



## **Nuclear Industry Summit 2016 Joint Statement**

*The 2016 Nuclear Industry Summit convened in Washington on March 30, 2016, as an official side event of the 2016 Nuclear Security Summit. It was attended by 350 leaders from the global nuclear industry with significant experience and responsibility for the operation of nuclear installations, production and management of nuclear materials, and for international nuclear cooperation and trade.*

*Nuclear technology and materials provide a vital contribution to modern society, as do the radiological sources through their application in industry, medicine, agriculture, research and other fields. Nuclear power currently provides 12% of the world's electricity and has one of the smallest carbon footprints of any major energy source. Tens of millions of patients are treated with nuclear medicine each year and 90% of these support clinical diagnosis; there are over a 100 different nuclear imaging procedures in use at the thousands of medical centers that use nuclear medicine for the benefit of human health.*

*Continued public confidence is essential for the application of nuclear technology and the extensive benefits that it brings. NIS participants commit to enhance public and stakeholder confidence through high standards of transparency, integrity, ethical behavior and social responsibility.*

*The participants acknowledge their individual responsibilities for implementing effective security arrangements within national regulatory frameworks and reaffirm their commitment to work together in a cooperative manner, and with respective States' authorities, to continuously improve security as well as safety performance. The nuclear industry has already worked actively over many years to improve all aspects of their nuclear security arrangements, including physical protection, material accountancy, the risk from trusted insiders, and security culture.*

*While reaffirming the commitments made in the previous Nuclear Industry Summits, the participants will undertake the following elements to further enhance nuclear security:*

- 1) **Effectively securing** all nuclear and radiological materials in industrial facilities and applications, at a minimum by complying with national regulations, taking into account IAEA guidelines and relevant best practices.

- 2) **Continuously improving** nuclear security practices by:
- a. Participating in regular International Atomic Energy Agency (IAEA) International Physical Protection Advisory Service (IPPAS) peer reviews as requested by States and relevant best practice exchanges while duly taking into account the obligation of protection of sensitive information; In the domain of international reviews, industry notes that the IAEA International Physical Protection Advisory Service (IPPAS) missions now include a new module on cybersecurity. Industry considers that it is an important development for IPPAS to develop a common understanding of security and cybersecurity review dedicated and specialized to nuclear activities;
  - b. Non-governmental entities, including World Nuclear Association (WNA), universities and World Institute for Nuclear Security (WINS) could also play a role in exchanging non-sensitive relevant best practices and non-sensitive general training in the field of security. This could be especially useful to new entrants to the industry;
  - c. Implementing robust training programs for security personnel, including performance-based testing and force-on-force exercises, as required by national regulation;
  - d. Ensuring that management and personnel with responsibility for nuclear security are demonstrably competent, including through national or international training programs;
  - e. Regularly reviewing security plans and adapting security measures so that they address emerging threats in line with national Design Basis Threat assessments;
  - f. Recognizing the importance of the nuclear security/safety interface, and ensuring that nuclear safety and nuclear security measures are designed and managed in a coherent and coordinated manner. Recognizing the role for WANO, which while conducting reviews on nuclear safety, should take into account the implications of its recommendations on nuclear security;
  - g. Recognizing that the nuclear industry has to work with the national requirements, including those of relevant nuclear security authority and/or national specific security agency. We understand that these national authorities develop national standards and national review/inspection process dedicated and specialized to nuclear

industry. The nuclear industry pledges to work for the implementation of the requirements.

- 3) **Enhancing public and stakeholder confidence** in the effectiveness of security practices and the sustainability of safe, secure and reliable nuclear energy by (if permitted), e.g., publishing periodic reports with an appropriate level of information and reaffirming a commitment to continuously improve security.
- 4) **Enhancing security culture** for management and personnel with accountability for nuclear security by:
  - a. Raising awareness among employees to nuclear security threats;
  - b. Fostering an open environment for reporting security concerns;
  - c. Providing workplace incentives for nuclear security excellence and ensuring oversight and accountability;
  - d. Encouraging employees to report suspicious behavior and/or events through appropriate channels;
  - e. Enhancing security culture by promoting, nuclear safety and security culture through regional and international cooperation.
- 5) **Improving the state of cybersecurity** across all nuclear facilities and applications by:
  - a. Collaborating with national and international organizations and other members of industry to develop and exchange non sensitive relevant best practices for cybersecurity at nuclear facilities, including supporting a potential international governmental-based forum or process for voluntary exchange of information and coordination to prevent, detect and respond to cybersecurity incidents; while duly taking into account the obligation for the protection of sensitive information;
  - b. Considering ways to move beyond traditional security solutions and develop more effective technological approaches to cybersecurity;
  - c. Participating in IAEA, and other cybersecurity workshops, training, and conferences to develop awareness and technical capacity among IT, engineering, and safety/security personnel;

- d. Encouraging governments to host IAEA IPPAS reviews that include a cybersecurity module;
  - e. Working with vendors to minimize vulnerabilities in the technology supply chain through, in certain cases, appropriate incentives.
- 6) **Supporting efforts to strengthen** the global nuclear security architecture and sustaining the high-level attention brought to nuclear security by industry leaders by:
- a. Establishing a process leading to continued exchange in industry forum dedicated to the advancement of nuclear security beyond the 2016 Nuclear Industry Summit, including but not limited to cybersecurity, based on experienced feedback of the current NIS process shared by representatives members of the nuclear industry;
  - b. Continuing to meet on a regular basis to exchange nuclear security non-sensitive relevant best practices and discuss emerging nuclear security challenges.
- 7) **Enhancing** the state of radiological security worldwide by:
- a. Converting applications using high-activity radioactive sources, where technically and economically feasible to alternatives technologies;
  - b. Effectively securing high-activity radioactive sources in accordance with national regulations and taking into account IAEA guidelines.
- 8) We recognize that highly enriched uranium (HEU) and separated plutonium require special precautions and that it is of great importance that they are appropriately secured, consolidated and accounted for. Over the past years, industry has made considerable progress in safe, secure and timely consolidation inside countries and in removal to other countries for disposal. Furthermore, a considerable amount of HEU has been down-blended to low-enriched uranium (LEU) and separated plutonium converted to mixed oxide (MOX) fuel. We are encouraged by States to continue to minimize stocks of HEU and to keep stockpiles of separated plutonium to the minimum level, both as consistent with national requirements.

We are encouraged by States to continue to minimize the use of HEU through the conversion of reactor fuel from HEU to LEU, where technically and

economically feasible, and in this regard welcome cooperation on technologies facilitating such conversion.

Similarly, we will continue to encourage and support efforts to use non-HEU technologies for the production of radioisotopes, including financial incentives, taking into account the need for an assured and reliable supply of medical isotopes.

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