Statement on behalf of Euratom

delivered by

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Madam President, Mr Director-General, Excellencies, Ladies and Gentlemen,

I have the honour to speak on behalf of Euratom, the European Atomic Energy Community.

Let me first congratulate you, Madam President, on your election as the President of this General Conference.

I would also like to warmly welcome Cabo Verde and The Gambia as new Member States of the IAEA. We look forward to a mutually beneficial cooperation on peaceful applications of nuclear science and technology.

The collaboration of the Euratom Community and the European Commission with the IAEA is long and well established.

At the outset, I would like to express our recognition of the efforts of the IAEA Secretariat for its continuous and intensive involvement in monitoring the safety and security of nuclear installations in war-torn Ukraine, in the most challenging of circumstances.

The nuclear safety and security situation in Ukraine remains a deep concern for the EU, the IAEA and all our partners.

I would like to refer to the EU statement in this regard, which condemns in the strongest possible terms, the Russian Federation's continued aggression against Ukraine. Beyond the immense human suffering and destruction, it poses serious and direct threats to the safety and security of Ukrainian nuclear facilities and continues to impede the Agency from fully and safely conducting safeguards verification activities in Ukraine.

The European Commission has been following the nuclear safety situation in Ukraine very closely from the beginning of the Russian invasion of Ukraine's territory. The European Commission is working to provide support to Ukraine, including on nuclear

safety, and in coordination with IAEA efforts. We work closely with the nuclear safety regulators of Euratom Member States as well as of Ukraine, and with the IAEA.

The Russian Federation's irresponsible and dangerous behaviour, in particular at the Zaporizhzhia nuclear power plant (NPP), continues to violate all internationally agreed nuclear safety and security provisions, underlining the need of enforcement mechanisms of international law and conventions. The EU underlines the importance of respecting existing rules of international humanitarian law and renewing efforts aimed at the prompt reinforcing of the international framework relating to the protection of nuclear facilities devoted to peaceful purposes, including in the situations of armed conflicts.

The European Commission keeps supporting Ukraine. As the war continues the potential needs of Ukraine remain high. These needs continue to be a priority for the EU. Through the Union Civil Protection Mechanism, the EU has already provided almost EUR 800 million worth of support to Ukraine, including a sizeable contribution for CBRN equipment and medical countermeasures thanks to the in-kind assistance provided by EU Member States and the mobilisation of the rescEU strategic reserves. A new contribution of EUR 14 million is proposed for 2023, including strengthening of the International Chornobyl Cooperation Account (ICCA) managed by EBRD and EUR 4 million for enhancing nuclear safety within the European Instrument for International Nuclear Safety Cooperation.

Nuclear Safety continues to be of critical importance for the European Union, Euratom and its Member States, beyond the situation in Ukraine. We are working together to ensure the highest standards of nuclear safety and their continuous improvement both in Europe and worldwide. It is in our common interest to make sure that all nuclear installations are safely operated, and accidents are prevented, or their consequences mitigated.

The Nuclear Safety Directive remains the cornerstone of the European approach to nuclear safety. In 2022, the European Commission adopted its second progress report on the status of the Directive's implementation, providing a comprehensive EU-wide overview of the nuclear safety governance as well as of important technical safety aspects. The Report highlighted the good level of implementation of the Directive's obligations and made recommendations for further improvement.

While the responsibility for nuclear safety lies with the states using nuclear energy and operating nuclear installations, sharing experiences and best practices and using international and regional peer review mechanisms have shown clear benefits. In this respect, the post-Fukushima Stress Tests now reached the stage where most of the required safety improvements have been made, and credible plans for the finalisation of the remaining ones are being put forward. The voluntary involvement of non-EU countries confirms the value the EU methodology to re-evaluate the safety margins of

nuclear power plants. Furthermore, the Topical Peer Reviews (TPR) offer a platform for regular cooperation on important safety matters. The topic chosen for the second TPR focuses on 'fire protection at nuclear installations'. 22 countries are producing national assessments that, starting next month, will be subject to a joint peer review by about 40 experts from European countries. The Topical Peer review will allow participating countries to review their provisions for fire protection and identify strengths and weaknesses, as well as share operating experience, in a process that includes stakeholder participation. All EU Member States have now been subject to an international peer review of their national framework for nuclear safety and regulatory authority under the IAEA Integrated Regulatory Review Service (IRRS) with a high level of implementation of the recommendations noted during follow-up missions in line with the existing IAEA/EU Commission contribution agreement.

For several partner countries in Africa, the Euratom Community will offer EUR 5.1 million, contributing to their efforts to strengthen nuclear safety regulatory capacity. A long-time sponsor of the environmental remediation of former uranium legacy sites in Central Asia, the Euratom Community will continue to support this work in 2023 by devoting to it EUR 2 million.

In the medical field, we continue implementing the Strategic Agenda for Medical Ionising Radiation Applications (SAMIRA), which contributes to Europe's Beating Cancer Plan. The SAMIRA action plan paves the way for future coordinated EU action in 3 priority areas: improving radiation quality and safety in medicine, securing the supply of medical radioisotopes, and facilitating innovation and the technological development of medical ionising radiation applications. Under SAMIRA, the European Commission has started a process towards establishing a European Radioisotope Valley Initiative (ERVI), with the aim of facilitating access to source materials needed to produce medical radioisotopes, improve efficiency and optimize industrial-scale production of radioisotopes, and develop innovative production methods and technologies through research.

In the area of Emergency Preparedness and Response, the European Union will seek to further enhance cooperation with IAEA on the exchange of radiological data from environmental monitoring and the use of tools to facilitate decision-making in the event of radiological incidents. The European Union is sharing this experience with partners worldwide, including the Gulf Cooperation Council, Western Balkans and ASEANTOM. Let it be mentioned here that the EURDEP system providing environmental monitoring data to the IAEA is the major data source for IAEA's IRMIS system.

Nuclear safeguards, with the verification of peaceful uses of nuclear material, are an important pillar of global non-proliferation. For more than half a century, Euratom, by operating a unique state-of-the art regional safeguards system, has acted as a reliable partner to the IAEA in this domain. In fact, this year we celebrate 50 years of signing

the safeguards agreement between the IAEA, Euratom and its Non-Nuclear Weapon Member States as well as 25 years of its Additional Protocol.

Central to the constructive collaboration are the performance of joint inspections and the development and use of common instruments and tools, as agreed under the New Partnership Approach. Over the years, evolving legal and technical challenges have been successfully addressed.

Safeguards-by-design principles have been applied systematically, providing a framework for the joint development of safeguards approaches and infrastructure in several projects, most notably in the Encapsulation Plant and Geological Repository (EPGR) project in Finland. Here, we would like to acknowledge the significant progress made by all parties involved in defining an effective and efficient safeguards regime for this new type of installation.

Euratom is also committed to continue its 40-years long support to IAEA safeguards through the dedicated European Commission Support Programme, which addresses a broad spectrum of IAEA research, development and training needs.

The long-term safe management of radioactive waste and spent fuel, including decommissioning and financial aspects of the back end of the fuel cycle, continue to require our close attention. Euratom has given legal force by a directive to the requirements included in the Joint Convention on the Safety of Spent Fuel and Radioactive Waste Management, to which it is a contracting party.

In December 2020, the European Commission and the IAEA extended the contribution agreement in this area, particularly in the framework of Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation (ARTEMIS) as well as in the framework of the above-mentioned IAEA Integrated Regulatory Review Service (IRRS). As of August 2023, on the 10th anniversary of the entry into force of the EU's Directive on spent fuel and radioactive waste management, most EU (22) Member States have already conducted the ARTEMIS peer-review, despite the setback posed by the 2020-2021 COVID-19 pandemic. Missions to the remaining five Member States are scheduled until the end of 2023. The ARTEMIS service will continue with follow-up missions, which are already planned for 2024.

I welcome in this regard the cooperation between the European Commission, the IAEA and the OECD Nuclear Energy Agency in harmonising the radioactive waste and spent fuel inventory reporting requirements for their Member States as well as the concepts and methods to describe and compare nuclear sites' decommissioning projects. This will help increase transparency and consistency of national financing schemes and cost estimations and thus strengthening the public trust in the back end of the nuclear fuel cycle. Particular attention needs to be paid by all Member States to taking timely steps towards identifying and implementing safe and sustainable solutions for high-level waste management. The European Commission further supports knowledge-

sharing about decommissioning approaches, leveraging existing experience to ensure all nuclear decommissioning project are implemented in a safe, effective and efficient way.

The Euratom Research and Training (R&T) Programme 2021-2025 with a budget of EUR 1.4 billion, is central to the European Union's efforts to promote excellence in nuclear research and innovation in fission and fusion, helping to ensure the highest standards of safety and increasing energy security.

The objectives of the 2021-2025 Programme present an evolution with respect to previous Euratom Programmes. The new programme will pursue the current programme's key research activities (nuclear safety, radioactive waste and spent fuel management, radiation protection and fusion energy), but it has also expanded research into non-power applications of ionising radiation.

On 17 March, the European Commission adopted the Work Programme 2023-2025, implementing the Euratom Research and Training Programme and supporting nuclear researchers with EUR 132 million in funding. On 4 April 2023, the call for proposals was officially launched with the deadline fixed on 8 November 2023.

The research focus of the new call for Work Programme 2023-2025, published on 4 April 2023, will be on the safety of Small Modular Reactors (SMRs), development of nuclear materials and the secure management and disposal of radioactive waste. The security of radioisotopes supply and radiation protection will continue to have a key role in line with the SAMIRA initiative and the Europe's Beating Cancer Plan. The Euratom R&T programme will complement the achievement of Horizon Europe's objectives. In the non-power application field, the programme explicitly supports research on plastic pollution, a topic of common interest with the IAEA. The Programme further strengthens the cooperation with Ukrainian research entities and academia.

Fusion technology has the potential to become an energy source for the future, particularly important to broaden the sources of energy and increasing energy independence.

The ITER project is a worldwide fusion flagship that has the full support of the European Union. While the project is facing many challenges due to its first of a kind nature, it is advancing in its assembly phase, and it will be moving into its operation phase. The operation of ITER will allow our scientists and engineers to be trained and to develop the necessary technological knowledge for the construction of the fusion demonstration power plant (DEMO) envisaged after ITER, which will open the way to the industrial and commercial use of fusion power as a new energy source.

For this, fusion needs a comprehensive and worldwide regulatory framework that enhances the development of fusion technology overall, addressing the many safety

requirements and supporting the construction and operation of the future fusion power plants.

The Euratom Research Programme and in particular the Work Programme 2023-2025, will continue to support the development of fusion energy through EUROfusion – the European Consortium of European fusion laboratories, the aim of which is to ensure the success of ITER and to advance demonstration power plant preparations. The Fusion Partnership will deliver the necessary knowledge, will prepare European teams for the exploitation of ITER and will provide the training of a new generation of fusion scientists and engineers. The Euratom grant of EUR 549 million is covering the years 2021 to 2025.

The Euratom Research and Training Programme continues also to provide opportunities for mobility of nuclear researchers to participate in the Marie Skłodowska-Curie Actions under Horizon Europe. This action ensures that the EU will maintain nuclear competencies for present and future generations of nuclear scientists.

Beyond the extensive use in health sector, nuclear and radiation technologies are present in a wide variety of non-power applications in industry, applied research, food and agriculture, environment, security, space or cultural heritage.

Euratom is cooperating with the IAEA on nuclear research, via the participation to several working groups, the joint organisation of conference sessions, and the support in the drafting of new publications. A fruitful cooperation can be especially observed in the Waste Management, Decommissioning and Geological disposal field and in Fusion Energy. For example, the IAEA is involved in the EU HARPERS project, devoted to the evaluation of the potential benefits of harmonizing regulations and sharing best practices in decommissioning. We expect to further strengthen our cooperation in the near future in research areas such as non-power applications of ionising radiation and Small Modular Reactors (SMRs). As mentioned above, we have also included in the Work programme 2023-25 a topic on plastic pollution. This paves the way for future cooperation and coordination.

The IAEA remains a key Euratom partner: it enables us to acquire a broad overview on research activities in the nuclear sector at global level. The insights gathered from this enriching cooperation feed our strategy for the future Euratom programmes and ensure alignment and homogeneity between the nuclear research activities of the IAEA and the European Commission, via the Euratom R&T programme.

The IAEA remains an important Euratom partner in the field of knowledge management, including human resources development.

SMRs are not just a research topic. They are an emerging nuclear technology that needs to successfully manage the transition to deployment stage. SMR should also not be seen as competitors of large reactors or of renewable energy, but rather as a complement in the decarbonised electricity generation (hybrid power) system. SMRs

can contribute to the replacement of retired fossil fuel electricity generation capacity and be used for other synergy applications, such as co-generation (i.e. district and process heating, water desalination and low-carbon hydrogen production).

European stakeholders advocated for the launch of a European SMR Partnership in the form of a collaboration scheme involving industrial stakeholders, research and technological organisations, interested customers (i.e. utilities and even Member States), and European regulators for advancing SMRs in Europe.

The Partnership preparation is currently ongoing and is led by a Steering Committee assessing the outlook and conditions for SMR technology safe deployment in the EU as regards market integration and deployment; licensing; financing and partnership; supply chain adaptation; and innovation, research and development. This partnership is to be formally launched later this year [on the margins of the European Nuclear Energy Forum].

The European Commission supports actions, aiming to ensure that the deployment of SMRs) is carried out with the highest levels of safety, security and safeguards. To ensure coherence and complementarity of the efforts, close links are also maintained with the new IAEA ‘Nuclear Harmonization and Standardization Initiative (NHSI)’.

Last but not least, allow me to refer to the important work that the Euratom Supply Agency has done for more than 60 years now in ensuring the stable supply of nuclear materials for power and non-power uses in the European Union.

The European Commission and the Euratom Supply Agency are working closely with all stakeholders in the European Union as well as global partners to further diversify the sources of supply in all stages of the nuclear fuel cycle. We stress the need to enhance the available production capacities in the open economies globally. The Euratom Supply Agency also follows up on the future supply of high-assay low-enriched uranium. It will be important for research, for isotope production, but also for new power generation technologies.

We are glad to see a renewed interest to secure the supply of medical radioisotopes. Past shortages of medical radioisotopes have shown that supply chains can be vulnerable. In partnership with the industry, the Euratom Supply Agency steers a European Observatory that helps reduce the risk of adverse events.

Madam President, Mr Director-General, Excellencies, Ladies and Gentlemen,

Nuclear safety, security, and safeguards are a concern for the whole international community, today so more than ever. We will all need to live up to these challenges.

Let us take full advantage of the IAEA's more than 60 years' accumulated experience and its continuous contribution to developing nuclear power in a safe and sustainable manner and of synergies with our policies and activities in this important area.

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