United Nations A/AC.294/2022/WP.20



Distr.: General 16 September 2022

English

Original: French

Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours Geneva, 12–16 September 2022 Item 6 (b) of the agenda Consideration of issues contained in paragraph 5 of General Assembly resolution 76/231: To consider current and future threats by States to space systems, and actions, activities and omissions that could be considered irresponsible

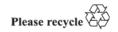
## Current and future threats by States to space systems, and actions, activities and omissions that could be considered irresponsible

#### **Submitted by France**

- 1. Today, the strategic context has worsened, with a strengthening of strategic competition among space actors, as can be seen in the increase in dangerous and potentially destabilizing behaviours. Such developments, which feed upon a lack of shared understanding of the norms, rules and principles of responsible behaviours, are conducive to the risk of misunderstandings and are likely to lead to an uncontrolled rise in tensions in space. They are all the more problematic as the dependency on space of our societies, economies and ways of life continues to grow, regardless of whether our countries are so-called "space powers".
- 2. This working group on reducing space threats through norms, rules, and principles of responsible behaviours is in itself a confidence-building measure insofar as it allows for a genuine dialogue between actors. It will allow States to hold a frank and direct exchange of views on their concerns and their visions of threats and on the strategic context, and it will thus strengthen a common understanding of the space environment.

#### I. Space is an area where the detection, characterization and attribution of threats are still complex

- 3. Space is a field in which systems are largely dual-use, and where situational awareness is inherently difficult. Harmful actions faced by Governments and private actors can be difficult to detect and characterize due to the inherent characteristics of the space environment, the difficulty of tracking and monitoring end-to-end space activities and the opportunities for States to use these private actors as proxies for developing malicious activities. Like in other fields, such as cyberspace, in space, this difficulty in detecting, characterizing and attributing activities increases the risk of misinterpretations and misunderstandings.
- 4. In practice, it is now extremely difficult, even for the great space powers, to detect all space events, anticipate the risks and threats they may face and identify the potentially aggressive or hostile nature of a given behaviour. Developing and implementing the norms, rules, and principles of responsible behaviours that are agreed upon by all will thus make it





possible to objectively assess intentions, better understand the space environment and reduce the risk of misunderstandings and misinterpretations.

## II. Today we are confronted in space with the dual purpose problem and with often ambiguous threats which are for the most part in a grey area

- 5. The States and the different actors now face an increase and intensification of mixed strategies, harassment methods and shows of force. These current and recurring threats, which are played out just short of the use of force, are now the priority because of their potential consequences on the space environment and international stability. In this context, surface-to-surface, surface-to-space and space-to-space threats are the ones that are most imminent and that must be addressed most urgently.
- 6. Moreover, in the event of a space attack, the interdependence of our economies, the growing dependence of our societies on space activities and the numerous examples of cooperation in space are likely to provoke consequences and chain reactions whose magnitude is difficult to assess, and which in any case cannot be kept under control. The indiscriminate nature and potentially uncontrolled and unpredictable effects of certain behaviours observed in recent months, such as destructive anti-satellite launches or cyberattacks, which do not always allow for a clear attribution of the threat, are dangerous and jeopardize international security.
- 7. Another concern is their dual purpose: some of the capabilities required for the maintenance of free and viable access to space, such as in-orbit servicing and active debris removal, for example, can be diverted from their primary applications and potentially used for unfriendly or even hostile purposes. Such a diversion of an object's function can thus make it an "improvised weapon" because of the use to which it is put by a malicious actor.

# III. In the future, the lack of common standards and transparency and the continuation of the current coercive strategies would be a disaster for the space environment and for the whole of international security

- 8. Today we observe a lack of transparency on the part of certain space actors, in terms of both their space capabilities and their doctrines and strategies. This lack of transparency necessarily leads to a lack of confidence and leaves no room for the establishment of the conditions for peaceful cooperation. In the same vein, it can spawn a kind of "overreaction", feeding suspicion and mistrust. Such strategies and obscurity, if they were to persist, would carry with them the seeds of destabilization and threats to international security. France has done its part for this necessary transparency by presenting its national defence strategy for space publicly and before the Conference on Disarmament.
- 9. The number of space nations, which was limited in the past, has steadily increased and will continue to grow in the future as the uses of space systems become more widespread. France defends and encourages this free access to space for all, in the interest of the prosperity of all nations. The viability of space activities and the continued use of orbits is therefore an issue for international society as a whole, and there can be no incentive for anyone to engage in any harmful action or sabotage against space systems such as the intentional creation of large amounts of debris without degrading the security of everyone. Resorting to such actions is irresponsible and must be prohibited.

**2** GE.22-14657

### IV. Characterization of actions that are responsible, irresponsible or threatening in respect of their consequences for international security

- 10. In light of the above, France considers several types of behaviour to be potentially irresponsible:
  - Behaviour that leads or may lead to the kinetic destruction of satellites, insofar as it poses an increased risk of damage to the space environment and the possibility of chain reactions: specifically, intentional actions, such as anti-satellite launches, that may lead to the creation of large amounts of debris and threaten the use of and freedom of access to space. These space threats can emanate from surface-based or co-orbital anti-satellite capabilities. When fired from the ground, such launches are easier to observe and attribute.
  - Behaviour leading to the disruption of space systems, when they carry a high risk of misunderstanding and uncontrolled escalation: Certain proximity manoeuvers may appear as a threat, because in the absence of confidence-building measures and transparency, a State cannot know the intent associated with such operations. In this case, the State cannot know if it is a simple error or if the objective is to disrupt the operation of its satellite, to destroy it or to deorbit it for example under the cover of an active debris removal mission.
  - Behaviour whose effects can have consequences for the safety of people and property:
    for example, anti-satellite fire, dazzling, jamming, military usurpation and
    cyberattacks, when used against certain space systems, can lead to a risk for the safety
    of property and people, for example by disrupting aircraft navigation systems, causing
    ship collisions (through attacks on satellite navigation systems) or impeding rescue
    and emergency services, or even by preventing the forecasting of certain natural
    disasters and meteorological phenomena.

#### V. Conclusion

11. In conclusion, this open-ended working group is an opportunity for all to express their concerns and to exchange ideas about what they perceive as space threats, what they see and observe on a daily basis and what they anticipate. The very holding of this discussion is an exercise in transparency, insofar as it allows for an understanding of what the various actors consider to be irresponsible or threatening behaviour. The only way to search for shared solutions is through this discussion of the current situation.

GE.22-14657 3