

## Information Circular

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# Communication dated 30 January 2017 received from the Permanent Mission of Norway concerning a Joint Statement on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications

### Joint Statement on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications

1. The Secretariat has received a communication dated 30 January 2017 from the Permanent Mission of Norway on behalf of the Governments of Argentina, Armenia, Australia, Canada, Czech Republic, Chile, Denmark, Finland, Georgia, Mexico, Netherlands, Nigeria, Norway, Philippines, Poland, Republic of Korea, Romania, Singapore, Sweden, the United Kingdom, and the United States of America requesting the Secretariat to bring the communication and its attachments to the attention of all IAEA Member States.

2. As requested, the communication and its attachments are herewith circulated for the information of all Member States.

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#### PERMANENT MISSION OF NORWAY TO THE INTERNATIONAL ORGANIZATIONS IN VIENNA

1-2017-005-BAH

Joint Statement on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian

Applications

The permanent Mission of Norway to the International Organizations in Vienna presents its compliments to the International Atomic Energy Agency and, on behalf of the Governments of Argentina, Armenia, Australia, Canada, Czech Republic, Chile, Denmark, Finland, Georgia, Mexico, Netherlands, Nigeria, Norway, Philippines, Poland, Republic of Korea, Romania, Singapore, Sweden, United Kingdom, and United States of America, has the honour to request that the IAEA Secretariat bring the following note verbale and its attachments to the attention of all IAEA Member States.

The aforementioned Member States, recognizing their national and international responsibilities, have pledged to make every effort to achieve further progress with regard to minimising and eliminating the use of highly enriched uranium (HEU) in civilian applications.

By minimising and eliminating HEU stocks States also eliminate the risk that terrorists could acquire HEU in their country. Therefore, HEU minimisation is a form of permanent threat reduction and an integral component of the global effort to combat the threat of nuclear terrorism.

Bearing in mind that most civilian applications of HEU have proven non-HEU alternatives, HEU minimisation – and the ultimate elimination of HEU use in civilian applications – should continue to be a top priority for all States that continue to possess HEU.

There has already been considerable progress made with regard to HEU minimisation, including through HEU reactor conversions, shut downs, fuel removals, technology substitution and downblending. Over 25 States have already removed all HEU from their territory – and in doing so, have significantly strengthened global nuclear security. We will continue these efforts, working towards ultimately eliminating the use of HEU in civilian applications, to the maximum extent possible.

The aim of the Joint Statement on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications is for States (hereafter referred to as "Subscribing States"), to commit themselves to the elements of a comprehensive plan aimed at minimising – and ultimately eliminating – the use of HEU in civilian applications.

IAEA Member States wishing to subscribe to this Joint Statement on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications are asked to inform the IAEA Secretariat via note verbale, and request for such official communication to be circulated as an INFCIRC document to all IAEA Member States.

The Permanent Mission of Norway to the International Organizations in Vienna avails itself of this opportunity to renew to the International Atomic Energy Agency the assurances of its highest consideration. BA-H



Vienna, 30/01/2017

Attached:

- Joint Statement on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications
- Template for Voluntary Reporting Mechanism on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications

To the International Atomic Energy Agency Vienna

## Joint Statement on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications

The following States: Argentina, Armenia, Australia, Canada, Czech Republic, Chile, Denmark, Finland, Georgia, Mexico, Netherlands, Nigeria, Norway, Philippines, Poland, Republic of Korea, Romania, Singapore, Sweden, United Kingdom, United States, commit themselves to the following elements of a comprehensive plan aimed at minimising – and ultimately eliminating – the use of HEU in civilian applications:

#### 1. Refrain from use of HEU in new civilian facilities or applications.

Avoid to the extent practicable the use of HEU in new civilian facilities or applications, including in research reactor facilities, critical assemblies, subcritical assemblies, pulsed reactors, fast reactors and civilian propulsion and power production reactors as well as for production of radioactive isotopes;

#### 2. HEU Reactor Conversions or Shut Downs.

- a. Convert or shut down all HEU civilian reactors, including research reactors, critical assemblies, subcritical assemblies, pulsed reactors, and fast reactors, as soon as economically and technically feasible.
- b. Continue to support and foster the development and qualification of high-density LEU fuels including multinational cooperation programs<sup>1</sup>.
- c. To readily share, within appropriate conditions, their experience and technologies regarding the minimisation of use of HEU.

#### 3. HEU Stocks Removals, Downblending or Disposition.

- a. Repatriate all civilian HEU to their countries of origin or otherwise permanently dispose or downblend remaining stocks of civilian HEU, where economically and technically feasible, and where there are viable non-HEU alternatives.
- b. Support regional efforts to minimise or eliminate HEU.
- c. Where practicable, downblend HEU stocks already declared excess, and continue to identify additional HEU stocks to be declared excess and downblended.

<sup>&</sup>lt;sup>1</sup> Referring to the multinational cooperation on high-density low-enriched uranium fuel development launched by the Four-party Joint Statement (Belgium, France, the Republic of Korea, the United States) issued at the Seoul Nuclear Security Summit and further strengthened by the Five-party Joint Statement (Belgium, France, Germany, the Republic of Korea, the United States) issued at The Hague Nuclear Security Summit.

**d.** Establish – through the IAEA – a Template for a Voluntary Reporting Mechanism on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications – to track States' progress on HEU removals, downblending, disposition and stocks.

#### 4. LEU Alternatives for Medical Isotope Production

- a. Where technically possible convert existing molybdenum-99 (Mo-99) medical isotope production facilities to use 100% LEU targets by December 31, 2017<sup>2</sup>.
- **b.** Focus efforts globally to expedite licensing approval of non-HEU-based Mo-99 and its daughter product technetium-99m (Tc-99m).
- c. Consistent with international trade agreements and the schedules of the major Mo-99 producers to convert to LEU targets, and subject to applicable domestic laws, end imports and exports of HEU-based Mo-99 unless the members of the Organization for Economic Cooperation and Development's Nuclear Energy Agency High Level Group on the Security of Supply of Medical Radioisotopes deem that the licensed global non-HEU production capacity of Mo-99 and its daughter product Tc-99m have become insufficient and unsustainable.
- **d.** Ensure that any exports of HEU are done within the existing legal and regulatory frameworks and are either (1) for the sole purpose of producing needed medical isotopes or tied to a pledge from the facility receiving the HEU for demonstrated actions to convert to the use of LEU, or (2) for the specific purpose of disposition in the receiving country by blending down that material to LEU or by other secure means.

<sup>&</sup>lt;sup>2</sup> Referring to the Four-party Joint Statement (the United States, France, Belgium and the Netherlands) issued at the Seoul Nuclear Security Summit, highlighting the ongoing cooperation to support conversion of production industries to non-HEU based processes.

### [COUNTRY NAME]

### Template for Voluntary Reporting Mechanism on Minimising and Eliminating the Use of Highly Enriched Uranium in Civilian Applications

This voluntary reporting mechanism is designed to track progress with respect to highly enriched uranium (HEU) removals, HEU research reactor conversions, HEU downblending, disposition and stocks. HEU is defined as uranium with enrichment levels of 20% or higher U-235. Quantities are expressed in kilogram (kgs), and reporting on category 1 and 2 quantities, in accordance to INFCRIC 225 is of special importance. The template will be updated yearly and transmitted to the IAEA by 1 March, also keeping former minimisation activities in the report. The first report, due by 1 May 2017, could also cover historical activities.

Annual figures as of 31 December 20

#### Current Inventories of Civilian HEU<sup>1</sup>

Description	Quantity	Comments

#### Removal(s) of HEU Through Repatriation or Other Export

<i>Type of Facility</i> <sup>2</sup>	Quantity of HEU	Recipient Country	Year

#### Conversion(s) or Shutdown(s) of Research Reactors from the Use of HEU to LEU

Reactor Name	Date of Conversion	Current Status

#### Efforts to Downblend Excess HEU Inventories

Description	Quantity of Excess HEU Downblended	Date(s) of Downblending Operations

<sup>&</sup>lt;sup>1</sup> As already reported by UK, France and Germany through INFCIRC 549

<sup>&</sup>lt;sup>2</sup> E.g. enrichment plants, fabricating plants, reactor sites etc. ref. INFCIRC 549