source : http://cn.dd-hsa.com/

② Wang Feng (王峰)

< WeChat profile photo >	o Occupation : Owner of Yiwu Gangchao Trading (义乌港朝贸易商行) * Address of the trading firm : Room #402, Line 1, Building #40, Zongtang 1qu, Jiangdongjie, Yiwushi, Jinhuashi, Zhejiang Province o Phone No. : [redacted] o WeChat ID : [redacted] o Major activities - Serves as the representative of gangchaomaoyi, which Song Rim registered as his workplace on LinkedIn profile - Suspected of lending his Chinese bank account to North Korean IT agents, and exchanging foreign currency paid for DPRK's SW development on behalf of the DPRK IT workers

Information about Yiwu Gangchao Trading

Source : https://aiqicha.baidu.com/company_detail_35347384018499

③ Hong Yong (洪勇)

	o Name : Hong Yong o DOB : June 1, 1985 o Major activities - Operating more than 6 voice phishing call centers in Tianjin and Shandong, China - Purchased hacking apps and personal information of ROK nationals from North Korean IT organizations, and delivered them to his call centers to be used for voice phishing crimes. - Names of multiple members of Hong Yong's crime ring were found in the Command & Control server of the voice phishing hacking app that is managed by Song Rim.

④ Jin ChengHao (金成浩)

	o Name : Jin, ChengHao o DOB : Jan. 19, 1983 o Major activities - Key member of Hong Yong's crime ring / manages call centers. - His name was found on the contact list of a smartphone registered in the Command & Control server of the hacking app that is managed by Song Rim.

Source : Member State, annotated by the Panel.

Annex 76: List of DPRK cyberthreat actors' malicious activities in 2022 monitored by the Panel

RGB Unit	Case Name	SPH	KAC	VAS	VAS Value	Publicized Month
Kimsuky	Distribution of KONNI RAT	√	√			January
BlueNoroff	Snatchcrypto Campaign	√		√	N/A	January
Kimsuky	Distribution of xRAT	√	√			February
Kimsuky	APT attacks using DPRK related documents	√				February
Kimsuky	APT attacks using VBS Script disguised as PDF	√				March
Kimsuky	APT attacks using Word Files about Cryptocurrency	√				March
Lazarus Group	Attacks using Trojanized DeFi applications	√		√		March
Lazarus Group	Axie Infinity Hack (Ronin Hack)			√	173,600 ETH 25.5 mil. USD Coin	March
Lazarus Group	Exploiting INITECH Process	√				April
Kimsuky	APT attacks using disguised Word File	√				April
Lazarus Group	Targeting Chemical Sector (Operation Dream Job)	√	√			April
Stonefly	Targeting Energy and Military Sectors	√	√			April
Kimsuky	APT attacks using Disguised Press Release	√				May
Lazarus Group	Exploiting Log4Shell Vulnerability (NukeSped)	√	√			May
BlueNoroff	BEAF, PXJ, ZZZ, ChiChi Ransomware attacks			√	N/A	May
Lazarus Group	Harmony Hack (Horizon Brigde Hack)			√	85,500 ETH	June
Andariel	Maui Ransomware attacks			√	N/A	July
Kimsuky	SharpTongue deploying SHARPEXT	√	√			July
Kimsuky	AppleSeed attack on Mil. Maintenance Company		√			July

Note: RGB Reconnaissance General Bureau, SPH Significant Phishing, KAC knowledge acquisition and espionage, VAS virtual asset seizures.

RGB Unit	Case Name	SPH	KAC	VAS	VAS Value	Publicized Month
Kimsuky	Disguised AppleSeed distribution	√	√			July
Andariel	H0lyGh0st Ransomware attack			√	N/A	July
Kimsuky	AppleSeed on Nuclear Energy related Industries	√	√			August
Kimsuky	APT attacks using Word File w/ External Links	√	√			August
Lazarus Group	Attack targeting Apple's MacOS users	√				August
Lazarus Group	Amazon-themed campaigns (Dell)	√	√			September
Lazarus Group	ZINC weaponizing open-source software	√	√			September
Lazarus Group	Three RATs attack	√	√			September
Lazarus Group	Rootkit Malware attack using BYOVD	√				October
Lazarus Group	DLL Side-Loading attack	√				October
Kimsuky	Fastfire, FastViewer and FastSpy	√				October
Lazarus Group	Attacks targeting digital asset firms	√		√	N/A	October
Lazarus Group	Dtrack malware attack	√				November
Lazarus Group	Targeting Ukraine Entities		√			November
Lazarus Group	AppleJeus Attacks	√		√	N/A	December
Kimsuky	Attacks against foreign policy experts	√		√	1980 USD worth of bitcoins	December
BlueNoroff	Attacks bypassing MotW	√		√	N/A	December
Lazarus Group	Phishing attacks on NFT users	√		√	N/A	December

Source: The Panel.

Annex 77: Links to reports from Ahnlab's ASEC

Kimsuky Group

Word File Provided as External Link When Replying to Attacker's Email (Kimsuky)

(2 August 2022)

AppleSeed Being Distributed to Maintenance Company of Military Bases (Kimsuky)

(28 July 2022)

원자력 발전소 관련 기업 대상으로 AppleSeed 유포 (Kimsuky)

(27 October 2022)

AppleSeed Disguised as Purchase Order and Request Form Being Distributed (Kimsuky)

(11 July 2022)

Lazarus Group

Lazarus Group Uses the DLL Side-Loading Technique (mi.dll) (Lazarus)

(12 October 2022)

Analysis-Report-on-Lazarus-Groups-Rootkit-Attack-Using-BYOVD (Lazarus)

(5 October 2022)

Annex 78: ROK National Police Agency's press release (26 December 2022) on Kimsuky's spearphishing investigation results

경찰청 **보 도 자 료**

다시 도약하는 대한민국 함께 잘사는 국민의 나라

보도 일시	2022. 12. 26.(월) 조간	누리망·방송	2022. 12. 25.(일) 09:00
담당 부서	국가수사본부 사이버수사국 사이버테러대응과	책임자	총경 정석화 (02-3150-0053)
		담당자	경정 이규봉 (02-3150-1459)

기자·국회의원실 등 사칭 전자우편 발송사건, 북 해킹조직 소행으로 확인

-교수 등 49명의 전자우편 감시, 일부 업체 서버에는 랜섬웨어 유포-

경찰청 국가수사본부(사이버수사국)에서는 지난 4. 28. 발송된 「제20대 대통령직 인수위원회」 출입기자를 사칭한 전자우편 및 「태영호 국회의원실」 비서를 사칭한 전자우편(5. 7.), 「국립외교원」을 사칭한 전자우편(10. 26.)에 대한 수사결과, 2013년부터 파악된 북한의 특정 해킹조직 소행으로 확인하였다.

북한 해킹조직은 국내외 두차별 해킹을 통해 26개국 326대(국내 87대)의 서버 컴퓨터를 장악하며 사이버테러를 위한 기반을 확보하였고, 이를 수사기관의 추적을 회피하기 위한 아이피(IP) 주소 세탁용 경유지로 이용하였다.

북한 해킹조직은 IP주소를 세탁한 뒤, 기자·국회의원실 등을 사칭하며 피싱 사이트로 유도하거나 악성 프로그램을 첨부한 전자우편을 외교·통일·안보·국방 전문가에게 발송하였다. 이러한 사칭 전자우편은 최소 892명에게 발송되었다.

피싱 사이트에 접속해 자신의 아이디와 비밀번호를 입력한 외교·통일·안보·국방 분야 종사자 49명이 확인되었으며, 북한 해킹조직은 이들 피해자의 송·수신 전자우편을 실시간으로 감시하며 첨부 문서와 주소록 등을 빼내 간 것으로 파악되었다.

- 1 -

특히, 이번 수사로 북한 해킹조직이 금품 요구 악성 프로그램(랜섬웨어)을 유포한 사실이 국내에서는 최초로 확인되었다. 장악한 서버 중 일부에는 랜섬웨어를 감염시켜 금전을 요구하였으며, 확인된 피해 규모는 국내 13개 업체의 서버 19대이다.

경찰청 등 정부 기관은 그간 국내외 민간 보안업체에서 일명 '김수키(Kimsuky)' 등으로 명명한 북한의 특정 해킹조직을 여러 차례 수사한 바 있으며, 이번 사건 또한 기존 북한발로 규명된 「한국수력원자력 해킹 사건(2014년)」 및 「국가안보실 사칭 전자우편 발송사건(2016년)」과 비교하여, △공격 근원지의 아이피(IP) 주소 △해외 사이트의 가입경보 △ 경유지 침입·관리 수법 △ 악성 프로그램의 특징 등이 같고, △ 북한어휘를 사용하는 점, △범행 대상이 외교·통일·안보·국방 전문가로 일관된 점 등을 근거로 같은 북한 해킹조직의 소행으로 판단하였다.

경찰청은 피해자와 소속 기업에 피해 사실을 통보하고, 한국인터넷진흥원 및 백신업체와 협력하여 피싱 사이트를 차단하는 한편, 관계기관에 북한 해킹조직의 침입 수법·해킹 도구 등 관련 정보를 제공하여 정보보호 정책 수립에 활용하도록 하였다.

경찰청은 북한의 이러한 시도가 앞으로도 지속할 것으로 예상되므로 전산망에 대한 접근통제, 전자우편 암호의 주기적 변경 및 2단계 인증 설정, 다른 국가로부터의 접속 차단 등 보안 설정 강화를 당부하였다.

또한, 경찰청은 앞으로도 치안 역량을 총동원하여 조직적 사이버 공격을 탐지·추적함과 동시에 관계기관과 긴밀히 협력하며 피해 방지를 위해 노력해 나아갈 계획이다.

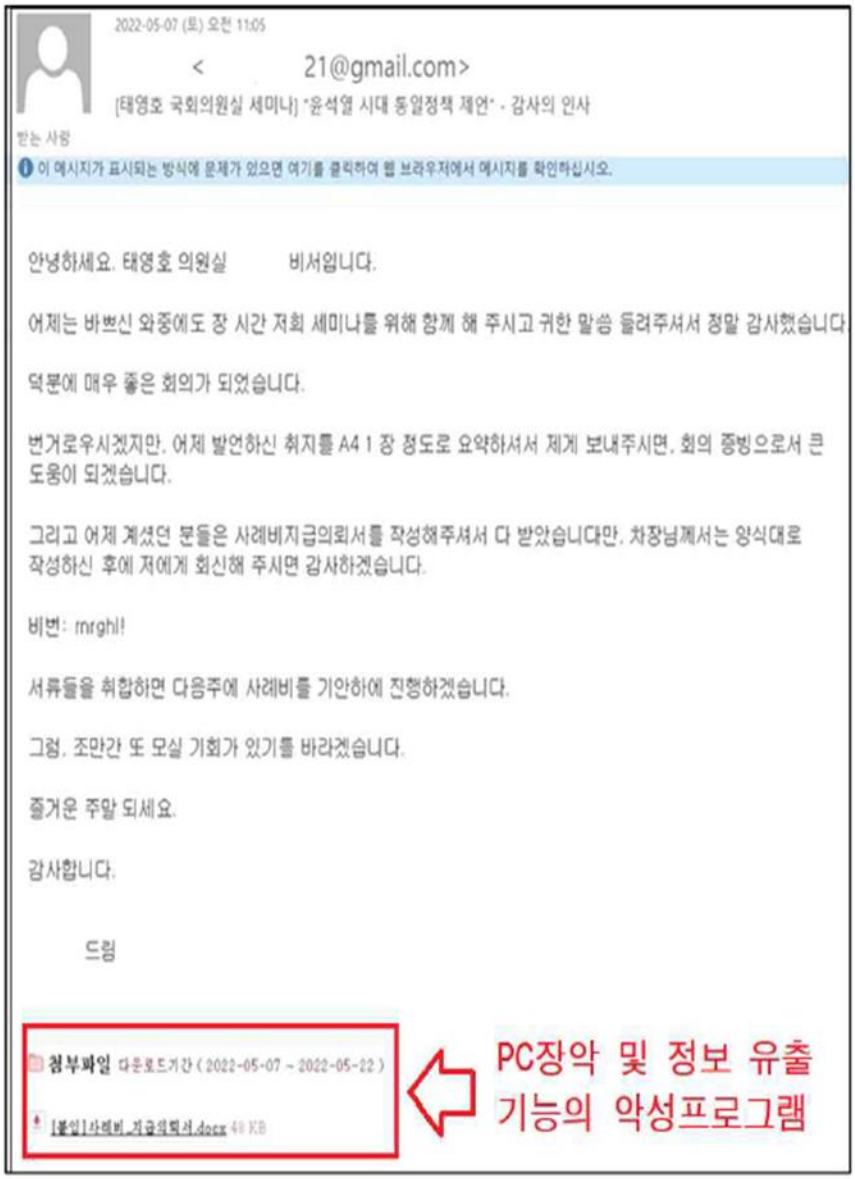
붙임) 1. 사건 개요도
2. 기자·국회의원실 사칭 전자우편

붙임 1 사건 개요

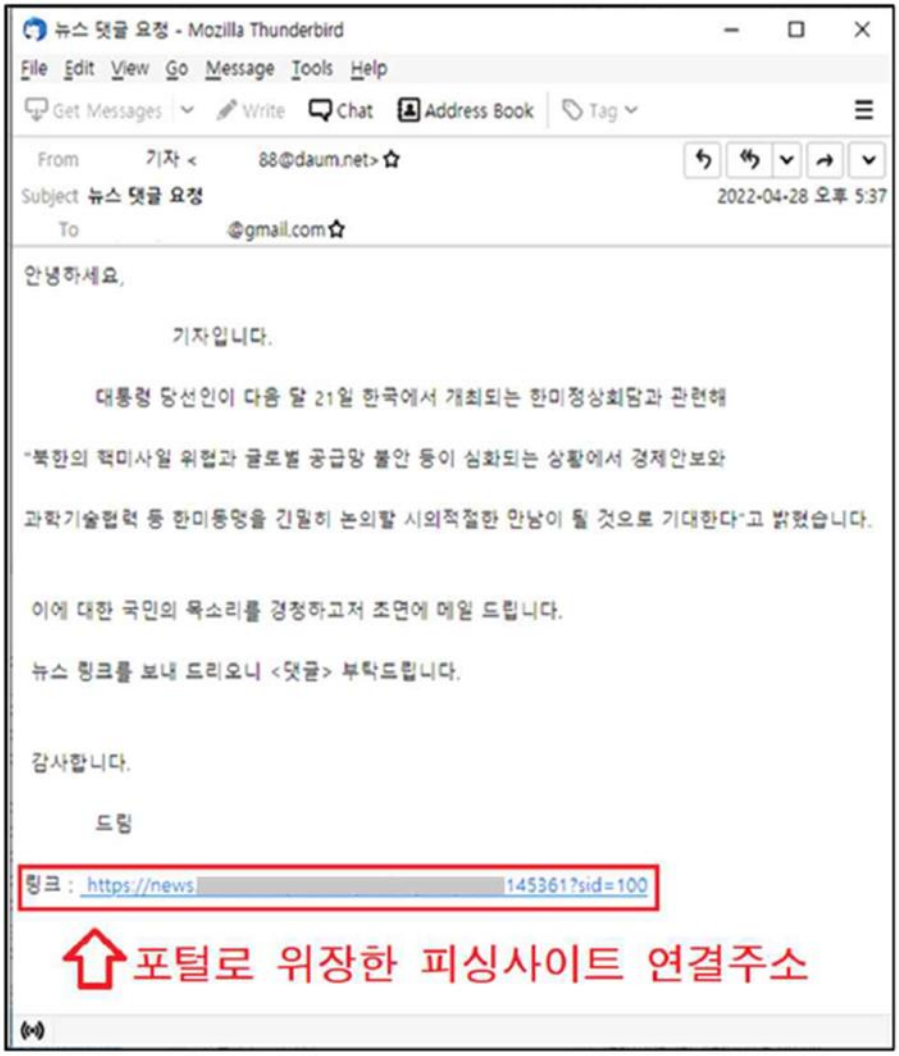
북한발 사칭이메일 유포사건 개요도

붙임 2 사칭 전자우편

○ 국회의원실 사칭 전자우편



○ 기자 사칭 전자우편


뉴스 댓글 요청 - Mozilla Thunderbird
File Edit View Go Message Tools Help
Get Messages Write Chat Address Book Tag
From 기자 < 88@daum.net>
Subject 뉴스 댓글 요청
2022-04-28 오후 5:37
To @gmail.com
안녕하세요,
기자입니다.
대통령 당선인이 다음 달 21일 한국에서 개최되는 한미정상회담과 관련해
"북한의 핵미사일 위협과 글로벌 공급망 불안 등이 심화되는 상황에서 경제안보와
과학기술협력 등 한미동맹을 긴밀히 논의할 시의적절한 만남이 될 것으로 기대한다"고 밝혔습니다.
이에 대한 국민의 목소리를 경청하고저 조연에 메일 드립니다.
뉴스 링크를 보내 드리오니 <댓글> 부탁드립니다.
감사합니다.
드림
링크 : https://news 145361?sid=100
포털로 위장한 피싱사이트 연결주소

Annex 79: Other espionage-related activities of Kimsuky and Lazarus Group

A cybersecurity company reported that Kimsuky has been using three different Android malware strains to target its victims.[119] This malware was named as malware families 'FastFire', 'FastViewer', and 'FastSpy'. The 'FastFire' malware was disguised as a Google security plugin, and the 'FastViewer' malware as 'Hancom Office Viewer'. 'FastSpy' was based on AndroSpy, a type of Android remote-access-tool. Once launched the malwares enable the adversary to seize control of the targeted devices, intercept phone calls and SMS, track users' locations, harvest documents, capture keystrokes, and record information from the mobile's camera, microphone, and speaker. The hackers also logged in using the victims IP. Attribution of these malwares to Kimsuky was based on overlaps with server domains previously used by the group.

In another case, cybersecurity firm reports acquired by the Panel demonstrates that the Lazarus Group has been using a 'DLL[120] Side-Loading attack technique' which abuses legitimate applications in the initial compromise stage to bypass the detection of security software in order to pave the way for the next stage of the attack process. In addition, the Lazarus Group also utilized vulnerable driver modules in its attack process to disable all internal monitoring systems of a victim's computer, including anti-virus programmes.[121]

[119] https://medium.com/s2wblog/unveil-the-evolution-of-kimsuky-targeting-android-devices-with-newly-discovered-mobile-malware-280dae5a650f

[120] https://learn.microsoft.com/en-us/troubleshoot/windows-client/deployment/dynamic-link-library

[121] See annex 77 for links to the firm's reports.

Annex 80: Information on Sok Kha's associates

No.	Name*	Date of Birth	Passport No. and Expiry Date		Note
①	**KIM** Nam Ryong	Oct. 7, 1990	DPRK Passport (PA) 390230070	April 28, 2025	-
②	**JON** Sung Jin	May 24, 1980	DPRK Passport (PA) 390230067	April 28, 2025	This individual holds two DPRK passports with different DoB
		July 27, 1981	DPRK Passport (PA) 108481360	Dec. 24, 2023	
③	**PAK** Jin Song	Feb. 1, 1981	DPRK Passport (PA) 390230064	April 28, 2025	-
④	**JO** Won Jong	April 7, 1994	Ecuadorian Passport 0930266648	Mar. 29, 2024	This DPRK individual holds a foreign passport
⑤	**HAN** Ji Yon	Mar. 15, 1995	DPRK Passport (PA) 109137555	Feb. 10, 2024	This individual holds another foreign passport
			Cambodian Passport N01673074	July 8, 2029	

* Capitalized and bold text represents last name of the individual.

Annex 81: Corporate registry of Beijing Chaoyi Online Cultural Exchange Co., Ltd (Brand name: Painted Arirang)

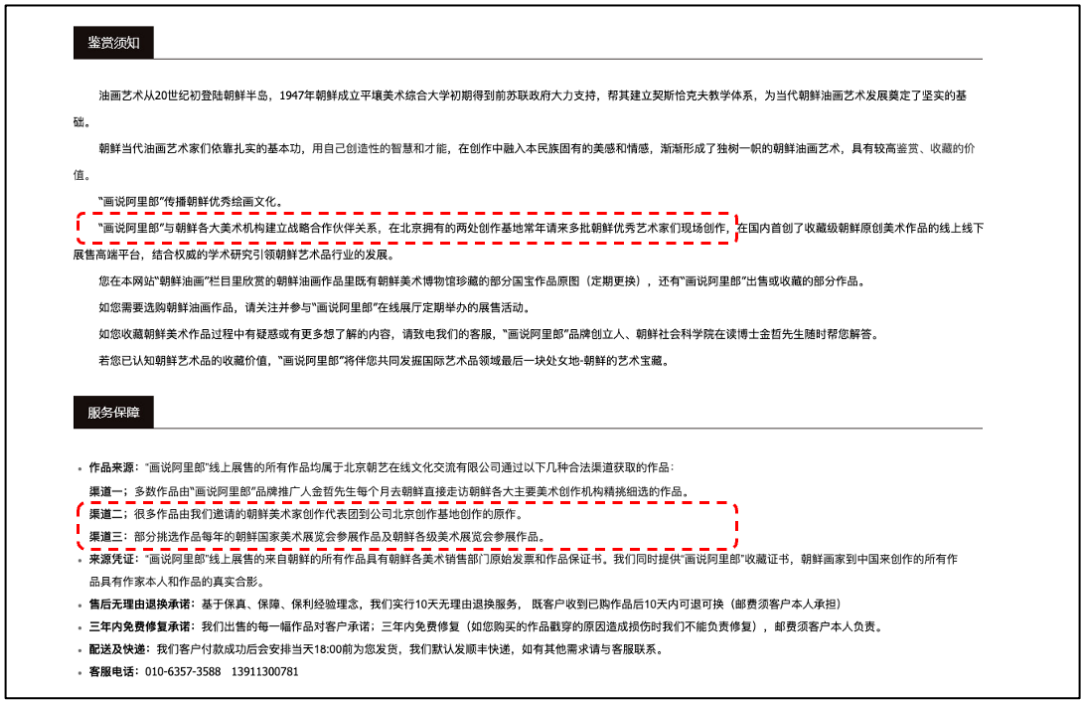
Source: 爱企查

Annex 82: Information about Painted Arirang

According to information provided to the Panel by a research center, Beijing Chaoyi Online Cultural Exchange Co., Ltd, which uses the brand name 'Painted Arirang', has an online platform for the sale of DPRK paintings, including the products of Mansudae Art Studio. The Panel has found that 'Painted Arirang' has frequently hosted exhibitions of DPRK artwork, occasionally in conjunction with DPRK authorities and diplomatic posts. The company's website explains that 'Painted Arirang' has established strategic partnerships with major DPRK art institutions and has invited many outstanding DPRK artists to create on-site works in two creative bases in Beijing. The company's representatives have been "regularly visiting" DPRK and procuring directly from North Korean art creation institutions (see figure 82-1).

The Panel found at least four paintings produced by Mansudae Art Studio on the company's website which were probably displayed for sale (see figure 82-5). Moreover, 'Painted Arirang' offered customised portrait service by DPRK artists who draw clients' portraits at a price between 10,000 (USD 1,470) and 30,000 RMB (USD 4,420) at art studio owned by 'Painted Arirang' (see figure 82-6).

Figure 82-1



鉴赏须知

油画艺术从20世纪初登陆朝鲜半岛，1947年朝鲜成立平壤美术综合大学初期得到前苏联政府大力支持，帮其建立契斯恰克夫教学体系，为当代朝鲜油画艺术发展奠定了坚实的基础。

朝鲜当代油画艺术家们依靠扎实的基本功，用自己创造性的智慧和才能，在创作中融入本民族固有的美感和情感，渐渐形成了独树一帜的朝鲜油画艺术，具有较高鉴赏、收藏的价值。

"画说阿里郎"传播朝鲜优秀绘画文化。

"画说阿里郎"与朝鲜各大美术机构建立战略合作伙伴关系，在北京拥有的两处创作基地常年请来多批朝鲜优秀艺术家们现场创作，在国内首创了收藏级朝鲜原创美术作品的线上线下展售高端平台，结合权威的学术研究引领朝鲜艺术品行业的发展。

您在本网站"朝鲜油画"栏目里欣赏的朝鲜油画作品里既有朝鲜美术博物馆珍藏的部分国宝作品原图（定期更换），还有"画说阿里郎"出售或收藏的部分作品。

如您需要选购朝鲜油画作品，请关注并参与"画说阿里郎"在线展厅定期举办的展售活动。

如您收藏朝鲜美术作品过程中有疑惑或有更多想了解的内容，请致电我们的客服，"画说阿里郎"品牌创立人、朝鲜社会科学院在读博士金哲先生随时帮您解答。

若您已认知朝鲜艺术品的收藏价值，"画说阿里郎"将伴您共同发掘国际艺术品领域最后一块处女地-朝鲜的艺术宝藏。

服务保障

- **作品来源**："画说阿里郎"线上展售的所有作品均属于北京朝艺在线文化交流有限公司通过以下几种合法渠道获取的作品：

渠道一：多数作品由"画说阿里郎"品牌推广人金哲先生每个月去朝鲜直接走访朝鲜各大主要美术创作机构精挑细选的作品。

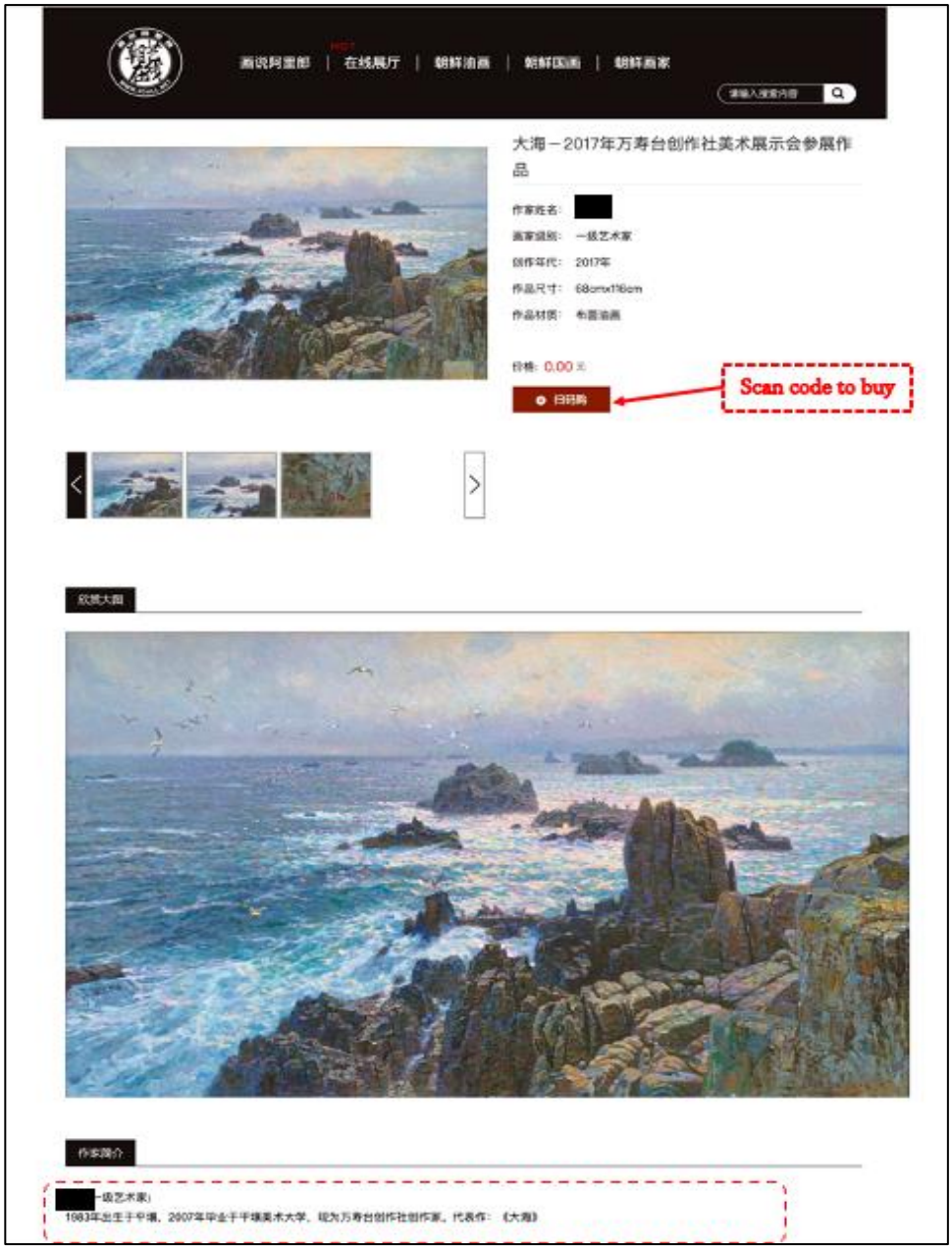
渠道二：很多作品由我们邀请的朝鲜美术家创作代表团到公司北京创作基地创作的原作。

渠道三：部分挑选作品每年的朝鲜国家美术展览会参展作品及朝鲜各级美术展览会参展作品。

- **来源凭证**："画说阿里郎"线上展售的来自朝鲜的所有作品具有朝鲜各美术销售部门原始发票和作品保证书。我们同时提供"画说阿里郎"收藏证书，朝鲜画家到中国来创作的所有作品具有作家本人和作品的真实合影。
- **售后无理由退换承诺**：基于保真、保障、保利经验理念，我们实行10天无理由退换服务，既客户收到已购作品后10天内可退可换（邮费须客户本人承担）
- **三年内免费修复承诺**：我们出售的每一幅作品对客户承诺；三年内免费修复（如您购买的作品戳穿的原因造成损伤时我们不能负责修复），邮费须客户本人负责。
- **配送及快递**：我们客户付款成功后会安排当天18:00前为您发货，我们默认发顺丰快递，如有其他需求请与客服联系。
- **客服电话**：010-6357-3588　13911300781

Source: http://www.hsall.net/product/1328.html (Accessed on 2 January 2023).

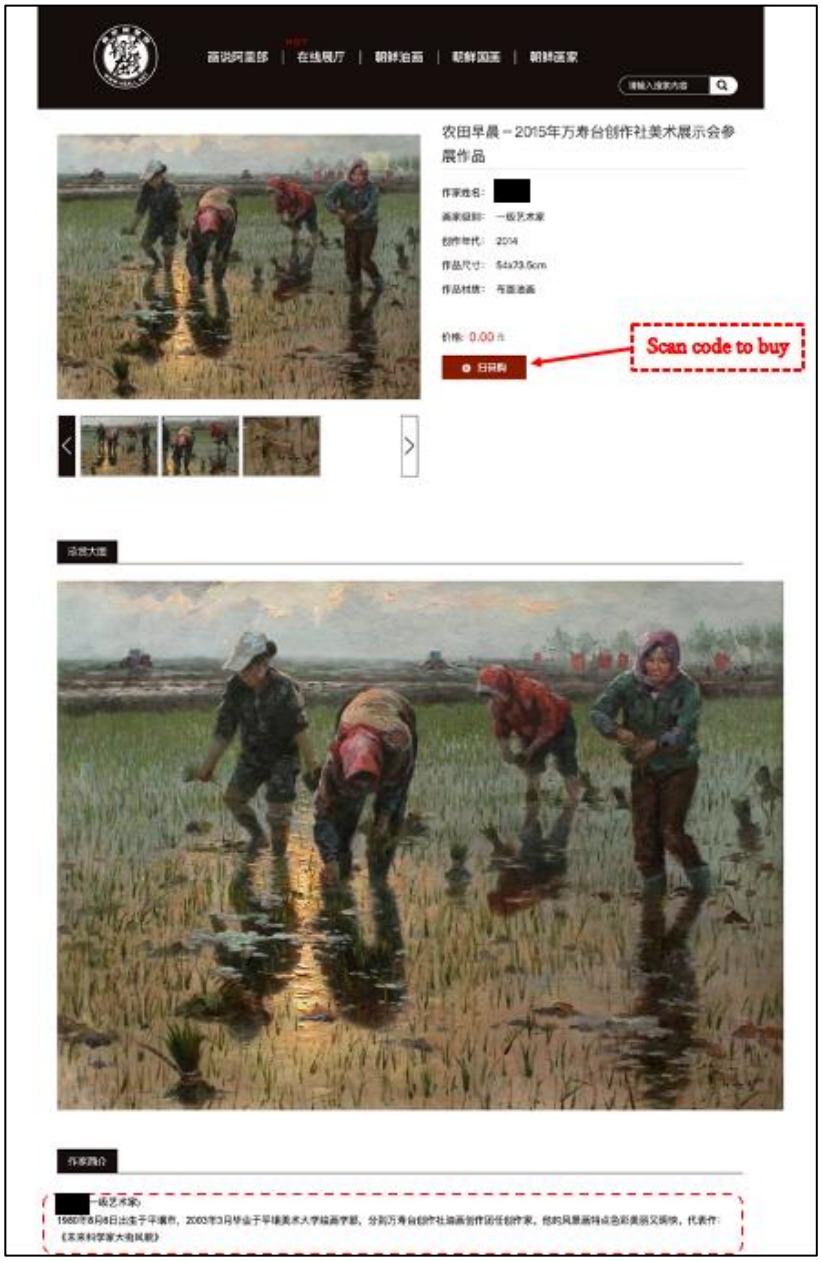
Figure 82-2: Painting produced by Mansudae Art Studio
The following part of this webpage explains that the artist of this painting is currently a creator at Mansudae Art Studio.



Source: http://www.hsall.net/product/1328.html (Accessed on 2 January 2023).

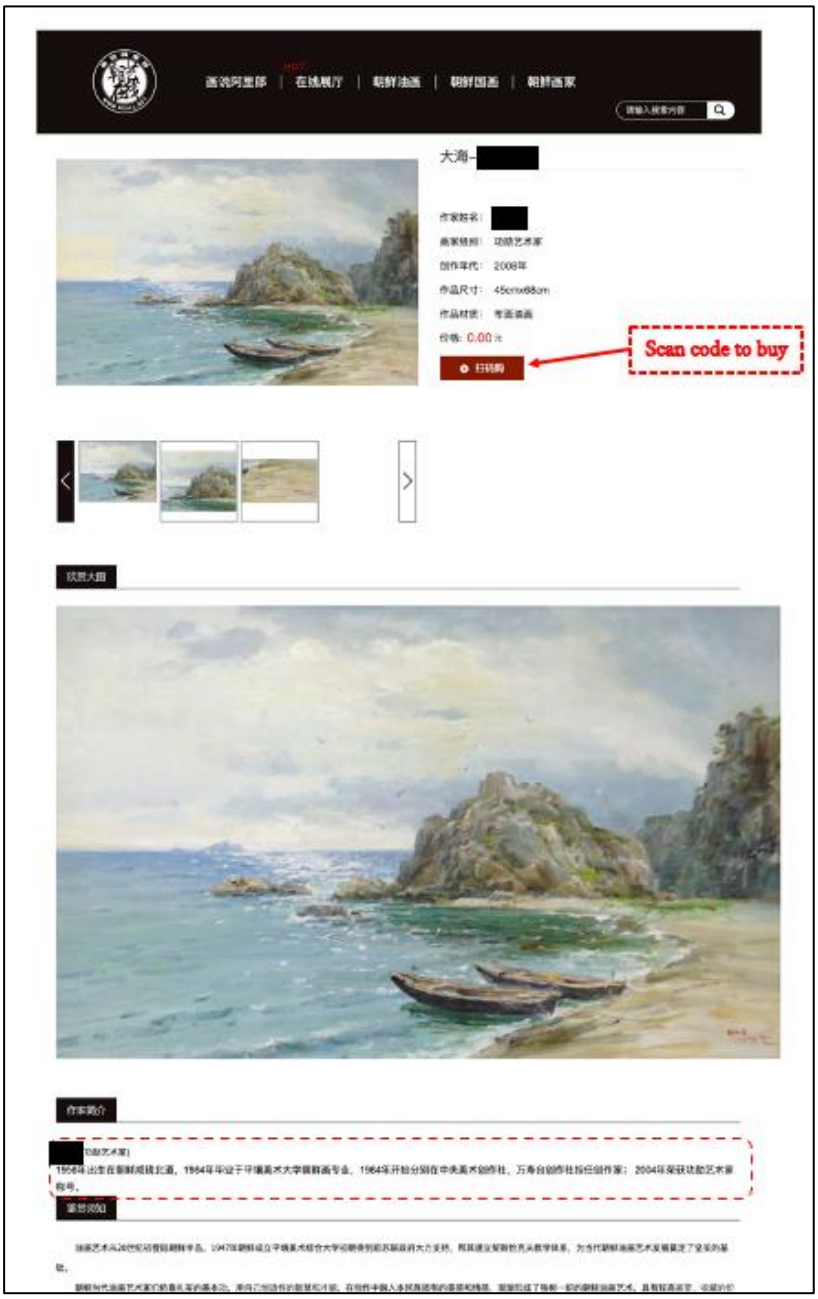
Figure 82-3: Painting produced by Mansudae Art Studio

The following part of this webpage explains that the artist of this painting is assigned to the Oil Painting Creation Group of Mansudae Art Studio.



Source: http://www.hsall.net/product/1331.html (Accessed on 2 January 2023).
Figure 82-4: Painting produced by Mansudae Art Studio

The following part of this webpage explains that the artist of this painting is a creator at Mansudae Art Studio.

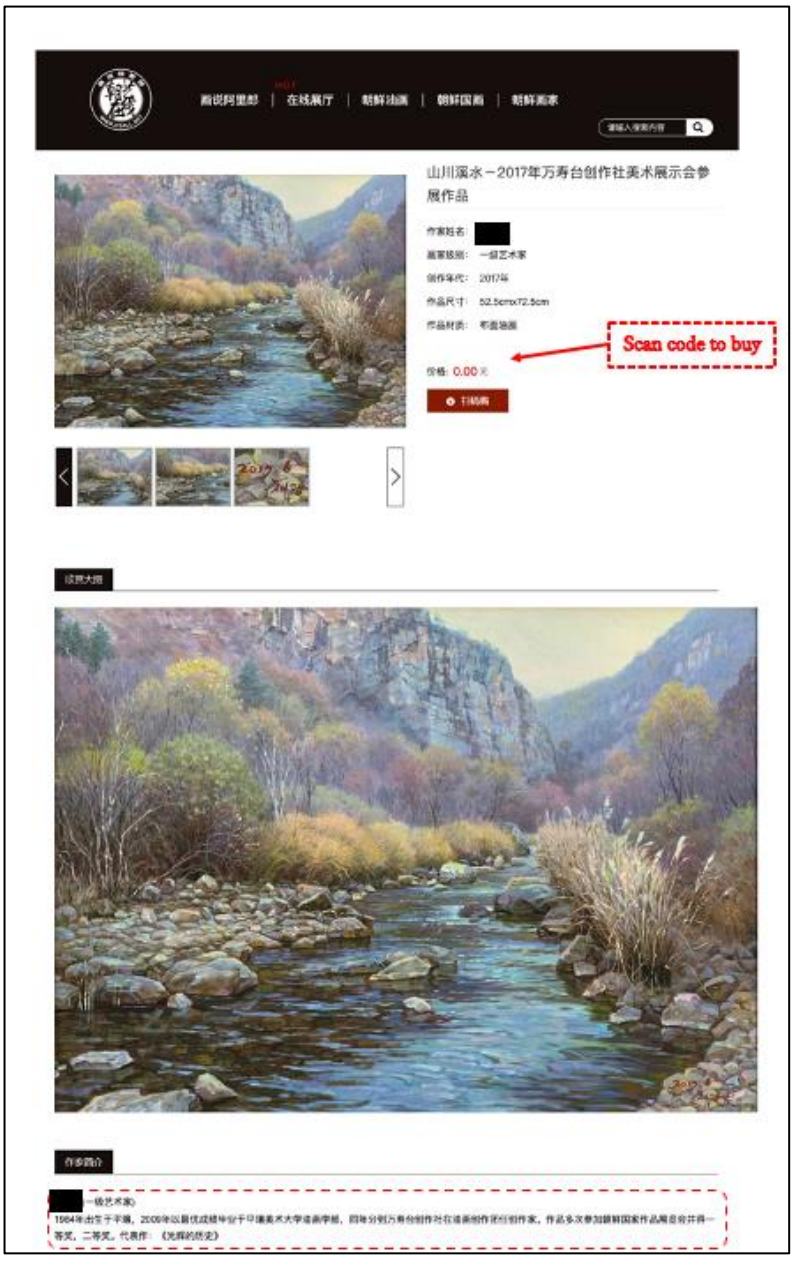


Source: http://www.hsall.net/product/1449.html (Accessed on 2 January 2023).

Figure 82-5: Painting produced by Mansudae Art Studio

The following part of this webpage explains that the artist of this painting was assigned to Mansudae Art Studio as a creator in the Oil Painting Creation Group.

Studio as a creator in the Oil Painting Creation Group.



Source: http://www.hsall.net/product/1329.html (Accessed on 2 January 2023).

Figure 82-6: Customised portrait service

The following shows Painted Arirang's "Customization of Portrait Painting Services". It says "The client must contact our customer service when customizing a realistic portrait. We will arrange for you to come to our "Painted Arirang" creative base as soon as possible, and the North Korean artist will take a number of photos of you on site and then discuss with you to determine the material. Depending on the popularity and level of the painter, the price is also based on the size required by the client; the general price is between 10,000 (USD 1,470) and 30,000 RMB (USD 4,420), and it takes about a month."

Source: http://www.hsall.net/intro/4.html (Accessed on 2 January 2023).

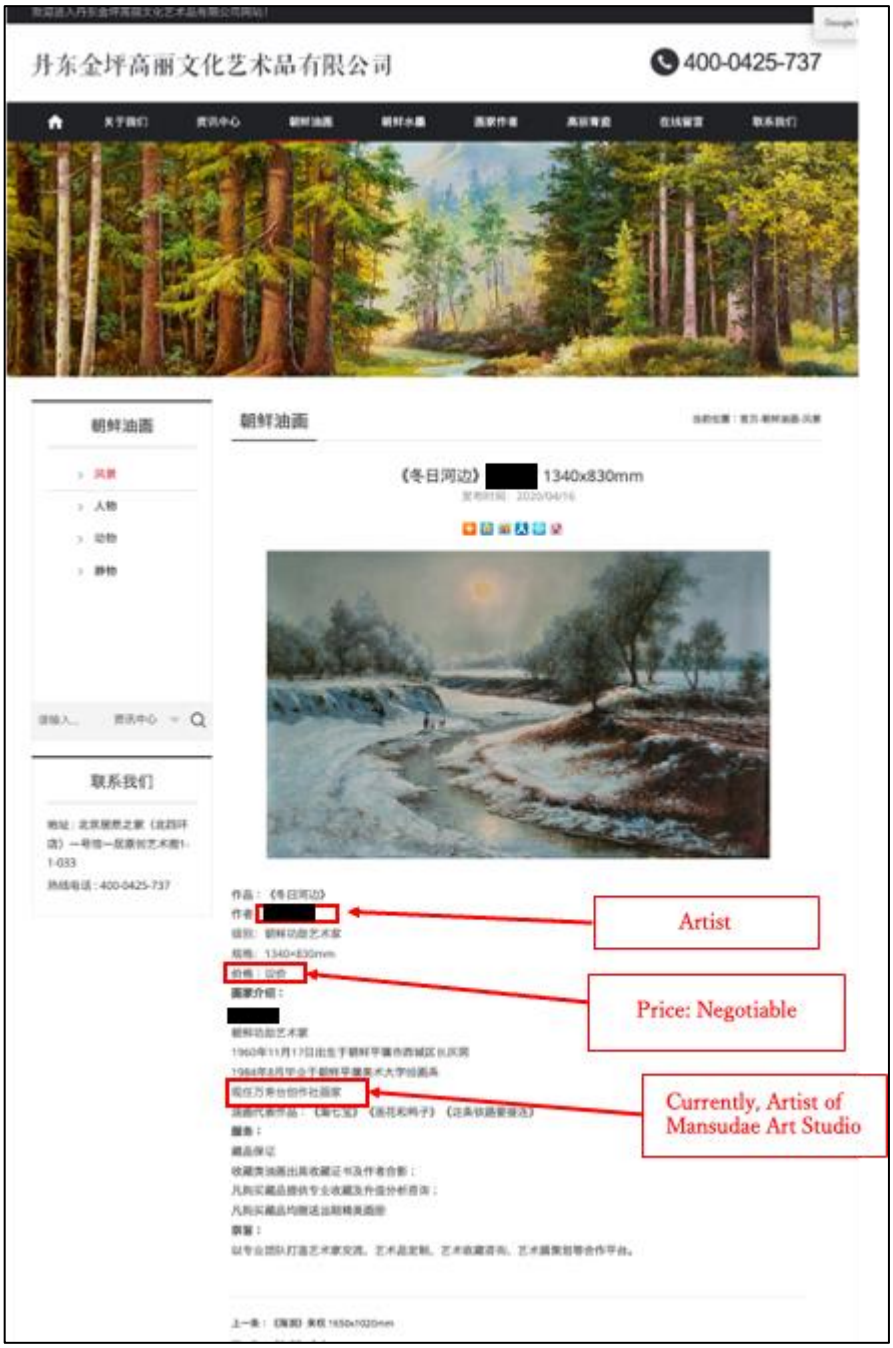
Annex 83: Corporate registry of Dandong Jinping Korea Cultural Art Co., Ltd

Source: 爱企查

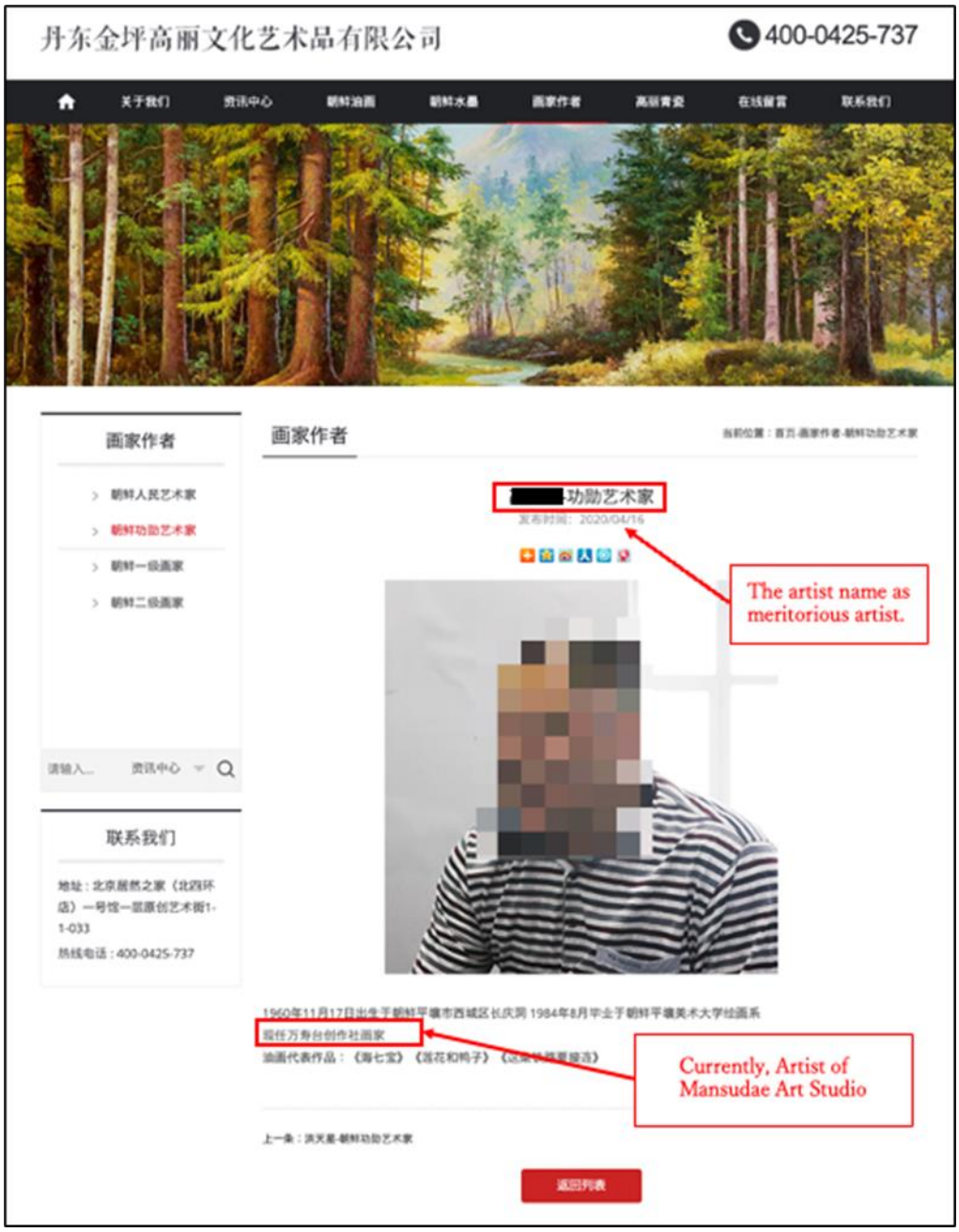
Annex 84: Website of Dandong Jinping Korean Culture Art Co., Ltd

According to information provided to the Panel by a research center, Dandong Jinping Korean Culture Art Co., Ltd has an online platform for the sale of DPRK paintings, including the products of Mansudae Art Studio (see figures 84-1 and 84-2). The company website shows that the company builds cooperation platforms for artist exchanges, artwork customization, art collection consultation, and art exhibition planning involving DPRK artworks. The company hosted an exhibition of DPRK artwork in April 2021 and invited DPRK artists from the Mansudae Art Studio.

Figure 84-1: Painting and artist from the Mansudae Art Studio

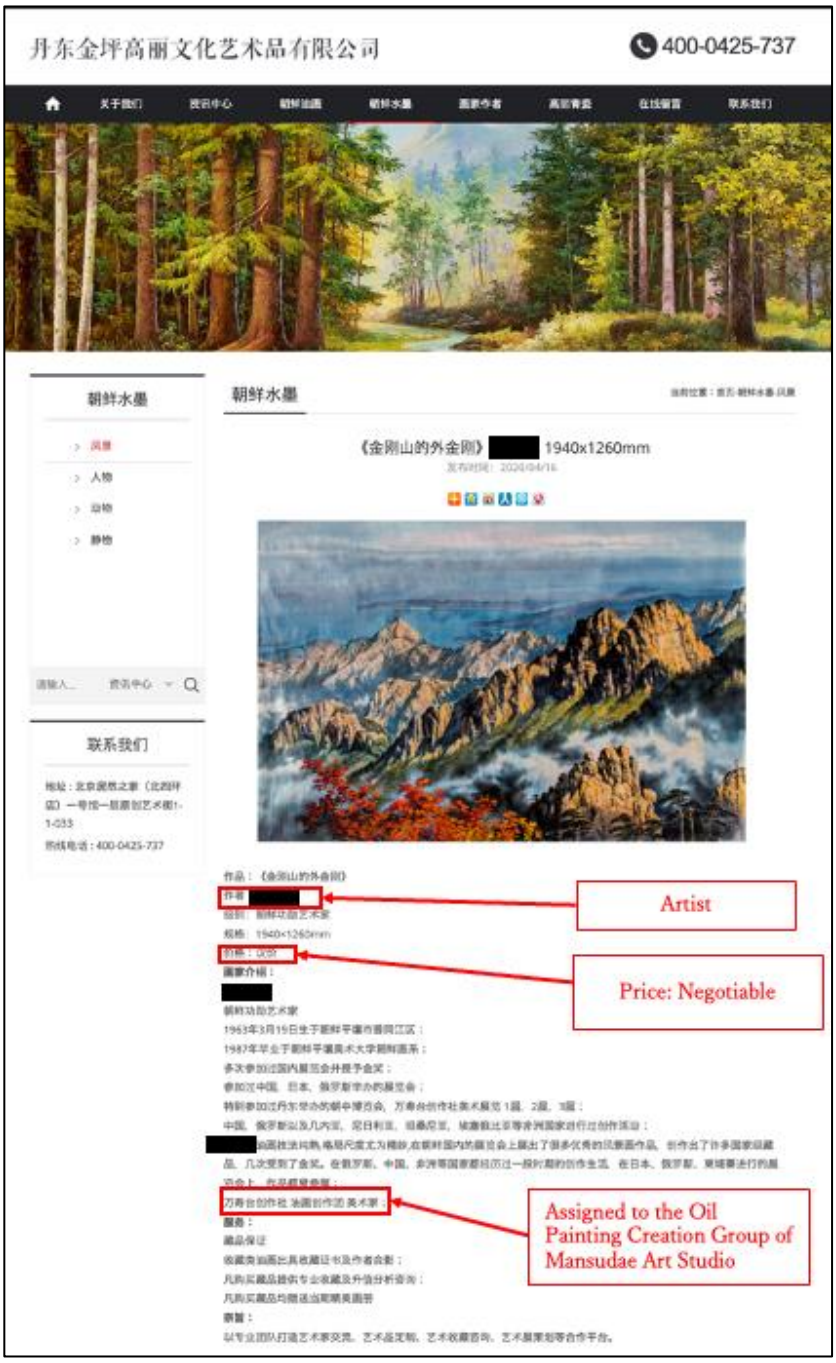


Source: http://www.jpcxyspom/index.php?m=cn&c=Productgzf&a=view&id=773.



Source: http://www.jpcxysp.com/index.php?m=cn&c=Case&a=view&id=399.

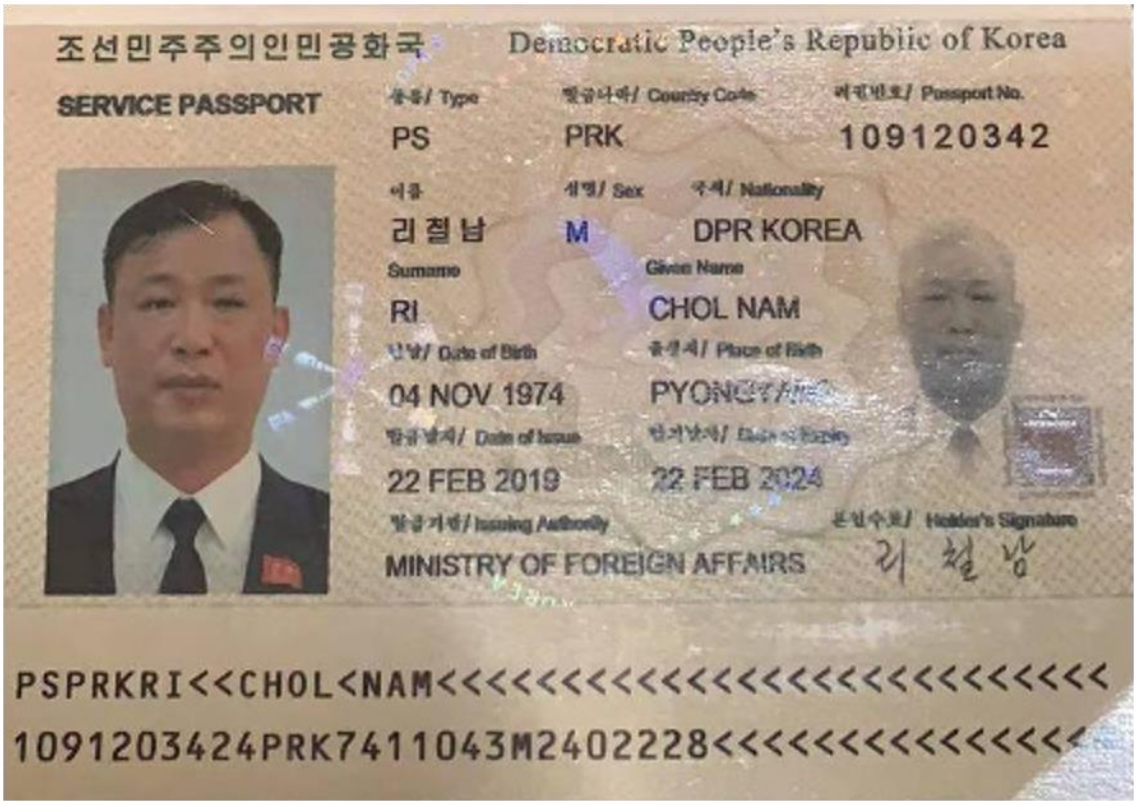
Figure 84-2: Painting and artist from the Mansudae Art Studio



Source: http://www.jpcxysp.com/index.php?m=cn&c=Product&a=view&id=551.

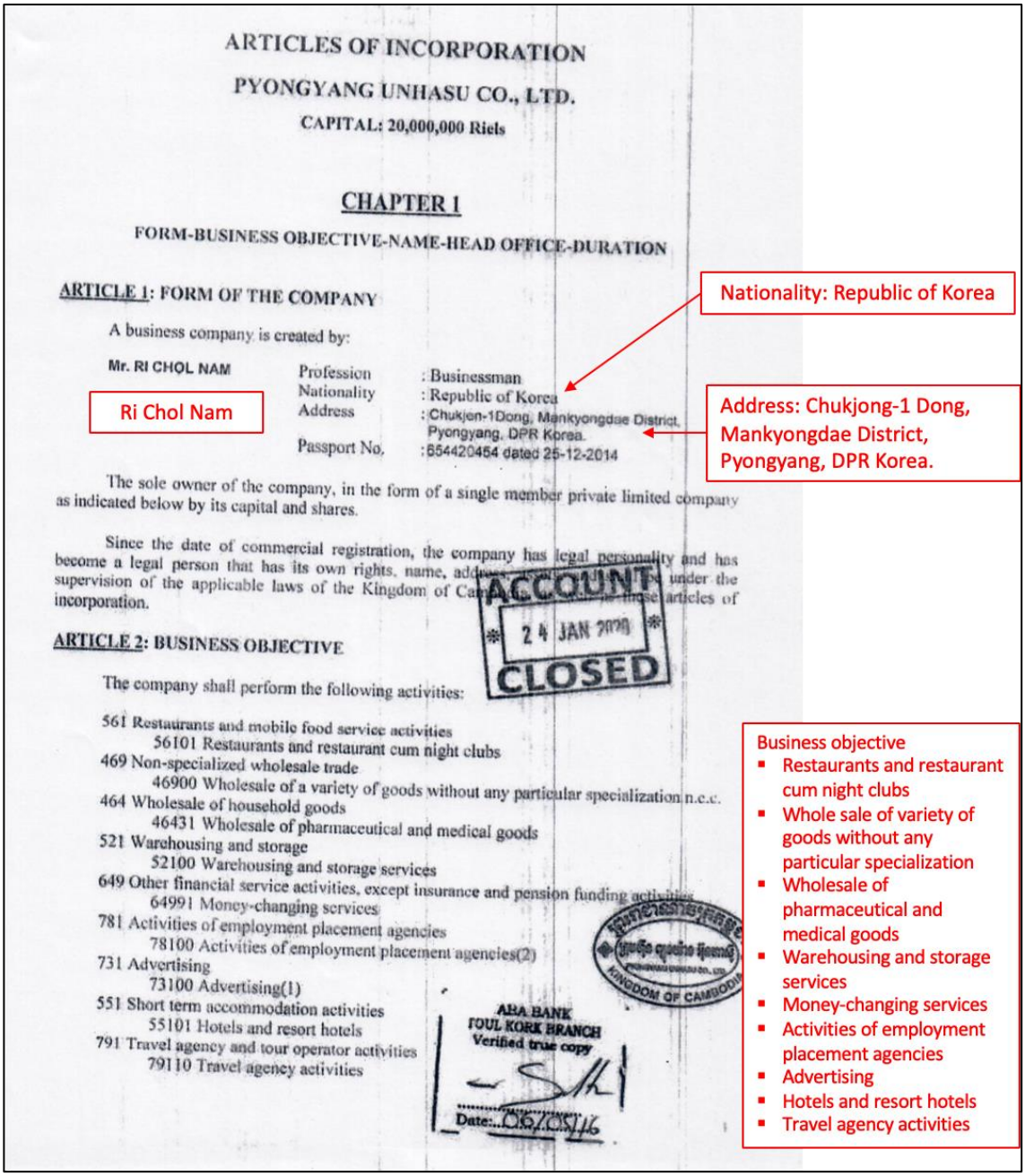
Source: http://www.jpcxysp.com/index.php?m=cn&c=Case&a=view&id=413.

Annex 85: Ri Chol Nam (current passport)



Source: Member State

Annex 86: Incorporation document of Pyongyang Unhasu Co., Ltd



ARTICLES OF INCORPORATION

PYONGYANG UNHASU CO., LTD.

CAPITAL: 20,000,000 Riels

CHAPTER 1

FORM-BUSINESS OBJECTIVE-NAME-HEAD OFFICE-DURATION

ARTICLE 1: FORM OF THE COMPANY

A business company is created by:

Mr. RI CHOL NAM — Profession : Businessman; Nationality : Republic of Korea; Address : Chukjen-1Dong, Mankyongdae District, Pyongyang, DPR Korea.; Passport No. : 654420454 dated 25-12-2014

Ri Chol Nam

Nationality: Republic of Korea

Address: Chukjong-1 Dong, Mankyongdae District, Pyongyang, DPR Korea.

The sole owner of the company, in the form of a single member private limited company as indicated below by its capital and shares.

Since the date of commercial registration, the company has legal personality and has become a legal person that has its own rights, name, addr... under the supervision of the applicable laws of the Kingdom of Ca... these articles of incorporation.

ACCOUNT 24 JAN 2020 CLOSED

ARTICLE 2: BUSINESS OBJECTIVE

The company shall perform the following activities:

561 Restaurants and mobile food service activities
56101 Restaurants and restaurant cum night clubs
469 Non-specialized wholesale trade
46900 Wholesale of a variety of goods without any particular specialization n.e.c.
464 Wholesale of household goods
46431 Wholesale of pharmaceutical and medical goods
521 Warehousing and storage
52100 Warehousing and storage services
649 Other financial service activities, except insurance and pension funding activities
64991 Money-changing services
781 Activities of employment placement agencies
78100 Activities of employment placement agencies(2)
731 Advertising
73100 Advertising(1)
551 Short term accommodation activities
55101 Hotels and resort hotels
791 Travel agency and tour operator activities
79110 Travel agency activities

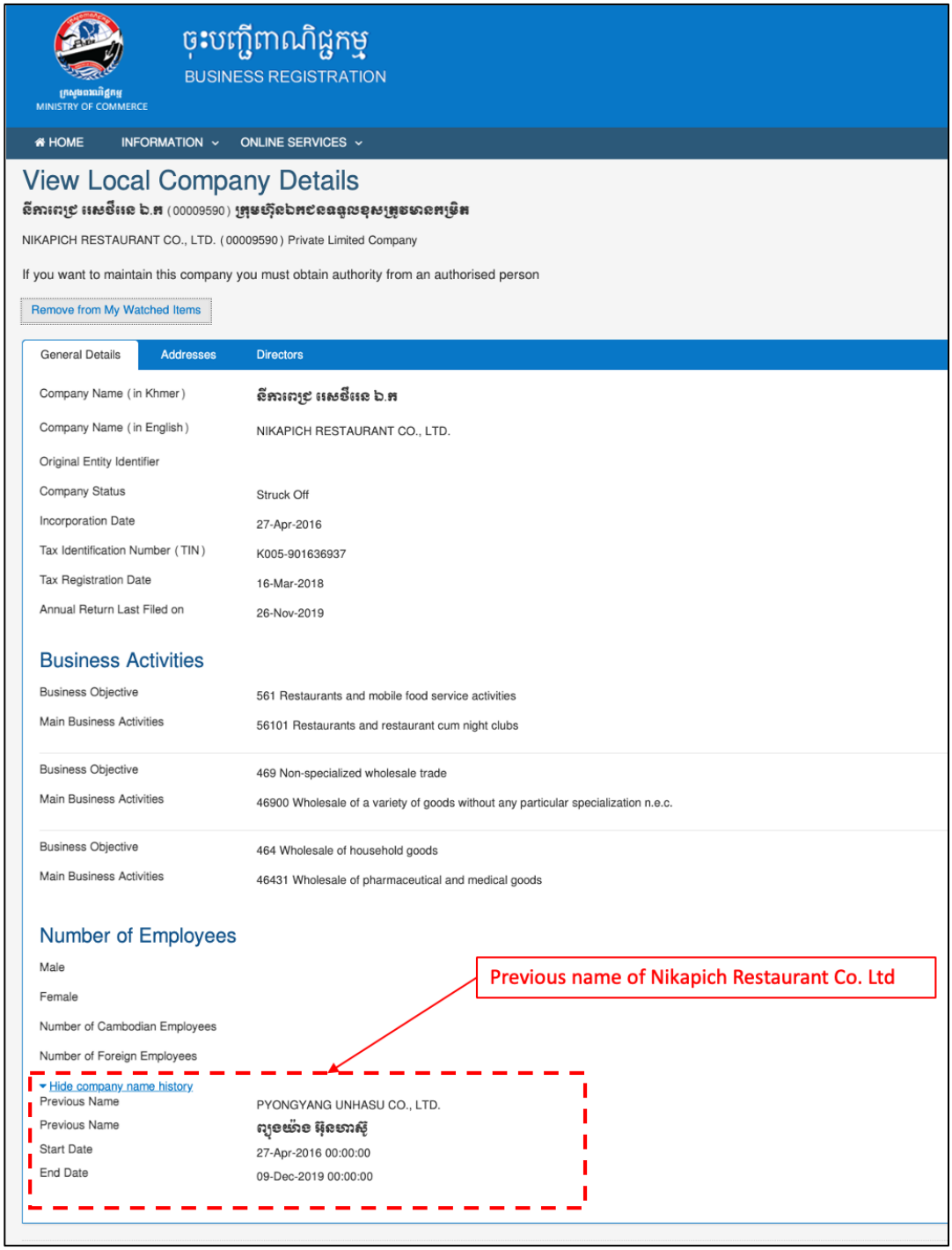
KINGDOM OF CAMBODIA

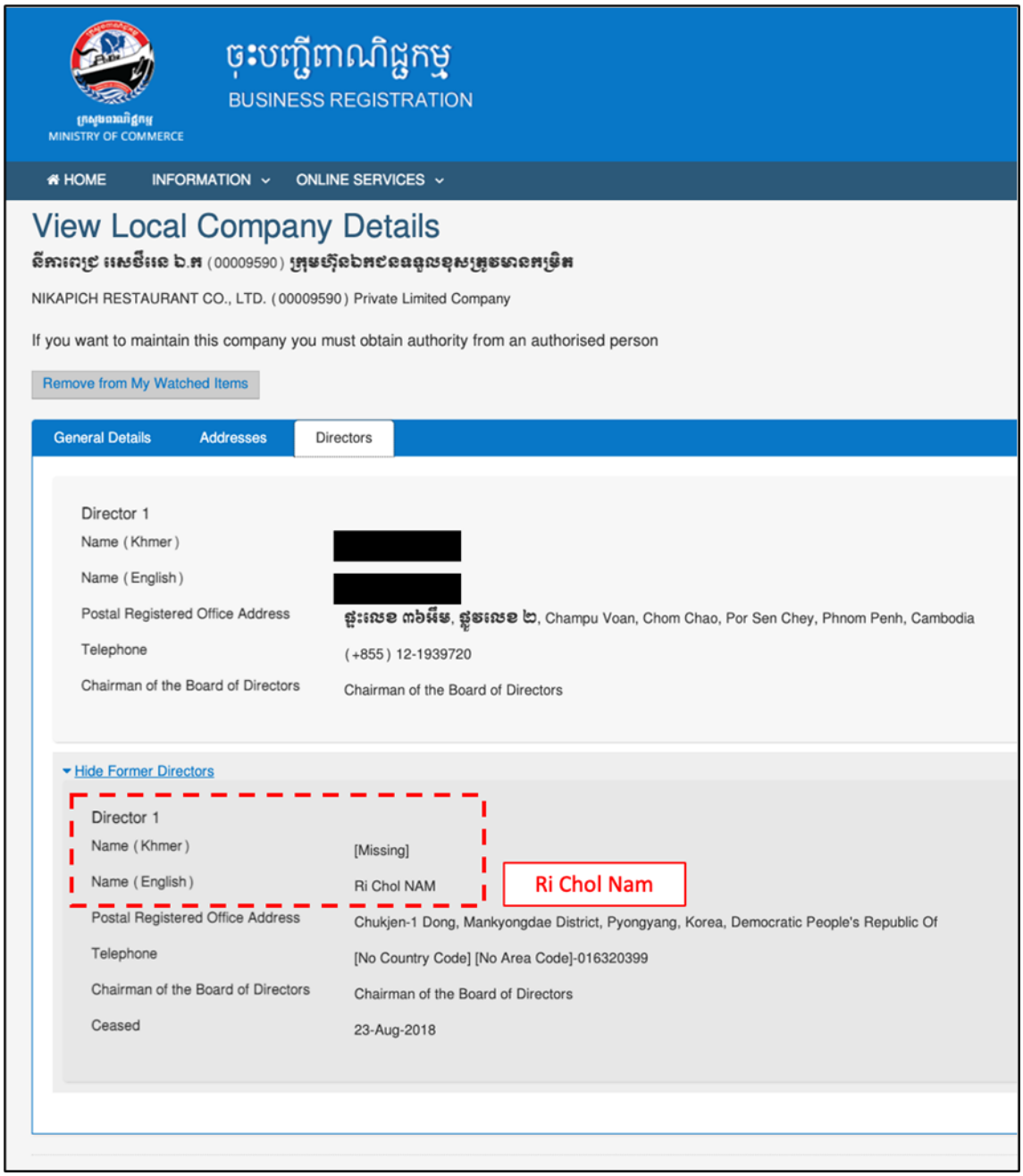
ABA BANK
TOUL KORK BRANCH
Verified true copy
Date: 06/05/16

Business objective
- Restaurants and restaurant cum night clubs
- Whole sale of variety of goods without any particular specialization
- Wholesale of pharmaceutical and medical goods
- Warehousing and storage services
- Money-changing services
- Activities of employment placement agencies
- Advertising
- Hotels and resort hotels
- Travel agency activities

Source: Cambodia (Annotated by the Panel).

Annex 87: Corporate registry of Nikapich Restaurant Co. Ltd





Source: Cambodia corporate registry.

Annex 88: Replies from Member States

1) Viet Nam

Mr. Ri Chol Nam, born in 1974, nationality: the DPRK, entered Viet Nam with the service passport which has the same number as indicated by the Panel of Expert in its letter dated 09th November 2022 by air from [redacted] on 5th April 2022.

His purpose of travel was to visit [redacted], Counselor of the Embassy of the DPRK in Viet Nam. In accordance with the visa-exemption agreement between Viet Nam and the DPRK, the DPRK service passport holder does not require a visa to visit Viet Nam for a period of up to 30 days. As such, Ri Chol Nam entered Viet Nam with his son. [redacted] (as stated in the Note dated 22nd March 2022 of the Embassy of the DPRK in Viet Nam applying for visa [redacted], the purpose [redacted] visit was to accompany his farther on his way returning to the DPRK after completing his assignment as Taekwondo coach in Cambodia). Later on, at the request of the Embassy of the DPRK in Viet Nam, Mr. Ri Chol Nam and his son were extended their stay in Viet Nam for another 1 month/time for 2 times til 23rd June 2022. Mr. Ri Chol Nam and his son exited from Viet Nam via Noi Bai International Airport to [redacted]) on 21st June 2022.

After that, Viet Nan denied Mr. Ri Chol Nam and his son's request for 3-month single entry visa for re-entrying into Viet Nam (from [redacted]) for the purpose to "visit the Embassy of the DPRK and work with Viet Nam Sports Administration, Ministry of Cultures, Sports and Tourism to discuss on Taekwondo training to prepare for the 33rd SEA game".

Through review and investigation, Viet Nam has not found Mr. Ri Chol Nam having any check-in at lodging facilities in Viet Nam, any violation of the Viet Nam's rules and regulation regarding immigration and national security or financial transactions and cooperation with any (business) entities in Viet Nam.

Viet Nam also has so far not found any violation of relevant United Security Council resolutions by Mr. Ri Chol Nam in Viet Nam. His entry and stay in Viet Nam were fully in compliance with Viet Nam's relevant laws and regulations.

On this occasion, Viet Nam would like to reaffirm its commitment to fulfilling its obligation under Security Council resolutions, including those related to the DPRK.

Source: Member State, redacted by the Panel.

2) China

China "*has made thorough investigations according to the information provided by the Panel and found no evidence that Ri Chol Nam conducted activities in violation of Security Council Resolutions within Chinese borders. The authenticity and accuracy of the information provided could not be verified, and such information should not be included in the Panel report*".

Source: Member State.

Annex 89: Questionnaire for humanitarian organisations that have worked in the DPRK

For this reporting period the Panel asked some reformulated questions addressing the impact of COVID-19 and the closed borders on organizational operations, and also each group's estimate of when they might be able to resume operations in DPRK.

1) What is your assessment of the effect of UN sanctions on the humanitarian situation in the DPRK? What sources of data and information do you draw from as the basis for this assessment?

2) How has the COVID-19 pandemic affected the economic and humanitarian spheres, and in what way have they influenced the overall humanitarian situation? If possible, please include information or examples that support your assessment.

3) What has been the scope of your organization's operations since DPRK borders were closed in early 2020? Where you able to continue keep some operations still proceeding with local staff? What problems, if any, have you encountered in this time period?

4)When, if at all, do you expect to be able to resume your operations in DPRK? Do you expect to return operations to the same level you had in pre-COVID time period? Why or why not?

5) Please provide detailed information about how the implementation of UN sanctions may have impacted your organization's COVID-19 response, stipulating one or two of the most important factors.

6) If your operations require humanitarian exemption approvals from the 1718 Committee, has the approval process met your needs?

7) What could be further improved in the exemption process, or the sanctions regime that would better meet your operational needs and objectives in addressing the humanitarian problems of DPRK?

8)Are there other issues, needs, or organizational viewpoints regarding the humanitarian impact of UN sanctions on your work in the DPRK that you want to share with the Panel?

Annex 90: Responses from humanitarian organisations

[Organisation 1]

1) **What is your assessment of the effect of UN sanctions on the humanitarian situation in the DPRK? What sources of data and information do you draw from as the basis for this assessment?**
    a. [Org.1] general assessment is that people in DPRK are suffering from a combination of border closures and sanctions against the country. The limitations to humanitarian operations as an effect of the sanctions, exacerbated by the imposed Covid-19 related regulations, have abrupted [Org.1] ability to contribute to local initiatives since mid-2021. We are concerned that humanitarian support cannot reach people in need, which are expected to be a large part of the population. This is a general understanding of the situation based on media articles, reports and sharing of information among peers.

2) **How has the COVID-19 pandemic affected the economic and humanitarian spheres, and in what way have they influenced the overall humanitarian situation in the DPRK? If possible, please include information or examples that support your assessment.**
    a. The pandemic has caused the DPRK government to establish extremely diligent measures to prevent any movement of either goods or people across their border, as well as movement within the country. Since closing of borders, routine vaccinations for children and pregnant women are negatively affected, which will impact their general health status. Recurring natural hazards such as heavy rainfalls and storms negatively influence food stocks and living conditions, including shelters, while health-related complications increase. An already fragile health system has little capacity to respond and treat Covid-19 related implications.

3) What has been the scope of your organization's operations in the DPRK since its borders were closed in early 2020? Were you able to continue some humanitarian operations with local staff? What problems, if any, have you encountered in this time period?

a. [Org.1] has been kept in place since the closing of the borders. [Org. 1] left DPRK in December 2020 as the last international staff in country. Due to the Covid-19 restrictions along with the lack of a functioning banking channel, operations have been very limited. Primary focus has been to procure emergency items and supporting emergency preparedness activities. The items have been purchased outside DPRK and are waiting for import approval since one year back. We are unsure about the exact reasons for such a lengthy approval process. Only two months back, [Org. 1] was notified that Covid-19 related materials such as thermometers, face shields and gloves will not be granted approval for import without a clear justification. In addition, some capacity building activities in terms of supplying information materials and developing training resources have been ongoing. The central problem for [Org.1] is the inability to get money into DPRK and to pay off the incurred debt to [team of Org.1], as well as paying for the transportation of contingency items.

4) If you had to pause your operations in the DPRK due to the COVID-19 pandemic, when, if at all, do you expect to be able to resume your operations in the DPRK? Do you expect to return operations to their pre-COVID levels? Why or why not?

a. This is highly unpredictable, but [Org.1] stands ready to re-establish international presence in Pyongyang when borders open. The situation on the ground and resumption of support must be assessed once back in country, following discussions on collaboration and main needs with our counterpart [Org.1] Operations will most likely go back to normal levels or higher since there seems to be of interest by partners and donors to reengage.

5) **Please provide any detailed information about how the implementation of UN sanctions may have impacted your organization's COVID-19 response.**
    a. The effects of the sanctions have mainly impacted the ability to contribute to the work of the [Org.1] due to the inability to transfer funds for the operations. The absence of a banking channel along with the unwillingness and overcompliance of banks and suppliers have made it almost impossible to continue funding programs in country, including Covid-19 response activities. [Org.1] is in a situation with increasing financial debt to the … and inability to continue support to community-based activities for improved basic health, clean water and livelihoods.

6) **If your operations require humanitarian exemption approvals from the 1718 Committee, has the approval process met your needs? What could be further improved in the exemption process or the sanctions regime itself that would better meet your operational needs and objectives in addressing the humanitarian problems of DPRK?**
    a. The approval process has been much improved and speedier during the last four years which is most appreciated. The complex cumulative effects of the number and multiple types of sanctions seem to influence political willingness to fund humanitarian operations in DPRK. There is a general hesitancy by donors and private actors, especially banks, to have any involvement with the country. We would argue for a general exception of humanitarian aid in the UN Security Council resolutions to avoid any misinterpretation and reduce over-compliance. Humanitarian organizations must be able to deliver humanitarian assistance in a way that does not compromise the humanitarian principles. There is a need for a permanent banking channel for humanitarian funding.

7) **Are there other issues, needs, or organizational viewpoints regarding the humanitarian impact of UN sanctions on your work in the DPRK that you want to share with the Panel?**
    a. N/A

[Organisation 2]

I commend the Panel's continued efforts to investigate non-compliance with the sanctions measures and the issues concerning the unintended impact of sanctions on the civilian population of the DPRK. [Org.2] strongly supports the Panel's mission to gather, examine, and analyze information regarding the effects of the UN sanctions as well as the impact of the COVID-19 pandemic on the humanitarian situation in the DPRK. In regard to the Panel's questions, it has become increasingly difficult to

exclusively examine the impact of the UN sanctions on the civilian population of the DPRK due to the COVID-19 outbreak and the DPRK's subsequent restrictions.

The aim of this correspondence is to examine the opportunity cost of money spent by the DPRK on the missile and nuclear programs that could have otherwise been allocated to support its citizens' health, nutrition, and human security during the COVID-19 pandemic. This is problematic not only because it impedes dealing with the nationwide COVID-19 crisis, but also because it threatens global security while violating multiple UN Security Council resolutions.

[Org.2] respectfully submits the following observations to the Panel based on our experience, expertise, and current understanding. Our response below addresses questions 1 and 2 from the list of questions provided by the Panel, as these questions most directly pertain to our activities.

1) **What is your assessment of the effect of UN sanctions on the humanitarian situation in the DPRK? What sources of data and information do you draw from as the basis for this assessment?**

In our previous correspondence with the Panel, we emphasized how one of the main factors that contributes to the dire humanitarian situation in the DPRK is how "the DPRK has deliberately chosen to prioritize the regime's security at the expense of the population's health and well-being." We also highlighted how the DPRK has continued to develop its nuclear missile program despite the multiple UN Security Council Resolutions, contributing to a "significant portion of state expenditures" and negatively affecting the flow of foreign aid into the country. The priority that the DPRK places on the nuclear weapons program rather than on the health, nutrition, and human security of the civilian population perpetuates the dire humanitarian situation in the DPRK.

According to data from the [Org.2] the DPRK has spent around $1.6 billion on its nuclear weapons program over the past 50 years. These expenditures include $600 to $700 million on a uranium refinery in Pyongsan, nuclear fuel manufacturing and reprocessing facilities, a nuclear reactor and a light-water reactor at Yongbyon, and $200-$400 million making centrifuges and building a uranium enrichment facility.

The UN has passed nearly a dozen resolutions condemning the DPRK for its nuclear pursuits and imposing sanctions. The imposed sanctions are purposefully designed to cut off sources of funding for the missile and nuclear development programs. These measures include the ban of the trade in arms and military equipment, dual-use technologies, the freezing of assets of individuals involved in the country's nuclear program, a cap on DPRK labor exports, and a cap on imports of oil and refined petroleum products, among others. These sanctions do explicitly allow for humanitarian assistance (CFR, 2022).

These sanctions limit the financial power of the DPRK leadership and the regime's sustenance. Although the UN sanctions limit the financial power and sustenance of the DPRK regime, **these sanctions may not directly affect the lack of health, nutrition, and human security of the DPRK citizens. The DPRK government is allocating their limited funds to its nuclear and missile programs rather than to the health, nutrition, and human security of its people,** and this decision is negatively impacting its citizens, much more so than any conceivable effect of UN sanctions.

To illustrate this proposition, we can look at this year's arms development expenditures versus food shortage. This year alone, the DPRK has spent about 2% of its GDP on missile launches, which translates into as much as $650 million. Between $208-$325 million was spent on ammunition, fuel, and other materials, while the rest was spent on labor and other expenses. These funds could have been used to buy between 510,000 and 840,000 tons of rice, which is enough to cover 59-98% of the annual food shortage (Kobara, 2022).

If we look more specifically at the missiles fired within just one day this year, November 2, 2022, the numbers are significant. There were 25 missiles fired, costing around $2-$3 million each, which totals up to $50-$70 million total. In 2019 alone, the DPRK imported $70 million worth of rice from China (Kim and Yang, 2022).

Looking at these expenditures more cumulatively, the patterns observed in this year's data hold true: "The U.N. Food and Agriculture Organization reported in 2021 that an estimated **860,000 tons of food are still annually needed in the country**." This means that the $1.1 billion to $1.6 billion the DPRK has spent on nuclear development could have been used to **make up for the rice deficit for one and a half to two years or corn for three to four years**, according to the [Org.2] estimate (Suzuki 2022).

However, it must be said that it is still possible that the UN sanctions may have **unintended negative effects** on the humanitarian situation in the DPRK. For example, a number of the sanctions including "export restrictions on the textile, fishing, and coal industries and bans on working abroad disproportionately affect North Koreans who depend on these economies," rather than the targeted elites.

What we know for sure is that the DPRK is struggling more than before due to bad harvests in 2022, and it was already dependent on imports to feed its population (Food and Agriculture Organization Report, September 2022). With the strengthening of border control at the outbreak of the COVID-19 pandemic, informal markets have had a harder time acquiring food, putting more pressure on the 'official' means to get food. In such a situation, it is essential to allocate funds for food imports; yet, the government is clearly keen on directing its funds to missile development rather than the welfare of its citizens. **It is a question of will, not capacity.** Despite the financial burden of the UN sanctions, the DPRK government has sufficient funds to ensure a more stable food supply but refuses to allocate adequate funds to such a purpose.

Furthermore, the DPRK attempts to evade these UN sanctions through illicit overseas labor, leading to further human rights violations on the civilian population. The DPRK forces its overseas workers to deposit their earnings into accounts controlled by the government (Ruggiero and Scarlatoiu, 2022). According to a report by the Biden administration, the DPRK "withholds up to 90 percent of wages of overseas workers which generates an annual revenue to the government of hundreds of millions of dollars" (Biden Administration Report). This exploitation of labor earns hard currency for the DPRK government, which is then used to fund the nuclear weapons program (Ruggiero and Scarlatoiu, 2022). The DPRK's exploitation of the labor and security of its citizens demonstrates the government's decision to prioritize the funding for the nuclear weapons program over the well-being of the DPRK civilian population.

Cyberattacks are another tactic that the DPRK utilizes to fund the nuclear program while bypassing the sanctions. From 2011 to 2020, the DPRK "stole more than $1 billion worth of cryptocurrency," and "$400 million worth of crypto coins" in 2021. These cyberattacks used to steal millions of dollars

for the regime while the citizens suffer from food insecurity and health disparities reveal how the DPRK government values its stability over its citizens (Park, 2022; Young, 2022). Both cyberattacks and the use of illicit overseas workers are essential strategies for the DPRK to fund the nuclear weapons program, despite the UN sanctions and the resulting human and labor rights violations of its citizens.

Although the UN sanctions may have unintended negative effects on the civilian population, the DPRK government's priority on the nuclear weapons program directly affects the human security, food security, and health of the civilian population. The UN sanctions can "frequently delay and suspend the delivery of international humanitarian aid" (What to Know About Sanctions on North Korea, 2022). However, the DPRK often refuses to accept this aid (Zwirko, 2022). As previously stated, if the DPRK were to reallocate the $1.6 billion budget for the nuclear weapons program, it could ensure enough rice and corn for the civilian population for several years (Suzuki 2022). Additionally, these funds could have been reallocated to provide COVID-19 relief and vaccines to protect the health of its citizens (Kobara 2022). The DPRK's allocation of funds for the nuclear weapons program while also rejecting foreign aid and vaccines for over two years demonstrates how the DPRK's priority on the nuclear weapons program exacerbates the unintended negative effects of the UN sanctions on the citizens of the DPRK.

2) How has the COVID-19 pandemic affected the economic and humanitarian spheres, and in what way have they influenced the overall humanitarian situation in the DPRK? If possible, please include information or examples that support your assessment.

In previous correspondence in July 2022 and December 2021, we expressed concern about the humanitarian risk caused by the COVID-19 pandemic, since the DPRK has a deficient healthcare infrastructure, is affected by severe food insecurity, and is suffering from an economic crisis. After two years of claiming no confirmed COVID-19 cases, the DPRK disclosed a nationwide outbreak last May and launched emergency epidemic prevention measures. However, only a few cases have been confirmed as COVID-19 since then, with the rest attributed to an "unidentified fever." In previous correspondence submitted in July, we mentioned that official statistics indicated a cumulative total of 4.7 million cases in a country of 25 million, with only 74 deaths reported as of July 7 (38 North, 2022). The numbers have stayed consistent as recently as December 8, since the official statistics have not been updated by the government since last July (Worldometer, 2022). Along with the absence of official statistics, the inability to conduct independent assessments within the DPRK hinders other countries, institutions and aid organizations from not only estimating the current COVID-19 situation, but also from providing humanitarian assistance in an effective manner. Meanwhile, experts have cast doubt on the exceedingly low COVID-19 fatality rate claimed by the DPRK, compared to that of countries with decent public health institutions and a high vaccination rate (Martyn Williams, 2022).

Yet on August 11, the DPRK announced that it had succeeded in defeating the virus without vaccines, as Kim called it the "greatest miracle." Subsequently, on August 13, the DPRK government lifted the mask mandate and social distancing regulations. However, it is the DPRK's preferred narrative to say the outbreak has been brought under control. The government needed to craft a victorious anti-pandemic story in order to control the plotline and achieve its objectives. Supposedly, one of the regime's objectives is to boost Kim's legitimacy and enhance domestic control over the population to quell public discontent caused by economic hardship and border closures. On top of that, by fabricating a victorious conclusion, the DPRK aimed to signal to the world that "it is self-reliant under its *Juche* ideology", proving it to those who doubted the DPRK's capability to contain an outbreak on its own (Khang Vu, 2022).

It is perplexing to see how the DPRK has been reluctant to reveal the facts regarding COVID-19, since the public health infrastructure in the DPRK is fragile, especially outside of Pyongyang and other major cities. Public health experts including WHO have noted that its healthcare system is not equipped to deal with a massive outbreak. Moreover, they have argued that it is extremely difficult to provide a proper analysis of the most closed country where we do not have access to the necessary data (Maria Cheng, 2022). During the peak of the outbreak in May, state TV broadcast infomercials about "home remedies such as honey tea" and recommended that people "see doctors if they have breathing problems (UN Human Rights Council, 2022)." Other testimonies show how unable and incompetent the DPRK is in dealing with public health issues. In October, Elizabeth Salmón, the special rapporteur on human rights in the DPRK, expressed her concerns about people's access to

healthcare given the fragile state of the health system, plagued by unreliable electricity supply, lack of equipment, and lack of access to basic medicine, which has reportedly been further limited during the prolonged border shutdown (Elizabeth Salmón, 2022).

Although the DPRK has announced its "victory" over COVID-19 in August, Kim Jong Un claimed that "not a single vaccine has been administered in our country." The DPRK has reportedly refused to receive millions of vaccines from foreign countries in the past two years, which implies their lack of "technical preparedness" and supply shortages, according to the global vaccine alliance Gavi. The situation seemingly changed when Kim announced last September that they would begin distributing COVID-19 vaccines officially for the first time during fall 2022, having been wary of the virus spreading during the winter (Zwirko, 2022). Gavi has also reported the DPRK had supposedly administered at least some vaccines originating from China in June. It remains uncertain, however, whether it has started any vaccine campaign or whether there are any prospects for opening any time soon (Fretwell, 2022).

According to recent satellite imagery analysis and the Chinese authorities, several trains started moving between China's city of Dandong and the DPRK's Sinuiju as goods piled up at a disinfection center near the border (Reuters, 2022). Beijing's foreign ministry also announced in late September that bilateral land trade had resumed after a five-month hiatus last month (Zwirko, 2022). Despite this, the DPRK government has significantly raised the level of its border security, restricting travel and trade, using COVID-19 as a pretext, according to *Human Rights Watch* in November (2022). A series of satellite images indicates that the increased border security has almost entirely stopped unauthorized cross-border economic activity, which has contributed to severe shortages of food, medicine, and other necessities. The reduced cases of DPRK citizens who seek asylum abroad are also attributed to the strengthening of border control. The DPRK government has used purported COVID-19 measures to further repress the citizens of the DPRK, which violates the right to freedom of movement and other rights (Lina Yoon, 2022).

In the meantime, international aid organizations and countries including the United States and the Republic of Korea have attempted to make multiple aid shipments to the DPRK to alleviate the COVID-19 situation in the country. Nevertheless, they have been consistently refused by the DPRK's government. In October, UNICEF sent a large humanitarian shipment to the DPRK that included goods such as medical supplies, as it was granted a second exemption from UN sanctions against the DPRK (Bremer, 2022). UNICEF has been one of the few aid organizations that has been able to ship supplies to the DPRK after it shut its borders in early 2020. Once a shipment crosses the border, it will likely be held at a storage facility for several months. Considering the organization's most recent aid shipment took more than a year to reach the country, however, it is unclear when the latest health and nutrition supplies will reach the DPRK's neediest. And it is impossible to make that determination without international UNICEF staff members on the ground. The lack of transparency continues to be the major obstacle to the efficient disbursement of humanitarian assistance that reaches the most vulnerable segments of the population first. On the other hand, the Republic of Korea approved two new deliveries of humanitarian aid to the DPRK last October, according to the ROK Ministry of Unification, which was the fourth aid delivery that had been approved under the Yoon Suk-yeol administration (Bremer, 2022). Regardless of the sender, the DPRK appears unlikely to accept the aid as it still exerts strict COVID-19 border controls, which have resulted in very few humanitarian shipments reaching DPRK shores over the last three years (Bremer, 2022).

What makes the circumstances worse is the fact that all foreign aid workers had departed the DPRK as of March 2021, which means that the citizens of the DPRK are the only ones able to handle and distribute aid supplies that enter the country, making it difficult to track the whereabouts of the aid shipment. In her first report to the UN General Assembly in October 2022, Elizabeth Salmón, the UN Special Rapporteur on the situation of human rights in the DPRK, noted that "the DPRK's self-imposed COVID-19 restrictions led to the departure of all international humanitarian staff from the country (Salmón, 2022)."

The pandemic grievously threatens the human security of the people of the DPRK, especially their health and food security. Since the DPRK has been exerting heavier controls on the movement of supplies and people, it may further constrain the population's ability to obtain food, and a few cases of death from starvation are reported [by Org.2] the previous Special Rapporteur on the situation of human rights in the DPRK, claimed that "prolonged border closures and restrictions on movement in-country have decimated the market activity that has become essential for the general population to access basic necessities (UN Human Rights Council, 2022)." Since the country's agriculture has been heavily dependent on its human labor, it is likely that the COVID-19 outbreak and related lockdown spurred difficulties with mobilizing enough people to plant crops. Prior to the outbreak of COVID-19, it was reported that the authorities had managed to mobilize as planned. With draconian restrictions on inter-regional travel and strengthened surveillance, farm mobilizations across the regional boundaries have been suspended, and local authorities rely on labor solely from within their own districts (Mun Dong-Hui, 2022).

It is apparent that the DPRK has been taking advantage of the pandemic to tighten controls and oppress its citizens, abusing their right to access to information, right to health, and suppressing the freedom of movement of its citizens. Its government continues to impose severe restrictions on basic freedoms to allegedly contain the spread of the virus. Kim Yeong-soo, a professor of Political Science and International Studies at Sogang University, said, "North Korean residents obtained food through rations in the past, but since the Arduous March, they have been securing food from the marketplace. The operations of the marketplace have since been restricted by the COVID-19 pandemic, severely affecting the food supply of the middle class in particular." (Jeong, 2022). Multiple sources have reported that the DPRK authorities have closed the market in many areas, including in Pyongyang and cities adjacent to the DPRK and Chinese border, with the majority of the places not having been allowed to open until now. "The North has been in serious economic difficulties since a total border lockdown early in the coronavirus pandemic. Yoo Seong-ok, a former chief of the Institute for National Security Strategy, said, "The North is launching provocations to create a warlike atmosphere and quell domestic discontent with economic difficulties" (Kim and Yang, 2022).

COVID-19 and the subsequent closure of borders has worsened the DPRK's economic situation. Even amidst these deteriorating conditions, Kim's choice lies in his nuclear and missile force, not food. The DPRK is consistent with its strategy of advancing its nuclear and missile capabilities to gain recognition for its status as a nuclear power and to increase its bargaining power with the United States. It is a strategy that leaves ICBMs, not food, to future generations. Some say that the food situation is relatively stable, and that large scale fatalities will not occur immediately. Sources within the DPRK escapee community who are in contact with sources inside the country have informed [Org.2] that, in absolute terms, the level of human insecurity may be comparable to the mid to late-1990s, the days of the "Arduous March," the great famine that devastated the DPRK. However, in relative terms, the people of the DPRK are doing better, as they have developed the survival skills

necessary to overcome economic adversity, by engaging in barter and other informal economic exchanges.

Rather than complementing aid with commercial food imports to alleviate food shortages, the DPRK has deliberately chosen to prioritize the regime's security at the expense of the population's health and well-being.

Furthermore, the analysis of the DPRK's budget allocation in the context of the pandemic must consider the claim that the DPRK uses its international trade to procure the funds to finance its missiles and nuclear programs, as mentioned in the 2017 UNSC Resolution 2397.

The economic impact of COVID-19 on the DPRK's economy is clearly felt on its international trade levels. Both import and export levels of the DPRK, while already reduced since 2018 due to the UN sanctions, declined significantly with the COVID-19 pandemic (Lee 2022). However, the DPRK is still heavily investing in its military power, while the government dedicates less budget or attention to COVID-19 relief.

If there were a shift in the DPRK's budget allocation from military spending to COVID-19 relief, the humanitarian impact of COVID-19 on the DPRK could be limited. "The money North Korea spent launching missiles this year could have been used to procure 20 million to 32.5 million coronavirus vaccine doses, according to KIDA. That would be enough to give each North Korean citizen one round of vaccination, the institute said." (Kobara 2022) Having previously refused vaccine offers from international aid groups, the DPRK announced in September 2022 a national vaccination campaign to start in the fall. (Zwirko 2022) However, since the official announcement, there has been no update on the vaccination campaign or information on where the DPRK would get the vaccine from, or its financial cost. Therefore, while COVID-19 has a clear economic and humanitarian impact on the DPRK, the DPRK seems to be prioritizing its military power over reducing the impact of the pandemic on its population.

In closing, [Org.2] would like to take this opportunity to highlight the likelihood of the injection of hard currency into the DPRK's nuclear and missile development, which otherwise should have been directed to address the humanitarian crisis caused by the pandemic. The DPRK's rejection of foreign aid while allocating funds to the nuclear weapons and missile programs demonstrates how the DPRK's prioritization of such programs worsens any possible unintended negative effects of the UN sanctions on its citizens. Moreover, the economic and humanitarian impact of COVID-19 has been exacerbated by the funding allocation to nuclear weapons and missiles, focusing on military power over health and human security, with only a recent official commitment to stronger COVID-19 relief.

[Org.2] wishes to emphasize the egregious human rights situation in the DPRK. [Org.2] continues to support human rights initiatives in the DPRK [Org.2 activities] including international access to DPRK detention facilities, increased transparency, and in-country access for human rights organizations as well as humanitarian assistance for the most vulnerable groups in the DPRK. [Org.2] respectfully recommends that the Panel ask organizations requesting sanctions exemptions for specific information on the intended locations of the disbursement of humanitarian aid as well as its beneficiaries. This will facilitate better monitoring of humanitarian aid and allow to determine more accurately whether the aid prioritizes the most vulnerable DPRK citizens.

To broaden the horizon for further dialogue and address the dire human rights situation in the DPRK, [Org.2] recommends allowing in-country visits by the Special Rapporteur or representatives of the UN OHCHR). Resolution 49/22 adopted by the UN Human Rights Council in April 2022 called on the DPRK in paragraph 30 to "allow international staff to operate in the country so that the international community can provide assistance based on independent needs assessments, including of vulnerable populations in detention centers, and a monitoring capacity, consistent with international standards and humanitarian principles and in accordance with relevant Security Council resolutions." It would promote more inclusive and sustainable strategies to support the health, nutrition, and human security of DPRK citizens.

Thank you very much for the invitation to submit an advisory opinion, and for your kind consideration. Should you be interested in a virtual meeting to further discuss the information provided, please feel free to contact [Org.2]. I would greatly appreciate an opportunity to continue this conversation and share more details about our work and mission.

[Organisation 3]

Thank you for initiating this consultative process to assess the unintended impact of sanction measures, as well as of the COVID-19 pandemic and related countermeasures, on the Humanitarian situation and operations in the Democratic People's Republic of Korea (DPRK). We very much appreciate the initiative taken by the 1718 Committee and [Org.3] appreciate your leadership and guidance on behalf of the Panel of Experts to engage in a meaningful dialogue at this juncture. [Org.3] has been actively engaged and working in DPRK on community based programming to address the key challenges related to food insecurity, childhood nutrition, disaster risk reduction (DRR) and water sanitation and hygiene (WASH) programmes since [date].

Based on the conditions of the UN Security Council's resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017) and 2397 (2017), [Org.3] has streamlined its standard operating procedures (SOPs) to comply with the obligatory UNSC policies and process. We actively pursued the derogation approval processes through the [Member State authority] as the competent member state authority responsible for the monitoring of the Sanctions. The guidance and collaboration [of Member State] on derogations from the UN Sanctions Committee 1718 has always proved to be an effective and collaborative support to [Org.3] adhering to the mandatory process and smooth submission.

[Org.3] successfully received three UNSC approvals; two in 2019 and one in 2020 from the 1718 Committee for the derogation of all humanitarian supplies falling under the restricted Harmonised Standard (HS) Codes on a half yearly basis. The cooperation and approval from the 1718 Committee and support [Org.3's] ensured timely humanitarian assistance in [DPRK province] and [DPRK province] up to 2021. Currently our biggest challenge is the strict lockdown of the country as a result of COVID-19 preventative measures. As you may be aware, the majority of humanitarian programmes have been suspended with limited international staff on the ground since early 2020. Supplies into the country (restricted only to China & Russia) have been severely hampered, which has no doubt put a huge strain on food supply, the health system and water and sanitation services. In addition, these restrictions have severely limited [Org.3] and the International Community's ability to assess and verify the level of humanitarian need on the ground.

Please see further details in response to the specific questions raised:

1) What is your assessment of the effect of UN sanctions on the humanitarian situation in the DPRK? What sources of data and information do you draw from as the basis for this assessment?

There is an immense need to provide emergency relief and development to the most vulnerable people in DPRK in a timely manner to save lives and uplift the lives of the people.
The UN OCHA's Needs and Priorities Report for 2022 estimates that 11 million people are in need of humanitarian assistance. The World Food Program (WFP) estimates that 40 percent of the population is undernourished and according to the Global Hunger Index (GHI) 2022, DPRK scored 24.9, a level of hunger that is serious. It is important to emphasise also that up-to-date data is not available and that the situation is likely to be worse than estimates indicate. The biggest humanitarian challenges facing the country include chronic food insecurity; lack of access to basic health services; declining conditions in water and sanitation, and hygiene (WASH); malnutrition and high vulnerability to natural disasters.

The unintended consequences of the sanctions continue to have a major impact on the humanitarian operations coupled with the gradual decline in funding. Other factors such as the disruption to the banking channel as the result of the sanctions; the delay in supply chains due to the border restrictions for the transportation of vital goods; inflation in the prices of humanitarian goods and a steady decline in donor funding due to restricted working environments have all complicated and delayed humanitarian responses. The situation gets more challenging in the case of rapid-onset-emergencies, where the humanitarian response needs to be swift to respond in real-time to needs. The capacity to secure supplies to deliver a timely humanitarian response is restricted and complicated by access issues and compliance issues relating to UNSC sanctions. While there is a mechanism of humanitarian exemptions of banned items for UN agencies and INGOs, the approval process of UNSC adds another layer to the huge logistical challenges of bringing the much needed relief assistance to the people in a timely manner. As detailed under question six below, modifications to the sanction approval timelines would be welcomed to expedite the process of delivery of humanitarian supplies once the country opens up.

2) How has the COVID-19 pandemic affected the economic and humanitarian spheres, and in what way have they influenced the overall humanitarian situation in the DPRK? If possible, please include information or examples that support your assessment.

The humanitarian situation in the DPRK is characterized by chronic food insecurity and lack of access to lifesaving essential basic services with profound impacts on the most vulnerable. The situation has been exacerbated during the global pandemic. DPRK, with its fragile health system took a more protective stand to shield the country from the spread of the pandemic. COVID-19 related restrictions, especially the closure of the border, further hampered the already complex and challenging humanitarian operations on the ground, with international staff unable to return to the country, and the entry of humanitarian supplies severely restricted. The ongoing border closures and the resulting suspension of most humanitarian programmes, means that the humanitarian situation is likely to have worsened significantly in 2022, and will continue to deteriorate through 2023.

The ongoing socio-economic and other challenges resulting from COVID-19 are likely to reverse the meagre development gains made in previous years and result in additional people requiring humanitarian support and deeper vulnerabilities. Natural disasters such as drought, floods and storms are recurring phenomena in the country, compounding vulnerabilities and food insecurity, and increasing the need for humanitarian assistance. There have been some reports of food imports [two Member States] but these are unverified, and there is no information on how the food items are being distributed across the country and if it reached those most in need.

Due to COVID-19 restrictions, field monitoring has not been possible and no verifiable data on the humanitarian situation is available, therefore the data is tentative and subject to adjustment once is access is restored.

3) What has been the scope of your organization's operations in the DPRK since its borders were closed in early 2020? Were you able to continue some humanitarian operations with local staff? What problems, if any, have you encountered in this time period?

DPRK has been under strict lockdown since early January 2020. [Org.3] staff left in [Month] by crossing the border by land to China. Since then, [Org.3] and other agencies have been waiting for the borders to re-open to resume full operations. [Org.3] was able to remotely deliver some ongoing activities (including COVID response activities with [another Organisation] in [years], however, it was not possible in 2022 with no international staff in-country throughout the year. As a result, projects were either suspended or terminated impacting the delivery of food security & agriculture, WASH and DRR activities.

Despite this context, [Org.3] has still maintained its presence in DPRK with limited national staff supervised remotely by [another Organisation]. The difficulty in accessing cash in country to support the remaining national staff has been a huge challenge, not only for [Org.3] but also to the UN and other INGOs. [Org.3] continues to accrue administration operational costs and once the country reopens, these costs will be considered.

4) If you had to pause your operations in the DPRK due to the COVID-19 pandemic, when, if at all, do you expect to be able to resume your operations in the DPRK? Do you expect to return operations to their pre-COVID levels? Why or why not?

It is anticipated that the country will re-open again in quarter three of 2023 and [Org.3] is cautiously optimistic that international staff will be able to return. There have been reports of a 'return plan' being drafted by the UN Permanent Representative to DPRK, following meetings with the DPRK Ambassador in Bangkok. The on-going DPRK response planning for 2023 is based on the assumption that the border will open at least in the third quarter of 2023. Resuming operations to pre-COVID levels will take time. There may be significant quarantine periods for international staff entering the country as well as long quarantine periods for imported goods. Therefore the priority first step upon re-entry will be to conduct detailed needs assessment to understand the needs on the ground and to scale up operations as quickly as possible.

5) Please provide any detailed information about how the implementation of UN sanctions may have impacted your organization's COVID-19 response.

In [Year] [Org.3] joined with the [another organization] to respond to the COVID preparedness at the community level, under the [another organization] in DPRK. Between [months], [another organization] COVID-19 preparedness response facilitated the distribution of PPE material/hygiene kits to 314 kindergartens, nurseries, schools and clinics, benefitting 12,394 children and community members.

However, as the monitoring and access to the field by the international team has been restricted since January 2020, monitoring and verification of data was limited. Due to the strict COVID restrictions, [Org.3] faced delays in procuring humanitarian supplies which resulted in the UNSC derogation approval received in April 2020 expiring, as it was valid for up to six months. This meant that COVID response, WASH and other activities could not be continued.

6) If your operations require humanitarian exemption approvals from the 1718 Committee, has the approval process met your needs? What could be further improved in the exemption process or the sanctions regime itself that would better meet your operational needs and objectives in addressing the humanitarian problems of DPRK?

Looking at the post- COVID-19 scenario when the border re-open and the increasing complexity of the operational environment as a result, it would be extremely helpful to extend the validity of the approval process to allow for expected delays in procurement and other processes.

Further, the consideration of a 'blanket waiver' for local procurement for humanitarian operations would be welcome to avoid the delays in meeting the priority needs for effective humanitarian assistance, once the border opens.

7) Are there other issues, needs, or organizational viewpoints regarding the humanitarian impact of UN sanctions on your work in the DPRK that you want to share with the Panel?

The list of sanctioned items from agricultural machinery to simple vegetable garden hand tools affect many aspects of everyday life and present serious challenges to social economic and development in the country. This impacts the most vulnerable people who live in remote villages and have very limited access for food, WASH, health supplies, and fuel for cooking and heating in winter. A review of the UN sanctions mechanisms would be welcome to make it more streamlined with wider inclusion to cover humanitarian supplies to reach the most vulnerable in timely manner. Apart from the supply of sanctioned items, many if not all the humanitarian agencies have been forced to suspend their operations due to the limitation of cash supply in the country. It would be very timely and progressive if a decision to pursue an operational banking channel was facilitated to ensure the continuity of the actions with cash flow possibilities for humanitarian operations.

Given the global crisis that COVID-19 has created and the unique consequences in DPRK, we must all work together to prevent further suffering and increasing vulnerability of communities. In order to do this, [Org.3] must be able to plan and coordinate our operations effectively and efficiently. We also require greater cooperation and support to secure entry for international staff and ensure international staff can move with fewer restrictions inside and outside the country. This will require continued bilateral engagement with relevant authorities and diplomatic missions to emphasise the negative consequence on the humanitarian assistance and negotiate for a formal arrangement in this regard.

Thanking you again for the opportunity to engage in these critical discussions in relation to the impact of sanctions and the COVID-19 pandemic on DPRK. We cannot underestimate the importance of greater cooperation and coordination to ensure humanitarian programming can resume and continue to deliver to the most vulnerable communities in DPRK.

[Organisation 4]

1. **What is your assessment of the effect of UN sanctions on the humanitarian situation in the DPRK? What sources of data and information do you draw from as the basis for this assessment?**

   In the current situation of the country's self-imposed border closure and self-imposed import restrictions, we deem that the UN sanctions currently do not have a major direct effect on the humanitarian situation. On the other hand, we can assume that the humanitarian impact of the DPRK's self-isolation because of COVID-19 is severe and threatens to undo some of the progress made in areas such as food security, nutrition and health. However, it has to be noted that any assessment of the impact within the DPRK of the COVID-19 pandemic or the country's border closure is based on assumptions rather than evidence at this point. No foreigner has visited the areas outside Pyongyang since 22 January 2020. Very little reliable information trickles out of the country.

2. **How has the COVID-19 pandemic affected the economic and humanitarian spheres, and in what way have they influenced the overall humanitarian situation in the DPRK? If possible, please include information or examples that support your assessment**

   The restricted movement of people is a concern especially for those requiring medical treatment, be it for chronic conditions, severe acute malnutrition (children) or tuberculosis. The supply of medical equipment and drugs is another concern. None of the international humanitarian actors that used to support the country's health system has been able to import and distribute any goods since June 2020. Schools have been closed for extended periods, leading to a lot of missed classes, and possibly also to children missing out on food hand-outs that are usually provided at schools. The World Food Programme informed that it has exhausted its in-country stocks in March 2021. The strict border closure further affects the livelihood of small traders and industries relying on cross-border trade and imported goods.

3. **What has been the scope of your organization's operations in the DPRK since its borders were closed in early 2020? Were you able to continue some humanitarian operations with local staff? What problems, if any, have you encountered in this time period?**

The COVID-19 pandemic preventive measures taken by the DPRK Government have strongly affected the ability of [Org.4], the UN system and other international actors to deliver humanitarian goods and assistance.

[Org.4] had to put its activities in the DPRK on hold (we refer here to our previous responses from November 2021 for the detailed timeline). The office in Pyongyang is running with minimal staffing looking after the maintenance of the premises and other assets. The last international humanitarian worker left Pyongyang in March 2021. An independent monitoring of the situation is impossible.

A recent positive development has been the delivery to DPRK in October 2022 of a stock of PPE gear (Personal Protective Equipment) destined for hospitals. It received clearance at the [a Member State's] border, where it was blocked since August 2020.No other activity is currently implemented.

4. **If you had to pause your operations in the DPRK due to the COVID-19 pandemic, when, if at all, do you expect to be able to resume your operations in the DPRK? Do you expect to return operations to their pre-COVID levels? Why or why not?**

The first and main condition to be able to resume humanitarian operations in the DPRK will be the reopening of borders. As long as they are closed and no international staff is allowed to enter into DPRK, the current minimal activities (maintenance of the premises and other assets) will continue. As for now, there is no signal for any development in that direction or a time horizon for a potential reopening of the border. Without such a signal, it is difficult and too early to assess the level of operations that will take place once they could resume. Their feasibility and the DPRK humanitarian needs at that moment will have to be taken into account.

5. **Please provide any detailed information about how the implementation of UN sanctions may have impacted your organization's COVID- 19 response.**

As stated above, the strict border closure imposed by DPRK has had more impact on the difficulties to respond to COVID•19 than the UN sanctions. For example, the stock of PPE gear was allowed to enter into the country after waiting for clearance from the DPRK authorities for two years, meaning the humanitarian exemption from the 1718 Committee had to be extended several times.

6. **If your operations require humanitarian exemption approvals from the 1718 Committee, has the approval process met your needs? What could be further improved in the exemption process or the sanctions regime itself that would better meet your operational needs and objectives in addressing the humanitarian problems of DPRK?**

   In some cases, in the past, the approval process was lengthy and required a lot of information to be collected. However, there has been a significant improvement in the approval process for humanitarian exemptions in the course of the last years. We are satisfied with the procedures, and highly appreciate the extension of the validity of the exemptions from six months to one year. We further appreciate the improvements to the exemption process made through Implementation Assistance Notice No. 7. We welcome the joint call to work together to sustainably resolve the banking channel. This matter has further increased in urgency, as cash-carry in the current situation is not a feasible option.

7. **Are there other issues, needs, or organizational viewpoints regarding the humanitarian impact of UN sanctions on your work in the DPRK that you want to share with the Panel?**

   There is room for improvement in the implementation of sanctions as follows:

   (i) establishment of a humanitarian international banking channel, and we refer here to our letter of May 2022 on that matter. We need a way to legally bring cash into DPRK to be able to pay local expenses. Without being able to pay our debts, we put at risk our cooperation with local partners.

   (ii) consideration of a "green list" of humanitarian goods for which multi-year exemptions could be granted (for example: water pipes, plastic sheeting for agriculture, personal protective equipment etc.).

As stated in your letter, the information above is provided to the Panel on the condition that it will be kept confidential and used solely for the purposes of the Panel's mandate. upon our approval, information may be included in reports of the Panel to the 1718 Committee and the Security Council.

We hope that this information is useful and remain at your disposal fur any further question.

[Organisation 5]

1. What is your assessment of the effect of UN sanctions on the humanitarian situation in the DPRK? What sources of data and information do you draw from as the basis for this assessment?

Prolonged UN and bilateral sanctions have contributed to the weakening of the country's health system and thus negatively affecting the humanitarian situation of the country. Much needed work to strengthen the health system, including procurement of critical medical equipment, medical consumables and essential drugs, and human resource development initiatives by the government have been challenged.

The sanctions also have brough immense challenges on the work of the UN Agencies and other humanitarian organizations. Lack of a functional banking channel leading to acute liquidity crunch has severely constrained critical in-country activities. Consequently, with limited in-country funds, the focus has been supporting and responding to humanitarian crisis such as medical emergencies, floods and typhoons rather than assistance to strengthen and develop the country's health system which are crucial for appropriate humanitarian work in the health sector. As a result, the health sector lacks the resources to develop strategies that would have been able to prevent and mitigate shocks and emergencies such as the COVID-19 pandemic.

As an example, the procurement of laboratory equipment is delayed and the new technologies like genomic sequencing could not be introduced which is required for detection of COVID-19 and its variants, impacting the national diagnostic capacity. Diagnosis of communicable disease such as detection of drug resistance TB suffered setback due to sanctions imposed on metal items thus cartridges which are used could not be procured unless sanction clearance is obtained.

These challenges resulted in poor utilization of resources, for example, GAVI, the Vaccine Alliance support under Health System Strengthening Project 2 for year 4 and 5 remained mostly unused due to dual effect of COVID-19 and UN sanction.

2. How has the COVID-19 pandemic affected the economic and humanitarian spheres, and in what way have they influenced the overall humanitarian situation in the DPRK? If possible, please include information or examples that support your assessment.

The government of DPRK closed its international borders (air, sea and land) in a bid to prevent the entry of the novel coronavirus into the country when [Org.5] in January 2020. As of date, the borders continue to remain closed although limited supply of essential health commodities are now being allowed on a case-by-case basis.

Sustained border closure has had a profound negative impact on the flow of supplies, which the DPRK population heavily relied on to supplement the government efforts. For example [Org.5] to supplement medicines for primary health care services and health care during emergency situations, respectively. [activities of Org.5]. Such support ceased when the borders were closed.

Several shipments of essential medicines, medical consumable, and critical medical equipment [activities of Org.5] most of which were approved by the Sanctions Committee were held up at different locations incurring large expenses on storage charges and customs demurrage. Multiple shipments including medicine and consumables expired while being held up costing more money to dispose such shipments.

Resultantly, an already weak health system has been further weakened due to lack of medicines, supplies and support, that would translate into higher risk for the already vulnerable population because of reduced country capacity in managing diseases/health issues.

3. What has been the scope of your organization's operations in the DPRK since its borders were closed in early 2020? Were you able to continue some humanitarian operations with local staff? What problems, if any, have you encountered in this time period?

Other than normal office administrative work, limited activities [Org.5] could be supported remotely in [year]. However, some of these were discontinued in 2021 due to a change in country policy and donor's conditionality. Other significant support provided remotely include [activities of Org.5]. Few procurements were done in early [year] [activities of Org.5].

The national staff [Org.5] continued to report to work, except during the strict lockdown and movement control in Pyongyang due to Covid-19 outbreak.

4. If you had to pause your operations in the DPRK due to the COVID-19 pandemic, when, if at all, do you expect to be able to resume your operations in the DPRK? Do you expect to return operations to the pre-COVID levels? Why or why not?

[Org.5] due to UN sanctions and later due to Covid- 19 pandemic and given the absence of borders and allow international staff to return to the country. At this point in time, it is not possible to estimate when the borders will reopen.international staff in country, the scale of operations has been narrowed down to very limited critical functions. This would change when the country opens its

Upon reopening, the operations will gradually return to pre-covid levels. However, the full-scale operations will be possible only with some relaxation of sanction measures or collectively finding a solution to some of the unintended consequences of the sanctions such as absence of a banking channel for UN/international organization based in DPRK.

5. Please provide any detailed information about how the implementation of UN sanctions may have impacted your organization's COVID-19 response.

The capacity [of Org.5] was markedly reduced before the pandemic as the Government decided to limit the number of international staff. This was based on the low programme implementation and budget utilization capacity because of the UN sanctions. Limited capacity due to suboptimal staff presence led to challenges in providing the initial support to the country in response to the pandemic. This was further aggravated when all international staff had to leave the country, resulting only in remote support through the national staff in country.

6. If your operations require humanitarian exemption approvals from the 1718 Committee, has the approval process met your needs? What could be further improved in the exemption process or the sanctions regime itself that would better meet your operational needs and objectives in addressing the humanitarian problems of DPRK?

[Org.5] has been able to obtain humanitarian exemption approvals from the 1718 committee in the past as required, generally very rapidly when required. We also appreciate the fact that the exemptions may now be provided for a period longer than 6 months, (up to 18 months) for instance when the applicant provides a well-founded justification such as transportation delays related to a pandemic. This development is very helpful and welcome. Thanks to the fast-track approval process used during the Covid-19 pandemic, [Org.5 activities] is another positive example of the flexibility and quick response demonstrated by the UN Sanctions Committee.

7. **Are there other issues, needs, or organizational viewpoints regarding the humanitarian impact of UN sanctions on your work in the DPRK that you want to share with the Panel?**

One of the major challenges in [Org.5's] work in DPRK has been the absence of a viable banking channel to transfer much needed funds for in-country operations and programmatic implementation. This is an unintended negative impact of the UN sanctions, and we would like to urge all stakeholders to find a rapid solution to this matter and resolve this major challenge.

[Organisation 6]

1) What is your assessment of the effect of UN sanctions on the humanitarian situation in the DPRK? What sources of data and information do you draw from as the basis for this assessment?

In the absence of international humanitarian workers in DPRK since 2020, it has not been possible to undertake any assessments of the humanitarian situation and it would therefore be difficult to assess any impact of sanctions at this time. The continued lack of an adequate banking channel to facilitate local payments results in a need for Government willingness to accrue certain costs for future repayment on behalf of international humanitarian agencies.

2) How has the COVID-19 pandemic affected the economic and humanitarian spheres, and in what way have they influenced the overall humanitarian situation in the DPRK? If possible, please include information or examples that support your assessment.

There is limited data or insight on the impact of COVID-19 inside DPRK. However, the pandemic prevention measures introduced by the Government of DPRK, notably border closures and lengthy periods of quarantine and disinfection for all supplies, and related lockdowns in key transit points in [one Member State], have indirectly impacted the humanitarian situation. For example, there has been greatly reduced immunization of children since 2020, due to vaccines being out-of-stock. No children in DPRK have been vaccinated against measles/rubella (MR), polio or TB in 2022, and no tetanus/diphtheria vaccine has been available for women. The number of children receiving treatment for malnutrition has fallen; only 1 in 10 under five (5) years with acute malnutrition has received standard nutrition treatment by the third quarter of the year, this is a similar proportion to the same period in 2021, but compared to 1 in 3 in 2020, and more than 9 out of 10 in 2019. Micronutrient supplementation for children has had to be restricted to one (1) round instead of the planned two (2), due to supply shortages. Capacity building and direct technical assistance from international personnel have also been put on hold in most cases.

3) What has been the scope of your organization's operations in the DPRK since its borders were closed in early 2020? Were you able to continue some humanitarian operations with local staff? What problems, if any, have you encountered in this time period?

Since 2021 it has been possible for some agencies to move a significant amount of humanitarian supplies into the country. However, stock levels remain low and there has been an inevitable reduction in both coverage and quality of key humanitarian services.

4) If your operations require humanitarian exemption approvals from the 1718 Committee, has the approval process met your needs? What could be further improved in the exemption process or the sanctions regime itself that would better meet your operational needs and objectives in addressing the humanitarian problems of DPRK?

Based on experience, [Org.6] has no concerns with regards the current process for humanitarian exemptions.

Annex 91: Member States' responses

In this reporting period the Panel also received two additional responses to its earlier humanitarian questionnaire.[122] We are thankful to the two Member States whose comments are anonymized here.

[Member State 1]

The entry and import restrictions imposed by the Democratic People's Republic of Korea (DPRK) due to the Covid-19 pandemic have made the provision of humanitarian assistance in accordance with the underlying humanitarian principles impossible. Therefore, all humanitarian projects supported by [MS1] have been suspended for the time being.

[122] S/2022/668, annex 68.1

[Member State 2]

Following the DPRK's decision to close its borders in 2020 in response to the Covid-19 pandemic … most diplomatic missions in the DPRK remain shut and the lack of international presence in the country has made it extremely challenging to gain an understanding of the current humanitarian situation, where more than 40% of the population was already food insecure pre-pandemic. Without doubt the most fundamental impact on the dire humanitarian situation in the DPRK is its Government's decision to divert its resources from providing for the needs of its people into its unlawful weapons of mass destruction and ballistic missile programmes. The DPRK's decision to launch a record number of missiles in 2022, including eight ICBMs, comes at huge financial cost, further aggravating the likely growing humanitarian crisis.

All responsible proponents of sanctions should monitor their effects wherever possible. Despite the continued temporary closure, [activities of MS] set out below are the areas where we have continued to track and monitor the situation in the DPRK.

In [year], [MS2] conducted an analysis on the effect of UN Sanctions on the DPRK economy. The findings provided us with valuable up to date [MS2] analysis of the impacts of sanctions on the DPRK economy from 2017 to 2019 and helped improve our understanding of these impacts. Whilst remaining cautious on data confidence, overall, the data provided compelling evidence that the DPRK state now has fewer resources as a result of sanctions.

The analysis found that for humanitarian impacts, there was no compelling evidence within economic data to suggest that the hardship already experienced by the DPRK people drastically increased in 2017-19 as a result of sanctions.

Overall GDP pointed to fewer opportunities for growth, but not wholesale loss of income. Agricultural prices remained stable (although we note the FAO/WFP found high levels of food insecurity at that time, including as a result of climatic factors and post-harvest losses).

This data offered a baseline as of 2019 for assessing sanctions on DPRK. The Covid- 19 pandemic and border shut-down since 2020 are inevitably having dramatic additional impacts on DPRK's economy and humanitarian situation. However, while impacts cannot be completely disentangled, it is clear that any steep change in trajectory of these indicators in 2020-21 would most likely reflect pandemic controls including border closures, not sanctions.

Other key evaluation points from the analysis included:

The 2016-17 sanctions regime has had, and continues to have an effect on the economy, acting in support of counter proliferation efforts and political signalling towards DPRK by the international community.

While the precise impact is impossible to confirm, the evidence indicates the DPRK state had fewer resources at its disposal in 2019 as a result of sanctions than if they had not been applied. Sanctions have reduced the overall size of the economy and have limited economic growth in DPRK.

Sanctions on key exports and imports have led to a steep decline in their respective reported trade despite large scale smuggling/illicit trade. As the DPRK Government looked to adapt, there has also been a significant change in the composition of the traded goods sector towards non-sanctioned sectors such as tourism, construction, and agriculture. The effect on prices has been ambiguous. Whilst observable price data suggested prices remained fairly constant, there were some signs that the cost of living may have increased towards the end 2019.

The impacts on other important aspects of the economy are less clear. Data gaps remain in analysis on the effects of sanctions on government revenues, gross foreign currency reserves, and the labour market. Overseas labour

data is too unreliable to make policy conclusions. If absolute numbers estimated are correct, the activity of overseas labourer groups continues to generate a significant proportion of revenue for the state.

There is evidence to suggest an increase in state-sponsored cyber activity between 2015 and 2019. As a source of illicit revenue, this activity is difficult to monetise, though even conservative estimates indicate that this activity may go some way towards addressing the DPRK Government's budget shortfalls.

Your letter also asked about possible proposals for the UN Security Council and other UN organizations that might mitigate any negative impact of UN sanctions

Panel of Experts reports have highlighted the issue of banking channels and the need to find a way for the humanitarian community to access funds in-country once operations recommence; we therefore hope a solution can be found soon to address this important issue to enable agencies to rapidly engage as soon as they are permitted to re-enter the DPRK.

Due to Covid-19 restrictions in the DPRK over the last two and a half years and the resulting severe difficulty in transfer of goods into the country, we also continue to fully support requests from humanitarian organisations for timeframe extensions of the exemptions for authorisation, procurement and shipment of materials and equipment and medical supplies to respond to Covid-19 and natural disasters in the country. We also welcome the adoption of SCR 2664 introducing a humanitarian carve out to all UN asset freezes.

Close coordination continues between [MS2] and UN agencies and NGOs on plans to resume work in the DPRK. [MS2] has also offered bilateral assistance to the DPRK in response to its Covid-19 outbreak in May 2022; however, we are yet to receive a response. Once the international community regains access to the country to conduct a needs assessment, [MS2] will consider how else we might provide further support in addition to our current assistance contributions through the UN's Central Emergency Response Fund [MS2 activities].

We welcome the ongoing engagement between the Panel of Experts and UN agencies and NGOs to assess the impact of sanctions on their operations and improve them where possible. Given deep concerns about the likely dire humanitarian situation in the DPRK, we believe the most effective immediate action that could be taken would be for the DPRK government to permit humanitarian agencies to re-enter the country to conduct a comprehensive needs assessment and provide assistance and support. This will also enable monitoring of the impact of sanctions directly.

Annex 92: Sanctions implementation questionnaire, November 2022

The Panel sent the following questionnaire to UN Member States in late November 2022:

1. Please provide brief details of any action taken by your state in 2022 in the following categories:

a: arrests, prosecutions or convictions of individuals or entities involved in breaches of the UN's DPRK sanctions regime[123][124];

b: customs inspections and seizures of restricted or prohibited goods destined for or originating from DPRK;

c: inspections, interdictions or seizure of vessels or aircraft believed to be involved in DPRK sanctions evasion;

d: any other executive actions (assets seizure, expulsion, prevention of entry or transit, etc.) taken against any designated individual, entity or vessel in connection with DPRK sanctions evasion, or those acting on behalf of designated individuals or entities;

e: the results of any actions taken to monitor possible sanctions evasion activities by DPRK officials with diplomatic accreditation in your state;

f: the results of any actions taken to monitor possible sanctions evasion activities by any DPRK students of technical or scientific subjects in your state;

g: any actions taken to repatriate DPRK workers in your state or, if repatriation has not been possible, an account of how you have dealt with obligations on such workers;

h: actions taken to reduce tensions on the Korean Peninsula and to facilitate a peaceful and comprehensive solution through dialogue.

2. Please provide brief details of any problems your state has encountered in the implementation of the UN's DPRK sanctions regime.

3. Notification and reporting. Please provide brief details of your state's actions on the following:

a: is your state up-to-date in its notification obligations to the 1718 Committee regarding DPRK sanctions implementation?

b: if you have received requests for information (RFIs) relating to the DPRK sanctions regime from the Panel of Experts this year, please provide a reference to your response (letter number/date), or an indication of when the Panel can expect to receive your response.[125]

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[123] The Panel is only responsible for monitoring, promoting and facilitating the implementation of UN sanctions, although recognises that executive action taken as a result of bilateral or other multilateral sanctions regimes may overlap with the aims of the UN's regime. In such cases, the Panel would be interested to hear of any such implementation action taken by your state.

[124] If the provisions of the UN sanctions regime are not formally incorporated into your state's domestic legislation, please note actions taken under your own legislation which correspond to the aims of the UN resolutions.

[125] If your State has overdue responses to earlier RFIs, the Panel would be grateful to receive them.

c: has your state found any of the recommendations to Member States contained in the Panel's 2022 reports (S/2022/132 and S/2022/668) useful and in what way?[126] Have they been implemented?

[126] The Panel's interest in the implementation of its recommendations goes back more than one year. We would be interested to hear about the practical value of our recommendations since 2017.

Annex 93: Fact Sheet compiling certain measures imposed by the Security Council, April 2018

respect each other's sovereignty and exist peacefully together, and that the Six Parties undertook to promote economic cooperation, and all other relevant commitments.[5]

Paragraph 27 of resolution 2397 (2017) reiterates the importance of maintaining peace and stability on the Korean Peninsula and in north-east Asia at large, and the commitment of the Security Council to a peaceful, diplomatic and political solution to the situation and welcomes efforts by Committee members as well as other States to facilitate a peaceful and comprehensive solution through dialogue and stresses the importance of working to reduce tensions in the Korean Peninsula and beyond.[6]

Paragraph 27 of resolution 2397 (2017) urges further work to reduce tensions so as to advance the prospects for a comprehensive settlement.[7]

Paragraph 2 of resolution 2397 (2017) underscores the imperative of achieving the goal of complete, verifiable and irreversible denuclearization of the Korean Peninsula in a peaceful manner.[8]

I. Arms and related materiel embargo

a) *Export to the DPRK*

States shall prevent the direct or indirect supply, sale, or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their territories, of **all arms and related materiel**, including **small arms and light weapons and their related materiel**.[9]

b) *Export by the DPRK*

The DPRK shall cease the export of **all arms and related materiel**, and States shall prohibit the procurement of such arms and related materiel from the DPRK by their nationals, or using their flag vessels or aircraft, and whether or not originating in the territory of the DPRK.[10]

c) *Conventional arms – repair*

States shall prevent **the shipment of items to or from the DPRK for repair**, servicing, refurbishing, testing, reverse-engineering, and marketing, regardless of whether ownership or control is transferred.[11]

d) Conventional arms – dual use

States shall prevent the direct or indirect supply, sale, or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their

[5] See resolution 2397 (2017), paragraph 26.
[6] See resolution 2397 (2017), paragraph 27.
[7] See resolution 2397 (2017), paragraph 27.
[8] See resolution 2397 (2017), paragraph 2.
[9] See resolution 1718 (2006), paragraph 8 (a) and resolution 2270 (2016), paragraph 6.
[10] See resolution 1718 (2006), paragraph 8 (b) and resolution 1874 (2009), paragraph 9.
[11] See resolution 2270 (2016), paragraph 7.

territories, of additional items set out in the **list of conventional arms dual-use items** which is to be updated every 12 months.[12]

II. Embargo on items, materials, equipment, goods and technology relevant to nuclear-, ballistic missile-, and other weapons of mass destruction-related programmes

States shall prevent the direct or indirect supply, sale or transfer **to the DPRK**, through their territory or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their territories, of:

- Items relevant to **nuclear-related programmes** set out in INFCIRC/254/Rev.12/Part 1 and INFCIRC/254/Rev.9/Part 2;[13]
- Items relevant to **ballistic missile-related programmes** set out in S/2014/253;
- Items relevant to **other weapons of mass destruction-related programmes** set out in S/2006/853 and S/2006/853/Corr.1;
- Additional items, materials, equipment, goods and technology that could contribute to DPRK's nuclear-, ballistic missile- and other weapons of mass destruction-related programmes, determined by the Security Council or the Committee.[14]

States shall also prohibit the procurement of all the above **from the DPRK** by their nationals, or using their flagged vessels or aircraft, and whether or not originating in the territory of the DPRK.[15] The Security Council reaffirmed that resolution 1540 (2004) obligates all States to take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials, and notes that these obligations are complementary to the obligations in the resolutions to prevent the direct or indirect supply, sale or transfer to the DPRK of items, materials, equipment, goods and technology which could contribute to DPRK's nuclear-related, ballistic missile-related or other weapons of mass destruction-related programmes.[16]

III. Catch-all provisions related to prohibited items

a) *Arms and related materiel catch-all provision*

The measures imposed by the arms and related materiel embargo shall also apply to any item, except food or medicine, if the state determines that such item could directly contribute to the development

[12] Approved by the Committee pursuant to paragraph 7 of resolution 2321 (2016), paragraph 5 of resolution 2371 (2017), and paragraph 5 of and resolution 2375 (2017). See S/2016/1069, S/2017/760 and S/2017/829 on the website of the Committee at https://www.un.org/sc/suborg/en/sanctions/1718/prohibited-items.

[13] Available with S/2014/253, S/2006/853 and S/2006/853/Corr.1 on the website of the Committee at https://www.un.org/sc/suborg/en/sanctions/1718/prohibited-items

[14] See resolution 1718 (2006), paragraph 8 (a) (ii), resolution 2094 (2013), Annex III, resolution 2321 (2016), Annex III and resolution 2371 (2017), paragraph 4. See also S/2017/822, approved by the Committee pursuant to paragraph 4 of resolution 2375 (2017), on the website of the Committee at https://www.un.org/sc/suborg/en/sanctions/1718/prohibited-items.

[15] See resolution 1718 (2006), paragraph 8 (b).

[16] See resolution 2321 (2016), paragraph 37.

of the DPRK's operational capabilities of its armed forces, or to exports that support or enhance the operational capabilities of armed forces of another Member State outside the DPRK.

This provision shall cease to apply to the supply, sale or transfer of an item, or its procurement, if:

- The State determines that such activity is exclusively for humanitarian purposes or exclusively for livelihood purposes which will be used by DPRK individuals or entities to generate revenue, and also not related to any activities prohibited by the resolutions, provided that the State notifies the Committee in advance of such determination and also informs the Committee of measures taken to prevent the diversion of the item for such other purposes, or

- The Committee has determined on a case-by-case basis that a particular supply, sale or transfer would not be contrary to the objectives of the resolutions.[17]

b) *Dual-use catch-all provision*

States shall prevent the direct or indirect supply, sale or transfer to or from the DPRK or its nationals, through their territories or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their territories of **any item if the State determines that such item could contribute to** the DPRK's nuclear or ballistic missile programmes or other weapons of mass destruction programmes, other activities prohibited by the resolutions or to the evasion of measures imposed by the resolutions (hereafter "evasion of sanctions").[18]

c) *Determined by State catch-all provision*

The resolutions also prohibit the transfer of **any items if a State relevant to a transaction has information** that provides reasonable grounds to believe that a designated individual or entity is the originator, intended recipient or facilitator of the item's transfer.[19]

IV. Ban on certain financial transactions, technical training, advice, services or assistance

States shall prevent any transfers **to the DPRK** by their nationals or from their territories, or **from the DRPK** by its nationals or from its territory, of financial transactions, technical training, advice, services or assistance related to the provision, manufacture, maintenance or use of the following items:[20]

- Arms and related materiel;

- Items, materials, equipment, goods and technology relevant to nuclear-, ballistic missile-, or other weapons of mass destruction-related programmes (see section II above for details);

- Any item if the State determines that such item could contribute to the DPRK's prohibited programmes or activities or to the evasion of sanctions.

[17] See resolution 2270 (2016), paragraph 8.
[18] See resolution 2270 (2016), paragraph 27.
[19] See resolution 2087 (2013), paragraph 9.
[20] See resolution 1718, paragraph 8 (c); resolution 1874 (2009), paragraphs 9 and 10; resolution 2094 (2013), paragraphs 7, 20, and 22; and resolution 2270 (2016), paragraph 6.

These measures **also apply to brokering or other intermediary services**, including when arranging for the provision, maintenance or use of prohibited items in other States or the supply, sale or transfer to or exports from other States.[21]

States are also prohibited from engaging in the hosting of trainers, advisors, or other officials for the purpose of military-, paramilitary- or police-related training.[22]

V. Proliferation networks

States shall expel DPRK diplomats, government representatives, other DPRK nationals acting in a governmental or representative office capacity, and foreign nationals that are working on behalf or at the direction of a designated individual or entity or of an individual or entity assisting in sanctions evasions or violating the resolutions or of an individual working on behalf of or at the direction of a DPRK bank or financial institution for the purpose of repatriation to the DPRK or to the individual's state of nationality respectively, consistent with applicable national and international law, provided that these measures shall not impede the transit of representative of the Government of the DPRK to the United Nations Headquarters or other UN facilities to conduct United Nations business. These measures shall not apply with respect to a particular individual if:

- The presence of the individual is required for fulfilment of judicial process;
- The presence of the individual is required exclusively for medical, safety or other humanitarian purposes; or
- The Committee has determined on a case-by-case basis that the expulsion of the individual would be contrary to the objectives of the resolutions.[23]

States shall close the representative offices of designated entities and prohibit such entities, as well individuals or entities acting for or on their behalf, directly or indirectly, from participating in joint ventures or any other business arrangements.[24]

States are called upon to exercise enhanced vigilance over DPRK diplomatic personnel so as to prevent such individuals from contributing to the DPRK's prohibited programmes or activities, or to the evasion of sanctions.[25]

VI. Ban on specialized teaching and training and suspension of scientific and technical cooperation

States shall prevent **specialized teaching or training** of DPRK nationals within their territories or by their nationals of disciplines which could contribute to the DPRK's proliferation sensitive nuclear activities or the development of nuclear weapon delivery systems, including teaching or training in advanced physics, advanced computer simulation and related computer sciences, geospatial navigation, nuclear engineering, aerospace engineering, aeronautical engineering and related disciplines.[26] Such specialized teaching or training includes, but is not limited to advanced materials

[21] See resolution 2094 (2013), paragraph 7.
[22] See resolution 1874 (2009), paragraph 9; and resolution 2270 (2016), paragraph 9.
[23] See resolution 2270 (2016), paragraphs 13 and 14; and resolution 2321 (2016), paragraph 33.
[24] See resolution 2270 (2016), paragraph 15.
[25] See resolution 2094 (2013), paragraph 24.
[26] See resolution 2270 (2016), paragraph 17.

science, advanced chemical engineering, advanced mechanical engineering, advanced electrical engineering and advanced industrial engineering.[27]

States shall suspend **scientific and technical cooperation** involving persons or groups officially sponsored by or representing the DPRK **except for medical exchanges unless**:

a) In the case of scientific or technical cooperation in the fields of nuclear science and technology, aerospace and aeronautical engineering and technology, or advanced manufacturing production techniques and methods, **the Committee has determined on a case-by-case basis** that a particular activity will not contribute to the DPRK's proliferation sensitive nuclear activities or ballistic missile-related programmes; or
b) In the case of all other scientific or technical cooperation, the State engaging in scientific or technical cooperation determines that the particular activity will not contribute to the DPRK's proliferation sensitive nuclear activities or ballistic missile-related programmes and **notifies the Committee in advance** of such determination.[28]

VII. Assets freeze

States shall, in accordance with their respective legal processes, freeze **the funds, other financial assets and economic resources** which are on their territories that are owned or controlled, directly or indirectly, by the individuals or entities designated by the Committee or by the Security Council. States shall ensure that any funds, financial assets or economic resources are prevented from being made available by their nationals or by any persons or entities within their territories, to or for the benefit of such persons or entities.[29]

States shall also, in accordance with their respective legal processes, freeze all **the funds, other financial assets and economic resources**[30] outside of the DPRK that are owned or controlled, directly or indirectly, by entities of the Government of the DPRK or the Worker's Party of Korea, or by individuals or entities acting on their behalf or at their direction, or by entities owned or controlled by them, that the State determines are associated with the DPRK's nuclear or ballistic missile programs or other activities prohibited by the resolutions.

All States except the DPRK shall ensure that any funds, financial assets or economic resources are prevented from being made available by their nationals or by any individuals or entities within their territories, to or for the benefit of such individuals or entities, or individuals or entities acting on their behalf or at their direction, or entities owned or controlled by them.[31]

States shall also impose the assets freeze on the following:

[27] See resolution 2321 (2016), paragraph 10.
[28] See resolution 2321 (2016), paragraph 11 (a) and (b).
[29] See resolution 1718 (2006), paragraph 8 (d).
[30] Paragraph 12 of resolution 2270 affirms vessels (including maritime vessels) as "economic resources". Annex III of the same resolution provides a list of vessels controlled or operated by the Ocean Maritime Management (OMM) at the time, as economic resources subject to the assets freeze measures (paragraph 23). The list of these vessels, with more identifying information, is available on the Committee website, at https://www.un.org/sc/suborg/sites/www.un.org.sc.suborg/files/vessels_list_-_e_final.pdf.
[31] See resolution 2270 (2016), paragraph 32.

- Any individuals or entities acting on behalf of or at the direction of the designated individuals and entities;
- Entities owned or controlled by designated individuals and entities, including through illicit means.[32]

The assets freeze does not apply to financial or other assets or resources that have been determined by relevant States to be:

- Necessary for basic expenses, after notification to the Committee and in the absence of a negative decision by the Committee;[33]
- Necessary for extraordinary expenses, provided that such determination has been notified by the relevant States and has been approved by the Committee;[34]
- Subject of a judicial, administrative or arbitral lien or judgement, after the Committee has been notified;[35]
- In the case of assets outside of the DPRK that are owned or controlled by entities of the Government of the DPRK or the Worker's Party of Korea, or by individuals or entities acting on their behalf or at their direction, or by entities owned or controlled by them, that the State determines are associated with the DPRK's nuclear or ballistic missile programs or other activities prohibited by the resolutions:
  - Required to carry out activities of the DPRK's missions to the United Nations and its specialized agencies and related organizations or other diplomatic and consular missions of the DPRK;
  - Required for the delivery of humanitarian assistance, denuclearization or any other purpose which is consistent with the objectives of the resolution 2270 (2016) and determined by the Committee in advance on a case-by-case basis;[36]

The assets freeze does not apply with respect to financial transactions with the DPRK Foreign Trade Bank or the Korea National Insurance Corporation, designated by resolution 2371 (2017), if such transactions are solely for the operation of diplomatic or consular missions in the DPRK or humanitarian assistance activities that are undertaken by, or in coordination with, the United Nations.[37]

VIII. Travel ban

States shall prevent (restrict) the entry into or transit[38] through their territories of:

[32] See resolution 2094 (2013), paragraph 8.
[33] See resolution 1718 (2006), paragraph 9 (a).
[34] See resolution 1718 (2006), paragraph 9 (b).
[35] See resolution 1718 (2006), paragraph 9 (c).
[36] See resolution 2270 (2016), paragraph 32.
[37] See resolution 2371 (2371), paragraph 26.

[38] For the purpose of implementing the resolutions, the term "transit" includes but is not limited to the travel of individuals through a State's international airport terminals en route to a destination in another State, regardless of

- Individuals designated by the Security Council or the Committee together with their family members;[39]
- Individuals acting on behalf or at the direction of the designated individuals listed in annex I of resolution 2094 (2013); annex I of resolution 2270 (2016); annex I of resolution 2321 (2016); annex I of resolution 2356 (2017); annex I of resolution 2371 (2017); annex I of resolution 2375 (2017); and annex I of resolution 2397 (2017).[40]
- Members of the Government of the DPRK, officials of that Government, and members of the DPRK armed forces, **if a State determines** that such members or officials are associated with the DPRK's nuclear or ballistic missile programmes or other activities prohibited by the resolutions.[41]
- Any individual whom **a State determines** is:
    - Acting on behalf or at the direction of a designated individual or entity;
    - Violating the provisions of the resolutions;
    - Assisting the evasion of sanctions;[42]
    - Traveling for the purposes of carrying out activities related to the shipment of prohibited items to or from the DPRK for repair, servicing, refurbishing, testing, reverse-engineering, and marketing.[43]

If such an individual is a DPRK national, then States shall expel the individual from their territories for the purpose of repatriation to the DPRK consistent with applicable national and international law, unless the presence of an individual is required for fulfilment of a judicial process or exclusively for medical, safety or other humanitarian purposes, provided that nothing shall impede the transit of representatives of the Government of the DPRK to the United Nations Headquarters to conduct United Nations business.[44]

The travel ban does not apply to designated individuals and entities when the Committee determines on a case-by-case basis that such travel is justified on the grounds of humanitarian need, including religious obligations, or the Committee concludes that an exemption would further the objectives of the resolutions.[45] States can submit requests for exemptions from the travel ban for designated individuals and entities following the instructions set out in the Committee Guidelines.

No aspect of the travel ban obliges a State to refuse its own nationals entry into its territory.

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whether such individuals pass through customs or passport control at that airport – see resolution 2321 (2016), paragraph 25.

[39] See resolution 1718 (2006), paragraph 8 (e); and resolution 2270 (2016), paragraph 11.

[40] See resolution 2094 (2013), paragraph 9; resolution 2270 (2016), paragraph 10; resolution 2321 (2016), paragraph 3, resolution 2356 (2017), paragraph 3, resolution 2371 (2017), paragraph 3, resolution 2375 (2017), paragraph 3, and resolution 2397 (2017), paragraph 3.

[41] See resolution 2321 (2016), paragraph 15.

[42] See resolution 2094 (2013), paragraph 10.

[43] See resolution 2270 (2016), paragraph 7.

[44] See resolution 2094 (2013), paragraph 10.

[45] See resolution 1718 (2006), paragraph 10.

IX. Financial measures

a) *Provision of financial services*

States shall prevent the provision of financial services or the transfer to, through, or from their territory, or to or by their nationals or entities organized under their laws (including branches abroad), or persons or financial institutions in their territory, of **any financial or other assets or resources, including bulk cash, and the clearing of funds through all Member States' territories, that could contribute to** the DPRK's prohibited programmes or activities, or to the evasion of sanctions, including by freezing any financial or other assets or resources on their territories or that hereafter come within their territories, or that are subject to their jurisdiction or that hereafter become subject to their jurisdiction, that are associated with such programs or activities and applying enhanced monitoring to prevent all such transactions in accordance with their national authorities and legislation.[46]

The measures apply also to the transfers of cash and gold, including through cash and gold couriers, transiting to and from the DPRK, so as to ensure such transfers of bulk cash and gold do not contribute to the DPRK's prohibited programmes or activities, or to the evasion of sanctions.[47]

States are called upon to exercise enhanced vigilance in this regard, including by monitoring the activities of their nationals, persons in their territories, financial institutions, and other entities organized under their laws (including branches abroad) with or on behalf of financial institutions in the DPRK, or of those that act on behalf or at the direction of DPRK financial institutions, including their branches, representatives, agents and subsidiaries abroad.[48]

b) *Opening of banking subsidiaries*

States shall prohibit in their territories the opening and operation of new branches, subsidiaries, or representative offices of DPRK banks and are also obliged to prohibit financial institutions within their territories or subject to their jurisdiction from establishing new joint ventures and from taking an ownership interest in or establishing or maintaining correspondent relationships with DPRK banks, **unless such transactions have been approved by the Committee in advance.** Furthermore, States shall take the necessary measures to close such existing branches, subsidiaries and representative offices, and also to terminate such joint, ventures, ownership interests and correspondent banking relationships with DPRK banks within ninety days from the adoption of resolution 2270 (2016).[49]

States also shall prohibit financial institutions within their territories or subject to their jurisdiction from opening new representative offices or subsidiaries, branches or banking accounts in the DPRK.[50]

States also shall take the necessary measures to close existing representative offices, subsidiaries or banking accounts in the DPRK within ninety days, **unless the Committee determines on a case-by-case basis** that such offices, subsidiaries or accounts are required for the delivery of humanitarian assistance or the activities of diplomatic missions in the DPRK pursuant to the Vienna Convention on

[46] See resolution 2094 (2013), paragraph 11 and resolution 2371 (2017), paragraph 13.
[47] See resolution 2094 (2013), paragraph 14; and resolution 2270 (2016), paragraph 37.
[48] See resolution 2087 (2013), paragraph 6.
[49] See resolution 2270 (2016), paragraph 33.
[50] See resolution 2270 (2016), paragraph 34.

Diplomatic Relations (see section XIX) or the activities of the United Nations or its specialized agencies or related organizations, or for any other purposes consistent with the resolutions.[51]

c) *Joint ventures*

States shall prohibit, by their nationals or in their territories, the opening, maintenance, and operation of **all joint ventures or cooperative entities, new and existing**, with DPRK entities or individuals, whether or not acting for or on behalf of the government of the DPRK.

This provision shall not apply with respect to those joint ventures or cooperative entities, in particular those that are non-commercial, public utility infrastructure projects not generating profit, that have been approved by the Committee in advance on a case-by-case basis.

If such joint venture or cooperative entity has not been approved by the Committee on a case-by-case basis, States shall close any such existing joint venture or cooperative entity within 120 days of 11 September 2017. States shall close any such existing joint venture or cooperative entity within 120 days after the Committee has denied a request for approval.

This provision shall not apply with respect to existing **China-DPRK hydroelectric power infrastructure projects** and the **Russia-DPRK Rajin-Khasan port and rail project solely to export Russia-origin coal** as permitted by paragraph 8 of resolution 2371 (2017).[52]

d) *Provision of public financial support*

States shall prohibit public and private financial support from within their territories or by persons or entities subject to their jurisdiction for trade with the DPRK (including the granting of export credits, guarantees or insurance to their nationals or entities involved in such trade), **except as approved in advance by the Committee on a case-by-case basis**.[53]

e) *New commitments for grants, financial assistance or concessional loans*

States and international financial and credit institutions are called upon not to enter into new commitments for grants, financial assistance, or concessional loans to the DPRK, except for humanitarian and developmental purposes directly addressing the needs of the civilian population, or the promotion of denuclearization. States are also called upon to exercise vigilance with a view to reducing current commitments.[54]

f) Companies performing financial services

Resolution 2371 (2017) clarifies that companies performing financial services commensurate with those provided by banks are considered financial institutions for purpose of implementing paragraph 11 of resolution 2094 (2013), paragraphs 33 and 34 of resolution 2270 (2016), and paragraph 33 of resolution 2321 (2016).[55]

X. Luxury goods embargo

[51] See resolution 2321 (2016), paragraph 31.
[52] See resolution 2375 (2017), paragraph 18.
[53] See resolution 2321 (2016), paragraph 32.
[54] See resolution 1874 (2009), paragraph 19.
[55] See resolution 2371 (2017), paragraph 13.

States shall prevent the direct or indirect supply, sale, or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, of **luxury goods**. The term "luxury goods" includes, but is not limited to, the items specified in Annex IV of resolution 2094 (2013), Annex IV of resolution 2270 (2016) and Annex IV of resolution 2321 (2016).[56]

In order to assist States in carrying out this obligation, the Committee has adopted an Implementation Assistance Notice (IAN #3) and has posted it on its website.[57]

XI. Sectoral sanctions

The DPRK shall not supply, sell, or transfer, directly or indirectly, from its territory or by its nationals or using its flag vessels or aircraft, **coal, iron, iron ore, gold, titanium ore, vanadium ore, rare earth minerals, copper, nickel, silver, zinc, lead and lead ore, food and agricultural products (HS codes 12, 08, 07), machinery (HS code 84), electrical equipment (HS code 85), earth and stone including magnesite and magnesia (HS code 25), wood (HS code 44), and vessels (HS code 89)**. States shall prohibit the procurement of such material from the DPRK by their nationals, or using their flag vessels or aircraft, whether or not originating in the territory of the DPRK.[58]

This provision shall not apply with respect to:

a) **Coal** procurements that are notified by the exporting State to the Committee in advance and confirmed on the basis of credible information that the **coal has originated outside the DPRK** and was transported through the DPRK solely for export from the Port of Rajin (Rason), and that such transactions are unrelated to generating revenue for the DPRK's nuclear or ballistic missile programs or other prohibited activities;[59]

b) Sales and transactions of **iron** and **iron ore** for which written contracts had been finalized prior to 5 August 2017 and shipments are imported into States' territories by 4 September 2017, with notification provided to the Committee containing all details on those imports by no later than 19 September 2017.[60]

c) **Lead** and **lead ore** procurements for which written contracts had been finalized prior to 5 August 2017, with notification provided to the Committee containing details on those imports by no later than 19 September 2017.[61]

d) **Food** and **agricultural products** (HS codes 12, 08, 07), **machinery** (HS code 84), **electrical equipment** (HS code 85), **earth** and **stone** including **magnesite** and **magnesia** (HS code 25), **wood** (HS code 44), and **vessels** (HS code 89), for which written contracts have been finalized prior to 22 December 2017, all States may only allow those shipments to be imported into

[56] See resolution 2094 (2013), paragraph 23, resolution 2270 (2016), paragraph 39 and resolution 2321 (2016), paragraph 5.
[57] The IAN is available on the webpage of the Committee at: https://www.un.org/sc/suborg/sites/www.un.org.sc.suborg/files/implementation_assistance_notice_3_3.pdf.
[58] See resolution 2270 (2016), paragraph 30; resolution 2321 (2016), paragraph 28; resolution 2371 (2017), paragraphs 8 and 10; and resolution 2397 (2017), paragraph 6.
[59] See resolution 2371 (2017), paragraph 8.
[60] See resolution 2371 (2017), paragraph 8.
[61] See resolution 2371 (2017), paragraph 10.

their territories up to 21 January 2018 with notification provided to the Committee containing details on those imports by no later than 5 February 2018.[62]

All Member States shall prohibit the direct or indirect supply, sale or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels, aircraft, pipelines, rail lines, or vehicles and whether or not originating in their territories, of all **industrial machinery** (HS codes 84 and 85), **transportation vehicles** (HS codes 86 through 89), and **iron**, **steel**, and **other metals** (HS codes 72 through 83).[63]

This provision shall not apply with respect to the provision of spare parts needed to maintain the safe operation of DPRK commercial civilian passenger aircraft (currently consisting of the following aircraft models and types: An-24R/RV, An-148-100B, Il-18D, Il-62M, Tu-134B-3, Tu-154B, Tu-204-100B, and Tu-204-300).[64]

All Member States shall prohibit the direct or indirect supply, sale or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their territories of **all condensates and natural gas liquids**. The DPRK shall not procure such materials.[65]

All Member States shall prohibit the direct or indirect supply, sale or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels, aircraft, pipelines, rail lines, or vehicles, and whether or not originating in their territories, of **all refined petroleum products**. The DPRK shall not procure such products.[66]

This provision shall not apply with respect to:

a) the direct or indirect supply, sale, or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels, aircraft, pipelines, rail lines, or vehicles, and whether or not originating in their territories, of **refined petroleum products**, including **diesel and kerosene**, in the aggregate amount of **up to 500,000 barrels** during a period of twelve months beginning on January 1, 2018, and for twelve month periods thereafter, provided that:
   i. The Member State notify the Committee every 30 days of the amount of such supply, sale or transfer to the DPRK of refined petroleum products along with information about all parties to the transaction;
   ii. The supply, sale or transfer of refined petroleum products involve no individuals or entities that are associated with the DPRK's nuclear or ballistic missile programmes or other activities prohibited by the relevant resolutions, including designated individuals or entities, or individuals or entities acting on their behalf or at their direction, or entities owned or controlled by them, directly or indirectly, or individuals or entities assisting in the evasion of sanctions;
   iii. The supply, sale or transfer of refined petroleum products are exclusively for livelihood purposes of DPRK nationals and unrelated to generating revenue for the

[62] See resolution 2397 (2017), paragraph 6.
[63] See resolution 2397 (2017), paragraph 7.
[64] See resolution 2397 (2017), paragraph 7.
[65] See resolution 2375 (2017), paragraphs 13.
[66] See resolution 2397 (2017), paragraph 5.

DPRK's nuclear or ballistic missile programmes or other activities prohibited by the relevant resolutions.

All Member States shall prohibit the direct or indirect supply, sale or transfer to the DPRK through their territories or by their nationals, or using their flag vessels, aircraft, pipelines, rail lines, or vehicles and whether or not originating in their territories, of **crude oil**
This provision shall not apply with respect to crude oil that for twelve months periods after 22 December 2017, does not exceed **4 million barrels** or **525,000 tons** in the aggregate per twelve-month period, and decides that all Member States providing crude oil shall provide a report to the Committee every 90 days from 22 December 2017 onward of the amount of crude oil provided to the DPRK.[67]

This provision shall further not apply with respect to shipments of crude oil which **the Committee approves in advance on a case-by-case basis** as exclusively for

a) **livelihood purposes** of DPRK nationals and

b) **unrelated to the DPRK's nuclear or ballistic missile programmes or other activities prohibited by the relevant resolutions**.[68]

XII. Seafood ban

The DPRK shall not supply, sell or transfer, directly or indirectly, from its territory or by its nationals or using its flag vessels or aircraft, **seafood** (including fish, crustaceans, mollusks, and other aquatic invertebrates in all forms). States shall prohibit the procurement of such items from the DPRK by their nationals, or using their flag vessels or aircraft, whether or not originating in the territory of the DPRK.[69]

This provision shall not apply with respect to:

a) Sales and transactions of **seafood** for which written contracts had been finalized prior to 5 August 2017 and shipments are imported into States' territories by 4 September 2017, with notification provided to the Committee containing details on those imports by no later than 19 September 2017.

The DPRK is further prohibited from selling or transferring, directly or indirectly, fishing rights.[70]

XIII. Textiles ban

The DPRK shall not supply, sell or transfer, directly or indirectly, from its territory or by its nationals or using its flag vessels or aircraft, **textiles** (including but not limited to fabrics and partially or fully completed apparel products). All States shall prohibit the procurement of such items from the DPRK

[67] See resolution 2397 (2017), paragraph 4.
[68] See resolution 2397 (2017), paragraph 4.
[69] See resolution 2371 (2017), paragraph 9.
[70] See resolution 2397 (2017), paragraph 6.

by their nationals, or using their flag vessels or aircraft, whether or not originating in the territory of the DPRK.[71] This provision shall not apply with respect to:

a) The supply, sales or transfer of **textiles** approved by the Committee on a case-by-case basis in advance, and
b) Sales, supplies, and transfers of **textiles** for which written contracts have been finalized prior to 11 September 2017 and the shipments are imported into States' territories by no later than 90 days from 11 September 2017, with notification provided to the Committee containing details on those imports by no later than 135 days after 11 September 2017.

XIV. Ban on import of statues from the DPRK

DPRK shall not supply, sell or transfer, directly or indirectly, from its territory or by its nationals or using its flag vessels or aircraft, statues, and that all States shall prohibit the procurement of such items from the DPRK by their nationals, or using their flag vessels or aircraft, whether or not originating in the territory of the DPRK, **unless the Committee approves on a case-by-case basis in advance**.[72]

XV. Fuel ban

States shall prevent the sale or supply, by their nationals or from their territories or using their flag vessels or aircraft, of **aviation fuel, including aviation gasoline, naptha-type jet fuel, kerosene-type jet fuel, and kerosene-type rocket fuel**, whether or not originating in their territory, to the territory of the DPRK, unless the Committee has approved in advance on an exceptional case-by-case basis the transfer to the DPRK of such products for verified essential humanitarian needs, subject to arrangement for effective monitoring of delivery and use.

This provision shall not apply with respect to the sale or supply of aviation fuel to civilian passenger aircraft outside the DPRK exclusively for consumption during its flight to the DPRK and its return flight.[73]

States are called upon to exercise vigilance to ensure that no more fuel is provided to DPRK-flagged civil passenger aircraft than is necessary for the relevant flight, including a standard margin for safety of flight.[74]

XVI. DPRK nationals working abroad

All Member States shall not provide work authorizations for DPRK nationals in their jurisdictions in connection with admission to their territories **unless the Committee determines on a case-by-case basis** in advance that employment of DPRK nationals in a member state's jurisdiction is required for the delivery of humanitarian assistance, denuclearization or any other purpose consistent with the objectives of the relevant resolutions.

This provision shall not apply with respect to **work authorizations for which written contracts have been finalized prior to 11 September 2017**.[75]

[71] See resolution 2375 (2017), paragraph 16.
[72] See resolution 2321 (2016), paragraph 29.
[73] See resolution 2270 (2016), paragraph 31.
[74] See resolution 2270 (2016), paragraph 31.
[75] See resolution 2375 (2017), paragraph 17.

Member States shall repatriate to the DPRK all DPRK nationals earning income in that Member State's jurisdiction and all DPRK government safety oversight attachés monitoring DPRK workers abroad immediately but no later than 24 months from 22 December 2017. All Member States shall provide a midterm report by 15 months from 22 December 2017 of all DPRK nationals earning income in that Member State's jurisdiction that were repatriated over the 12 month period starting from 22 December 2017, including an explanation of why less than half of such DPRK nationals were repatriated by the end of that 12 month period if applicable, and all Member States shall provide final reports by 27 months from 22 December 2017.

This provision shall not apply if the Member State determines that a DPRK national is a national of that Member State or a DPRK national whose repatriation is prohibited, subject to applicable national and international law, including international refugee law and international human rights law, and the United Nations Headquarters Agreement and the Convention on the Privileges and Immunities of the United Nations.[76]

XVII. Inspection and transportation

States are called upon to redouble efforts to implement in full the measures in the resolutions, and to cooperate with each other in doing so, particularly with respect to **inspecting, detecting and seizing** items the transfer of which is prohibited by these resolutions.[77]

All States **shall inspect the cargo within or transiting through their territory, including in their airports, seaports and free trade zones** that has originated in the DPRK, or that is destined for the DPRK, or has been brokered or facilitated by the DPRK or its nationals, or by individuals or entities acting on their behalf, or at their direction, or entities owned or controlled by them, or by designated individuals or entities, or that is being transported on DPRK flagged aircraft or maritime vessels, for the purposes of ensuring that no items are transferred in violation of the resolutions.[78] This also includes the **personal luggage and checked baggage of individuals** entering into or departing from the DPRK that may be used to transport items the supply, sale or transfer of which is prohibited by the resolutions.[79]

States are required to inspect **DPRK-flagged aircraft** when they land in or take off from their territory[80] and **cargo transported by rail and road** within or transiting through their territory.[81]

States are called upon to implement such inspections in a manner that minimizes the impact on the transfer of cargo that the State determines is for humanitarian purposes.[82]

States are also authorized **to seize and dispose** (such as through destruction, rendering inoperable or unusable, storage, or transferring to a State other than the originating or destination States for disposal) of items the supply, sale, transfer, or export of which is prohibited by the resolutions that are identified in inspections, in a manner that is not inconsistent with their obligations under the resolutions, including resolution 1540 (2004), as well as any obligations of parties to the NPT, the

[76] See resolution 2397 (2017), paragraph 8.
[77] See resolution 2371 (2017), paragraph 19.
[78] See resolution 2270 (2016), paragraph 18.
[79] See resolution 2321 (2016), paragraph 13.
[80] See resolution 2321 (2016), paragraph 20.
[81] See resolution 2321 (2016), paragraph 21.
[82] See resolution 2270 (2016), paragraph 18.

Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction of 29 April 1997, and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction of 10 April 1972.[83]

All Member States shall seize, inspect, and freeze (impound) any vessel in their ports, and may seize, inspect, and freeze (impound) any vessel subject to its jurisdiction in its territorial waters, if the Member State has reasonable grounds to believe that the vessel was involved in activities, or the transport of items, prohibited by relevant resolutions. Member States are encouraged to consult with the flag States of relevant vessels once they are seized, inspected, and frozen (impounded).

This provision shall not apply if, after six months from the date such vessels were frozen (impounded), the Committee decides, on a case-by-case basis and upon request of a flag State, that adequate arrangements have been made to prevent the vessel from contributing to future violations of these resolutions.[84]

When a Member State has information to suspect that the DPRK is attempting to supply, sell, transfer or procure, directly or indirectly, illicit cargo, that Member State may request additional maritime and shipping information from other relevant Member States, including to determine whether the item, commodity, or product in question originated from the DPRK.

All Member States receiving such inquiries shall respond as promptly as possible to such requests in an appropriate manner with support from the Committee and the Panel of Experts to facilitate timely coordination of such information requests through an expedited process.[85]

There are several reporting obligations relating to inspections.

a) *Inspections on the high seas*

States are called upon to inspect vessels, with the consent of the flag State, on the high seas, if they have information that provides reasonable grounds to believe that the cargo of such vessels contains prohibited items.[86]

States are called upon to cooperate with the inspections. If the flag State does not consent to inspection on the high seas, the flag State shall direct the vessel to proceed to an appropriate and convenient port for the required inspection by the local authorities. If a flag State neither consents to inspection on the high seas nor directs the vessel to an appropriate and convenient port for the required inspection, or if the vessels refuses to comply with the flag State direction, then the Committee shall consider designating the vessel for the measures imposed in paragraph 8 (d) of resolution 1718 (2006) and paragraph 12 of resolution 2321 (2016) and the flag State shall immediately deregister that vessel provided the designation of the vessel by the Committee.[87]

Resolution 2375 (2017), in paragraph 10, affirms that inspections conducted per paragraph 7 of that resolution should only be carried out by warships and other ships or aircraft clearly marked and identifiable as being on government service and authorized to that effect, and underscores that the

[83] See resolution 2371 (2017), paragraph 21.
[84] See resolution 2397 (2017), paragraph 9.
[85] See resolution 2397 (2017), paragraph 10.
[86] See resolution 1874 (2009), paragraph 12 and resolution 2375 (2017), paragraph 7.
[87] See resolution 1874 (2009), paragraph 13 and resolution 2375 (2017), paragraph 8.

inspection authority found in paragraph 7 does not apply with respect to inspection of vessels entitled to sovereign immunity under international law.[88] Resolution 2375 (2017) further affirms that such authorization for inspection on the high seas apply only with respect to the situation in the DPRK and shall not affect the rights, obligations, or responsibilities of Member States under international law, including any rights or obligations under the United Nations Convention on the Law of the Sea of 10 December 1982, with respect to any other situation and underscores in particular that this resolution shall not be considered as establishing customary international law.[89]

If any vessel has refused to allow an inspection after such an inspection was authorized by the vessel's flag State, or if any DPRK-flagged vessel has refused to be inspected, all States shall deny such a vessel entry to their ports, unless entry is required for the purpose of an inspection, in the case of emergency or in the case of return to its port of origination.[90]

All Member States shall prohibit their nationals, persons subject to their jurisdiction, entities incorporated in their territory or subject to their jurisdiction, and vessels flying their flag, from facilitating or engaging in ship-to-ship transfers to or from DPRK-flagged vessels of any goods or items that are being supplied, sold, or transferred to or from the DPRK.[91]

b) *Ban on all leasing or chartering vessels/aircraft, provision of crew services*

States shall prohibit their nationals and those in their territories from leasing or chartering their flagged vessels or aircraft or providing crew services **to the DPRK**. This prohibition shall also apply with respect to any designated individuals or entities, any other DPRK entities, any other individuals or entities whom the State determines to have assisted in the evasion of sanctions or in violating the provisions of the resolutions, any individuals or entities acting on behalf or at the direction of any of the aforementioned, and any entities owned or controlled by any of the aforementioned. States are called upon to de-register any vessel that is owned, operated or crewed by the DPRK, and not to register any such vessel that is de-registered by another Member State.

These measures shall apply without exception, **unless the Committee approves on a case-by-case basis in advance**.[92]

States shall prohibit their nationals from procuring vessel and aircraft crewing services **from the DPRK**.[93]

c) *Registering, insuring, operating DPRK-flagged vessels*

States shall **prohibit their nationals, persons subject to their jurisdiction and entities incorporated in their territory or subject to their jurisdiction** from registering vessels in the DPRK, obtaining authorization for a vessel to use the DPRK flag, and from owning, leasing, operating, providing any vessel classification, certification or associated service, insuring or chartering any vessel

[88] See resolution 2375 (2017), paragraph 10.
[89] See resolution 2375 (2017), paragraph 12.
[90] See resolution 2094 (2013), paragraph 17.
[91] See resolution 2375 (2017), paragraph 11.

[92] See resolution 2321 (2016), paragraph 8.
[93] See resolution 2321 (2016), paragraph 23.

flagged by the DPRK. These measures shall apply without exception, **unless the Committee approves on a case-by-case basis accompanied in advance**.[94]

d) *Insurance or re-insurance services to vessels*

States shall prohibit their nationals, persons subject to their jurisdiction and entities incorporated in their territory or subject to their jurisdiction from providing insurance or re-insurance services to vessels it has reasonable grounds to believe were involved in activities, or the transport of items, prohibited by the relevant resolutions or owned, controlled, or operated, including through illicit means, by the DPRK **unless the Committee determines on a case-by-case basis** that the vessel is engaged in activities exclusively for livelihood purposes which will not be used by DPRK individuals or entities to generate revenue or exclusively for humanitarian purposes.[95]

e) *Vessels' de-registration*

States shall de-register any vessel it has reasonable grounds to believe was involved in activities, or the transport of items, prohibited by the relevant resolutions or that is owned, controlled, or operated by the DPRK, and shall not register any such vessel that has been de-registered by another Member State pursuant to paragraph 24 of resolution 2321 (2016).

Member States are required to prohibit its nationals, persons subject to its jurisdiction and entities incorporated in its territory or subject to its jurisdiction from thereafter providing classification services to such a vessel **except as approved in advance by the Committee on a case-by-case basis**.[96]

States shall not register any such vessel that has been de-registered by another Member State pursuant to this paragraph **except as approved in advance by the Committee on a case-by-case basis**.[97]

f) *Ban on port calls*

States shall **prohibit the entry into their ports of any vessel** if the Member State has information that provides reasonable grounds to believe the vessel is owned or controlled, directly or indirectly, by a designated individual or entity, or contains cargo the supply, sale, transfer or export of which is prohibited by the resolutions, unless entry is required in the case of emergency or in the case of return to its port of origination, or for inspection, or unless the Committee determines in advance that such entry is required for humanitarian purposes or any other purposes consistent with the objectives of this resolution.[98]

All Member States shall **prohibit the entry into their ports of vessels designated by the Committee** for which it has information indicating they are, or have been, related to activities prohibited by the relevant resolutions, unless entry is required in the case of emergency or in the case of return to its port of origination, or **unless the Committee determines in advance** that such entry is required for

[94] See resolution 2321 (2016), paragraph 9 and resolution 2371 (2017), paragraph 7.
[95] See resolution 2321 (2016), paragraph 22 and resolution 2397 (2017), paragraph 11.
[96] See resolution 2397 (2017), paragraph 12.
[97] See resolution 2397 (2017), paragraph 12.
[98] See resolution 2270 (2016), paragraph 21.

humanitarian purposes or any other purposes consistent with the objectives of the relevant resolutions.[99]

g) *Ban on the provision of bunkering services*

States shall prohibit the provision by their nationals or from their territory of bunkering services, such as the provision of fuel or supplies, or other servicing of vessels, to DPRK vessels if they have information that provides reasonable grounds to believe they are carrying prohibited items.

Such bunkering services can be provided when necessary for humanitarian purposes or until such time as the cargo has been inspected, and seized and disposed if necessary.

The ban on the provision of bunkering services is not intended to affect legal economic activities.[100]

h) *Flight denials*

States shall deny permission to any aircraft to take off from, land in or overfly their territory, unless under the condition of landing for inspection, if they have information that provides reasonable grounds to believe that the aircraft contains prohibited items, except in the case of an emergency landing. States are called upon when considering whether to grant overflight permission to flights to assess known risk factors.[101]

i) *Ban on new helicopters and vessels*

States shall prevent the direct or indirect supply, sale or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their territories, of new helicopters, new and used vessels**, except as approved in advance by the Committee on a case-by-case basis**.[102]

XVIII. Seizure and disposal

States are authorized to, and shall, seize and dispose (such as through the destruction, rendering inoperable or unusable, storage, or transferring to a state other than the originating or destination States for disposal) of prohibited items that are identified in inspections. This must be done in a manner that is not inconsistent with their obligations under applicable Security Council resolutions, including resolution 1540 (2004), as well as any obligations of parties to the Treaty on the Non-Proliferation of Nuclear Weapons, the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction of 29 April 1997, and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction of 10 April 1972. All States shall cooperate in such efforts.[103]

[99] See resolution 2371 (2017), paragraph 6.
[100] See resolution 1874 (2009), paragraph 17.
[101] See resolution 2270 (2016), paragraph 21.
[102] See resolution 2321, paragraph 30 and resolution 2397 (2017), paragraph 14.
[103] See resolution 2397 (2017), paragraph 20.

Methods for States to dispose prohibited items include, but are not limited to, destruction, rendering inoperable, storage or transferring to another State other than the originating or destination States for disposal.[104]

There are several reporting obligations relating to seizure and disposal (see section XXV for details).

XIX. Liability limitations

Resolutions 2087(2013), 2094(2013), 2270 (2016), 2321 (2016), 2371 (2017), 2375 (2017) and 2397 (2017) emphasize the importance of all States, including the DPRK, taking the necessary steps to ensure that no claim lie at the instance of the DPRK, or of any person or entity in the DPRK, or of persons or entities designated for measures in the resolutions, or any person claiming through or for the benefit of any such person or entity, in connection with any contract or other transaction where its performance was prevented by reason of the measures in the resolutions.[105]

XX. Humanitarian consequences

Resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), and 2397 (2017) repeatedly underlined that the imposed measures **are not intended to have adverse humanitarian consequences for the civilian population of the DPRK** or to **affect negatively those activities, including economic activities and cooperation, food aid and humanitarian assistance**, that are **not prohibited by the resolutions** and the **work of international organizations and non-governmental organization carrying out assistance and relief activities in the DPRK** for the benefit of the civilian population of the DPRK. [106]

Resolution 2397 (2017) further stresses the DPRK's primary responsibility and need to fully provide for the livelihood needs of people in the DPRK. The Committee may, on a case-by-case basis, exempt any activity from the measures imposed by these resolutions if the committee determines that such an exemption is necessary to facilitate the work of such organizations in the DPRK or for any other purpose consistent with the objectives of these resolutions.[107]

XXI. DPRK Diplomatic missions/consular posts

States shall take steps to limit the number of bank accounts to one per DPRK diplomatic mission and consular post, and one per accredited DPRK diplomat and consular officer, at banks in their territory;[108]

The Council recalled that, under the Vienna Convention on Diplomatic Relations of 1961, a diplomatic agent shall not in the receiving State practice for personal profit any professional or commercial

[104] See resolution 2087 (2013), paragraph 8.
[105] See resolution 2087 (2013), paragraph 13; resolution 2094 (2013), paragraph 30; resolution 2270 (2016), paragraph 47; resolution 2321 (2016), paragraph 41; resolution 2371 (2017), paragraph 22; resolution 2375 (2017), paragraph 23; and resolution 2397 (2017), paragraph 21.
[106] See resolution 2087 (2013), paragraph 18; resolution 2094 (2013), paragraph 31; resolution 2270 (2016), paragraph 48; resolution 2321 (2016), paragraph 46; resolution 2371 (2017), paragraph 26; resolution 2375 (2017, paragraph 26; and resolution 2397 (2017), paragraph 25.
[107] See resolution 2397 (2017), paragraph 25.
[108] See resolution 2321 (2016), paragraph 16.

activity, and emphasized accordingly that DPRK diplomatic agents are prohibited in the receiving State from such practice of professional or commercial activity;[109]

States shall prohibit the DPRK from using real property that it owns or leases in their territory for any purpose other than diplomatic or consular activities.[110]

XXII. Diplomatic missions in the DPRK

The Council emphasised that States should comply with the provisions of paragraphs 8(a) (iii) and 8(d) of resolution 1718 (2006) **without prejudice to the activities of diplomatic missions in the DPRK** pursuant to the Vienna Convention on Diplomatic Relations;[111]

The Council also demanded that the DPRK fully comply with its obligations under the Vienna Convention on Diplomatic Relations and the Vienna Convention on Consular Relations;[112]

States are called upon to reduce the number of staff at DPRK diplomatic missions and consular posts.[113]

XXIII. International agencies

International agencies are encouraged to take necessary steps **to ensure that all their activities with respect to the DPRK are consistent with the provisions of the resolutions**. International agencies are also encouraged to engage with the Committee regarding their activities with respect to the DPRK that may relate to provisions of the resolutions.[114]

States, relevant United Nations bodies and other interested parties are urged to cooperate fully with the Committee and the Panel of Experts, in particular by supplying any information at their disposal on the implementation of the measures imposed by the resolutions.[115]

XXIV. Reporting and notification obligations

a) *Related to the overall implementation of resolutions*

States are called upon to submit a report to the Security Council on the "steps" or "concrete measures" they have taken in order to implement effectively the provisions of resolutions 1718 (2006), 1874 (2009), 2094 (2013), 2270 (2016), 2321 (2016), 2371 (2017), 2375 (2017) and 2397 (2017) within a

[109] See resolution 2321 (2016), paragraph 17.
[110] See resolution 2321 (2016), paragraph 18.
[111] See resolution 1874 (2009), paragraph 21; resolution 2087 (2013), paragraph 17; and resolution 2094 (2013), paragraph 32.
[112] See resolution 2371 (2017), paragraph 16
[113] See resolution 2321 (2016), paragraph 14.
[114] See resolution 2087 (2013), paragraph 11.
[115] See resolution 1874 (2009), paragraph 27.

specified period of time.[116] States are also encouraged to provide, if any, additional information related to the implementation of the resolutions.[117]

b) *Related to inspection, seizure and disposal*

- States that **inspect** cargo in their territory or vessels on the high sea with the consent of the flag State **or seize and dispose** of prohibited items must submit promptly reports containing relevant details to the Committee on the inspection, seizure and disposal;[118]

- States that do not receive the cooperation of a flag State are required to submit promptly to the Committee a report containing relevant details;[119]

Any State that has been refused by a vessel to allow an inspection shall promptly report the incident to the Committee.[120]

c) *Related to non-compliance with the measures*

States are called upon to supply information at their disposal regarding non-compliance with the measures imposed in resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013) or 2270 (2016).[121]

d) *Related to transfers, re-naming or re-registering of DPRK aircraft, vessels or ships*

States are requested to communicate to the Committee any information available on transfers of DPRK aircraft, vessels or ships to other companies that may have been undertaken in order to evade the sanctions or in violating the provisions of resolution 1718 (2006), 1874 (2009), 2087 (2013), or 2094 (2013), **including renaming or re-registering** of aircraft, vessels or ships. The Committee is requested to make that information widely available.[122]

e) *Related to designated vessels*

If a Member State has information regarding the number, name, and registry of vessels encountered in its territory or on the high seas that are designated by the Security Council or by the Committee as subject to the asset freeze imposed by paragraph 8 (d) of resolution 1718 (2006), the various measures imposed by paragraph 12 of resolution 2321 (2016), the port entry ban imposed by paragraph 6 of resolution 2371 (2017), or relevant measures in this resolution, then the Member State shall notify the Committee of this information and what measures were taken to carry out an inspection, an asset

[116] Reports pursuant to resolution 1718 (2006) must be submitted within 30 days of the adoption of the resolution (see paragraph 11 of that resolution); reports pursuant to resolution 1874 (2009), within 45 days (see paragraph 22 of that resolution); reports pursuant to resolution 2094 (2013), within 90 days (see paragraph 25 of that resolution); reports pursuant to resolution 2270 (2016), within 90 days (see paragraph 40 of that resolution); reports pursuant to resolution 2321 (2016), within 90 days (see paragraph 36 of that resolution); reports pursuant to resolution 2371 (2017), within 90 days (see paragraph 18 of that resolution); reports pursuant to resolution 2375 (2017), within 90 days (see paragraph 19 of that resolution); reports pursuant to resolution 2397 (2017), within 90 days (see paragraph 17 of that resolution).
[117] See resolution 2087 (2013), paragraph 10.
[118] See resolution 1874 (2009), paragraph 15.
[119] See resolution 1874 (2009), paragraph 16 and resolution 2375 (2017), paragraph 9.
[120] See resolution 2094 (2013), paragraph 17.
[121] See resolution 2270 (2016), paragraph 41.
[122] See resolution 2094 (2013), paragraph 19.

freeze and impoundment or other appropriate action as authorized by the relevant provisions of the relevant resolutions.[123]

f) *Related to sectoral sanctions*

All Member States providing crude oil shall provide a report to the Committee every 90 days from the date of adoption of this resolution of the amount of crude oil provided to the DPRK.[124]

g) *Related to DPRK nationals working abroad*

All Member States shall provide a midterm report to the Committee by 15 months from 22 December 2017 of all DPRK nationals earning income in that Member State's jurisdiction that were repatriated over the 12-month period starting from 22 December 2017, including an explanation of why less than half of such DPRK nationals were repatriated by the end of that 12 month period if applicable, and all Member States shall provide final reports by 27 months from 22 December 2017.[125]

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[123] See resolution 2397 (2017), paragraph 15.

[124] See resolution 2397 (2017), paragraph 4.
[125] See resolution 2397 (2017), paragraph 8.

Annex 94: Preliminary assessment of responses to the Panel's implementation questionnaire

1. The Panel sent its questionnaire (see annex 92) to UN Member States at the end of November 2022; by mid-January, it had received 23 responses from the following States:

Australia, Benin, Bulgaria, Colombia, Czech Republic, Estonia, Japan, Kiribati, Luxembourg, Moldova, Monaco, Morocco, Palau, Poland, Republic of Korea, San Marino, Seychelles, Singapore, Switzerland, Trinidad and Tobago, Turkmenistan, United Kingdom and United States.

2. Very few of the reporting Member States had taken executive action on the basis of the Security Council resolutions; the Panel was already aware of almost all of the actions taken by those that reported them (Republic of Korea, Palau, Singapore and the United States). The large majority reported no opportunity to take executive action against sanctions-evading individuals or entities, but also provided detail regarding their legislative preparedness to do so should any sanctions evasion in their territories be detected. All of the responding Member States were up-to-date in notification obligations (question 3a in the questionnaire) and the majority had responded to the Panel's requests for information in a timely and constructive way. Most responding Member States were polite about the value of the Panel's recommendations in its 2022 reports in informing their implementation of sanctions; recommendations on maritime issues, cyber, finance and the updating of export control lists had been implemented according to some reporting Member States.

3. Regarding problems in implementation, two Member States noted a lack of training for officials involved in the implementation of sanctions, as well as the complexity of the DPRK sanctions regime. The difficulty of gathering evidence of sanctions evasion to the standards required by law was noted by another. One Member State noted difficulties with coding and customs issues. These comments are likely to inform the recommendations in future Panel reports.

4. The Panel is extremely grateful to those Member States which have already responded to the 2022 implementation questionnaire. The Panel requires much more data in order fully to assess the global state of implementation and looks forward to further responses.

Annex 95: Consolidated list of recommendations

Maritime

1. **The Panel recommends that the various parties engaging in vessel sales adhere to the following best practice:**

   (i) Prior to contract signing:
   - **Ensure transactions occur through accredited domestic ship brokers;**
   - **Verify the vessel's final/end destination and the identity of the contracting party (e.g. shipping company and ship charterer);**
   - **Verify the identity of the transacting partner's broker as well as information of the party's past transaction records;**
   - **Keep proper records of all documentation and due diligence verification processes throughout the transaction.**

   (ii) Upon entering a contract:
   - **Validate all information, contact details and identity of the vessel's consignee (vessel recipient);**
   - **Seek a statement of confirmation affirming the compliance with relevant Security Council resolutions (Statement(s) and clause(s) could be entered as additional clauses to the contract);**
   - **Exercise a risk-based approach and refrain from transactions with counterparties that cannot be expected to fulfil such a contractual obligation.**

   (iii) Following hand-over of vessel:
   - **Commit buyer to update the relevant authorities and the IMO of its purchase / ownership;**
   - **Submit to the IMO updated information on the vessel sale and ownership change, and verify it on the IMO GISIS website;**
   - **Alert the relevant national authorities where there could be potential cause for sanctions evasion including turning off the AIS signal.**

2. **The Panel recommends that the Committee designate the following DPRK vessels pursuant to paragraph 14 of resolution 2397 (2017) that prohibit the direct or indirect supply, sale or transfer to the DPRK of all new and used vessels:**

   (i) RAK WON 1 (IMO: 8355786)
   (ii) SA HYANG SAN 1 (IMO: 9054779)
   (iii) SO BAEK SU (IMO: 9054767)
   (iv) MO RAN BONG 2 (IMO: 8357112)
   (v) SONGRIM (IMO: 8594540)
   (vi) RAK NANG 2 (IMO: 8594552)
   (vii) CHOL BONG SAN 1 (IMO: 9125308)
   (viii) TAE DONG MUN 2 (IMO: 8356120)
   (ix) SIN PHYONG 5 (IMO: 8865121)
   (x) SU RYONG SAN (IMO: 9016430)
   (xi) TAE PHYONG 2 (IMO: 8602763)
   (xii) MU PHO (IMO: 8651178)
   (xiii) UN HUNG (IMO: 9045962)
   (xiv) KANG HUNG (IMO: 9340257)

(xv) RA SON 6 (IMO: 9340271)
(xvi) XIN HAI (IMO: 7636638)
(xvii) TAE DONG MUN (IMO: 9011399)
(xviii) TO MYONG (IMO: 9162318)
(xix) TAE PHYONG (IMO: 9018751)
(xx) PUK DAE BONG (IMO: 9020003)
(xxi) SF BLOOM aka PU YANG 2 (IMO: 8891297)

3. The Panel recommends the Committee designate the following vessels pursuant to the following relevant Security Council resolutions:

(xxii) HENG XING (IMO: 8669589), pursuant to paragraph 14 of resolution 2397 (2017) and to paragraph 5 of resolution 2397 (2017) that prohibits the illicit unreported transfer of refined petroleum to the DPRK
(xxiii) ANNI aka KYONG SONG 3 (IMO: 8356584), pursuant to paragraph 14 of resolution 2397 (2017) and to paragraph 11 of resolution 2375 (2017) that prohibits any facilitation or engagement in ship-to-ship transfer with DPRK vessels of any goods or items that are supplied, sold or transferred to or from the DPRK

4. The Panel reiterates its recommendations for designation of the following "direct delivery" vessels:

(xxiv) NEW KONK (IMO: 9036387), pursuant to paragraphs 5 of resolution 2397 (2017) and 11 of resolution 2375 (2017)
(xxv) UNICA (IMO: 8514306), pursuant to paragraphs 5 of resolution 2397 (2017) and 11 of resolution 2375 (2017)

Trade and Customs

5. **The Panel reiterates its recommendation that appropriate measures be taken by the International Organization for Standardization and Member States, including outreach activities to respective customs authorities, to prevent erroneous usage of country codes.**

6. **The Panel reiterates its recommendation that Member States streamline their export and import control lists, using as supporting material the informal list of prohibited commodities.**

7. **The Panel reiterates its recommendation that customs authorities of Member States use the above-mentioned list to inform trading agents in their jurisdictions for due diligence purposes, in particular when dealing with such commodities in the vicinity of sanctioned jurisdictions such as the DPRK.**

8. **The Panel reiterates its recommendation, with regards to the Member States requiring assistance with the issue of the sectoral ban, that the Committee consider information outreach.**

Implementation of Luxury Goods Ban

9. **The Panel reiterates its recommendation that Member States consider updating their export control lists to reflect their lists of prohibited luxury goods in a manner consistent with the objectives of Security Council resolutions 1718 (2006), 1874 (2009), 2094 (2013), 2270 (2016) and 2321 (2016), avoiding unnecessary broadening of their scope in order not to restrict the supply of unprohibited goods to the civilian population or have a negative humanitarian impact once trade resumes.**

10. **The Panel reiterates its recommendation that Member States encourage their business entities and nationals exporting luxury goods to include a contractual provision to prevent trans-shipment to the DPRK.**

Finance

11. The Panel recommends the designation of the following individual for his role in and support for the prohibited weapons programme in accordance with paragraph 27 of resolution 2094 (2013) and paragraph 43 of resolution 2270 (2016) : General Ri Chang Ho (리창호), the Director of the RGB, an organization whose cyber units (known as Lazarus Group, Kimsuky, Andariel etc.) are continuously engaged in the illicit generation of revenue and acquisition of sensitive information. The RGB was designated in March 2016.

12. The Panel emphasises its previous recommendations:

- **that Member State agencies, as well as financial institutions, businesses and virtual asset service providers, devote appropriate attention to increased cyberhygiene by requiring all cryptocurrency users attempting access to a cryptocurrency exchange to set a higher default threshold, such as a two-factor authentication of transaction;**
- **that Member States implement as soon as possible the Financial Action Task Force guidance on virtual assets, which seeks to prevent financing of weapons of mass destruction proliferation by placing anti-money-laundering and counter-terrorism financing requirements on these assets and virtual asset service providers;**
- **that any entity suffering a cyberattack report this to and engage with the proper legal authorities as soon as possible, issue a public announcement of the incident and engage with agencies relevant to the event, including blockchain analysis firms, to increase the prospects for recovery of some stolen assets.**

13. The Panel recommends that Member States consider national legislation that establishes directives for cyber security that enforce "know your customer" protocols and tighten procedures for virtual asset service provider registration.

14. The Panel recommends that Member States strengthen cooperation, facilitate dialogue, and enhance information-sharing especially in their geographic region, to address the growing intelligence and financial threat of cybercrime. This would include:

- **information-sharing on threats with other financial institutions through organisations such as the Financial Services Information Sharing and Analysis Center (https://www.fsisac.com);**
- **cybersecurity training for financial institutions conducted by a number of organisations such as UNODC, FATF, and various cyber firms.**

Unintended Humanitarian Effects of Sanctions

15. The Panel recommends that the Committee consider renewable and standing exemptions for humanitarian aid actors and humanitarian-related commodities.

16. The Panel emphasises the urgency of re-establishing a durable banking channel to allow the sustainable resumption of humanitarian operations in DPRK.

17. The Panel values the biannual briefings by the relevant United Nations agencies on the unintended impact of sanctions and recommends that the Committee continue this practice.

18. The Panel reiterates its recommendations that the Security Council continues to address issues and processes that mitigate the potential unintended adverse impact of sanctions on the civilian population of the DPRK and on humanitarian aid operations.

19. The Panel recommends that the Committee and other relevant stakeholders practically consider the idea of exempting selected exports currently under sanctions, the proceeds of which might be used to finance humanitarian supplies.

20. The Panel recommends that the Committee consider more active outreach with civil society providing humanitarian assistance to the Democratic People's Republic of Korea to help implement resolution 2664 (2022), including providing input to the preparation of the Secretary General's report.