

## **FMWG Quarterly Regional Report for Western Europe**

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4<sup>th</sup> Quarter 2013 (1 October-31 December)

6 January 2014

### **Current status of region [updates in italics]**

Countries in the region with research reactors using HEU as fuel or in targets:	Belgium <sup>1</sup> , <i>Czech Republic</i> <sup>2</sup> , France, Germany, Italy, Netherlands, <i>Poland</i> <sup>3</sup> , Switzerland, United Kingdom. <sup>4</sup>	
Countries in the region with civilian HEU stocks <sup>5</sup>	1000-10000kg:	France, UK
	100-1000 kg:	Belgium, Germany, Italy, Netherlands, Poland
	10-100 kg:	<i>[NOTE: all HEU removed from Hungary in 2013]</i>
	1-10 kg:	Norway, Switzerland
Countries in the region with separated unirradiated civilian Pu	France	57.5 t <sup>6</sup>
	UK	118.2 t <sup>7</sup>
Countries in the region participating in the ITDB	All	
Countries in the region that have submitted UNSCR 1540 National Reports	All	
Countries in the region party to the CPPNM	All	
Countries in the region still to ratify the 2005 CPPNM Amendment	Iceland, Ireland, Italy, Montenegro, Serbia, Turkey <sup>8</sup>	
Countries in the region who have signed (or succeeded to signature), but not yet ratified ICSANT	Albania, Bosnia and Herzegovina, Estonia, Iceland, Ireland, Italy, Montenegro, Norway, Portugal, Sweden <sup>9</sup> <i>[Note: France ratified in September 2013]</i>	
Countries not contributing to the Nuclear Security Fund include [partial list] <sup>10</sup>	Czech Republic, Hungary, Lithuania, Poland, Romania, Switzerland, Turkey	

<sup>1</sup> Belgium is in the process of returning excess US origin HEU and separated plutonium. Arms Control Association. The Nuclear Security Summit: Progress Report. July 2013.

<sup>2</sup> LVR-15 RR was converted to use LEU fuel, though it reportedly uses HEU targets to produce medical isotopes, including possibly those utilizing US-origin HEU. [http://fissilematerials.org/blog/2013/04/all\\_heu\\_removed\\_from\\_czec.html](http://fissilematerials.org/blog/2013/04/all_heu_removed_from_czec.html). <http://energy.gov/articles/united-states-international-partners-remove-last-remaining-weapons-usable-highly-enriched>

<sup>3</sup> The US NNSA has requested license for US-origin HEU targets, manufactured in France, to be used in Poland's Maria Research Reactor.

<sup>4</sup> This list does not include naval reactors in France and the UK.

[http://fissilematerials.org/facilities/research\\_and\\_isotope\\_production\\_reactors.html](http://fissilematerials.org/facilities/research_and_isotope_production_reactors.html) (25 Oct 2013).

<sup>5</sup> <http://fissilematerials.org/materials/heu.html> (4 Nov 2013). <http://energy.gov/articles/united-states-international-partners-remove-last-remaining-weapons-usable-highly-enriched>

<sup>6</sup> 31 December 2011 declaration to IAEA.

<sup>7</sup> 31 December 2011 declaration to IAEA.

<sup>8</sup> [http://www.iaea.org/Publications/Documents/Conventions/cppnm\\_amend\\_status.pdf](http://www.iaea.org/Publications/Documents/Conventions/cppnm_amend_status.pdf) (04 Dec 2013).

<sup>9</sup> <https://treaties.un.org/doc/Publication/MTDSG/Volume%20II/Chapter%20XVIII/XVIII-15.en.pdf> (3 January 2014).

<sup>10</sup> Arms Control Association. The Nuclear Security Summit: Progress Report. July 2013.



### **Key developments by country / international organization**

Albania, Bulgaria, Romania, Turkey

- Approximately 75 officials from 13 countries in the Caucasus and Eastern Europe gathered in Antalya in December 2013 to promote national and regional co-operation to counter nuclear smuggling. The three-day training was organized in co-operation with the Turkish National Police, Interpol and the International Atomic Energy Agency (IAEA). The countries that were represented in the training included Albania, Armenia, Bulgaria, Georgia, Jordan, Kazakhstan, Kyrgyzstan, Moldova, Romania, Tajikistan, Turkey, Ukraine and Uzbekistan.<sup>11</sup>

Belgium, Czech Republic, France, Netherlands, Poland

- The US National Nuclear Security Administration has requested the Nuclear Regulatory Commission to amend its export license (granted in March) to authorize additional amounts of highly enriched uranium to be sent from the Y-12 National Security Complex in Oak Ridge. The material will be used to manufacture HEU targets in France, for irradiation in research reactors for production of molybdenum-99 medical isotopes in the Institute for Radioelements in Belgium. The NNSA's amended application, according to information in a Dec. 2 Federal Register notice, would increase the amount of exported uranium from 6.2 kilograms to 13.5 kilograms, also bumping up the enrichment from 93.2 percent to 93.35. The original license permitted irradiation of the US-origin HEU targets by the BR-2 research reactor in Belgium, HFR Petten research reactor in the Netherlands, and OSIRIS reactor in France; the amended license would also add the LVR-15 research reactor in the Czech Republic and the Maria research reactor in Poland.<sup>12</sup>
- Belgium has sent an official request to the IAEA for an IPPAS mission for 2014.<sup>13</sup>

Bulgaria [*see Albania*]

Czech Republic [*see Belgium*]

France

- France ratified the International Convention for the Suppression of Acts of Nuclear Terrorism on 11 September 2013.
- From 4-5 December, the International Seminar to Share Experience and Best Practices from Conducting International Physical Protection Advisory Service (IPPAS) Missions was held in Paris.<sup>14</sup>
- [*also, see Belgium*]

France, Netherlands

- In October 2013 French Areva's MELOX fuel fabrication facility began production of MOX fuel for the Borssele NPP in the Netherlands.<sup>15</sup>

Hungary

- Under a multi-year international effort coordinated between Hungary, the United States, the Russian Federation, and the IAEA, the successful removal of all remaining highly enriched uranium (HEU) from

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<sup>11</sup> <http://www.turkishweekly.net/news/160975/turkey-balkans-fight-nuclear-trafficking.html>

<sup>12</sup> <http://knoxblogs.com/atomiccity/2013/12/04/nnsa-seeks-increase-heu-exports-europe-mo-99-work/>  
<http://www.gpo.gov/fdsys/pkg/FR-2013-12-02/html/2013-28820.htm>

[http://fissilematerials.org/blog/2013/12/united\\_states\\_to\\_supply\\_m.html](http://fissilematerials.org/blog/2013/12/united_states_to_supply_m.html)

<sup>13</sup> <http://internationaltrainingcourse.com/content/guest/iaea.pdf>

<sup>14</sup> [http://www.ujd.gov.sk/ujd/web.nsf/0/526e24f7bb4543f4c1257bb8000ea3c0/\\$FILE/viesm0052.pdf](http://www.ujd.gov.sk/ujd/web.nsf/0/526e24f7bb4543f4c1257bb8000ea3c0/$FILE/viesm0052.pdf)

<sup>15</sup> [http://fissilematerials.org/blog/2013/11/areva\\_to\\_produce\\_mox\\_fuel.html](http://fissilematerials.org/blog/2013/11/areva_to_produce_mox_fuel.html)

<http://www.areva.com/scripts/news/publigen/content/templates/Show.asp?P=10033&L=EN>



Hungary was completed by November 2013. The final 49.2 kilograms of the remaining HEU in Hungary were removed over a series of three secure air shipments in the second half of 2013 and transported to Russia.<sup>16</sup>

#### International Atomic Energy Agency

- The IAEA Director General approved in December 2013 the creation of a new Division of Nuclear Security, to replace the Office of Nuclear Security; the change will be effective as of 1 January 2014.<sup>17</sup>

#### Italy

- Italy and US GTRI continue to work to meet the commitment to eliminate all excess HEU and plutonium from Italy by the 2014 NSS.<sup>18</sup>

#### Netherlands

- The Netherlands continues preparations to host the third Nuclear Security Summit on 24-25 March 2014 in The Hague. A Nuclear Industry Summit and a Nuclear Knowledge Summit are also being planned to take place in Amsterdam in March 2014.
- On 4 December 2013 the last HEU spent fuel was removed from the Low Flux Reactor (LFR) site at Petten, the Netherlands. The fuel was removed to the Central Organization for Radioactive Waste (Covra) facility in the Zeeland region of the Netherlands. The LFR reactor was shut down in December 2010 and is currently being dismantled.<sup>19</sup>
- [also, see Belgium, France]

#### Norway

- Norway is reported to be in the process of ratifying ICSANT, however no further information was identified during the reporting period regarding the status of the ratification.<sup>20</sup>

Poland [*see Belgium*]

Romania [*see Albania*]

Turkey [*see Albania*]

#### **International Partner Events and Activities**

- On September 18, INENS hosted a roundtable discussion on ‘Strengthening Nuclear Safety and Security in Developing Countries’ on the margins of the IAEA General Conference in Vienna, Austria, hosted in collaboration with the IAEA’s Department of Nuclear Safety and Security and included speakers from the IAEA’s Division of Nuclear Installation Safety and Office of Nuclear Security, the Nuclear Threat Initiative, the Verification Research, Training and Information Centre (VERTIC), and the World Institute for Nuclear Security (WINS). [*Note: this event is outside of the reporting period, however was not in the previous report.*]
- On October 8, the International Affairs and Foreign Policy Institute held “Getting Ready for the 2014 Nuclear Security Summit” in Madrid, Spain.

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<sup>16</sup> <http://energy.gov/articles/united-states-international-partners-remove-last-remaining-weapons-usable-highly-enriched>

<sup>17</sup> SEC/DIR/195 – New Division of Nuclear Security. 19 December 2013.

<sup>18</sup> Arms Control Association. The Nuclear Security Summit: Progress Report. July 2013.

<http://nnsa.energy.gov/sites/default/files/nnsa/12-13-inlinefiles/2013-12-12%204%20Year%20Effort.pdf>

<sup>19</sup> [http://fissilematerials.org/blog/2013/12/heu\\_spent\\_fuel\\_removed\\_fr.html](http://fissilematerials.org/blog/2013/12/heu_spent_fuel_removed_fr.html)

<http://www.world-nuclear-news.org/WR-LFR-fuel-removed-from-Petten-0612134.html>

<sup>20</sup> Arms Control Association. The Nuclear Security Summit: Progress Report. July 2013.



- On October 8, the VCDNP co-organized with the Permanent Mission of Hungary and the United Nations Office for Disarmament Affairs a workshop “Chemical Biological, Radiological and Nuclear (CBRN) Threats and Responses” in Vienna, Austria, the second event in a series on “Developing a Comprehensive Security Culture”.
- On 7 November, VCDNP executive director Elena Sokova lectured on “Trafficking in Nuclear and Radioactive Materials: Trends and Patterns” at an international conference on combatting illicit trafficking in the Black Sea region, Chisinau, Moldova.
- On 14-15 November in Vienna, Austria, the VCDNP co-hosted with the Organisation for the Prohibition of Chemical Weapons (OPCW) the International Workshop on Disarmament and Non-Proliferation Education and Capacity Development, which included discussions of lessons learned in nuclear security capacity building and training, including efforts by the IAEA, academic institutions, and nuclear support centers in nuclear security education and training.
- On 9 December in Vienna, Austria, the VCDNP co-hosted with the Stanley Foundation a briefing by Will Tobey, former Deputy Administrator, US NNSA, and currently with Harvard, for diplomatic missions in Vienna on the priorities for the 2014 Nuclear Security Summit.

#### **International Partner Publications**

- In December, the Universiteit Antwerpen published a paper in De Standaard by Prof. Dr. Tom Sauer and Sylvain Fanielle on securing radioactive materials: "Radioactief materiaal hoort thuis achter slot en grendel' [Radioactive materials are supposed to be locked up]."
- In November, the EU Non-Proliferation Consortium published Non-Proliferation Paper No. 32 by Ian Anthony on “The Role of the European Union in Strengthening Nuclear Security”.
- In November, 1540 Compass published a piece by VCDNP executive director Elena Sokova on the strengths, challenges, and recommendations for NGO involvement in combatting WMD terrorism.
- In December, the EU Non-Proliferation Consortium newsletter published an interview with VCDNP executive director Elena Sokova on the Mexico radiological accident, the Nuclear Knowledge Summit, and the Nuclear Security Summit.
- Daniel Salisbury, Project Alpha researcher at the King’s College London Centre for Science & Security Studies published an article in the journal Business and Politics entitled “Trade controls and non-proliferation: compliance costs, drivers and challenges”. In the article he builds upon data gathered through the project to present an overview of compliance costs drivers and challenges for companies which export dual-use and other sensitive technologies.

#### **Upcoming Partner Events and Publications:**

- Chatham House and INENS will be hosting an event on “[Progress in US Nonproliferation Priorities](#)” on 7 January in London. Simon Limage, Deputy Assistant Secretary for Nonproliferation Programs, US State Department will discuss how US nonproliferation initiatives, such as Export Control Cooperation, the Global Initiative to Combat Nuclear Terrorism, the Cooperative Threat Reduction Program, and the Nonproliferation and Disarmament Fund, aim to support the Obama administration’s priorities as outlined in the 2009 Prague speech and 2013 Berlin speech.
- The [Nuclear Knowledge Summit](#) is being organized on the sidelines of the 2014 Nuclear Security Summit by Clingendael & FMWG for 21-22 March 2014 in Amsterdam.

#### **Suggestions for FMWG action**

- Creation of an information sheet to distribute to the media prior to the Nuclear Security Summit.