Regional engagement to strengthen nuclear security as a confidence-building measure

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Nuclear security: an uncontroversial subject

- Nuclear security: prevention, detection of and response to malicious acts involving nuclear or other radioactive materials or associated facilities;
- Nuclear security = defence against nuclear terrorism;
- Nuclear terrorism - malicious acts involving nuclear or other radioactive materials or associated facilities:
  - Acquiring a ready nuclear weapon;
  - Making nuclear explosive device from acquired nuclear material;
  - Making radiological dispersal device (“dirty bomb”);
  - Attacking a nuclear installation.

- Practically universal endorsement across the world regardless of conflicts. Example: Global Initiative to Combat Nuclear Terrorism (GICNT).
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Nuclear security threats around the Black Sea

- Since the early 1990s the Black Sea region was the area most affected by illicit trafficking of nuclear materials.
- HEU smuggling attempts were thwarted:
  - in Bulgaria in 1999;
  - in Georgia in 2003, 2006 and 2010;
  - in Moldova in 2011.
- Multiple “contested spaces” (“grey zones”) in the region present nuclear security threats.
  - E.g. up to 2 kg of 90% HEU disappeared from the Sukhumi Institute of Physics and Technology during the civil Abkhazian-Georgian conflict between 1992 and 1997.
Nuclear security threats around the Black Sea

❖ Crisis in and around Ukraine: annexation of Crimea, formation of DNR and LNR, adding to contested spaces of Abkhazia, Nagorno-Karabakh, South Ossetia and Trans-Dniester;

❖ The 2016 failed coup d’état in Turkey, resulting purges limited country’s responsiveness on nuclear security issues;

❖ Reduction of Russian participation in nuclear security cooperation: exclusion from G8, end of G8 Global Partnership projects, decision not to attend the NSS 2016;

❖ The Nuclear Security Summits process is over, so there is a consensus that the political attention to nuclear security will (continue to) diminish.
IAEA data on nuclear smuggling in the Black Sea states

**Global and regional ITDB incidents 1993-2017**
- Outside BSR: 2,539 (77%)
- BSR: 752 (23%)

**BSR incidents by material type, 1993-2017**
- Rad. sources: 442 (57%)
- Rad. cont.: 169 (22%)
- Nuclear material: 160 (21%)
“Contested spaces”: main source of nuclear security threats

- Findings of a SIPRI research project:
  - Most states’ nuclear security threats are connected with contested spaces in their immediate neighbourhood: Abkhazia, DNR&LNR, Nagorno-Karabakh, South Ossetia and Trans-Dniester;
  - With detection infrastructure nearly finished (except in Ukraine) across the region, stakeholders talk about the need for coordination, nationally and internationally.
Regional nuclear security threats

- Nuclear security is uncontroversial;
- Nuclear smuggling is international by definition;
- Common problems for neighbours originating in “contested spaces”:
  - Potential “safe havens” for smugglers (e.g. illicit trafficking of radioactive sources between LNR (‘BIK enterprise’) and DNR (‘JSC Yenakievo Steel Plant’);
  - “Soviet radioactive legacy”: radioactive materials or sources left behind by the USSR (e.g. co-location of radioactive waste and explosives at the Donetsk State Chemical Production Plant);
  - Threats from decaying infrastructure (e.g. a Soviet PNE site in DNR).
Regional nuclear security cooperation

❖ Makes sense. Leveraging existing regional capabilities for joint use:
  ❖ General decline in political attention to nuclear security after the end of NSS process;
  ❖ Impracticality of having full set of capabilities in each state;

❖ Encouraged. The EU and other donors’ approach of promoting harmonization of nuclear security planning across neighbouring countries:
  ❖ Contribution to sustainability by providing political momentum. (“Energized by neighbors”).

❖ Is being implemented. Wide agreement that more cooperation is necessary, where politically feasible.
  ❖ Examples exist (e.g. GUAM Regional Collaboration in Nuclear Forensics, cross-border response exercises, regional table-top exercises);
Nuclear security engagements as CBMs

- Nuclear security cooperation is not usually conceptualised as a CBM;
- However, it fits the ‘negative feedback’ model of CBMs, and has features possessed by specifically designed CBMs (conducting partnered activities, sharing experiences and risk, maintaining lines of communication and sharing information, joint planning and problem solving, etc.).
Nuclear security engagements as CBMs
Nuclear security and specifically dealing with nuclear and other radioactive materials outside of regulatory control is a major problem in the BSR.

General agreement that the main source of nuclear security threats are “contested spaces” in the immediate neighbourhood.

With equipment and infrastructure in place, attention shifts to sustainability, as well as improvement of cooperation and coordination (nationally, bilaterally and regionally), including pooling of resources.

Such coordination and cooperation can be conceptualised and promoted as a CBM in the Black Sea region.