

Science and Technology Center in Ukraine

SESSION 5: Environmental Impacts: Risks from Damage to Nuclear Infrastructure

Presentation for NASEM
Workshop on Addressing Environmental Impacts of War in UA

May 3rd, 2024















Sample of Relevant STCU Projects:

- Provision of mine-detecting dogs for the UA Armed Forces (will eventually be handed over to civilian part of UA govt)
 - Thousands of explosive threats across a contaminated land area equivalent to Austria, Denmark, and The Netherlands combined (approx. 30% of UA territory).
 - STCU working with the Directorate-General for Migration and Home Affairs (DG HOME) and funding is provided for the STCU by the EU's Service for Foreign Policy Instruments (FPI),
- Remediation of Pridniprovskiy Chemical Plant (PChP) Site
 - Soviet uranium processing facility, work done in 3 phases
 - Collab. with Min. of Environ. Protection and Natural Resources of UA
- Ukraine as a Regional Nuclear Forensics Hub for GUAM
 - A key tool that may be needed for dealing with environmental impacts of damage to nuclear infrastructure













Provision of Mine Detecting Dogs

Program funding: Service for Foreign Policy Instruments, European Commission

September 2022 – Ongoing

~€600K to date

Results to Date:



- Provided 18 dogs in first two batches to date - target is 50 dogs total
- Third batch of 12 dogs currently in training for handover in June '24
- Dogs trained by EU trainers for ~6 months and then handed over to UA trainers during 2-week transition
- UA trainers and dogs go immediately to line of contact after handover
- Belgian military and the Carpathian
 Unit of the Polish Border Guard also making large contributions











Remediation of Pridniprovskiy Chemical Plant (PChP)

Program funding: International Partnerships (INTPA), European Commission

2013 – Ongoing

~€9.5M to date















Remediation of PChP Site - Continued

Program funding: International Partnerships (INTPA), European Commission

3 Phases:



- Establish remediation strategy for the Site
- Radiation mapping and concept for bringing the site into a safe condition
- Phase 2 Completed November 2021
 - Implementation of urgent actions
 - Legislative and regulatory framework
 - Stabilization of radiological hazards
 - Institutional support to SE Barrier
 - Supply of priority one equipment
- Phase 3 Started September 2021 (Ongoing)
 - Achieving Safe Conditions
 - Establishment of a safe storage facility for RM and relocation of RM
 - Priority Two Equipment supply
 - Continued support to SE Barrier















Ukraine as a Regional Nuclear Forensics Hub for GUAM

Program funding: U.S. Department of State; U.S. Department of Energy; European Commission

June, 2010 - Ongoing



US \$ 4,5M EURO 2,6M

Program Impact:

- Created a regional Nuclear Forensics
 Laboratory in Ukraine
- Created mobile Nuclear Forensics laboratories in Azerbaijan, Georgia, and Moldova
- Established a Nuclear Forensics
 Library for the GUAM partners
- Knowledge Transfer and Development of Scientific Skills
- Enhanced regional security in Nuclear Forensics











