Formal Consultative Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

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2022 Meeting
Geneva, 26 August and 5-9 September 2022
Item 6 of the agenda
Respective outstanding questions by the Russian Federation to the United States and to Ukraine concerning the fulfilment of their respective obligations under the Convention in the context of the operation of biological laboratories in Ukraine

Questions to Ukraine regarding compliance with obligations under Part 2 of Article I of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BTWC), in the context of activities of biological laboratories

Submitted by the Russian Federation

UP-4 : Risk assessment of selected Especially Dangerous Pathogens potentially carried by migratory birds over Ukraine

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BTRP TO 04 Ukraine Phase IIb – Country Science Plan
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VII. CURRENT PROJECTS

Key aspects of each CBR project are outlined below.

A. UP-4 Option Year (OY)2: Risk assessment of selected Especially Dangerous Pathogens potentially carried by migratory birds over Ukraine

- **Purpose:** Comprised of a base year and two option years (OY1 and 2), the UP-4 research project aims to assess the ecologic, epizootic, and epidemiologic risk of infectious diseases transmitted by migratory birds associated with major flyways in Ukraine.
- **Engaged:** University of Alaska Anchorage (UAA)
- **Primary Collaborators:**
  - Dr. Eric Bortz, Assistant Professor, Dept. of Biological Sciences, UAA, Anchorage, AK, USA
- **Reginal Partners:**
  - Dr. Otar Parkadze, Director (Avian Diseases), Laboratory of the Ministry of Agriculture, Tbilisi, Georgia
  - Dr. Levan Ninua, Research associate, Institute of Ecology, Ilia State University, Tbilisi, Georgia
- **Ukrainian Collaborating Institutes:**
  - National Scientific Center "Institute of the Experimental and Clinical Veterinary Medicine" (NSC IECVM), Kharkiv, Ukraine
  - State Scientific Research Institute of Laboratory Diagnostics and Veterinary and Sanitary Expertise (SSRILDVSE), Kyiv, Ukraine
  - Institute of Veterinary Medicine (IVM), Kyiv, Ukraine
  - SI (State Institution) "Ukrainian I.I. Mechnikov Anti-Plague Research Institute" (UAPRI) of the Ministry of Health of Ukraine, Odesa, Ukraine
- **Primary Ukrainian Collaborators:**
  - Dr. Borys Stegniy (NSC IECVM): Ukraine Project Manager
  - Dr. Anton Gerylovych (NSC IECVM): Ukraine Leader on Molecular Epidemiology
  - Dr. Denys Muzyka (NSC IECVM): Ukraine Leader on Field Collection
  - Dr. Andrii Mezhenskyi (SSRILDVSE): Participating Institution Manager
  - Dr. Sergiy Nychyk (IVM): Participating Institution Manager
  - Mr. Maksym Bezymennyi (IVM): GIS Leader
  - Dr. Oksana Yurchenko (UAPRI): Principal Investigator (TBD)
- **Regions Targeted:** Three distinct ecoregions in northern and southern Ukraine along major avian migratory flyways, including Odesa, Kherson, and Chernihiv Oblasts
  Target Pathogens: Avian EDPs (AIV, HPAIV, and NDV)
- **Field Collection Activities:** In selected regions of Ukraine, bird specimens will be collected in field expeditions according to the field schedule organized by NSC IECVM, closely mirroring the fieldwork activities in the UP-4 base year and OY1. Sampling will be organized to include ornithological observations recorded in an

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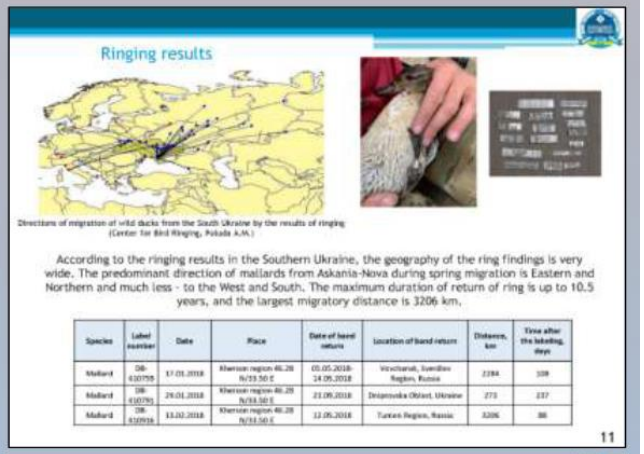
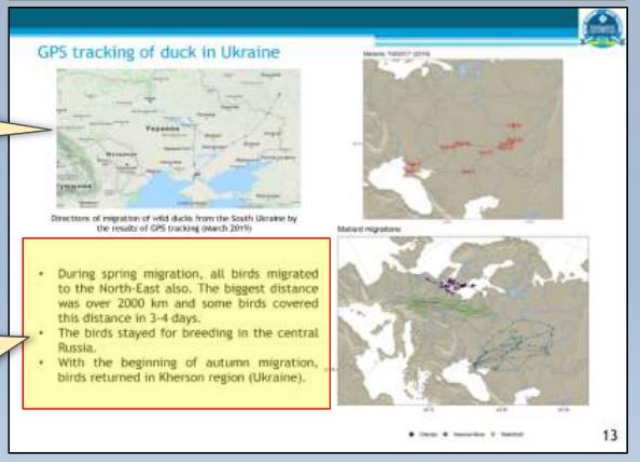
Purpose: Comprised of a base year and two option years (OY1 and 2), the UP-4 research project aims to assess the ecologic, epizootic, and epidemiologic risk of infectious diseases transmitted by migratory birds associated with major flyways in Ukraine.

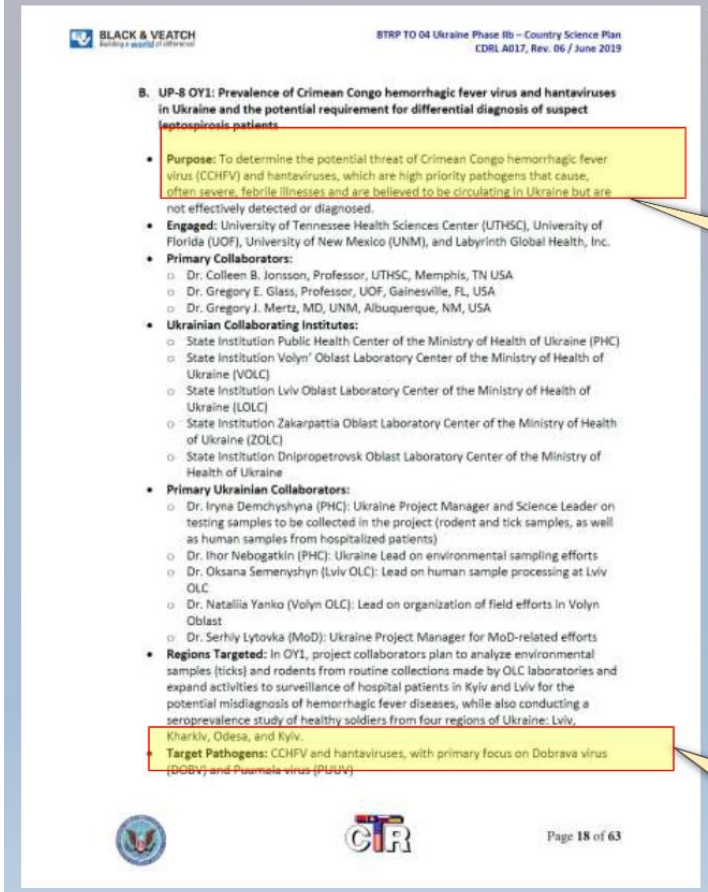


Wild ducks' migration routes from the South of Ukraine to Russia based on GPS tracking

During their spring migration a part of the birds migrated to the North-East. The maximum distance – 2000 km., some birds covered the distance in 3-4 days.
During the nidification the birds were in Russia.



UP-8: Prevalence of Crimean Congo hemorrhagic fever virus and hantaviruses in Ukraine and the potential requirement for differential diagnosis of suspect leptospirosis patients



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B. UP-8 OY1: Prevalence of Crimean Congo hemorrhagic fever virus and hantaviruses in Ukraine and the potential requirement for differential diagnosis of suspect leptospirosis patients

- **Purpose:** To determine the potential threat of Crimean Congo hemorrhagic fever virus (CCHFV) and hantaviruses, which are high priority pathogens that cause, often severe, febrile illnesses and are believed to be circulating in Ukraine but are not effectively detected or diagnosed.
- **Engaged:** University of Tennessee Health Sciences Center (UTHSC), University of Florida (UOF), University of New Mexico (UNM), and Labyrinth Global Health, Inc.
- **Primary Collaborators:**
  - Dr. Colleen B. Jonsson, Professor, UTHSC, Memphis, TN USA
  - Dr. Gregory E. Glass, Professor, UOF, Gainesville, FL, USA
  - Dr. Gregory J. Mertz, MD, UNM, Albuquerque, NM, USA
- **Ukrainian Collaborating Institutes:**
  - State Institution Public Health Center of the Ministry of Health of Ukraine (PHC)
  - State Institution Volyn' Oblast Laboratory Center of the Ministry of Health of Ukraine (VOLC)
  - State Institution Lviv Oblast Laboratory Center of the Ministry of Health of Ukraine (LOLC)
  - State Institution Zakarpattia Oblast Laboratory Center of the Ministry of Health of Ukraine (ZOLC)
  - State Institution Dnipropetrovsk Oblast Laboratory Center of the Ministry of Health of Ukraine
- **Primary Ukrainian Collaborators:**
  - Dr. Iryna Demchyshyna (PHC): Ukraine Project Manager and Science Leader on testing samples to be collected in the project (rodent and tick samples, as well as human samples from hospitalized patients)
  - Dr. Ihor Nebogatkin (PHC): Ukraine Lead on environmental sampling efforts
  - Dr. Oksana Semenyshyn (Lviv OLC): Lead on human sample processing at Lviv OLC
  - Dr. Nataliia Yanko (Volyn OLC): Lead on organization of field efforts in Volyn Oblast
  - Dr. Serhiy Lytovka (MoD): Ukraine Project Manager for MoD-related efforts
- **Regions Targeted:** In OY1, project collaborators plan to analyze environmental samples (ticks) and rodents from routine collections made by OLC laboratories and expand activities to surveillance of hospital patients in Kyiv and Lviv for the potential misdiagnosis of hemorrhagic fever diseases, while also conducting a seroprevalence study of healthy soldiers from four regions of Ukraine: Lviv, Kharkiv, Odesa, and Kyiv.
- **Target Pathogens:** CCHFV and hantaviruses, with primary focus on Dobrava virus (DOBV) and Puumala virus (PUUV)

CTR

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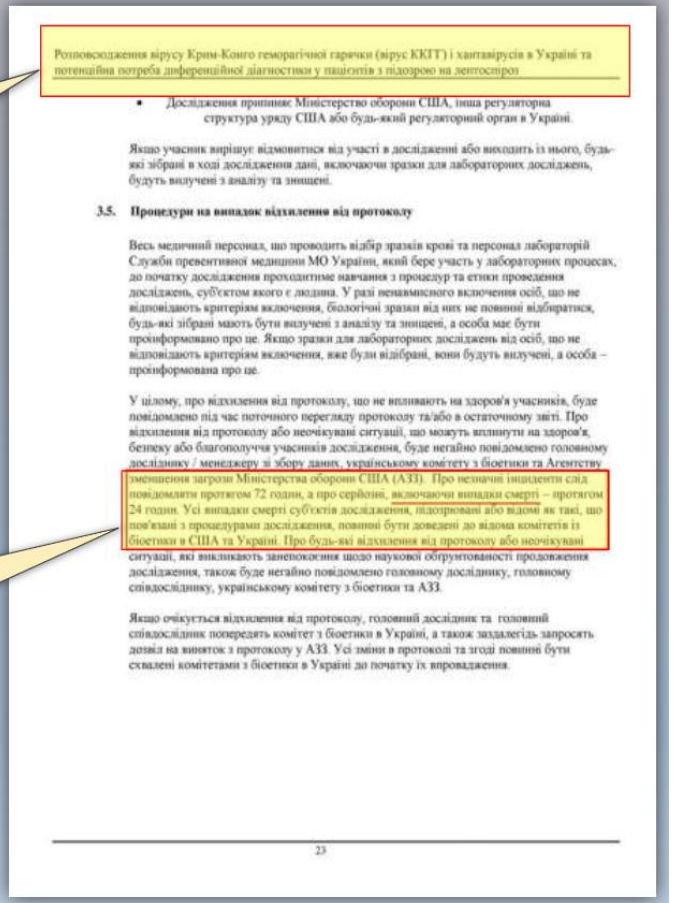
A decision signed by the head of the Center for Public Health's ethics committee on June 12, 2019, in the framework of the project UP-8.

Purpose: To determine the potential threat of Crimean Congo hemorrhagic fever virus (CCHFV) and hantaviruses, which are high priority pathogens that cause, often severe, febrile illnesses and are believed to be circulating in Ukraine but are not effectively detected or diagnosed.

«…minor incidents involving volunteers are supposed to be reported to bioethics committees of the US and Ukraine within 72 hours, while serious accidents, involving the subjects' death are to be reported within 24 hours…»

Target Pathogens: CCHFV and hantaviruses, with primary focus on **Dobrava virus** (DOBV) and **Puumala virus** (PUUV)



Розповсюдження вірусу Крим-Конго геморагічної гарячки (вірус ККГГ) і хантавірусів в Україні та потенційна потреба диференційної діагностики у пацієнтів з підозрою на лептоспіроз

- Дослідження припинив Міністерство оборони США, інша регуляторна структура уряду США або будь-який регуляторний орган в Україні.

Якщо учасник вирішує відмовитися від участі в дослідженні або виходить із нього, будь-які зібрані в ході дослідження дані, включаючи зразки для лабораторних досліджень, будуть вилучені з аналізу та знищені.

3.5. Процедури на випадок відхилення від протоколу

Весь медичний персонал, що проводить відбір зразків крові та персонал лабораторій Служби превентивної медицини МО України, який бере участь у лабораторних процесах, до початку дослідження проходитиме навчання з процедур та етики проведення досліджень, суб'єктом якого є людина. У разі ненавмисного включення осіб, що не відповідають критеріям включення, біологічні зразки від них не повинні відбиратися, будь-які зібрані мають бути вилучені з аналізу та знищені, а особа має бути проінформовано про це. Якщо зразки для лабораторних досліджень від осіб, що не відповідають критеріям включення, вже були відібрані, вони будуть вилучені, а особа – проінформована про це.

У цілому, про відхилення від протоколу, що не впливають на здоров'я учасників, буде повідомлено під час поточного перегляду протоколу та/або в остаточному звіті. Про відхилення від протоколу або неочікувані ситуації, що можуть вплинути на здоров'я, безпеку або благополуччя учасників дослідження, буде негайно повідомлено головному дослідник / менеджеру зі збору даних, українському комітету з біоетики та Агентству зменшення загрози Міністерства оборони США (A33). Про незначні інциденти слід повідомляти протягом 72 годин, а про серйозні, включаючи випадки смерті – протягом 24 годин. Усі випадки смерті суб'єктів дослідження, підозрювані або відомі як такі, що пов'язані з процедурами дослідження, повинні бути доведені до відома комітетів із біоетики в США та Україні. Про будь-які відхилення від протоколу або неочікувані ситуації, які викликають занепокоєння щодо наукової обґрунтованості продовження дослідження, також буде негайно повідомлено головному дослідник, головному співдослідник, українському комітету з біоетики та A33.

Якщо очікується відхилення від протоколу, головний дослідник та головний співдослідник попередять комітет з біоетики в Україні, а також заздалегідь запросять дозвіл на виняток з протоколу у A33. Усі зміни в протоколі та згоді повинні бути схвалені комітетами з біоетики в Україні до початку їх впровадження.

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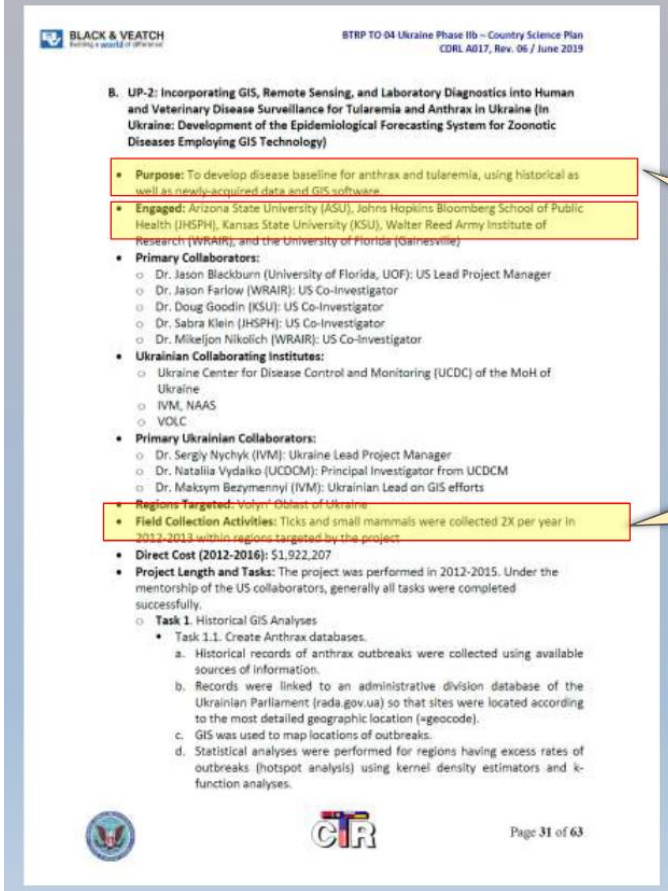
BWC/CONS/2022/WP.17

UP-2: Incorporating GIS, Remote Sensing, and Laboratory Diagnostics into Human and Veterinary Disease Surveillance for Tularemia and Anthrax in Ukraine (In Ukraine: Development of the Epidemiological Forecasting System for Zoonotic Diseases Employing GIS Technology)



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B. UP-2: Incorporating GIS, Remote Sensing, and Laboratory Diagnostics into Human and Veterinary Disease Surveillance for Tularemia and Anthrax in Ukraine (In Ukraine: Development of the Epidemiological Forecasting System for Zoonotic Diseases Employing GIS Technology)

- **Purpose:** To develop disease baseline for anthrax and tularemia, using historical as well as newly-acquired data and GIS software
- **Engaged:** Arizona State University (ASU), Johns Hopkins Bloomberg School of Public Health (JHSPH), Kansas State University (KSU), Walter Reed Army Institute of Research (WRAIR), and the University of Florida (Gainesville)
- **Primary Collaborators:**
  - Dr. Jason Blackburn (University of Florida, UOF): US Lead Project Manager
  - Dr. Jason Farlow (WRAIR): US Co-Investigator
  - Dr. Doug Goodin (KSU): US Co-Investigator
  - Dr. Sabra Klein (JHSPH): US Co-Investigator
  - Dr. Mikeljon Nikolich (WRAIR): US Co-Investigator
- **Ukrainian Collaborating Institutes:**
  - Ukraine Center for Disease Control and Monitoring (UCDC) of the MoH of Ukraine
  - IVM, NAAS
  - VOLC
- **Primary Ukrainian Collaborators:**
  - Dr. Sergiy Nychyk (IVM): Ukraine Lead Project Manager
  - Dr. Nataliia Vydalko (UCDCM): Principal Investigator from UCDCM
  - Dr. Maksym Bezymennyi (IVM): Ukrainian Lead on GIS efforts
- **Regions Targeted:** Volyn' Oblast of Ukraine
- **Field Collection Activities:** Ticks and small mammals were collected 2X per year in 2012-2013 within regions targeted by the project
- **Direct Cost (2012-2016):** $1,922,207
- **Project Length and Tasks:** The project was performed in 2012-2015. Under the mentorship of the US collaborators, generally all tasks were completed successfully.
  - **Task 1.** Historical GIS Analyses
    - Task 1.1. Create Anthrax databases.
      a. Historical records of anthrax outbreaks were collected using available sources of information.
      b. Records were linked to an administrative division database of the Ukrainian Parliament (rada.gov.ua) so that sites were located according to the most detailed geographic location (=geocode).
      c. GIS was used to map locations of outbreaks.
      d. Statistical analyses were performed for regions having excess rates of outbreaks (hotspot analysis) using kernel density estimators and k-function analyses.

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Partner project agreement STCU P363/ DTRA UP-2 between U.S. Department of Defence Threat Reduction Agency/Biological Threat Reduction Project, the Science and Technology Center in Ukraine and Central Sanitary Epidemiological Station Lviv Research Institute of Epidemiology and Hygiene

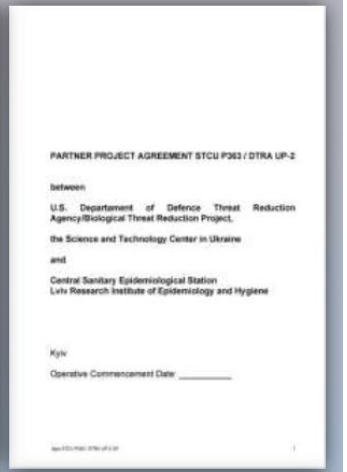
Purpose: To develop disease baseline for anthrax and tularemia, using historical as well as newly-acquired data and GIS software
Engaged: Arizona State University (ASU), Johns Hopkins Bloomberg School of Public Health (JHSPH), Kansas State University (KSU), **Walter Reed Army Institute of Research (WRAIR)**, and the University of Florida (Gainesville)

Field Collection Activities: Ticks and small mammals were collected 2X per year in 2012-2013 within regions targeted by the project

Decision on the adoption of project UP-2

TAKING INTO ACCOUNT THE FOLLOWING CONSIDERATIONS:

HAVE AGREED AS FOLLOWS:



PARTNER PROJECT AGREEMENT STCU P363 / DTRA UP-2

between

U.S. Department of Defence Threat Reduction Agency/Biological Threat Reduction Project,

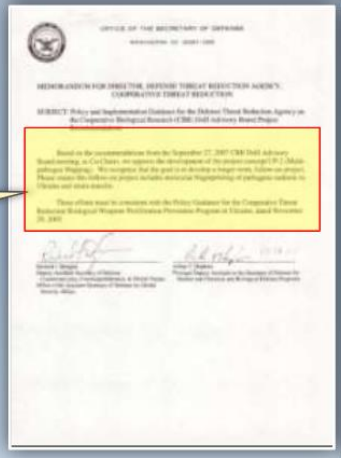
the Science and Technology Center in Ukraine

and

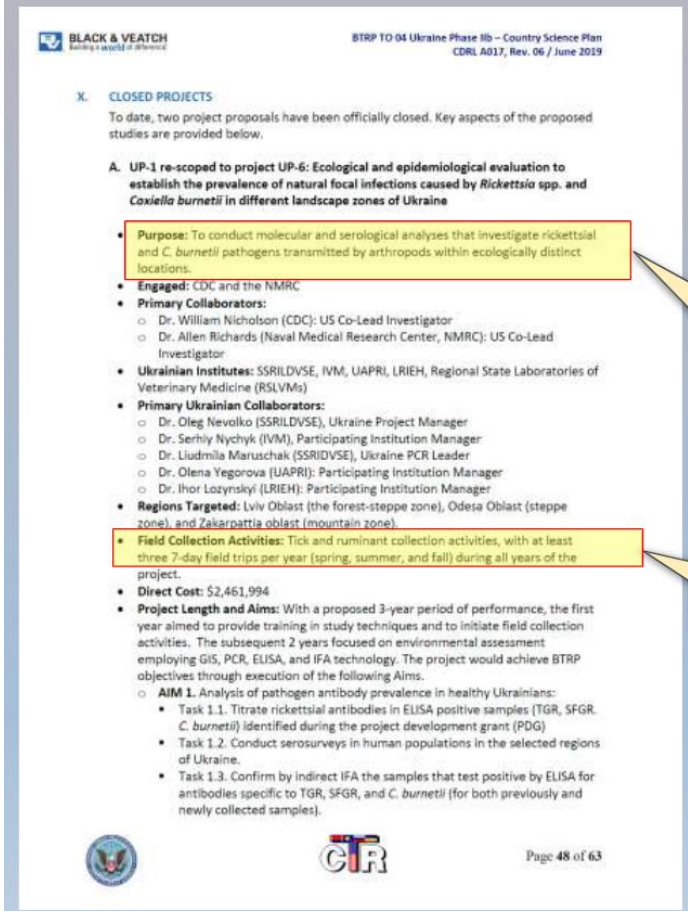
Central Sanitary Epidemiological Station
Lviv Research Institute of Epidemiology and Hygiene

Kyiv

Operative Commencement Date: _____



UP-1 re-scoped to project UP-6: Ecological and epidemiological evaluation to establish the prevalence of natural focal infections caused by Rickettsia spp. and Coxiella burnetii in different landscape zones of Ukraine



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X. CLOSED PROJECTS

To date, two project proposals have been officially closed. Key aspects of the proposed studies are provided below.

A. **UP-1 re-scoped to project UP-6: Ecological and epidemiological evaluation to establish the prevalence of natural focal infections caused by *Rickettsia* spp. and *Coxiella burnetii* in different landscape zones of Ukraine**

- **Purpose:** To conduct molecular and serological analyses that investigate rickettsial and *C. burnetii* pathogens transmitted by arthropods within ecologically distinct locations.
- **Engaged:** CDC and the NMRC
- **Primary Collaborators:**
  - Dr. William Nicholson (CDC): US Co-Lead Investigator
  - Dr. Allen Richards (Naval Medical Research Center, NMRC): US Co-Lead Investigator
- **Ukrainian Institutes:** SSRILDVSE, IVM, UAPRI, LRIEH, Regional State Laboratories of Veterinary Medicine (RSLVMs)
- **Primary Ukrainian Collaborators:**
  - Dr. Oleg Nevolko (SSRILDVSE), Ukraine Project Manager
  - Dr. Serhiy Nychyk (IVM), Participating Institution Manager
  - Dr. Liudmila Maruschak (SSRIDVSE), Ukraine PCR Leader
  - Dr. Olena Yegorova (UAPRI): Participating Institution Manager
  - Dr. Ihor Lozynskyi (LRIEH): Participating Institution Manager
- **Regions Targeted:** Lviv Oblast (the forest-steppe zone), Odesa Oblast (steppe zone), and Zakarpattia oblast (mountain zone).
- **Field Collection Activities:** Tick and ruminant collection activities, with at least three 7-day field trips per year (spring, summer, and fall) during all years of the project.
- **Direct Cost:** $2,461,994
- **Project Length and Aims:** With a proposed 3-year period of performance, the first year aimed to provide training in study techniques and to initiate field collection activities. The subsequent 2 years focused on environmental assessment employing GIS, PCR, ELISA, and IFA technology. The project would achieve BTRP objectives through execution of the following Aims.
  - **AIM 1.** Analysis of pathogen antibody prevalence in healthy Ukrainians:
    - Task 1.1. Titrate rickettsial antibodies in ELISA positive samples (TGR, SFGR. *C. burnetii*) identified during the project development grant (PDG)
    - Task 1.2. Conduct serosurveys in human populations in the selected regions of Ukraine.
    - Task 1.3. Confirm by indirect IFA the samples that test positive by ELISA for antibodies specific to TGR, SFGR, and *C. burnetii* (for both previously and newly collected samples).

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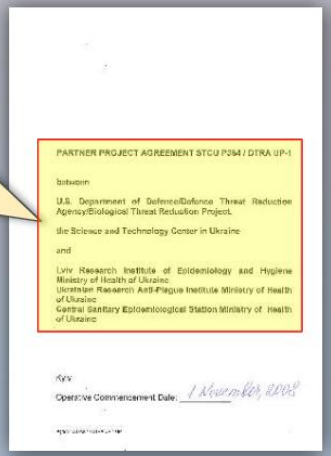
Partner project agreement STCU P364/ DTRA UP-2 between U.S. Department of Defence Threat Reduction Agency/Biological Threat Reduction Project, the Science and Technology Center in Ukraine and Central Sanitary Epidemiological Station Lviv Research Institute of Epidemiology and Hygiene, Ukrainian Research Anti-Plague Institute Ministry of Health of Ukraine, Central Sanitary Epidemiological Station Ministry of Health of Ukraine

Purpose: To conduct molecular and serological analyses that investigate rickettsial and *C. burnetii* pathogens transmitted by arthropods within ecologically distinct locations.
Engaged: CDC and the **NMRC (Naval Medical Research Center)**

Field Collection Activities: Ticks and small mammals were collected 2X per year in 2012-2013 within regions targeted by the project



PARTNER PROJECT AGREEMENT STCU P364 / DTRA UP-1

between

U.S. Department of Defence/Defence Threat Reduction Agency/Biological Threat Reduction Project,

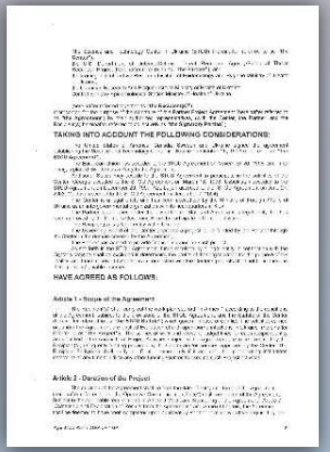
the Science and Technology Center in Ukraine

and

Lviv Research Institute of Epidemiology and Hygiene Ministry of Health of Ukraine
Ukrainian Research Anti-Plague Institute Ministry of Health of Ukraine
Central Sanitary Epidemiological Station Ministry of Health of Ukraine

Kyiv

Operative Commencement Date: 1 November 2008

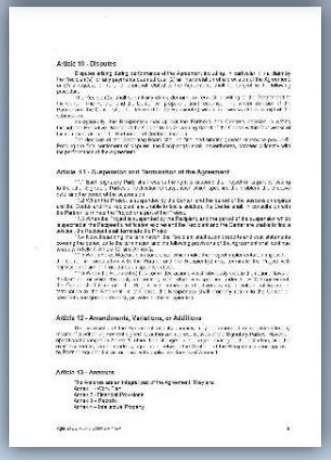


TAKING INTO ACCOUNT THE FOLLOWING CONSIDERATIONS:

HAVE AGREED AS FOLLOWS:

Article 1 - Scope of the Agreement

Article 2 - Duration of the Project



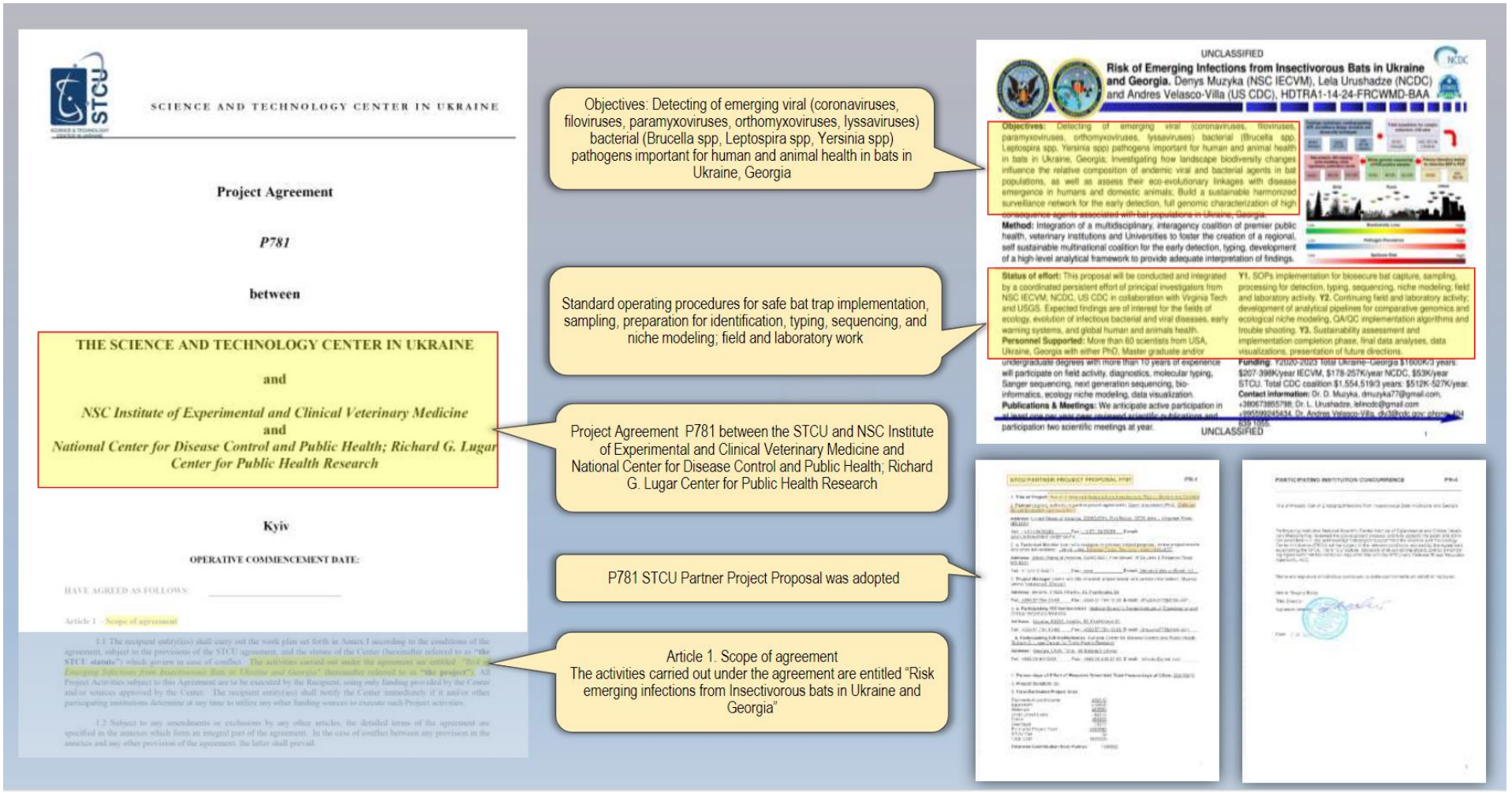
Article 10 - Disputes

Article 11 - Suspension and Termination of the Agreement

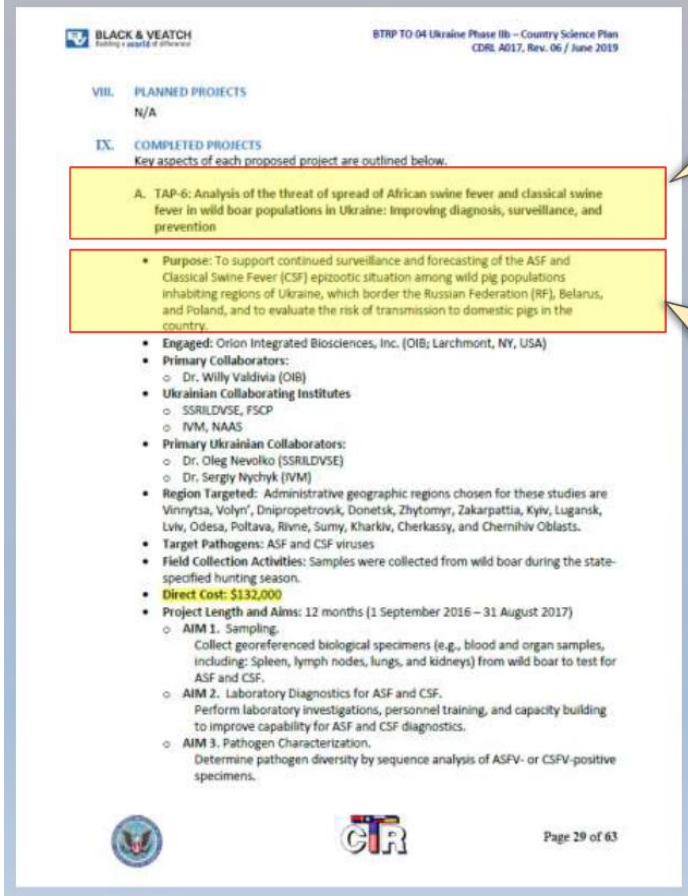
Article 12 - Amendments, Variations, or Additions

Article 13 - Annexes

Article 14 - Entry into Force of the Agreement


SCIENCE AND TECHNOLOGY CENTER IN UKRAINE
Project Agreement
P781
between
THE SCIENCE AND TECHNOLOGY CENTER IN UKRAINE
and
NSC Institute of Experimental and Clinical Veterinary Medicine
and
National Center for Disease Control and Public Health; Richard G. Lugar Center for Public Health Research
Kyiv
OPERATIVE COMMENCEMENT DATE:
HAVE AGREED AS FOLLOWS:
Article 1 – Scope of agreement
Objectives: Detecting of emerging viral (coronaviruses, filoviruses, paramyxoviruses, orthomyxoviruses, lyssaviruses) bacterial (Brucella spp, Leptospira spp, Yersinia spp) pathogens important for human and animal health in bats in Ukraine, Georgia
Standard operating procedures for safe bat trap implementation, sampling, preparation for identification, typing, sequencing, and niche modeling; field and laboratory work
Project Agreement P781 between the STCU and NSC Institute of Experimental and Clinical Veterinary Medicine and National Center for Disease Control and Public Health; Richard G. Lugar Center for Public Health Research
P781 STCU Partner Project Proposal was adopted
Article 1. Scope of agreement
The activities carried out under the agreement are entitled "Risk emerging infections from Insectivorous bats in Ukraine and Georgia"
UNCLASSIFIED
Risk of Emerging Infections from Insectivorous Bats in Ukraine and Georgia. Denys Muzyka (NSC IECVM), Lela Urushadze (NCDC) and Andres Velasco-Villa (US CDC), HDTRA1-14-24-FRCWMD-BAA
UNCLASSIFIED

TAP-6: Analysis of the threat of spread of African swine fever and classical swine fever in wild boar populations in Ukraine: Improving diagnosis, surveillance, and prevention



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VIII. PLANNED PROJECTS

N/A

IX. COMPLETED PROJECTS

Key aspects of each proposed project are outlined below.

A. TAP-6: Analysis of the threat of spread of African swine fever and classical swine fever in wild boar populations in Ukraine: Improving diagnosis, surveillance, and prevention

- **Purpose:** To support continued surveillance and forecasting of the ASF and Classical Swine Fever (CSF) epizootic situation among wild pig populations inhabiting regions of Ukraine, which border the Russian Federation (RF), Belarus, and Poland, and to evaluate the risk of transmission to domestic pigs in the country.
- **Engaged:** Orion Integrated Biosciences, Inc. (OIB; Larchmont, NY, USA)
- **Primary Collaborators:**
  - Dr. Willy Valdivia (OIB)
- **Ukrainian Collaborating Institutes**
  - SSRILDVSE, FSCP
  - IVM, NAAS
- **Primary Ukrainian Collaborators:**
  - Dr. Oleg Nevolko (SSRILDVSE)
  - Dr. Sergiy Nychyk (IVM)
- **Region Targeted:** Administrative geographic regions chosen for these studies are Vinnytsa, Volyn', Dnipropetrovsk, Donetsk, Zhytomyr, Zakarpattia, Kyiv, Lugansk, Lviv, Odesa, Poltava, Rivne, Sumy, Kharkiv, Cherkassy, and Chernihiv Oblasts.
- **Target Pathogens:** ASF and CSF viruses
- **Field Collection Activities:** Samples were collected from wild boar during the state-specified hunting season.
- **Direct Cost:** $132,000
- **Project Length and Aims:** 12 months (1 September 2016 – 31 August 2017)
  - **AIM 1.** Sampling.
    Collect georeferenced biological specimens (e.g., blood and organ samples, including: Spleen, lymph nodes, lungs, and kidneys) from wild boar to test for ASF and CSF.
  - **AIM 2.** Laboratory Diagnostics for ASF and CSF.
    Perform laboratory investigations, personnel training, and capacity building to improve capability for ASF and CSF diagnostics.
  - **AIM 3.** Pathogen Characterization.
    Determine pathogen diversity by sequence analysis of ASFV- or CSFV-positive specimens.

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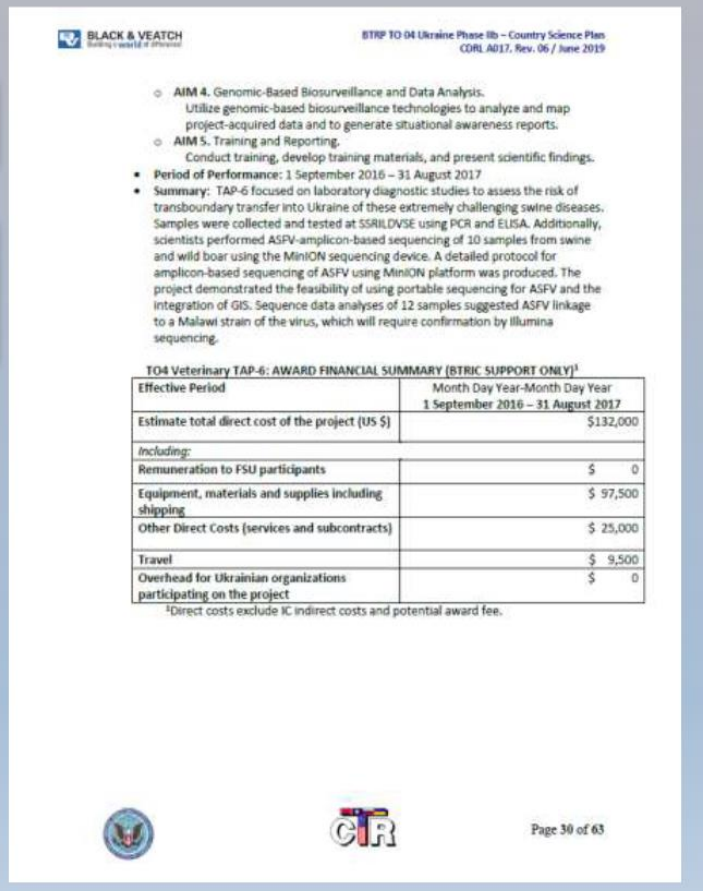
TAP-6: Analysis of the threat of spread of African swine fever and classical swine fever in wild boar populations in Ukraine: Improving diagnosis, surveillance, and prevention

Purpose: To support continued surveillance and forecasting of the ASF and Classical Swine Fever (CSF) epizootic situation among wild pig populations inhabiting **regions of Ukraine, which border the Russian Federation,** Belarus, and Poland, and to evaluate the risk of transmission to domestic pigs in the country.



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- **AIM 4.** Genomic-Based Biosurveillance and Data Analysis.
  Utilize genomic-based biosurveillance technologies to analyze and map project-acquired data and to generate situational awareness reports.
- **AIM 5.** Training and Reporting.
  Conduct training, develop training materials, and present scientific findings.

- **Period of Performance:** 1 September 2016 – 31 August 2017
- **Summary:** TAP-6 focused on laboratory diagnostic studies to assess the risk of transboundary transfer into Ukraine of these extremely challenging swine diseases. Samples were collected and tested at SSRILDVSE using PCR and ELISA. Additionally, scientists performed ASFV-amplicon-based sequencing of 10 samples from swine and wild boar using the MinION sequencing device. A detailed protocol for amplicon-based sequencing of ASFV using MinION platform was produced. The project demonstrated the feasibility of using portable sequencing for ASFV and the integration of GIS. Sequence data analyses of 12 samples suggested ASFV linkage to a Malawi strain of the virus, which will require confirmation by Illumina sequencing.

TO4 Veterinary TAP-6: AWARD FINANCIAL SUMMARY (BTRIC SUPPORT ONLY)[1]

Effective Period	Month Day Year-Month Day Year **1 September 2016 – 31 August 2017**
Estimate total direct cost of the project (US $)	$132,000
Including:	
Remuneration to FSU participants	$ 0
Equipment, materials and supplies including shipping	$ 97,500
Other Direct Costs (services and subcontracts)	$ 25,000
Travel	$ 9,500
Overhead for Ukrainian organizations participating on the project	$ 0

[1]Direct costs exclude IC indirect costs and potential award fee.

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BWC/CONS/2022/WP.17

Evidence of Ukrainian interest in obtaining equipment and means of delivery aimed at using biological agents and toxins in hostile purposes or in armed conflicts

BAYKAR

Date: 2021/12/15
Document №: 211215-UKR-MTC-GNR/48

Subject : Baykar Reply to The State Export Control Service of Ukraine Requests About MS-500V-02ST
References :

To: Motor-Sich JSC, 15, Motorostroiteley Avenue Zaporozhye, 69068, Ukraine
Vyacheslav Shuklin
Senior Contract Engineer

Dear Mr. Shuklin

Baykar would like to express its sincere respect to your company for continuous support.

You may see Baykar reply for The State Export Control Service of Ukraine requests as follows in bold letters;

Государственная служба экспортного контроля Украины просит предоставить следующую информацию про базовый БПЛА:	The State Export Control Service of Ukraine requests you to provide the following information on the basic UAV:
1. Название БПЛА? - **БПЛА Bayraktar Akinci**	1. UAV name. - **Bayraktar Akinci UAV**
2. Сфера применения БПЛА? - **Двухмоторный самолет с неподвижным крылом**	2. UAV scope. - **Twin engine fixed wing aircraft**
3. Осуществляет контролируемый полет за пределами прямого "естественного видения оператора"? - **Да**	3. Does the UAV operational mode foresee the capability to be controlled out of the "direct vision range" of the operator? **- Yes**
4. Максимальная продолжительность полета БПЛА? **- 24 часа**	4. Maximum duration of a UAV flight **-24 hour**
5. Предназначен взлетать и осуществлять стабильный управляемый полет при порывах ветра 46,3 км/ч (25 узлов) или больше? **-Нет**	5. Is the UAV designed to take off and perform stable controlled flight in wind gusts of 46.3 km / h (25 knots) or more? **-No**
6. Способен ли достигать дальность полета 300 км?	6. Is the UAV capable of flying to distances of 300 km?

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To «Motor-Sich»

Is there a system/mechanism of spraying aerosols with a capacity of more than 20 liters?

UAV name: Bayraktar Akinci

- Нет, в зависимости от прямой видимости и идеальных погодных условий иногда БПЛА может преодолевать расстояние до 300 км, используя 1 наземный терминал передачи данных.	**-No, depending on LOS and ideal weather conditions sometimes UAV can go up to 300km by using 1 ground data terminal.**
7. Имеется функция автономно осуществлять управление полетом и навигацией? **-Да**	7. Does the UAV have a function of autonomous flight and navigation control? **-Yes**
8. Имеется функция осуществлять управляемый полет вне границ зоны прямой видимости при участии человека-оператора? **-Да**	8. Does the UAV foresee the capability to be controlled out of the "direct vision range" of the operator with the help of a human operator? **-Yes**
9. Имеется система/механизм распыления аэрозолей емкостью свыше 20л? **-Нет**	9. Is the UAV equipped a system / mechanism for spraying aerosols with a capacity of more than 20 liters? **-No.**
10. Какую максимальную полезную нагрузку (кг) и дальность полета (км) способен доставлять БПЛА? **-Максимальная полезная нагрузка: 3000фунт.** **Дальность полета: как указано в пункте 6.**	10. What is the maximum payload (kg) and flight range (km) that the UAV can deliver? **- Maximum payload: 3000lb** **Flight range: As mentioned in item 6.**

We are looking forward to our continued close cooperation

Best regards,
Mustafa KÖSEOĞLU
Coordinator / Vice General Manager

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