

## **Statement on behalf of the Euratom Community**

delivered on 27 September 2016 by

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on the occasion of the

**60<sup>th</sup> General Conference of the IAEA, Vienna**

Mr President, Mr Director General, Ladies and Gentlemen,

Let me begin by congratulating, on behalf of the European Commission, the IAEA on its 60<sup>th</sup> anniversary. We welcome the comprehensive role that the International Atomic Energy Agency plays in promoting the peaceful use of nuclear energy and its efforts to advance global nuclear safety and security. The cooperation between the IAEA and the Euratom Community is long and well-established. In fact, the Euratom Community will be celebrating its own 60th birthday next year.

Let me also congratulate you, Mr. President, on your election as President of this General Conference. The European Commission would also like to express its appreciation to the IAEA Director-General and the Secretariat for their professional and impartial work, and to assure them of our unwavering support. We also welcome the applications for membership by Saint Lucia, Saint Vincent and the Grenadines and the Islamic Republic of Gambia.

I would like to welcome the entry into force of the Amendment to the Convention on the Physical Protection of Nuclear Materials (CPPNM), which took place at the beginning of May, after two thirds of the parties to the Convention, including the Euratom Community, ratified the Amendment.

Ladies and Gentlemen,

The European Union and its Member States in line with our COP 21 commitments are developing sustainable solutions to the energy challenges that we are facing as regards energy security, efficiency, decarbonisation of the economy and market opening.

The Commission's Strategy for a European Energy Union sets the groundwork for this. Within this broader framework, I would like to take the opportunity today to highlight the European Union's policy priorities and actions in the fields of nuclear safety, safeguards, nuclear security, nuclear non-power applications as well as fission and fusion research.

## **I. Nuclear safety**

The European Union possesses a coherent and comprehensive legal framework for the safe, secure and sustainable use of civil nuclear power by all the countries that choose to make use of this source of energy. This framework also serves in those fields that are not related to electricity generation.

As I described in detail at this Conference last year, after the Fukushima accident and following comprehensive stress tests, the European Union updated and strengthened its nuclear safety legal framework. I will highlight today major actions taken since last year.

In 2016, the Commission, in collaboration with the European Nuclear Safety Regulators Group (ENSREG), assessed progress in the implementation of the action plans established by EU nuclear operators following the stress tests. We will continue to press for the timely implementation of all measures in EU Member States.

In line with the provisions of the new Nuclear Safety Directive that will come into effect in the summer of 2017, a topical peer review must be carried out every six years. The first such topical peer review, to be carried out in 2017, will address "ageing management". This topical peer review will be mandatory for all EU Nuclear Power Plants in operation as well as for research reactors above 1 MWth.

The Terms of Reference have been developed by ENSREG and are currently under Public Consultation. In addition, the Technical Specifications developed by WENRA will be submitted to Public Consultation before the end of 2016.

Following the coming into force of new EU legislation on Radioactive Waste Management, National programmes and National Reports on spent fuel and radioactive waste management were submitted to the

Commission by each member state. Later this year, basing itself upon a comprehensive analysis, the Commission plans to issue a Report to the Council and the European Parliament on the implementation of the Directive.

The Commission is collaborating closely with the IAEA on the implementation of the peer reviews required by the Waste Directive through ARTEMIS, with the first countries already requesting peer reviews for 2017.

Moreover, the Commission aims to compile next year a comprehensive report on the full costs linked to decommissioning and waste management and on how Member States ensure their financing in line with the polluter pays principle. The Commission also plans to launch a debate on options for disposal, including regional and other EU-based solutions.

Ladies and Gentlemen,

I would like to highlight that in all our actions in the area of nuclear safety the Commission is actively engaging in, and encouraging discussion with, stakeholders, and in particular civil society, in order to receive input and increase awareness and effectiveness of measures taken.

#### *Nuclear Illustrative Program*

Nuclear Safety and waste management require significant investments. As part of the Energy Union strategy, the Commission therefore adopted last April a new Nuclear Illustrative Program (PINC). It focusses upon investments related to post-Fukushima safety upgrades and the safe operation of existing facilities.

This PINC also includes an estimation of the financing needs related to nuclear power plants' decommissioning and to the management of radioactive waste and spent fuel.

There are currently 129 nuclear power reactors in operation in 14 Member States, with a total capacity of 120 GWe and an average age close to 30 years. New build projects are envisaged in 10 Member States, with four reactors already under construction in Finland, France and Slovakia.

All EU Member States operating nuclear power plants are investing in safety improvements. Due to the average age of the EU nuclear fleet, several Member States are also faced with policy decisions on the replacement or the long term operation of their nuclear power plants. Whatever these decisions will be, 90% of the existing nuclear electricity production capacity in the EU will need to be replaced by 2050.

Member States operating nuclear power plants currently use facilities for storing waste for between 40 and 100 years. However, the storage of radioactive waste, including long-term storage, is an interim solution and not an alternative to final disposal.

Disposal facilities for low-level and intermediate-level radioactive waste are already in place in most Member States. Operators are moving from research to action with the construction of the world's first geological disposal facilities for high-level waste and spent fuel. These facilities are expected to become operational in Finland, Sweden and France between 2020 and 2030.

The PINC provides forward-looking information for nuclear investments in the EU, helping Member States and other stakeholders to better understand the overall situation and make informed decisions for the future. At the same time, the PINC acts as a stimulus for discussion on the role of nuclear energy in achieving the EU energy and decarbonisation objectives.

Ladies and Gentlemen,

The Commission regularly contributes to the work of the IAEA in the area of nuclear safety by providing technical and scientific know-how through its experts.

The Commission cooperates closely with the IAEA on the implementation of nuclear safety projects in non-EU countries and provides considerable support to the Technical Cooperation programme and to the implementation of the Agency's Action Plan. A further €3.5m is made available this year for nuclear safety projects implemented by the IAEA in third countries.

The European Commission strongly supports the IAEA's Regulatory Cooperation Forum and the Coordination Group on Uranium Legacy Sites, two successful fora for the coordination of nuclear safety activities.

During this General Conference, the IAEA and the European Commission organized a side event on the environmental remediation of uranium legacy sites in Central Asia. Together with the European Bank for Reconstruction and Development, both organizations are working on the preparation of an international donors conference to be held in the fall 2017.

Regional co-operation to promote nuclear safety is a priority for Euratom as it is for the IAEA. We are both strongly committed to promoting nuclear safety globally. The current INSC programme will continue to put emphasis on the EU neighbouring countries, Central Asia and Africa.

We are supporting the promotion of nuclear safety culture, the safe management of radioactive wastes and the establishment of effective and efficient nuclear safeguards systems. Beyond the INSC, the EU has also assisted several neighbouring states carry out Stress Tests of their nuclear power plants. Most recently, a mission for the Peer Review of the Armenian Stress Test report took place in June this year and the Commission undertook a technical assessment mission to Belarus on 19-20 September to discuss safety aspects and implementation of the stress test process for the Ostrovets Nuclear Power Plant.

Ladies and gentlemen,

The historic agreement on the Joint Comprehensive Plan of Action, provides the international community with a sound basis for developing cooperation in the peaceful uses of nuclear energy with

Iran. The European Commission is actively contributing to the implementation of the JCPoA through projects addressing nuclear safety and nuclear governance as well as through a deepening of nuclear research cooperation. The first practical activities have already started and should start bearing fruit in the near future. They are expected to lead to the identification of further cooperative activities in the medium term.

The Iranian Nuclear Regulatory Authority (INRA) and the Bushehr Nuclear Power Plant operator (BNPPP) will receive support through the Instrument for Nuclear Safety Cooperation, in line with the provisions of Annex 3 of the JCPoA.

The IAEA's verification activities provided for in Annex 1 of the JCPoA will also be supported through the Instrument for Nuclear Safety Cooperation.

Upon Iranian request, a road map describing the medium-term cooperation (2017 - 2020) in the field of civil nuclear cooperation is under preparation.

The European Commission and Iran are working towards integrating Iranian research entities into the Euratom nuclear research programme. The European Commission will also provide assistance to Iran's accession to those international nuclear governance convention where Iran is not yet a party.

### *Nuclear Safety Convention*

Let me close my comments on the issue of nuclear safety by addressing the subject of the Nuclear Safety Convention. The Commission, on behalf of the Euratom Community, calls for continued efforts among all Contracting Parties to the Nuclear Safety Convention, to implement fully the Vienna Declaration. We have a collective obligation to do our utmost to prevent a nuclear accident taking place and, should an accident occur, to mitigate its consequences and to avoid long-term off-site contamination.

We are looking forward to the 7<sup>th</sup> CNS Review Conference taking place from 27 March to 7 April next year, to its main results and to

the measures taken by the Contracting Parties. The Euratom report to the Review Conference has already been delivered to the IAEA.

## **Nuclear Security**

Ladies and Gentlemen,

Let me now turn to the issue of Nuclear Security. The ongoing rise in terrorist threats has led European Heads of State and Government to increasingly focus their attention and action on the strengthening of our security. Commissioner King was recently appointed with a mandate to deliver on our recently adopted Security Union strategy.

The IAEA-organised Ministerial Conference in December is of paramount importance. The EU has been an active participant and contributor to the Nuclear Security Summits and plans to remain engaged in this area.

Euratom has continued its support and collaboration with the IAEA in nuclear security. The Practical Arrangement signed in 2013 is under implementation, closely followed by both parties. The EU CBRN Centres of Excellence, funded by the Instrument Contributing to Stability and Peace, have taken a stronger role in the regions. The synergies between these and the IAEA Network of Nuclear Security and Support Centres are being explored by bringing together the national contact points of both initiatives to ensure the maximum benefit for the Partner Country with the most efficient use of the resources invested.

The EU has also made a contribution of €25 million to the IAEA low-enriched uranium (LEU) Fuel Bank.

Safeguards, security and safety are commonly seen as separate areas in nuclear governance. While there are technical and legal reasons to justify this, the European Commission will promote enhanced cooperation between these areas, working in close collaboration with the Member States.

## **Safeguards**

In implementing nuclear Safeguards in the European Union the European Commission relies on the strong mandate given to it in the Euratom treaty and cooperates closely with the IAEA.

The Commission will continue its well-established safeguards approach, and put particular emphasis on efficiency gains by closer internal collaboration and knowledge sharing.

Moreover, the Euratom Community continues to provide important technical support to the IAEA through the European Commission Cooperative Support Programme, which during its more than 35 years of existence has grown to be one of the largest of its kind.

It provides support and expertise in: measurement techniques; containment and surveillance; development of reference materials; development of new concepts, approaches and methodologies as well as addressing IAEA's specific training needs.

New challenges in safeguards require attention: one such example is safeguarding of final storages. The European Commission will continuously strive to review and adapt its operational safeguards implementation and the technologies it employs to meet the upcoming challenges.

Since 2010, the Community 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.

## **Radiation protection and EPR**

Ladies and gentlemen,

Following Fukushima, the European Union revised its radiation protection and related food and feed legislation.

A Council Regulation laying down maximum permitted levels of radioactive contamination of food and feed following a nuclear accident or other radiological emergency was adopted and entered into force in February 2016.

Our revised Basic Safety Standards Directive, adopted in 2013, shall be implemented by February 2018. The Commission is currently pursuing a strategy to monitor and facilitate the transposition of the Directive into Member States' national legislation and to support its implementation.

On this occasion, I would like to acknowledge the valuable contribution made by IAEA to the work of the Commission to support a coherent implementation of both the Euratom BSS and the International BSS.

## **EPR**

Emergency Preparedness and Response is a priority for the Commission. There is a need to strengthen cross border cooperation in the European Union, acknowledged in the Council Conclusions of last December. Preparing for the implementation of the BSS Directive, the Commission is organising workshops and will intensify the dialogue with the civil society.

The need for the early exchange of information in the event of a nuclear or radiological emergency has resulted over the years in the adoption of related legislation and the development of state of the art arrangements whereby Member States will be promptly notified in case of such an event via our ECURIE system. Moreover, the radiation levels present in the environment over almost the entire European continent are available in near-real-time via the EURDEP system. We celebrated 20 years of successful operation of the EURDEP system last year.

In the context of our continuous cooperation with the IAEA in the fields of Nuclear Safety and Emergency Preparedness & Response we strive to harmonise and bring our respective emergency notification systems, namely ECURIE and USIE ever-closer. This is an area in which we have made substantial progress during recent years with practical implementation imminent. Within the same scope of cooperation we have also been supporting the IAEA in their development of the International Radiation Monitoring Information System (IRMIS) which is based on the same principles as EURDEP.

During this General Conference, the IAEA and the European Commission organised a side event dedicated to their mutual cooperation efforts in Emergency Preparedness and Response. The audience attending the event welcomed the opportunity to become familiar with the advances in this field and encouraged both organisations to further develop their systems in a coordinated manner.

Experts groups such as HERCA have published strategies for more consistent approaches to coordination of protective actions in an emergency especially where these involve possible cross-border effects. Member States could also take these into account in their implementation plans.

The European Commission and the IAEA are cooperating in an ambitious programme on Emergency Preparedness and Response in South East Asia, launched in the aftermath of the Fukushima accident.

### **Nuclear Non-power Applications, including the supply of medical radioisotopes**

The EU continues to support the development of peaceful uses of nuclear energy and the advancement of nuclear science in different fields including medicine, industry and technology. The European Commission is finalising a bilateral agreement with the IAEA to enhance technical collaboration in these areas.

The serious shortages of medical radioisotopes experienced in 2009 and 2010 clearly demonstrate the fragility of their supply. The EU Observatory on the Security of Supply of Medical Radioisotopes and its four working groups, in partnership with industry, have strived to reduce as far as possible the risk of such events recurring. One noteworthy achievement is the successful coordination of planned reactor outages.

In 2015, the Euratom Supply Agency prepared a comprehensive report which describes several initiatives undertaken at the EU level to improve the security of supply of medical radioisotopes and gives an outlook of further short- and medium-term actions to be undertaken.

The next years will see important new developments in the area of non-power applications of nuclear and radiation technology in the EU. The Commission is in the final stages of launching a study on non-power applications of nuclear and radiation technology with the framework of the Strategic Agenda for Medical, Industrial and Research of nuclear and radiation technology (SAMIRA). Topics to

be studied include safety as well as structural and economic issues surrounding the supply of medical radioisotopes.

The European Commission will, at the end of 2017, organize an international conference to discuss the challenges we face. These activities will underpin our further action on developing, in 2018, an EU Strategic Agenda for Medical, Industrial and Research of nuclear and radiation technology.

## **Research and training**

The Euratom Research and Training Programme for 2014-2018 focusses on continuous improvement of nuclear safety (including waste management and emergency preparedness), security (including safeguards), standardisation and radiation protection. The relevant Euratom budget consists of €315 million for indirect actions for nuclear fission, safety and radiation protection, and €559 million for direct actions on nuclear safety, safeguards and security.

Education, training and knowledge management are matters of common interest to Euratom and the IAEA. The Memorandum of Understanding on Nuclear Safety Cooperation provides the framework for coordinating and optimizing the use of resources. A topical Working group has been set up to pursue these themes.

Ladies and gentlemen,

Beyond fission I would also like to mention the leading role that Europe plays in the ITER project, one of the world's biggest scientific collaborations, on the route to fusion as a sustainable and secure energy source. Europe has demonstrated consistent leadership in fusion research over the years and is now hosting the ITER site where the first Tokamak reactor of such a size is being constructed.

The ITER International Organisation's seven Members represent over half the world's population. The organisation is bringing the international community together behind the important and ambitious mission to bring clean and limitless energy into everyday use.

Intensive efforts made by Euratom and our ITER partners in 2015 and 2016 have ensured a major turnaround, stabilizing the project

and tackling delays and cost overruns. A revised schedule and cost estimates were endorsed by the ITER Council in June 2016.

The detailed schedule from First Plasma to Deuterium-Tritium phase (estimated in 2035) will be presented in November 2016. This should allow the ITER Members to approve the ITER Baseline (schedule, cost and cost of the project) at a Ministerial-level ITER Council level, expected early 2017.

These efforts have been complemented by the introduction of changes concerning (i) management at European and international levels; (ii) improving governance – e.g. more effective integration of the ITER Organization and Domestic Agencies; as well as (iii) robust risk management based on a set of milestones and regular reviews targeting critical areas, thereby allowing for enhanced monitoring of project progress.

All the efforts undertaken to get the project back on track provide the necessary grounds for the completion of the construction of ITER and for Europe's continued commitment and leadership towards its success.

Mr President, Mr Director General, Ladies and Gentlemen,

Nuclear safety, security, and safeguards are a concern for the whole international community: those countries which use civil nuclear power and those which do not. We need a common understanding of the relevant issues and we need close co-operation in resolving them. In nuclear countries this applies both to new build projects and to existing capacities, especially if they are to operate longer than their original design lifetime.

We must take full advantage of the IAEA's 60 year's of accumulated experience and its continuous contribution to developing nuclear power in a safe and sustainable manner.

Thank you for your attention.