

**Statement on behalf of the Euratom Community**  
**Mr Massimo Garribba, Director,**  
**Directorate-General for Energy, European Commission**  
**58<sup>th</sup> General Conference of the IAEA**  
**Vienna, 22-26 September 2014**

Mr President, Mr Director General, Ladies and Gentlemen,

On behalf of the European Commission, I welcome the role that the International Atomic Energy Agency plays in nuclear, radiation, waste and transport safety and emergency preparedness and response. Let me stress the collaboration between the IAEA and Euratom to effectively implement the Action Plan on Nuclear Safety.

I will now present some recent key developments in the field of nuclear energy and radiation matters in the European Union and the cooperation between the Euratom Community and the Agency.

### **Nuclear safety - EU legislative framework**

After the Fukushima accident, the European Council called on the Commission to review the EU nuclear safety framework. A revised Nuclear Safety Directive was adopted by the EU in July 2014.

This amended Directive enhances the nuclear safety framework of the EU, building on the lessons learned from Fukushima and the EU nuclear stress tests as well as on the safety requirements of WENRA - the Western European Nuclear Regulators Association.

The Directive strengthens the power and independence of national regulatory authorities, introduces a high-level EU-wide safety objective to prevent accidents and avoid radioactive releases, sets up a European system of peer reviews on specific safety issues every six years, increases transparency on nuclear safety matters by informing and involving the public, enhances accident management and on-site emergency preparedness and response, and promotes an effective nuclear safety culture.

The reassessment of the safety of nuclear power plants in the EU – the stress tests – that the Commission carried out together with the Member States following the Fukushima accident, has reached the stage where required safety improvements are being implemented by the nuclear operators. The Commission is following the process and will, in 2015, assess the progress made in collaboration with the national nuclear safety regulators.

### **Basic safety standards**

The first Directive on Basic Safety Standards was adopted more than fifty years ago. Since then, a significant body of EU legislation in radiation protection has been set up.

In December 2013, the European Council adopted the latest revision of the Basic Safety Standards Directive. The revised Directive modernises and consolidates the European radiation protection legislation and takes into account recent international recommendations and standards. It offers in a single coherent document basic safety standards for radiation protection which take account of the state of play in science and technology. It covers all relevant radiation sources, including natural, and integrates the protection of workers, members of the public, patients and the environment. It allows for all exposure situations, planned, existing, and emergency, and harmonises numerical values with international standards. It also strengthens requirements on emergency preparedness and response.

EU Member States will now have four years for the transposition and implementation of this new Directive.

### **Nuclear safety cooperation with the IAEA**

The cooperation between the International Atomic Energy Agency and the European Commission has a long history, particularly in the area of nuclear safeguards. Later, the cooperation was extended to nuclear, radiation, and waste safety and to emergency. To further enhance the relations with the IAEA, annual meetings at the level of senior officials are organised, bringing together officials from the Commission and European External Action Service with officials

from the Agency to discuss enhanced cooperation and common goals in the areas of Nuclear Safety, Nuclear Security, Nuclear Applications, Technical Cooperation, Nuclear Energy and Nuclear Safeguards.

In this context, I would like to mention the Memorandum of Understanding for a partnership that was signed in 2013 between the Commission and the Agency. The Memorandum creates an enhanced frame for planning and reviewing various forms of our cooperation. It is aimed at further improving nuclear safety worldwide.

The Commission fully supports the IAEA Action Plan on Safety and welcomes the efforts of the Agency to strengthen its nuclear safety standards. Furthermore, the Commission, through its Joint Research Centre, actively participate to the revision of the IAEA General and Specific Safety Requirements, which was initiated to incorporate the lessons learned from the Fukushima accident.

The Commission cooperates closely with the IAEA on the implementation of nuclear safety projects in third countries and provides considerable support to the Technical Cooperation programmes and to the implementation of the Agency's Action Plan. In this framework, we have also developed joint projects with the Agency.

The Commission welcomes the work performed by the IAEA in organising IRRS missions to EU Member States as foreseen by the EU Directive on Nuclear Safety. Comparable peer-review missions in the area of waste safety are being developed together.

## **Nuclear Safety Convention**

In response to the observed necessity to strengthen its effectiveness, the Contracting Parties to the Convention on Nuclear Safety agreed in 2012 to start a review process. At the 6<sup>th</sup> Review Meeting, the Swiss Confederation submitted a formal proposal to amend the Convention. This proposal will be subject of a Diplomatic Conference to be convened in early 2015. The Euratom Community will be fully represented in the negotiating process for amending the Convention through the European Commission and the Euratom Member States.

## **Emergency preparedness and response**

In order to facilitate a coherent international response to a nuclear accident, the EU has for a long time operated a European system for quick and automatic exchange of environmental radiation data. It is with pleasure that I have noted the recent collaboration with the IAEA in order to expand the use of this technology to other parts of the world. The Commission will be happy to continue to collaborate on this project and to seek further areas of cooperation to strengthen emergency preparedness and response measures.

## **Cooperation in Nuclear Safeguards**

In the area of nuclear safeguards, all 26 NNWS in the European Union have Comprehensive Safeguards Agreements in place together with the Additional Protocols. Integrated Safeguards are fully implemented in the EU since January 2010. The newest EU Member State, Croatia, is expected to accede to the Euratom Community's Safeguards Agreement in the very near future.

The Commission supports all measures to strengthen the effectiveness and efficiency of the Agency's safeguards system, amongst them the State-level Concept. The Commission welcomes the Director-General's recent report on this subject. The State-level approach should enable the IAEA to focus its efforts on where the risks of proliferation are the greatest.

Let me assure you of my readiness to continue our constructive cooperation on these matters.

I recall that the EU continues to provide important technical support to the IAEA through the Commission's Safeguards Support Programme, which is one of the biggest support programmes in this field. Under this programme, the Commission's DG Energy and the Joint Research Centre actively collaborate with the IAEA in its scientific and technical work programme in nuclear safeguards. 46 tasks are currently on-going and 84 tasks have been completed since the programme began in 1981. The EU also recognized the need to strengthen the Agency's capability to provide credible and timely analysis of safeguards samples. Since 2010, the EU has committed more than €10 million from the Instrument for Stability to the

international ECAS project enhancing the IAEA's Safeguards Analytical Services in Seibersdorf.

## **Cooperation in Nuclear Security**

The EU has enhanced its support to the IAEA, including the regard to promote Nuclear Security worldwide. The EU remains a key donor to the Nuclear Security Fund, with more than €40 million committed since 2004. The EU and the IAEA have closely coordinated their support to third countries, mainly through the border monitoring working group. This included the provision of detection equipment as well as training.

I am also pleased to mention the Practical Arrangement signed in December 2013 on technical cooperation in nuclear security. This Arrangement allows a close coordination between the EU CBRN Centres of Excellence, funded by the Instrument for Stability, and the IAEA Network of Nuclear Security and Support Centres.

## **International nuclear, radiation and waste safety cooperation**

We in the European Union strongly believe in the importance of promoting nuclear safety not only in the EU, but beyond our borders. As a concrete example of this position, the Commission associated to its stress tests all neighbouring countries which operate or own nuclear installations or which have plans for the development of nuclear power. In addition to Switzerland and Ukraine, which participated fully, Armenia, Belarus, Croatia, Russia and Turkey remain associated to the stress-test process.

In the context of the EU Multiannual Financial Framework for 2014-2020 and its External Financing Instruments, at the end of 2013 the Council adopted the Instrument for Nuclear Safety Cooperation with a financial reference amount of some €225 million for the next 7 years. This will enable the EU to continue to support nuclear safety and safeguards in non-EU countries worldwide.

The main objectives of the INSC programme are: (i) promotion of an effective nuclear safety culture and implementation of the highest nuclear safety and radiation protection standards and continuous

improvement of nuclear safety; (ii) responsible and safe management of spent fuel and radioactive waste, decommissioning and remediation of former nuclear sites and installations; and (iii) establishment of frameworks and methodologies for the application of efficient and effective safeguards for nuclear material in third countries.

The new INSC programme will continue past activities with emphasis on the EU neighbouring countries, Ukraine in particular (where the completion of the Chernobyl projects will require a significant additional effort). It will expand in new areas like regulatory support to mining activities in Africa, environmental remediation of the uranium mining legacy in Central Asia and regional emergency preparedness and response. Cooperation with and support to the IAEA will remain an important component of the programme.

As in the past, the EU projects will aim to assist the beneficiary country in the most efficient way and will complement national and other international projects and initiatives, such as the IAEA Technical Cooperation Programme. The Research and Training Programme of Euratom for the period 2014-2018, which complements the Horizon 2020 Framework Programme for Research and Innovation, is open to non-EU countries. For example, Switzerland has been making extensive contribution to the Seventh Euratom Framework Programme, which ran until last year and to which it was associated. Beneficial cooperation has also been accounted for from other non-EU countries such as China, Japan, Ukraine and USA in the field of management of ultimate radioactive waste.

### **Spent fuel and radioactive waste management**

After the adoption of the Directive on the responsible and safe management of spent fuel and radioactive waste in 2011, the European Commission focuses on reviewing notified transposition measures and on assisting Member States in drafting national spent fuel and waste management programmes. The second Workshop on National Programmes will take place next November in Luxembourg. National programmes and reports should be submitted

by August 2015. The Commission is collaborating with the IAEA on the implementation of the peer review required by the Directive.

The Commission is also preparing for Euratom presentation at the 5<sup>th</sup> Joint Convention meeting in May 2015. It is monitoring the funding regimes in the Member States in view of properly applying the "polluter pays" principle and has prepared the Third report to the European Parliament and the Council on funding of decommissioning and waste management. It is also finalising the 8<sup>th</sup> Situation Report on Radioactive Waste and Spent Fuel Management in the EU, which will be followed by a report to the European Parliament based on the national reports provided according to the Directive.

### **Supply of medical radioisotopes**

In recent years, many difficulties have been encountered in the supply of medical radioisotopes (mainly Molybdenum-99/Techneium-99m). The Commission and the Euratom Supply Agency have undertaken several initiatives to improve the security of supply. Most of these activities were concentrated around the European Observatory jointly established by the Commission and industry representatives in 2012.

The coordination of research reactors schedules, creation of a sustainable economic structure of the supply chain, conversion from HEU to LEU targets and production capacity and infrastructure development are the most important points addressed by the Observatory.

Despite all the efforts, the current capacity remains fragile as shown during the recent unplanned outages of the production reactors and processing facilities. Therefore the medical radioisotope issue still requires full consideration by the EU institutions, the Member States, the regulators, the industry and the international organizations like OECD's NEA and the IAEA.

### **Research and training**

The general objectives of the Euratom Research and Training Programme for 2014-2018 follow nuclear research and training

activities. The emphasis is on continuous improvement of nuclear safety (including waste management and emergency preparedness), security (including safeguards) and radiation protection.

Furthermore, nuclear safety and security have been given increased emphasis in the Euratom research programs. Also SNE-TP (Sustainable Nuclear Energy - Technology Platform and IGD-TP (Implementing Geological Disposal of Radioactive Waste - Technological Platform) research and innovation Agendas have been established via a large consultation using also IAEA expertise and been implemented through significant number of scientific projects and involvement of EU experts. The current launch from SNE-TP of the Euratom supported NUGENIA Association to promote Nuclear Safety research, offers an even greater opportunity for technical cooperation in this area. EC RTD and IAEA services are active in determining concrete terms for this cooperation. New Euratom Fission Training Schemes have been launched in collaboration with IAEA, for instance the NUSHARE project. The EU Research and Innovation programme (Horizon 2020) will continue to focus research towards safety and security. Horizon 2020 is the biggest ever program with nearly €80 billion of funding available over 7 years (2014 to 2020).

The support provided directly by the Commission's in-house science service, the Joint Research Centre, focuses on research and training but also on increasing excellence in the nuclear science base for standardisation and in fostering knowledge management, in line with the policies of the European Union.

## **Conclusion**

Mr President, Mr Director General, Ladies and Gentlemen,

A highly interdependent global community needs common understanding and a dynamic and close co-operation in a domain as critical as nuclear and radiation safety.

I want to stress that this is true for all countries, independent of whether or not they are using nuclear energy for power generation. Nuclear safety and security concern all countries because nobody can



be completely safe from the effects of any major nuclear accident or incident.

Let me conclude that we are willing and interested to share the EU experience in ensuring and improving safety and development and implementation of legal framework for inspiration and as a model for other countries, in particular those embarking on the path of developing this energy source and small countries. Following the same nuclear safety objective but having national flexibility on how to achieve it may be an attractive concept for global solutions.

I hope that this conference will be another successful step towards achieving this ambitious but necessary goal.

Thank you for your attention.