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Proposal for a

COUNCIL REGULATION

establishing the research and training programme of the European Atomic Energy Community for the period 2028-2032, complementing Horizon Europe, the Framework Programme for Research and Innovation, and providing for the Community's contribution to the ITER project, and repealing Regulation (Euratom) 2025/1304

{SWD(2025) 594 final} - {SWD(2025) 595 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons and objectives

This proposal for a 2028-2032 Euratom research and training programme (the ‘Programme’) is one of the instruments for delivering the policy ambitions outlined in the Commission’s proposal for the next long-term EU budget (2028–2034)¹ and it takes into account the political priorities for 2024–2029, as set out in President von der Leyen’s guidelines for her second mandate². The Programme is an EU-funded thematic research and training programme operating in scientific and technical areas covered by the Treaty establishing the European Atomic Energy Community (the ‘Euratom Treaty’)³.

This proposal aims to support EU competitiveness in line with the objectives of the European Competitiveness Fund (ECF)⁴ and the Horizon Europe Framework Programme 2028-2034 (‘Horizon Europe’)⁵ by pursuing research on safe, innovative nuclear technologies for a prosperous, resilient and sustainable EU. In this context, the Programme will complement Horizon Europe’s action for the development of the proposed ‘Moonshot Fusion’, aimed at overcoming the scientific, engineering and technological challenges to the deployment of fusion energy on the EU grid. Making progress on fusion energy requires state-of-the-art infrastructure. To this end, the Programme will continue to provide for Euratom’s contribution to the ITER project. For all applications of nuclear technologies, the Euratom Programme will carry on with critical actions to protect people and the environment by reducing the risks associated with ionising radiation.

The Programme’s actions will be implemented in close synergy with ECF and Horizon Europe while respecting the ITER project’s specificities. Using the rules for participation and instruments of these programmes, the Programme will promote simplicity and flexibility, enabling faster and more strategic EU spending through clearer rules and more transparent procedures for applicants and stakeholders. The contribution of nuclear research to raising the EU’s standard of living and to achieving the Union’s objectives⁶ should be acknowledged and supported through synergies and combined funding with the ECF and Horizon Europe.

¹ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: A dynamic EU Budget for the priorities of the future - The Multiannual Financial Framework 2028-2034 (COM(2025)570, 16.7.2025) and Proposal for a Council Regulation laying down the multiannual financial framework for the years 2028 to 2034 (COM(2025) 571, 16.7.2025).

² *Europe’s Choice - Political Guidelines for The Next European Commission 2024–2029*, Ursula von der Leyen, Candidate for the European Commission President (18.07.2024) <https://dorie.ec.europa.eu/en/details/-/card/8005305>.

³ References to the Euratom Treaty are to the consolidated version. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02016A/TXT-20240901>

⁴ Proposal for a Regulation of the European Parliament and of the Council on establishing the European Competitiveness Fund (‘ECF’), including the specific programme for defence research and innovation activities, repealing Regulations (EU) 2021/522, (EU) 2021/694, (EU) 2021/697, (EU) 2021/783, repealing provisions of Regulations (EU) 2021/696, (EU) 2023/588, and amending Regulation (EU) [EDIP] (COM(2025) 555 final, 16.7.2025).

⁵ Proposal for a Regulation of the European Parliament and of the Council establishing Horizon Europe, the Framework Programme for Research and Innovation, for the period 2028-2034 laying down its rules for participation and dissemination, and repealing Regulation (EU) 2021/695 (COM(2025) 543, 16.7.2025).

⁶ Throughout this Explanatory memorandum, ‘Union’ should be taken to refer to the EU and the European Atomic Energy Community (Euratom), separately and jointly, as the case may be. See also Article 2 of the proposed Regulation.

Today, the EU faces several challenges, including ensuring strategic autonomy and securing the supply of affordable, low-carbon energy with co-benefits for air quality and maintaining competitiveness and technological leadership amid growing geopolitical instability. All zero- and low-carbon energy solutions, including nuclear, are necessary to decarbonise the EU's energy system by 2040⁷. Recent developments in the nuclear landscape have seen increased interest in Member States in incorporating nuclear in their energy mix, developing fusion energy and in the application of ionising radiation. This calls for more research in nuclear technologies while contributing to maintaining the highest standards of safety, security, safeguards, security of supply and radiation protection. Public and private research in Member States can contribute significantly to providing these results and Euratom's task is to complement national efforts by carrying out a Community⁸-based research and training programme.

The Programme will aim to maintain Europe as a global leader in the fusion field by accelerating the transition from achieving fusion energy gain to the full commercialisation of fusion energy. By leveraging outcomes from the ITER project's construction, research, and contributions from Member States, the Programme will aim to address critical technological gaps through focused research and innovation. This way, it will build a competitive industrial ecosystem, engage the EU private sector and focus on the development of a skilled workforce. The Programme will also seek greater alignment with other Euratom and Union programmes to disseminate the successes of EU Research and align this to the EU's external policy actions.

A key element in fusion energy development will be the funding of delivery of European components to ITER, in particular by the European Joint Undertaking for ITER and the Development of Fusion Energy ('Fusion for Energy'), established by Council Decision 2007/198/Euratom⁹. The completion of the ITER project in line with the project baseline will remain a priority while ensuring that technical and scientific lessons learned from ITER benefit the Union.

The Programme will be implemented through direct actions managed by the JRC and indirect actions primarily through research grants as well as by providing the Euratom contribution to the ITER project. It will maintain its focus on improving nuclear safety and safeguards. Actions will support the development of tools, methods and guidance to continue reinforcing the safety of existing nuclear installations, including long-term operations and new build projects in the EU while ensuring security of supply in the nuclear value chain and increasing the EU's energy resilience.

The global development of nuclear fission technologies, against the backdrop of an unstable geopolitical situation, also underscores the Programme's key role in strengthening global and European nuclear non-proliferation. Actions will enhance nuclear safeguards through the development of innovative tools and methods for measurement, containment, surveillance and verification, the training of safeguards inspectors and international cooperation with the International Atomic Energy Agency (IAEA). Research on non-proliferation will also focus on strategic trade control and support nuclear security and nuclear forensics to reinforce the

⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Delivering on the Clean Industrial Deal I (COM(2025) 378, 2.7.2025).

⁸ See also f. 6.

⁹ 2007/198/Euratom: Council Decision of 27 March 2007 establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it (OJ L 90, 30.3.2007, p. 58), ELI: <http://data.europa.eu/eli/dec/2007/198/oj>

EU's and Member States' response to illicit trafficking and criminal use of radioactive materials.

In addition, the Programme will reinforce actions in specific areas to address the several challenges faced by the Union. This includes fostering innovation in nuclear technology (innovative designs, fuels and materials, etc.) while ensuring the safe development and use of advanced systems. Nuclear research in the EU will rely on modelling tools, such as the JRC's in-house modelling capacities, to improve the understanding of the behaviour of energy components and systems by integrating science and experimental data.

The Programme's actions will pursue research into developing solutions for the safe management of radioactive waste and spent fuel. The research will support the development of safety cases and approaches to safeguards for the deep geological disposal of intermediate- and high-level waste, ensuring the operation and oversight of deep geological facilities. It will also focus on finding solutions for the management of radioactive waste and spent fuel and will support Member States in defining national strategies for long-term storage and disposal through knowledge management and the sharing of best practices.

The Programme will continue to improve European citizens' lives with nuclear medicine and radiation protection. The research will reduce radiation risks to people and the environment by developing knowledge and tools, as well as strengthening emergency preparedness and response in the event of a radiological accident. The Programme will investigate innovative applications of ionising radiation (for example, medical radionuclides) to advance treatments and optimise therapies against cancer and other diseases. Power and non-power applications of ionising radiation in other fields, such as space¹⁰, industry, environmental monitoring and the circular economy, could also be supported.

Nuclear skills, competencies and access to research infrastructures are necessary to maintain a qualified workforce and expertise in the nuclear field. Funding will be provided in synergy with Horizon Europe to education, training and knowledge dissemination activities, helping to maintain strategic nuclear skills, building capacities across Member States and promoting EU expertise. Actions will also support researchers' mobility. As a pivotal asset to research, European nuclear research infrastructures, including those operated by the JRC, will be supported to ensure they remain fit for purpose and available to the Union through an open access scheme. This will allow retaining independent capacity to act in key areas of nuclear research.

Global competitiveness cannot occur simply by supporting the internal knowledge base. An element of aligning with external action policy should be included. At policy level, the EU can better leverage its nuclear safety expertise and programmes by ensuring an improvement in the links between Euratom programmes and Union programmes. For this reason, apart from Horizon Europe, the Programme also seeks synergies with the Euratom Instrument for Nuclear Safety Cooperation and Decommissioning (INSC-D).

The Commission started preparations for the proposal by consulting the Euratom Scientific and Technical Committee (STC), as required by the legal basis¹¹. The STC delivered an opinion¹² which the Commission took into consideration when preparing this proposal.

¹⁰ The application of nuclear science to space is mainly related to space exploration because it stands to benefit from research on nuclear energy. At the same time, research is also needed on protecting space hardware (such as electronics) from ionising radiation.

¹¹ See also 'External expertise' under Section 3.

¹² Nuclear research and training activities for the MFF 2028-2034 (FP10) (STC-2024-36 FINAL, 25.4.2025).

As Article 7 of the Euratom Treaty limits the length of programmes to 5 years, the Commission is proposing a programme with the maximum duration allowed. As this is shorter than the 7-year duration of the MFF, the Commission, as it has done in the past, intends to implement the remaining budget earmarked for nuclear research for the last 2 years of the next MFF (2028-2034) by presenting a proposal for a 2-year “extension” covering 2033-2034, in all likelihood in early 2032. The 5:2 split has been kept so that the conclusions of the implementation report, expected to be adopted by the end of the fourth year of the first programme, can serve in the preparation of the extension and its work programme.

The proposal sets out the general and specific objectives, the indicative financial envelope and the support instruments.

- **Consistency with existing policy provisions**

The Programme is consistent with the EU’s existing policy provisions and aligns with a simpler, more focused and higher impact Union budget. Together with the ECF and the Horizon Europe, the Programme will work to strengthen competitiveness, resilience, sustainability and technological leadership. It is consistent with the objectives of these programmes with which it shares definitions, rules of participation and dissemination and instruments, including European Partnerships¹³. This approach brings major simplification for implementation: less red tape and reporting, greater trust, better enforcement and faster permitting. At the same time, the Programme’s proposed architecture will ensure predictability and continuity in funding priorities with the necessary agility and flexibility to allow the Union to respond to emerging or unforeseen priorities. The provisions on synergies also ensure that programmes complement each other.

- **Consistency with other Union policies**

The Programme shall adhere to the Union’s climate and environmental standards and policies, including the rules on the ‘do no significant harm’ principle, set out in the proposed Performance Regulation¹⁴.

The Programme will support research in nuclear safety and the strategic areas indicated in the Net-Zero Industry Act¹⁵ and the safety and safeguards initiatives of the European Industrial Alliance on Small Modular Reactors.

The Programme will contribute to implementing Chapter 7 of the Euratom Treaty on nuclear safeguards and the EU’s security agenda and strategies by supporting nuclear security research. It will support the implementation of the Euratom Directives on the safety of nuclear installations¹⁶, the safe management of spent fuel and radioactive waste¹⁷, and radiation

¹³ See Articles 9, 7 and 6(3) of this proposal and Article 11 of COM(2025) 543 final.

¹⁴ Proposal for a Regulation of the European Parliament and of the Council establishing a budget expenditure tracking and performance framework and other horizontal rules for the Union programmes and activities (COM(2025) 545 final, 16.7.2025).

¹⁵ Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe’s net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (OJ L, 2024/1735, 28.6.2024, ELI: <http://data.europa.eu/eli/reg/2024/1735/oj>).

¹⁶ Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (OJ L 172, 2.7.2009, p. 18, ELI: <http://data.europa.eu/eli/dir/2009/71/oj>).

¹⁷ Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste (OJ L 199, 2.8.2011, p. 48, ELI: <http://data.europa.eu/eli/dir/2011/70/oj>).

protection¹⁸. It will also provide support to the implementation of the EU Dual Use and Trade Control legislation¹⁹. It will contribute to help acceding countries, candidate countries and potential candidate countries align with the EU acquis in these areas.

The Programme will also continue to support the implementation of the Instrument for Nuclear Safety Cooperation Partnership and Decommissioning²⁰ and the nuclear and radiological aspects of Global Europe²¹.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

The Euratom Treaty states that the Commission is responsible for promoting and facilitating research in the nuclear field in the Member States and for complementing it by conducting a Community research and training programme (Article 4). That programme is to be adopted by the Council acting unanimously on a proposal from the Commission (Article 7).

According to the Treaty, the European Parliament is not consulted but, in the past, the holder of the Council's rotating Presidency invited Parliament to make comments on proposed regulations setting up the Euratom Programmes. The European Economic and Social Committee will be informed, as required by the legal basis (Article 7).

For the purpose of coherence and having a streamlined approach, the Programme's financial envelope will provide for Euratom's contribution to the ITER project, which has its legal basis in the Euratom Treaty, specifically Article 101 for the ITER Agreement and the Broader Approach Agreement, and Articles 45 to 51 for the Joint Undertaking Fusion for Energy.

• Subsidiarity (for non-exclusive competence)

The Programme will help Member States, irrespective of their national energy mix choices, to use nuclear technologies in a safe way, to work together to develop the opportunities offered by nuclear science and to reduce the risks associated with the different applications of ionising radiation.

The Programme will be of interest to all EU countries as they all use radioisotopes for non-power purposes (e.g. in the medical and industrial fields) and they all stand to benefit from ensuring the highest standards of nuclear safety, security and safeguards.

The development of fusion energy, which calls for research efforts on a very large scale, is also in the interest of all EU Member States. Successful deployment of fusion energy could contribute to decarbonisation goals, enhancing strategic autonomy in the context of global race for new energy sources and creating strong new value chains in Europe and developing critical skills and capacities.

While nuclear security remains a national responsibility, the Programme's direct actions help address some of the security challenges facing the EU and their global dimension by building capacity at the EU and national level with R&D, technical support and specialised training in

¹⁸ Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (OJ L 13, 17.1.2014, p. 1, <https://eur-lex.europa.eu/eli/dir/2013/59/oj>).

¹⁹ Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (recast) (OJ L 206, 11.6.2021, p. 1–461. ELI: <https://eur-lex.europa.eu/eli/reg/2021/821/oj>)

²⁰ [Ref. to Instrument for Nuclear Safety Cooperation Partnership and Decommissioning].

²¹ [Ref. to Global Europe].

the fields of mitigation of Chemical, Biological, Radiological and Nuclear (CBRN) security risks, combatting illicit trafficking, use of nuclear and radioactive material and forensic analysis of materials out of regulatory control. Safeguards are Euratom's exclusive competence and continuous technical support and R&D through direct actions are crucial to keep the Euratom safeguards system efficient and effective.

- **Proportionality**

The Programme will support researchers and coordinate Member States' research efforts with a view to avoiding duplication, retaining critical mass in key areas and ensuring that public funds are spent to best effect. These measures may lead to additional public and private investments in R&I. They are also needed to support policymaking and meet the objectives set out in EU policies. The proposed measures do not go beyond what is required to achieve the Union's objectives.

- **Choice of the instrument**

The Programme will be implemented by a Council Regulation in accordance with the Euratom Treaty. This creates rights and obligations for beneficiaries that are binding in their entirety and directly applicable in all EU Member States and countries associated to the Programme. This is also consistent with the way in which other EU spending programmes are set up.

3. RESULTS OF RETROSPECTIVE EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Retrospective evaluations/fitness checks of existing legislation**

This proposal draws on the interim evaluation of the 2021-2025 Euratom Programme²² which concluded that the actions which had been funded by the Programme over four years had helped Member States to work together to develop nuclear technologies, regardless of their national choice as to whether to generate or consume nuclear power. This enables Member States to harness the opportunities offered by these technologies in the interest of all, while reducing the risks associated with ionising radiation.

Euratom actions deliver results and provide a supportive framework for developing, sharing and maintaining expertise and skills in nuclear safety, safeguards and security, strategic trade control, the safe management of radioactive waste and radiation protection. They also bring the EU closer to achieving practical use of fusion energy. This knowledge will be essential for those Member States that want to pursue nuclear energy as part of their energy mix (whether the technology is domestic or imported) and for those that need reassurance that nuclear power plants in neighbouring countries meet the highest safety standards. The public also stands to benefit from Euratom-funded research on other applications of ionising radiation, in particular in medicine.

Council's decision in 2021 to reduce the budget for the programme by 20% limited possibilities to fund excellent research proposals. It also hampered the JRC's efforts to address the emerging challenges with the necessary flexibility and capacity at a time of renewed interest in nuclear technologies.

This evaluation provided some important findings. First, the programme had addressed new challenges such as research on alternative fuel for Russian designed reactors used in some

²² Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Interim evaluation of the 2021-2025 Euratom research and training programme (COM(2025) 61, 28.2.2025).

Member States, increased strategic autonomy in nuclear materials and data and support for researchers in Ukraine. The results of the call for innovative applications of ionising radiation showed a high interest within medicine, the circular economy, space exploration and environmental monitoring which could be developed further in synergy with Horizon Europe. These new actions also attracted newcomers. However, the limited budget for the 2021-2027 programmes, together with the need to maintain the programmes' focus on the core activities of nuclear safety, radioactive waste and radiation protection, meant that there were very limited possibilities to continue funding these new actions in 2021-2027.

If the scope and level of funding of the 2021-2027 programmes were to be maintained, it wouldn't be sufficient to allow the EU to catch up with international competitors, address key issues for the development of small, modular reactors (SMRs), advanced fuels and fuel cycles and substantially increase nuclear skills in the EU.

Euratom co-funded partnerships are the result of long-term efforts by the research community, stakeholders and Member States to advance with a common research agenda and to address key challenges in all the fields concerned. While scientific progress has already been made, the Commission will push to further improve the organisation and operation of partnerships to ensure that research funded by the Programme remains relevant and that it tackles the most pressing challenges. The Commission will pay particular attention to partnerships so as to systematically consider the long-term perspectives of a broad range of stakeholders and Member States.

Euratom-funded fusion research has delivered important results in the last years, and the ITER project – recognised as the first fusion power plant-like initiative – is now making significant progress after undergoing delays and cost overruns. To bring fusion energy to the market and contribute to the EU's decarbonisation efforts and competitiveness these efforts must be extended. Fusion power will only become a reality if the remaining scientific, engineering and technological challenges are addressed comprehensively, underpinned by accurate assumptions about technical complexity and realistic investment in industrial supply chains.

The Programme must evolve to address the technological bottlenecks that require additional focus and investment, possibly in specific research infrastructures, involve more private financing and industry experience and increase international collaboration with reliable partners where there is a clear added value for the EU. The Commission has already started to prepare a co-programmed European Partnership in this field which will bring together public and private stakeholders. The actions under the 2026-2027 programme should pave the way for this partnership and for supplementary innovation actions. This new partnership would also mean rethinking EUROfusion's role and activities which will play a major part in developing the fundamentals of fusion science. Further details will be provided in the Communication on the EU's fusion strategy, which is currently being drawn up.

The evaluation concluded that, thanks to its expertise and nuclear research facilities, the JRC benefits both the Union and a number of external stakeholders by carrying out relevant direct actions in research, providing high quality analyses, reference materials and methods, data and studies for policy support and delivering specialised training on the whole spectrum of activities from nuclear safety to security and safeguards.

The evaluation also concluded that the JRC's provision of nuclear data, measurements and reference materials make an important contribution to the assessment of safety and safeguards of current systems and future technologies such as SMRs. Analyses on ways to treat, minimise and recycle radioactive waste and spent fuel or to evaluate their characteristics and behaviour were deemed particularly relevant to advance research in this area.

In the area of safeguards and non-proliferation, the JRC's expertise and research also make a valuable contribution both at European and international level to reinforce non-proliferation efforts. The research results of direct actions in non-power applications, particularly in relation the medical field, are equally relevant, serving to advance research on safe and innovative uses of ionising radiation, as well as meeting EU policy goals. The JRC's education and training activities propose a relevant complement to national-level capacities. The availability of state-of-the-art nuclear research facilities continues to represent a high added value at EU level, contributing to independent quality research benefiting Euratom and complementing Member States' capacities. Direct actions also provide technical support to the implementation and monitoring of EU policies in nuclear safety, radioactive waste and spent fuel management, radiation protection and nuclear safeguards and non-proliferation initiatives.

Under the 2021-2027 Euratom programmes, the JRC introduced a new strategy for its nuclear activities, with actions to prioritise, consolidate and rationalise activities, while optimising the use of its nuclear infrastructures and sustainable operation. Using a new portfolio approach in its work programme, the JRC aims to improve synergies across research domains, improve foresight capability for analysing upcoming trends and enhance communication efforts to showcase research results.

On the contribution to ITER, the study commissioned in 2021²³ concluded that the return on investment of ITER is around 1:1 and projections indicate that by 2030 ITER could generate an additional EUR 15.9 billion in Gross Value Added (GVA) and create 72 400 job-years²⁴.

Since the beginning of the project ITER has faced several challenges. The delays in project execution were mainly due to design immaturity, lack of quality of some components supplied by some Domestic Agencies (DAs) requesting repairs, regulatory challenges, the COVID-19 crisis and the war in Ukraine, which disrupted the supply chain and contributed to the delays in the delivery of key components.

In order to bring the project back on track, several measures, under the supervision of Euratom, were implemented. In 2022, the new Director-General of the ITER Organization (IO) launched a series of reforms aiming in particular at improving the IO's organisation, putting a project matrix structure in place to streamline the decision-making process, improving and enforcing enhanced quality control procedures, repairing key components and redefining its interactions with the French Nuclear Safety Regulatory Authority (ASNR).

In 2024, the IO presented a revision of the project Baseline (scope, schedule and cost), to mitigate key assembly and commissioning risks, define contingencies for schedule and cost, while incorporating lessons learnt from previous first-of-their-kind activities. This Baseline is underpinned by a phased-licensing approach aiming at reducing risks.

Euratom also identified the need to better integrate Fusion for Energy's activities with the IO's to improve project efficiency. As a result, IO and Fusion for Energy have explored ways to better integrate their activities and exploit the potential synergies and complementarities between the two organisations. Since September 2023, a major effort has been undertaken by Fusion for Energy and IO to identify the most relevant activities, tools and functions. The expected outcomes of the integration are efficiency gains and potential savings, as the IO and

²³ European Commission: Directorate-General for Energy, IHS Markit, LGI, Erim, S., Chauvet, V. et al., *Follow up study on the economic benefits of ITER and BA projects to EU industry*, Publications Office, 2021, <https://data.europa.eu/doi/10.2833/51838>

²⁴ Commission Staff Working Document Accompanying the document Communication from the Commission Nuclear Illustrative Programme presented under Article 40 of the Euratom Treaty for the opinion of the European Economic and Social Committee (SWD(2025) 160, 13.6.2025).

Fusion for Energy could jointly identify optimisations in the way components are designed, procured and delivered.

In 2024, the project achieved an unprecedented execution rate which surpassed all the rates for previous years. This excellent performance was confirmed on 1 Semester 2025, with indicators showing that the project is on schedule and slightly under cost.

- **Stakeholder consultations**

In the framework of preparing for the next MFF 2028-2034, the Commission conducted a public consultation to gather views on EU funding for competitiveness.

The public consultation, held from 12 February to 7 May 2025, gathered 2 034 survey responses and 462 position papers, with strong participation from EU citizens (26%), academia (22%) and public authorities (13%), alongside businesses, NGOs, and other stakeholder networks.

Most respondents which had experience in EU-funded research programmes expressed positive views on the funding process, from identifying funding opportunities to the relevance and clarity of the calls. However, they highlighted the application procedure and overall timeline as key weak points, underscoring the need for simplification, clarity and better coherence to enhance accessibility, especially for SMEs and newcomers. Respondents recognised fragmentation in support across the investment journey as a barrier to competitiveness, particularly in relation to underinvestment in research and innovation.

The public consultation was complemented by targeted outreach to key stakeholder groups in industry, research and innovation. Research and innovation stakeholders have been actively engaged in shaping the debate on the future role of R&I in EU competitiveness, particularly following the launch of the Commission's political guidelines in July 2024 and the Competitiveness Compass in February 2025.

- **External expertise**

As is the case with the proposal for Horizon Europe, this initiative builds on three key external reports: Draghi's on EU competitiveness, Letta's on the future of the single market and the Commission Expert Group's on the interim evaluation of Horizon Europe²⁵.

The Commission also relied on the opinion delivered by the Euratom STC which is composed of independent experts appointed by the Council in terms of Article 134 of the Euratom Treaty.

All reports converge in their core message: Europe must innovate, adapt and lead to safeguard its competitiveness, prosperity, sustainability and security. Their combined analysis provides a strong analytical and political foundation for the proposed Horizon Europe, the wider strategic orientation of the European Competitiveness Fund and the Euratom programme.

- **Impact assessment**

In line with the Better Regulation guidelines, the Commission carried out an ex-ante evaluation for this proposal instead of an impact assessment as the Euratom programme provides continuity as regards its broad content and structure and has a relatively small budget. The ex-ante evaluation concluded that to address the new competitiveness and energy security challenges facing the EU, and in view of meeting decarbonisation targets, the

²⁵ Communication from the Commission to the European Parliament and the Council: Horizon Europe: Research and Innovation at the heart of competitiveness (COM(2025) 189 final, 20.4.2025).

Euratom programme must be reinforced in terms of budget and measures to enhance innovation and skills in the field of nuclear science and technology.

ITER will remain a cornerstone for the development of fusion energy in Europe and, for this purpose, must be fully integrated into a broader EU strategy. The aim is to complete construction for the first phase of experiments on time and within budget, in line with the 2024 baseline. This will be achieved by delivering European components for ITER in line with the project baseline, supervising Fusion for Energy in the performance of its tasks, while ensuring that technical and scientific lessons learned from ITER benefit the Union.

To enhance innovation and skills in the field of nuclear science and technology, the Programme will benefit from the proposed Horizon Europe's rules for participation and dissemination designed to simplify access further, enhance openness and maximise the impact of funding. There are areas, such as industrial competitiveness and public health, where joint actions between the Euratom and Union programmes can be of greater benefit to Union citizens than having actions under the Programme alone. For this reason, the Programme should seek synergies with Horizon Europe and other Union programmes. Streamlined governance should enable the Commission to discuss all aspects of fission and fusion research, including the ITER project, with Member States and key stakeholders providing a strategic overview and improving coordination between Euratom and national actions, while recognising that, for Fusion for Energy, the governance with the Member States is currently covered by the Fusion for Energy Governing Board.

- **Simplification**

As explained in the explanatory memorandum of the proposal for Horizon Europe, simplification is an overarching priority of the Commission to reduce burden and over-complexity and in favour speed and flexibility. As the Programme applies its rules of participation and dissemination, Horizon Europe's new features offering simplification to beneficiaries also apply here. These are:

- Reduced length of the work programme with less prescriptive programming: reducing the overall number of topics, shortening of topic descriptions and minimising single-project topics.
- Open topics by default: less prescriptive with more freedom for applicants to choose different pathways towards expected outcomes.
- Continuity and further simplification of the funding landscape: there will be no distinction between Research and Innovation Actions (RIA) and Innovation Actions (IA) but one single funding rate of up to 100%, except for for-profit entities other than SMEs, with a funding rate of up to 70%. The funding rates will be the maximum that can be reduced when justified for implementing specific actions.
- Increased use of simplified cost options: building on the experience gained with lump sum pilots under Horizon 2020 and their broader application in the current Horizon Europe, lump sum funding will become the default form of Union contribution, unless otherwise provided. Other simplified forms of cost options, including financing not linked to costs or personnel unit costs, will be used. These simplification measures aim to foster broader participation, particularly from newcomers and smaller entities, while preserving sound financial management and control.

A faster implementation will be achieved with a reduction of the maximum time to grant to 7 months, which is one of the shortest time-to-grant for EU programmes and two months shorter than the maximum time to grant set out in the Financial Regulation.

As part of the wider Commission efforts to reduce the number of spending programmes, the Programme will include and provide for Euratom's contribution to the ITER project.

- **Fundamental rights**

The proposed regulation respects fundamental rights and observes the principles recognised in the Charter of Fundamental Rights of the European Union.

4. BUDGETARY IMPLICATIONS

The Commission Communication on the Multiannual Financial Framework 2028-2034²⁶ provides a budget envelope of EUR 9 794 000 000 in current prices for the Euratom Programme, of which EUR 5 794 000 000 is allocated to ITER. Due to the Euratom Treaty's limitations, the proposal for the Euratom programme covers 5 years of the proposed budget, i.e., EUR 6 682 000 000 in current prices.

5. OTHER ELEMENTS

- **Implementation plans and monitoring, evaluation and reporting arrangements**

The Commission will implement the Programme through direct management and indirect management by European Partnerships (see Article 10 of the proposal) and, where relevant, indirect management by Fusion for Energy.

The monitoring, evaluation and reporting arrangements for the Programme will be carried out based on the proposed Performance Regulation²⁷. This means that the implementation report will be published by the end of the fourth year of the programme (i.e. 2031). It's the Commission's intention to propose in the Regulation of the "extension" (2033-2034) that a joint retrospective evaluation of this Programme and the extension are held at the latest three years after the end of the programming period.

- **Detailed explanation of the specific provisions of the proposal**

Article 1 sets out the Programme's subject matter. Article 2 applies the definitions from the Regulation establishing Horizon Europe to the Euratom Programme. The Programme's general and specific objectives are set out in Article 3 while Article 4 applies Horizon Europe's horizontal principles to the Programme.

The indicative financial envelope is set out in Article 5.

The proposal then makes a number of standard provisions which have counterparts in the proposed Regulation establishing Horizon Europe. There is provision for additional resources (Article 6), alternative, combined and cumulative funding (Article 7), association to the Programme (Article 8) and implementation and forms of Union funding (Article 9) Article 10 provides for Partnerships which is similar to the ones in Horizon Europe except that it also provides for Euratom co-funded partnerships to ensure the continuation of these type of partnerships from previous programmes.

²⁶ COM(2025) 570.

²⁷ COM(2025) 545.

Article 11 sets out the role of the JRC in wording similar to Horizon Europe's. Horizon Europe's rules of participation and dissemination are applied to the Programme through Article 12 with one derogation on access to results necessary for Euratom.

Standard provisions for work programmes (Article 13) and committee procedure (Article 14) are made, the latter providing for fission and fusion configurations both having strategic overview on the implementation of actions in their respective area.

In the final and transition procedures, the Regulation establishing the 2026-2027 programme is repealed (Article 15), actions launched under the previous programme are unaffected and the smooth transition between programmes is ensured (Article 16). The Regulation enters in force on the twentieth day after its publication and is applicable from 1 January 2028 (Article 17).

Finally, the Annex lists the activities that can be supported by the Programme.

Proposal for a

COUNCIL REGULATION

establishing the research and training programme of the European Atomic Energy Community for the period 2028-2032, complementing Horizon Europe, the Framework Programme for Research and Innovation, and providing for the Community's contribution to the ITER project, and repealing Regulation (Euratom) 2025/1304

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Atomic Energy Community, and in particular Article 7, first paragraph, thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the Scientific and Technical Committee¹,

Whereas:

- (1) The European Atomic Energy Community (the 'Community') aims to raise the living standards in the Member States by promoting and facilitating nuclear research, complementing it with Community research and training programmes.
- (2) Research in the nuclear field contributes to social well-being, economic prosperity, security and environmental sustainability. Research on the applications of ionising radiation has led to improvements in medical, industrial, agricultural, environmental and security technologies from which many benefit.
- (3) In order to ensure the continuity of research in the nuclear field at the Community level, it is necessary to establish a Community research and training programme (the 'Programme') and, as the Treaty establishing the European Atomic Energy Community (the 'Euratom Treaty') limits the length of its research and training programmes to 5 years, the Programme should cover the period from 1 January 2028 to 31 December 2032. The Commission would present a new proposal to implement the remaining budget of the last 2 years of the 2028-2034 Multiannual Financial Framework².
- (4) The Programme should be tightly connected with the European Competitiveness Fund (the 'ECF') established by Regulation [*establishing the ECF*]³ and Horizon Europe, the Framework Programme for Research and Innovation for the period 2028-2034 ('Horizon Europe') established by Regulation [*establishing the Horizon Europe Framework Programme*]⁴ by placing research and innovation at the heart of the Union's economy and investment strategy.

¹ OJ C , , p. .

² Council Regulation (EU, Euratom) 2025/NNN of DD MMMM 2025 laying down the multiannual financial framework for the years 2028 to 2034 (OJ L NNN, DD.MM.YYYY, p. N, ELI:).

³ Regulation [*establishing the ECF*]

⁴ Regulation [*establishing the Horizon Europe Framework Programme*]

- (5) The Union should, furthermore, aim to eliminate inequalities and to promote equality between men and women, as well as to combat discrimination in accordance with Article 8 and Article 10 of the Treaty on the Functioning of the European Union (TFEU) and the Charter of Fundamental Rights of the European Union.
- (6) There are areas where joint actions between the Programme and Union programmes can be of greater benefit to Union citizens than having actions under the Programme alone. For this reason, the Programme should seek synergies with Horizon Europe and other Union programmes.
- (7) In a rapidly changing economic, social and geopolitical environment, recent experience has shown the need for more flexible multiannual financial framework and spending programmes. To that effect, and in line with the objectives of the Programme, the funding should duly consider the evolving policy needs and the Union's priorities as identified in relevant documents published by the Commission, European Parliament resolutions and in Council conclusions, while ensuring sufficient predictability for the budget's implementation.
- (8) The Programme applies Horizon Europe's rules for participation and dissemination and is part of the ECF's digital framework and makes use of its corporate information and communication tools to further simplify access, enhance openness and maximise the impact of Union funding.
- (9) The Programme should contribute to increasing public and private investment in research and innovation (R&I) in Member States, thereby helping to reach an overall investment target of at least 3% of the Union's gross domestic product (GDP) in research and development. Member States' investment in R&I should be assessed with the help of the framework for the coordination of economic, budgetary, employment and social policies within the Union – the European Semester process. Achieving that target would require Member States and the private sector to complement the Programme with their own reinforced investment actions in research, development and innovation. The Union has made steady progress in increasing research and development investments but is lagging behind other global leaders. The 3% target mentioned earlier, set over two decades ago, acknowledged the importance of research and development as a foundation for a knowledge-based society. While the target encouraged various Member States to set their own research and development intensity goals, significant disparities remain as only a few Member States have reached or exceeded their investment ambition.
- (10) As in Horizon Europe, the OECD definitions regarding technological readiness levels (TRLs) should continue to be taken into account in the classification of technological research, product development and demonstration activities and in the definition of types of action available in calls for proposals. Grants should not be awarded for actions where activities go above TRL 8.
- (11) It should be possible to implement parts of the budget through European Partnerships together with other public and private entities, where this is the most effective implementation form to achieve the policy objectives. European Partnerships should be established where a close involvement of the Union is required and should ensure appropriate voting rights for the Union as well as sufficient co-investment by other partners to leverage Union funding. In view of fostering synergies and efficiencies, it is necessary to ensure harmonised rules. Therefore, a strategic and coherent portfolio of a limited number of European Partnerships should be established.

- (12) European Partnerships, as an essential tool to deliver on industrial involvement and investment in collaborative research and innovation, should contribute to the specific policy objectives of the policy windows of the ECF and be supported through it, where necessary, to complete these objectives.
- (13) The Joint Research Centre ('JRC') should continue to provide independent scientific evidence and technical support for Union policies throughout the whole policy cycle. The direct actions of the JRC should be implemented in a flexible, efficient, and transparent manner, taking into account the needs of Union policies and the relevant needs of the users of the JRC and ensuring the protection of the Union's financial interests. The JRC should continue to generate additional resources, which it may use to support its scientific and technical activities.
- (14) The Programme should ensure the effective promotion and protection of values and principles of the European Research Area and the Pact for Research and Innovation⁵, notably ethics and integrity in research and innovation, freedom of scientific research, science for policy, gender equality and equal opportunities, non-discrimination, open science and the promotion of attractive research careers and mobility. In particular, the Programme should ensure the effective promotion of equal opportunities for all and the implementation of gender mainstreaming, including the integration of the gender dimension in R&I content. It should aim to address the causes of gender imbalance. Particular attention should be paid to ensuring, to the extent possible, gender balance in evaluation panels and in other relevant advisory bodies such as boards and expert groups.
- (15) Nuclear research infrastructures are pivotal assets for the Union, providing essential tools and equipment to advance research in science and technology. The development, integration and financial sustainability of such research infrastructures of Union interest should ensure operational excellence and continuous accessibility to European researchers, enabling collaborative and cross-border research while complementing Member States' capabilities.
- (16) Acknowledging the benefit derived from international cooperation towards addressing, among others, shared technological, economic, environmental and societal concerns, the Programme, should promote cooperation with third countries. International cooperation should aim to strengthen the Union's competitiveness and excellence in R&I, including its capacity to attract and retain the best talents worldwide. Geopolitical considerations, including economic security, should be at the centre of the approach and varying degrees of cooperation should be considered based on an overall assessment of the benefit that could be derived by the Union towards addressing its priorities and global challenges while safeguarding the Union's values and interests. Association to all or parts of the Programme should remain the most comprehensive form of cooperation.
- (17) To reinforce the Union's strategic autonomy and ensure long-term sustainable economic growth, it is essential to bolster its global competitiveness while safeguarding its strategic assets and interests as outlined in the European Economic Security Strategy⁶. Article 136 of Regulation (EU, Euratom) 2024/2509 of the

⁵ Council Recommendation (EU) 2021/2122 of 26 November 2021 on a Pact for Research and Innovation in Europe, OJ L 431, 2.12.2021, p. 1, ELI: <http://data.europa.eu/eli/reco/2021/2122/oj>

⁶ Joint Communication to the European Parliament, the European Council and the Council on "European Economic Security Strategy, JOIN(2023) 20 final, Brussels, 20.06.2023.

European Parliament and of the Council⁷, as complemented by Article 10 of Regulation (EU) [*establishing the ECF*], promotes the competitiveness of the Union (as defined in Regulation [*establishing the ECF*]) and protects its economic security. The application of these provisions for the purpose of the Programme should provide an appropriate legal framework to allow, where necessary, for the establishment of specific conditions regarding award procedures that promote research-driven competitiveness and protect the interests and strategic autonomy of the Union, including measures aimed at restricting participation or protecting results and ensuring coherence and consistency with specific rules under the ECF windows. Where necessary, a risk-based approach should be applied to ensure that risks related to research and innovation are identified, assessed, and addressed through proportionate and effective measures⁸.

- (18) In light of increasing risks linked to natural hazards, health emergencies, technological accidents, water scarcity, evolving security and energy supply threats and other disruptions, it is essential to enhance the Union's and Member States' capability to anticipate, prepare for and respond to crises and disasters. The Programme should support research that strengthens disaster risk and crisis management, invest in climate and water resilience and enhance the resilience of vital societal functions, and build a more resilient, secure and prepared Union, in line with the objectives of the European Preparedness Union Strategy⁹ and the Roadmap towards ending Russian energy imports¹⁰. The Programme acknowledges climate change as one of the biggest global and societal challenge and climate action as a driver for industrial competitiveness. Activities should reflect the importance of tackling climate change in line with the Union's commitments to implement the Paris Agreement¹¹.
- (19) Simplification in the Programme's implementation is essential to ensure its accessibility and efficiency, particularly by reducing the administrative burden on beneficiaries and minimising the risk of errors. To this end, the Programme should primarily rely on lump sums as the default form of Union funding. Advancing efforts over the previous Framework Programmes to streamline funding rules and minimise errors, the reimbursement of personnel costs should also be further simplified by using personnel unit costs, which reduces complexity for participants and facilitates reporting.
- (20) In view of strengthening the Union's competitiveness and maximising the uptake and deployment of the results in general, beneficiaries owning results should manage their results in accordance with their obligations established under this Regulation regarding valorisation and dissemination. Those obligations may be adjusted in the work programme, call conditions or grant agreement where appropriate based on policy considerations, including related to economic security, but should encompass

⁷ Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council of 23 September 2024 on the financial rules applicable to the general budget of the Union (OJ L, 2024/2509, 26.9.2024, ELI: <http://data.europa.eu/eli/reg/2024/2509/oj>)

⁸ Council Recommendation of 23 May 2024 on enhancing research security (OJ C, C/2024/3510, 30.5.2024, ELI: <http://data.europa.eu/eli/C/2024/3510/oj>).

⁹ Joint Communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions on the European Preparedness Union Strategy, JOIN(2025) 130 final.

¹⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Roadmap towards ending Russian energy imports (COM(2025) 440, 12.5.2025).

¹¹ OJ L 282, 19.10.2016, p. 4.

requirements to protect, give access, valorise results and make them public as appropriate and justified, including through open science practices. To facilitate and accelerate the valorisation process, support instruments and tools should be put in place in line with the Commission's valorisation strategy as developed under Regulation [*establishing the ECF*] and any such support and services provided for in its Chapter III.

- (21) In full respect of the Member States' right to determine their choice between different energy sources, the Programme's results should contribute towards a climate-neutral energy system with co-benefits for air quality.
- (22) Regulation (EU) 2024/1735 of the European Parliament and of the Council¹² lists nuclear amongst net-zero technologies and acknowledges that innovation will be a crucial factor in ensuring the Union's competitiveness.
- (23) As all Member States make use of radioactive materials, it is important to ensure the responsible and safe management of spent fuel and radioactive waste, as required by the Council Directive 2011/70/Euratom¹³, to avoid undue burdens on future generations. The Programme should continue to improve and support research and development relating to technologies and competencies in spent fuel and radioactive waste management.
- (24) The Community should continue to play a key role in the development of fusion energy, recognising its potential significant benefits in ensuring long-term security and diversity of energy supply. Fusion energy research under the Programme should be implemented in accordance with [the Union's Fusion Strategy]¹⁴ which outlines the actions, notably on research and development, required to advance towards a Union fusion pilot power plant. The strategy seeks a stronger involvement of industry and start-ups and encompasses alternative fusion concepts.
- (25) In the short- to medium-term, a key step in fusion energy development in the Community is the timely completion of ITER construction and the start of research operations. While this is the responsibility of the ITER International Fusion Energy Organization (the 'ITER Organization'), Euratom bears the largest contribution among international partners, according to the Agreement on the Establishment of the ITER International Fusion Energy Organization for the Joint Implementation of the ITER Project (the 'ITER Agreement')¹⁵. To ensure a more coherent and streamlined approach to the goals of [the Union's Fusion Strategy] and the Programme's objectives, that contribution to the ITER project should come from the Programme's indicative financial envelope.
- (26) The Community should also continue the privileged partnership between Euratom and Japan, embedded in the Agreement for the Joint Implementation of the Broader

¹² Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (OJ L, 2024/1735, 28.6.2024), ELI: <http://data.europa.eu/eli/reg/2024/1735/oj>

¹³ Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste (OJ L 199, 2.8.2011, p. 48, ELI: <http://data.europa.eu/eli/dir/2011/70/oj>).

¹⁴ European Strategy to harness Fusion Energy (COM(YYYY) NNN, DD.MM.YYYY).

¹⁵ Agreement on the Establishment of the ITER International Fusion Energy Organization for the Joint Implementation of the ITER Project (OJ L 358, 16.12.2006, p. 62, ELI: [http://data.europa.eu/eli/agree_internation/2006/943\(1\)/oj](http://data.europa.eu/eli/agree_internation/2006/943(1)/oj)).

Approach Activities (the ‘Broader Approach Agreement’)¹⁶ setting out complementary joint fusion research activities.

- (27) Article 12(1)(a) of the Statutes of Fusion for Energy contained in Council Decision 2007/198/Euratom¹⁷ provides that the Euratom contribution shall be made available through the Community research and training programmes adopted pursuant to Article 7 of the Treaty or through any other decision adopted by the Council.
- (28) Council Decision 2007/198/Euratom is not amended by this Regulation and remains to form part, together with the ITER Agreement and the Broader Approach Agreement, of the existing applicable legal framework for ITER.
- (29) It should also be possible to address the Programme’s objectives through financial instruments, budgetary guarantees and blending operations under Union programmes provided that actions comply with the objectives and rules of such programmes.
- (30) Indirect actions under this Programme should be covered by the Mutual Insurance Mechanism established pursuant to Regulation [*establishing the Horizon Europe Framework Programme*].
- (31) The actions supported under this Regulation should be proportionate, avoiding duplication or crowding out, incentivise private funding and have Union added-value. This should also ensure consistency between the Programme’s actions and State aid rules, thereby avoiding undue distortions of competition in the internal market.
- (32) This Regulation lays down an indicative financial envelope for the Programme for the period 2028-2032. For the purpose of this Regulation, current prices are calculated by applying a fixed 2% deflator.
- (33) Regulation (EU, Euratom) 2024/2509 applies to the Programme. It lays down the rules on the establishment and the implementation of the general budget of the European Union, including the rules on grants, prizes, non-financial donations, procurement, indirect implementation, financial assistance, financial instruments and budgetary guarantees.
- (34) Fusion for Energy uses a distinct financial regulation in line with Article 5 of Council Decision 2007/198/Euratom.
- (35) In view of ensuring consistency, a budgetary guarantee and financial instruments, including when combined with non-repayable support in blending operations, under this Programme should be implemented in accordance with Title X of the Financial Regulation and with technical arrangements, terms and conditions established by the Commission for the purposes of its application.
- (36) Where Union support under the Programme is to be provided in the form of a budgetary guarantee or a financial instrument, including where combined with non-repayable support in a blending operation, with the exception of financial instruments under the EIC, such support should be provided exclusively through the ECF InvestEU Instrument in accordance with the applicable rules of the ECF InvestEU Instrument.

¹⁶ Agreement between the European Atomic Energy Community and the Government of Japan for the Joint Implementation of the Broader Approach Activities in the Field of Fusion Energy Research (OJ EU L 246, 21.9.2007, p. 34, ELI: http://data.europa.eu/eli/agree_internation/2007/614/oj).

¹⁷ Council Decision 2007/198/Euratom of 27 March 2007 establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it (OJ L 90, 30.3.2007, p. 58, ELI: <http://data.europa.eu/eli/dec/2007/198/oj>).

- (37) In accordance with Regulation (EU, Euratom) 2024/2509, Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council¹⁸, Council Regulation (Euratom, EC) No 2988/95¹⁹, Council Regulation (Euratom, EC) No 2185/96²⁰ and Council Regulation (EU) 2017/1939²¹, the financial interests of the Union are to be protected through proportionate measures, including the prevention, detection, correction and investigation of irregularities and fraud, the recovery of funds lost, wrongly paid or incorrectly used and, where appropriate, the imposition of administrative sanctions. In particular, in accordance with Regulation (EU, Euratom) No 883/2013 and Regulation (Euratom, EC) No 2185/96 the European Anti-Fraud Office (OLAF) may carry out investigations, including on-the-spot checks and inspections, with a view to establishing whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the Union. In accordance with Regulation (EU) 2017/1939, the European Public Prosecutor's Office (EPPO) is competent to investigate and prosecute fraud and other criminal offences affecting the financial interests of the Union as provided for in Directive (EU) 2017/1371 of the European Parliament and of the Council²². In accordance with Regulation (EU, Euratom) 2024/2509, any person or entity receiving Union funds is to fully cooperate in the protection of the Union's financial interests, to grant the necessary rights and access to the Commission, OLAF, the European Court of Auditors and, as appropriate, to the EPPO, and to ensure that any third parties involved in the implementation of Union funds grant equivalent rights.
- (38) The Programme is to be implemented in accordance with Regulation (EU, Euratom) XXX of the European Parliament and of the Council [Performance Regulation]²³ which establishes the rules for the expenditure tracking and the performance framework for the budget, including rules for ensuring a uniform application of the principles of 'do no significant harm' and gender equality referred to in Article 33(2), points (d) and (f), rules for monitoring and reporting on the performance of Union programmes and activities, rules for establishing a Union funding portal, rules for the evaluation of the programmes, as well as other horizontal provisions applicable to all Union programmes such as those on information, communication and visibility.
- (39) The Programme should be implemented in compliance with the principle of the rule of law and the rights and principles set out in the Charter of Fundamental Rights of the European Union and be in line with the international obligations of the Union and the

¹⁸ Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999 (OJ L 248, 18.9.2013, p. 1, ELI: <http://data.europa.eu/eli/reg/2013/883/oj>).

¹⁹ Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (OJ L 312, 23.12.95, p. 1, ELI: <http://data.europa.eu/eli/reg/1995/2988/oj>).

²⁰ Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (OJ L 292, 15.11.96, p. 2, ELI: <http://data.europa.eu/eli/reg/1996/2185/oj>).

²¹ Council Regulation (EU) 2017/1939 of 12 October 2017 implementing enhanced cooperation on the establishment of the European Public Prosecutor's Office ('the EPPO') (OJ L 283, 31.10.2017, p. 1, ELI: <http://data.europa.eu/eli/reg/2017/1939/oj>).

²² Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on the fight against fraud to the Union's financial interests by means of criminal law (OJ L 198, 28.7.2017, p. 29, ELI: <http://data.europa.eu/eli/dir/2017/1371/oj>).

²³ Regulation [Performance Regulation].

Member States arising from the international instruments to which they are party, including Human rights instruments such as the UN Convention on the Rights of Persons with disabilities.

- (40) In order to ensure uniform conditions for the Programme's implementation through work programmes, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council²⁴.
- (41) The advisory procedure set out in Regulation (EU) No 182/2011 of the European Parliament and of the Council should be used for the adoption of the work programmes given the important financial implications of the Programme.
- (42) The JRC Board of Governors set up by Commission Decision 96/282/Euratom²⁵ has been consulted on the scientific and technological content of the Programme on the nuclear direct actions of the JRC.
- (43) The European Parliament and the European Economic and Social Committee have been consulted on a voluntary basis and have delivered opinions²⁶.
- (44) The Programme replaces the programme established by Regulation (Euratom) 2025/1304²⁷. Regulation (Euratom) 2025/1304 should therefore be repealed,

HAVE ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation establishes the Research and Training Programme of the European Atomic Energy Community (the 'Programme') for the period 2028-2032. It also lays down the objectives of the Programme and its budget for that period including the Community's contribution to the ITER project, the forms of Union funding and the rules for providing such funding.

Article 2

Definitions

For the purposes of this Regulation, and subject to the second paragraph of this Article, the definitions in Article 2 of Regulation [*establishing the Horizon Europe Framework Programme*] apply.

For the purposes of this Regulation:

²⁴ Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13) ELI: <http://data.europa.eu/eli/reg/2011/182/oj>

²⁵ Commission Decision 96/282/Euratom of 10 April 1996 on the reorganization of the Joint Research Centre (OJ L 107, 30.4.1996, p. 12) ELI: <http://data.europa.eu/eli/dec/1996/282/oj>

²⁶ OJ ... and OJ ...

²⁷ Council Regulation (Euratom) 2025/1304 of 23 June 2025 establishing the Research and Training Programme of the European Atomic Energy Community for the period 2026-2027 complementing Horizon Europe – the Framework Programme for Research and Innovation and repealing Regulation (Euratom) 2021/765 (OJ L, 2025/1304, 3.7.2025) ELI: <http://data.europa.eu/eli/reg/2025/1304/oj>

- (1) 'Union' means the European Union, the European Atomic Energy Community, or both, as the context may require;
- (2) 'coordination and support action' means an action contributing to the Programme's objectives, excluding R&I activities, except when undertaken in the case of Euratom co-funded partnerships.

Article 3

Programme objectives

- 1. In line with the general and specific objectives of the ECF and Horizon Europe, the Programme shall strengthen the Union's competitiveness and decarbonisation while protecting people and the environment by advancing research and training in nuclear science and technology in synergy with Union programmes.
- 2. The Programme's specific objectives are:
 - (a) support the construction and operation of ITER, ensuring performance-based funding for the delivery of European components by Fusion for Energy, the integration work by the ITER Organization and that technical and scientific lessons learnt from ITER benefit the Union;
 - (b) advance fusion research, supporting the transition from basic science to technology, engineering and innovation, foster the development of the Union's fusion industry, support the emergence of start-ups and innovative concepts for enabling future fusion power plants, and strengthen international cooperation;
 - (c) advance research on nuclear safety, security and safeguards, non-proliferation, radiation protection, nuclear data, the management of radioactive waste and spent fuel and the innovative use of ionising radiation including in the medical sector;
 - (d) develop, retain and utilise expertise and competencies in the nuclear field through education and training and support access to state-of-the-art research infrastructures, ensuring their long-term sustainability and operational excellence; and
 - (e) provide independent and science-based policy support to Union policies and develop the knowledge base for standardisation and modelling.
- 3. The objectives referred to in paragraphs 1 and 2 shall be achieved through the activities listed in the Annex.

Article 4

Horizontal principles

The horizontal principles set out in Article 5 of Regulation [*establishing the Horizon Europe Framework Programme*] shall apply to the Programme.

Article 5

Budget

1. The indicative financial envelope of the Programme for the period 1 January 2028 to 31 December 2032 shall be EUR 6 682 000 000²⁸ in current prices.
2. The amount referred to in paragraph 1 of this Article and the amounts of additional resources referred to in Article 6 may also be used for technical and administrative assistance for the implementation of the Programme, such as preparatory, monitoring, control, audit and evaluation activities, information technology systems and platforms, information and communication activities, including corporate communication on the political priorities of the Union, and all other technical and administrative assistance or staff-related expenses incurred by the Commission for the management of the Programme.
3. If necessary to enable the management of actions not completed by 31 December 2032, appropriations may be entered in the Union budget beyond 2032 to cover the expenses necessary and to enable the management of actions not completed by the end of the Programme.
4. Budgetary commitments for activities extending over more than one financial year may be broken down over several years into annual instalments.

Article 6

Additional resources

1. Member States, Union institutions, bodies and agencies, third countries, international organisations, international financial institutions, or other third parties, may make additional financial or non-financial contributions to the Programme. Additional financial contributions shall constitute external assigned revenue within the meaning of Article 21(2), points (a), (d), or (e) or Article 21(5) of Regulation (EU, Euratom) 2024/2509.
2. Resources allocated to Member States under shared management may, at their request, be made available to the Programme. The Commission shall implement those resources directly or indirectly in accordance with Article 62(1), point (a) or (c) of Regulation (EU, Euratom) 2024/2509. They shall be additional to the amount referred to in Article 5(1) of this Regulation. Those resources shall be used for the benefit of the Member State concerned. Where the Commission has not entered into a legal commitment under direct or indirect management for additional amounts thus made available to the Programme, the corresponding uncommitted amounts may, at the request of the Member State concerned, be transferred back to one or more respective source programmes or their successors.

Article 7

Alternative, combined and cumulative funding

1. The Programme shall be implemented in synergy with other Union programmes. An action that has received a Union contribution from another programme may also

²⁸ That indicative financial envelope includes the Programme's contribution to Fusion for Energy

receive a contribution under this Programme. The rules of the relevant Union programme shall apply to the corresponding contribution or a single set of rules may be applied to all contributions and a single legal commitment may be concluded. If the Union contribution is based on eligible cost, the cumulative support from the Union budget shall not exceed the total eligible costs of the action and may be calculated on a pro-rata basis in accordance with the documents setting out the conditions for support.

2. Award procedures under the Programme may be jointly conducted under direct or indirect management with Member States, Union institutions, bodies and agencies, third countries, international organisations, international financial institutions, or other third parties, provided the protection of the financial interests of the Union is ensured. Such procedures shall be subject to a single set of rules and lead to the conclusion of single legal commitments. For that purpose, the partners to the joint award procedure may make resources available to the Programme in accordance with Article 6 of this Regulation, or the partners may be entrusted with the implementation of the award procedure, where applicable in accordance with Article 62(1), point (c), of Regulation (EU, Euratom) 2024/2509. In joint award procedures, representatives of the partners to the joint award procedure may also be members of the evaluation committee referred to in Article 153(3) of Regulation (EU, Euratom) 2024/2509.
3. Under this Programme, in addition to the conditions set out in Article 8(1) and (2) of Regulation [*establishing the ECF*], a Competitiveness Seal shall be awarded only to high-quality actions that not been financed under the Programme due to budgetary constraints.
4. Member States may finance actions to which a Competitiveness Seal was awarded.

Article 8

Third countries associated to the Programme

1. The Programme may be opened to the participation of the following third countries through full or partial association, in accordance with the objectives laid down in Article 3 and in accordance with the relevant international agreements or any decisions adopted under the framework of those agreements and applicable to:
 - (a) acceding countries, candidate countries and potential candidates;
 - (b) European Neighbourhood Policy countries;
 - (c) other third countries.
2. The association agreements for participation in the Programme shall:
 - (a) ensure a fair balance as regards the contributions and benefits of the third country participating in the Programme;
 - (b) lay down the conditions of participation in the Programme, including the calculation of financial contributions, consisting of an operational contribution and a participation fee, to the Programme and its general administrative costs;
 - (c) not confer on the third country any decision-making power in the Programme;
 - (d) guarantee the rights of the Union to ensure sound financial management and to protect its financial interests.

- (e) where relevant, ensure the protection of security and public order interests of the Union.
3. For the purpose of paragraph 1, point (c), association or partial association with other third countries shall only be possible if they fulfil all the following criteria:
 - (a) a good capacity in science, technology and innovation;
 - (b) commitment to a rules-based open market economy, including fair and equitable dealing with intellectual property rights, respect of human rights, backed by democratic institutions;
 - (c) active promotion of policies to improve the economic and social well-being of citizens.
 4. For the purposes of paragraph 2, point (d), the third country shall grant the necessary rights and access required under Regulations (EU, Euratom) 2024/2509 and (EU, Euratom) No 883/2013, and guarantee that enforcement decisions imposing a pecuniary obligation on the basis of Article 299 TFEU, as well as judgements and orders of the Court of Justice of the European Union, are directly enforceable.
 5. The scope of association of each third country to the Programme shall take into account an analysis of the risks, notably those likely to affect the Union's public order and security in relevant policy areas, including economic and research security, as well as benefits and the broader objective of driving economic growth and competitiveness of the Union through innovation. Accordingly, acceding countries, candidate countries and potential candidate countries and third countries may be excluded from parts of the Programme in accordance with this Regulation or the association agreement itself.
 6. The association agreement setting out the conditions for participation in the Programme, shall, as far as possible, provide for the reciprocal participation of legal entities established in the Union in equivalent programmes of associated countries in accordance with the conditions laid down in those programmes.
 7. The conditions determining the level of the financial contributions referred to in paragraph 2, point (b) shall ensure a regular automatic correction of any significant imbalance compared to the amount that entities established in the associated country receive through participation in the Programme, taking into account the costs in the management, execution and operation of the Programme. The allocation of the financial contributions shall take into account the level of participation of the legal entities of the associated countries in each part of the Programme.

Article 9

Implementation and forms of Union funding

1. The Programme shall be implemented in accordance with Regulation (EU, Euratom) 2024/2509, under direct management or under indirect management with bodies referred to in Article 62(1), point (c) of that Regulation.
2. Union funding may be provided in any form in accordance with Regulation (EU, Euratom) 2024/2509, in particular grants, prizes, procurement, non-financial donations and financial instruments.

3. With the exception of financial instruments under the EIC (Fund), where Union support is provided in the form of a budgetary guarantee or a financial instrument, including where combined with non-repayable support in a blending operation, it shall be exclusively provided through the ECF's InvestEU Instrument and implemented in accordance with the applicable rules of the ECF's InvestEU Instrument through the contribution or guarantee agreements concluded for that purpose.
4. Union support in the form of a budgetary guarantee shall be provided within the maximum amount of the budgetary guarantee established by the ECF Regulation.
5. Where the Programme makes use of the ECF Investment Instrument, it shall provide the provisioning for the budgetary guarantee and the financing to financial instruments, including when combined with non-repayable support in the form of a blending operation.
6. Where Union funding is provided in the form of a grant, funding shall be provided as financing not linked to costs or as simplified cost options in particular through lump sums as well as unit costs for personnel, in accordance with Regulation (EU, Euratom) 2024/2509. Funding may be provided in the form of actual eligible cost reimbursement only where the objectives of an action cannot be achieved otherwise. Where it is necessary to enable other sources of funding including co-investments with national resources subject to State aid rules, funding shall be provided in the form of actual eligible cost reimbursement or simplified cost options.
7. For the purposes of Article 153(3) of Regulation (EU, Euratom) 2024/2509, the evaluation committee may be composed partially or fully of independent external experts.

Article 10

Partnerships

1. Where necessary to achieve the objectives set out in Article 3, activities under this Regulation may be implemented through European Partnerships under paragraphs 2 to 6 of this Article, by default through the work programmes, or through Euratom co-funded partnerships under paragraph 7 of this Article.
2. European Partnerships shall be based on a Memorandum of Understanding, agreed and signed between the partners, stipulating:
 - (a) the results to be delivered, which shall be clear, measurable, time-bound;
 - (b) reporting requirements;
 - (c) the related commitments from all partners;
 - (d) governance arrangements with a mechanism for partners to discuss and agree on the partnerships' programming and activities.
3. For European Partnerships established pursuant to paragraph 2 of this Article, support from the Programme shall be conditional upon efficient use of Union financing, a proportionate financial or in-kind contribution from other partners at least matching the Union contribution.
4. European Partnerships shall:

- (a) be established only in cases where Union action alone or other forms of support under the Programme cannot achieve the desired objectives.
 - (b) be established for the purpose of addressing challenges that require a critical mass of resources and a unified and coordinated approach, both in terms of programming and implementation, across actors.
 - (c) align with and assist in the implementation of major Union policies and policy initiatives.
 - (d) be selected in a transparent manner based on a set of quantifiable lifecycle criteria and a strong portfolio approach, resulting in a coherent set of initiatives.
 - (e) be based on ex-ante, long-term and formal commitments from all partners to contribute financially to the resources of the European Partnership, which shall be centrally managed, except in duly justified cases.
 - (f) require a clear lifecycle approach, including an upfront plan for the implementation of the initiative with a strategy for gradually or fully phasing out from Union funding.
5. Contributions from partners in European Partnerships other than the Union shall take the following forms:
- (a) financial contributions to the operational budget of the initiative;
 - (b) co-financing by the partners of their own participation, or that of their members, in projects funded through the initiative;
 - (c) in duly justified cases and according to the provisions of the Memorandum of Understanding, in-kind contributions for additional activities which help achieve the European Partnership's objectives.
6. All partners in European Partnerships other than the Union shall provide information on the structure, membership and activities developed within the partnership. In cases where partnerships are concluded with representative organisations and associations, this shall include regular information on their membership.
7. Euratom co-funded partnerships may be funded through grants awarded to consortia comprising a core of legal entities established or designated by Member States and by any third country associated to the Euratom Programme that will develop a joint programme of R&I and coordination and support activities, including potentially the organisation of joint open calls. The work programmes referred to in Article 13 shall define the scope of Euratom co-funded partnerships, the funding rate enabling appropriate co-financing by the partners and the potential participation of entities other than those established or designated by Member States and by any third country associated to the Euratom Programme. Euratom co-funded partnerships may also support the objectives of European Partnerships established under paragraph 2 as well as international cooperation in their respective field.

Article 11

Joint Research Centre

The JRC shall provide independent, evidence-based knowledge and science, supporting EU policies to positively impact society. This shall be undertaken through JRC direct actions and

through participation of the JRC in indirect actions. Chapter II of Title II of Regulation [*establishing the Horizon Europe Framework Programme*] shall not apply to direct actions.

Article 12

Eligibility and rules of participation and dissemination

1. Eligibility criteria shall be set to support achievement of the general and specific objectives laid down in Article 3, in accordance with Regulation (EU, Euratom) 2024/2509 and apply to all award procedures under the Programme.
2. Subject to paragraph 3 of this Article, Chapters I and II of Title II on rules for participation and dissemination of Regulation [*establishing the Horizon Europe Framework Programme*] shall apply to actions supported under the Programme. References in Regulation [*establishing the Horizon Europe Framework Programme*] to ‘Horizon Europe’ shall be construed as references to the Programme where appropriate. References in Regulation [*establishing Horizon Europe Framework Programme*] to ‘security rules’ shall be construed to include the defence interests of the Member States within the meaning of Article 24 of the Euratom Treaty.
3. By way of derogation from Article 32(g) of Regulation [*establishing the Horizon Europe Framework Programme*], a beneficiary that has received Community funding shall grant access to its results on a royalty-free basis to the Union institutions, bodies, offices, agencies or Fusion for Energy, for the purpose of developing, implementing and monitoring Community policies and programmes or obligations under international cooperation with third countries and international organisations. Such access rights shall include the right to authorise third parties to use the results in public procurement and the right to sub-license. Access rights shall be limited to non-commercial and non-competitive use.

Article 13

Work programme

1. The Programme shall be implemented by work programmes referred to in paragraph 2 of this Article in accordance with Article 110 of Regulation (EU, Euratom) 2024/2509 and, for the Programme’s contribution to the ITER project, in the financial regulation of Fusion for Energy.

Without prejudice to the first subparagraph, the work programmes may in particular set out:

- (a) actions and associated budget;
- (b) eligibility and award criteria;
- (c) a single co-financing rate per action;
- (d) rules applicable to actions concerning more than one specific objective;
- (e) actions to which specific rules apply, in particular on ownership of results, valorisation and dissemination, transfer and licensing as well as access rights to results.

The second subparagraph shall not apply to the work programmes referred to in Council Decision 2007/198/Euratom.

2. The Commission shall, by means of implementing acts, adopt the work programmes implementing the specific objectives referred to in Article 3(2) and the activities set out in the Annex. Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 14(3).
3. The Commission shall adopt separate, multi-annual work programmes, by means of implementing acts, for the implementation of actions under the JRC. Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 14(3). The multi-annual work programmes shall take into account the opinion provided by the Board of Governors of the JRC referred to in Decision 96/282/Euratom.

Article 14

Committee procedure

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. The committee may convene in the following configurations, having regard to the subject matter to be discussed:
 - (a) Fission: Strategic overview of the implementation of Fission actions
 - (b) Fusion: Strategic overview of the implementation of Fusion actions
3. Where reference is made to this paragraph, Article 4 of Regulation (EU) No 182/2011 shall apply.
4. Where the opinion of the committee is to be obtained by written procedure, that procedure shall be terminated without result when, within the time-limit for delivery of the opinion, the chair of the committee so decides or a simple majority of committee members so request.
5. In accordance with international agreements concluded by the Union, representatives of third countries or international organisations may be invited as observers in the meetings of the committee under the conditions laid down in its rules of procedure, taking into account security and public order of the Union or its Member States.

Article 15

Repeal

Regulation (Euratom) 2025/1304 is repealed with effect from 1 January 2028.

Article 16

Transitional provisions

1. This Regulation shall not affect the continuation or modification of the actions concerned, until their closure, under Regulation (Euratom) 2025/1304, which shall continue to apply to the actions concerned until their closure.
2. The financial envelope for the programme may also cover technical and administrative assistance expenses necessary to ensure the transition between the

Programme and the measures adopted under its predecessor, Regulation (Euratom) 2025/1304.

Article 17

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 1 January 2028.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Council

The President

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1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Council Regulation establishing the research and training programme of the European Atomic Energy Community for the period 2028-2032, complementing Horizon Europe, the Framework Programme for Research and Innovation, and providing for the Community's contribution to the ITER project, and repealing Regulation (Euratom) 2025/1304.

1.2. Policy area(s) concerned

Research and innovation

1.3. Objective(s)

1.3.1. General objective(s)

In line with the general and specific objectives of the ECF and Horizon Europe, the Programme shall strengthen the Union's competitiveness and decarbonisation while protecting people and the environment by advancing research and training in nuclear science and technology in synergy with Union programmes.

1.3.2. Specific objective(s)

Specific objective (a): support the construction and operation of ITER, ensuring performance-based funding for the delivery of European components by Fusion for Energy, the integration work by the ITER Organization and that technical and scientific lessons learnt from ITER benefit the Union;

Specific objective (b): advance fusion research, supporting the transition from basic science to technology, engineering and innovation, foster the development of the Union's fusion industry, support the emergence of start-ups and innovative concepts for enabling future fusion power plants, and strengthen international cooperation.

Specific objective (c): advance research on nuclear safety, security and safeguards, non-proliferation, radiation protection, nuclear data, security of supply, the management of radioactive waste and spent fuel and the innovative use of ionising radiation including in the medical sector;

Specific objective (d): develop, retain and utilise expertise and competencies in the nuclear field through education and training and support access to state-of-the-art research infrastructures ensuring their long-term sustainability and operational excellence;

Specific objective (e): provide independent and science-based policy support to Union policies and develop the knowledge base for standardisation and modelling.

1.3.3. Expected result(s) and impact

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

- In fusion energy development, the Euratom Programme will (1) accelerate the development of key enabling technologies: transitioning from pure research to innovation, towards commercialisation, also supporting the emergence and consolidation of innovative and competitive fusion players in Europe; (2) enhance competitiveness of EU industry and start-ups: targeting high-priority technology areas with significant business potential, for fusion applications and

- beyond; (3) ensure technology neutrality: while keeping the focus on magnetic confinement as the most mature concept for future fusion power plants, helping academia and start-ups to demonstrate alternative concepts and encouraging the industry to deliver innovation for cross-cutting technologies (e.g., fusion-grade materials, tritium breeding).
- Delivery of European components for ITER by Joint Undertaking ‘Fusion for Energy’ in line with the project baseline, while ensuring that technical and scientific lessons learned from ITER benefit the Union;
 - Improving nuclear safety: Euratom action will support the development of tools, methods and guidance to continue reinforcing the safety of existing nuclear installations, including in view of long-term operations and new build projects. The use of modelling capacities will enhance understanding of energy components and systems behaviour.
 - Fostering nuclear innovation: Euratom-funded research will conduct R&D enabling the safety, security and safeguards assessment of advanced systems. It will help analyse the needs of the European supply chains, including in terms of competences. Research will also look to advance the development of innovative fuel cycles and materials, as well as a broad range of applications of nuclear technology beyond power generation.
 - Advancing radioactive waste and spent fuel management: the Euratom-funded actions will pursue R&D into developing waste management solutions. The research will support the development of the safety and safeguards cases for the deep geological storage of medium- and high-level waste, including by ensuring the operation and oversight of deep geological facilities. It will also focus on the development of safe and safeguarded solutions for the predisposal and interim storage of waste and will support Member States in defining their national strategy for long term storage and disposal through knowledge management and the sharing of best practices.
 - Improving European citizen’s life with nuclear medicine and radiation protection: research will reduce radiation risks for the people and the environment (i) with development of knowledge and tools and (ii) with the strengthening of emergency preparedness and response in the event of a radiological accident; (iii) it will investigate innovative applications of ionising radiation, including medical radionuclides, to advance treatments and optimise therapies used in the fight against cancer and other diseases; and (iv) support the development of power and non-power ionising radiation applications in other fields, such as space, industry, environmental monitoring and the circular economy.
 - Boosting nuclear skills, competences and access to nuclear research infrastructure to benefit the Community: Euratom-funded actions will aim to support researchers’ mobility and improve the availability of nuclear research facilities and equipment through open access schemes. Substantial support will be provided in synergy with Horizon Europe to education, training and knowledge dissemination activities helping to maintain strategic nuclear skills and support a qualified workforce in the EU while building capacities across Member States.

- Strengthening EU and global nuclear non-proliferation: Euratom action will enhance nuclear safeguards through the development of innovative tools and methods for measurement, containment, surveillance and verification, the training of safeguards inspectors and the international cooperation with the IAEA. R&D on non-proliferation will also focus on strategic trade control and support nuclear security and nuclear forensics to reinforce EU and Member States response to illicit trafficking and criminal use of radioactive materials.

1.3.4. *Indicators of performance*

Specify the indicators for monitoring progress and achievements.

This initiative will be monitored through the performance framework for the post-2027 budget, which is covered in the proposed Performance Regulation (see COM(2025) 545 final). The performance framework also sets out the rules for evaluations, which shall be conducted in accordance with the Commission's Better Regulation Guidelines and will be based on the Performance Regulation's indicators relevant to the objectives of the Programme.

1.4. **The proposal/initiative relates to:**

- ☒ a new action
- ☐ a new action following a pilot project / preparatory action¹
- ☐ the extension of an existing action
- ☐ a merger or redirection of one or more actions towards another/a new action

1.5. **Grounds for the proposal/initiative**

1.5.1. *Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative*

The use of nuclear energy and ionising radiation technologies plays an important role in the lives of Europeans, contributing to the security of energy supply and supporting EU climate policies with environmental co-benefits such as improved air quality. Nuclear technologies also provide important solutions to the health sector (medical imaging and cancer treatment, etc.) and other fields such as space, industry or agriculture; generally improving EU's competitiveness and innovation. Ionising radiation technologies however require a continuous effort to reduce safety and security risks and to support the development of safe, safeguarded and secure nuclear technologies and optimal radiation protection.

Today, the EU faces several challenges from ensuring strategic autonomy, securing supply of affordable, low carbon energy to maintaining technological leadership and supporting innovation amid growing geopolitical instability. Recent developments in the nuclear landscape, including an upward trend in the nuclear industry and an increasing number of applications of ionising radiation, means that the Euratom Programme needs to further research in fission technologies to promote innovation and build capacities, while contributing to maintain the highest standards of safety, security, safeguards, non-proliferation and radiation protection in all applications of ionising radiation.

¹ As referred to in Article 58(2), point (a) or (b) of the Financial Regulation.

Public and private research in Member States can contribute significantly to providing these results, and the task of Euratom is to complement national efforts by carrying out a Community-based research and training programme.

Euratom-supported research should help Member States and industry to meet the requirements of the Euratom Treaty and of Euratom directives on nuclear safety, basic safety standards and the management of radioactive waste and spent fuel. It should also support the Euratom safeguards requirements from Chapter 7 of the Euratom Treaty and related regulation. It also provides support to the implementation of the EU Dual Use legislation.

The proposed Programme will continue the previous programmes key research activities on nuclear safety, security and safeguards, radioactive waste and spent fuel management and radiation protection, as well as fusion energy. It will also reinforce action to address selected priorities.

- 1.5.2. *Added value of EU involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this section 'added value of EU involvement' is the value resulting from EU action, that is additional to the value that would have been otherwise created by Member States alone.*

The actions funded by the 2021-2025 Euratom Programme help Member States to work together to develop nuclear technologies, regardless of their national choice as to whether to generate or consume nuclear power. Euratom-funded research is of added value for all Member States as it concerns a broad spectrum of applications of ionising radiation and risks, not only electricity production. It enables Member States to harness the opportunities offered by the technologies in the interest of all citizens, while reducing the risks associated with ionising radiation. The Programme significantly increased the EU's ability to mobilise a wider pool of excellence, expertise and multidisciplinary in nuclear research, achieving impacts that extend far beyond what would have been achieved at national or regional level. This is of particular benefit to smaller Member States, which were able to take advantage of economies of scale afforded by the Europe-wide pooling effect.

Through the JRC, the Euratom Programme provides valuable independent scientific expertise and advice to support the implementation of relevant EU policies in the nuclear field, contributing to improve nuclear safety, radioactive waste and spent fuel management, nuclear security, safeguards and non-proliferation. The JRC's scientific contributions is based on multidisciplinary in-house expertise across the nuclear field, quality nuclear data and the use of state-of-the-art nuclear experimental facilities. The JRC's unique infrastructure, laboratories and tools play a crucial role in advancing nuclear research, offer unique training opportunities and guarantee open access to European researchers.

- 1.5.3. *Lessons learned from similar experiences in the past*

The findings of the interim evaluation of the 2021-2025 Programme highlighted the Programme's success in supporting significant research that has had impact on nuclear safety, safeguards, non-proliferation, security, radiation protection, radioactive waste management and development of fusion energy. The available outcomes, including the scope, portfolio and the preliminary results of launched projects, provide compelling evidence that direct and indirect actions over the past four years are substantially advancing the achievement of the Programme's

objectives. The interim evaluation identified also several areas for improvement – for details please consult explanatory memorandum.

1.5.4. Compatibility with the multiannual financial framework and possible synergies with other appropriate instruments

Through its interaction with Horizon Europe and the Competitiveness Fund, Euratom Programme can address full spectrum of research challenges in nuclear field (from basic research to the actions closer to the market) as well as leverage additional public and private investments in R&I; contribute to further strengthening the European R&I landscape; and accelerate the commercialisation and diffusion of innovation.

1.5.5. Assessment of the different available financing options, including scope for redeployment

Additional funding could come from the association of third countries with the Euratom Programme. Sectors covered by the Euratom Treaty can be eligible for funding under programmes established under the TFEU if they are to attain TFEU objectives that are not covered by the Euratom Treaty.

1.6. Duration of the proposal/initiative and of its financial impact

☒ limited duration

- ☒ in effect from 1 January 2028 to 31 December 2032
- ☒ financial impact from 2028 to 2032 for commitment appropriations and from 2028 to 2036 for payment appropriations.

☐ unlimited duration

- Implementation with a start-up period from YYYY to YYYY,
- followed by full-scale operation.

1.7. Method(s) of budget implementation planned²

☒ Direct management by the Commission

- ☒ by its departments, including by its staff in the Union delegations;
- ☐ by the executive agencies

☐ Shared management with the Member States

☒ Indirect management by entrusting budget implementation tasks to:

- ☐ third countries or the bodies they have designated
- ☐ international organisations and their agencies (to be specified)
- ☐ the European Investment Bank and the European Investment Fund
- ☒ bodies referred to in Articles 70 and 71 of the Financial Regulation (Joint Undertaking ‘Fusion for Energy’)
- ☐ public law bodies
- ☐ bodies governed by private law with a public service mission to the extent that they are provided with adequate financial guarantees
- ☒ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that are provided with adequate financial guarantees
- ☐ bodies or persons entrusted with the implementation of specific actions in the common foreign and security policy pursuant to Title V of the Treaty on European Union, and identified in the relevant basic act
- ☐ bodies established in a Member State, governed by the private law of a Member State or Union law and eligible to be entrusted, in accordance with sector-specific rules, with the implementation of Union funds or budgetary guarantees, to the extent that such bodies are controlled by public law bodies or by bodies governed by private law with a public service mission, and are provided with adequate financial guarantees in the form of joint and several liability by the controlling bodies or equivalent financial guarantees and which may be, for each action, limited to the maximum amount of the Union support.

Comments

² Details of budget implementation methods and references to the Financial Regulation may be found on the BUDGpedia site: <https://myintracomm.ec.europa.eu/corp/budget/financial-rules/budget-implementation/Pages/implementation-methods.aspx>.

The Commission will implement the Programme through direct management and indirect management by European Partnerships and Fusion for Energy (see Article 6(1) of the proposal). Some of the Euratom co-funded partnerships will implement funding through cascading calls for proposals. Euratom contribution to ITER will be implemented by Fusion for Energy (see Council Decision 2007/198/Euratom of 27 March 2007 establishing the European Joint Undertaking for ITER and the Development of Fusion Energy – OJ L 90, 30.3.2007, pp. 58–72).

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

The monitoring and reporting rules for this programme will follow the requirements laid down in a Proposal for a Regulation of the European Parliament and of the Council establishing a budget expenditure tracking and performance framework and other horizontal rules for the Union programmes and activities ('Performance Regulation', COM(2025)545).

The progress of the programme towards its objectives will be measured in the short-, medium- and longer-term along a number of impact pathways. Common indicators from the Regulation on Performance monitoring of the MFF will be used where relevant, particularly those indicators that were measured also in previous Programmes. Reporting rules for participants have been designed with these indicators in mind, but also with a conscious intention to limit the administrative burden for participants. Wherever possible data will be collected from open sources. All data on the management processes (applications, success rates, time to grant, type of beneficiaries, etc.) will be collected and stored, and made available in real time via a dedicated data storage. Today, the reference system (CORDA) works well, and is available for Member States and other interested bodies. A programme evaluation and implementation report is planned and will be published according to the Performance Regulation. Programme impacts will be assessed only in evaluations. In addition, the JRC's direct actions are assessed internally by means of an annual internal evaluation and externally through peer review by a number of top-level experts selected in consultation with the JRC's Board of Governors.

2.2. Management and control system(s)

2.2.1. *Justification of the budget implementation method(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed*

The Euratom Programme will be implemented in direct management mode. The Commission may also decide, where appropriate and effective, to implement the Euratom activities through shared and/or indirect management (through European Partnerships and Fusion for Energy). In terms of broad lines of implementation, there are no fundamental changes compared to 2021-2027. Simplification measures introduced under 2021-2027 programmes will be further extended. Lump sum project funding will become the standard model. For the remaining exceptional cases of funding based on actual costs, the personnel costs will be defined by a unit cost system. These two measures will contribute to minimising the vulnerability to financial errors.

The general maximum time to grant will be reduced from 8 months to 7 months. The Common Implementation Centre continues providing cost effective services to Commission services responsible for the implementation of the Euratom Programme.

The control strategy is based on:

- procedures for selecting the best projects and translating them into legal instruments;
- project and contract management throughout the lifetime of every project; -
- ex-ante checks on 100 % of claims,

- certificates on the financial statements above a certain threshold, and certification on methodologies to calculate unit costs or ex-ante assessment on Large Research Infrastructure on a voluntary basis;
- ex post audits (representative and risk-based) on a sample of paid claims for grants under actual costs;
- regular project reviews on the technical implementation and results for all grants
- ex-post technical reviews on a sample of grants.

2.2.2. *Information concerning the risks identified and the internal control system(s) set up to mitigate them*

The basic funding model in the Euratom Programme of reimbursement of actual eligible costs is gradually replaced by use of lump sum project funding during 2026-2027. This follows the European Court of Auditors statements, e.g. in its 2016 Annual Report, that ‘the principal risk to the regularity of transactions is that beneficiaries declare ineligible costs which are neither detected nor corrected before [reimbursement]. recommending the wider use of Simplified Cost Options (SCOs). Data available for Horizon 2020 shows that for grants, the estimated representative rate of error is 3.86 %, with a ‘residual’ error rate of 1.92 %, after taking account of all recoveries and corrections that have been or will be implemented. However, the error rates were lower in those parts of the Horizon 2020 where it was possible to use Simplified Cost Options (SCOs) more widely and/or where a small and stable group of beneficiaries were involved. This included the European Research Council grants and Marie Curie Actions.

2.2.3. *Estimation and justification of the cost-effectiveness of the controls (ratio between the control costs and the value of the related funds managed), and assessment of the expected levels of risk of error (at payment & at closure)*

The narrower estimate of the costs of the control system (evaluation, selection, project management, ex-ante and ex-post control) are in the range of 2-4 % across the Commission services responsible for the implementation of the previous Framework Programmes and Euratom Programmes for 2024. This is considered to be a reasonable cost in the light of the efforts needed to ensure that objectives are achieved and the number of transactions involved. The expected risk of error at payment for grants depends on the a funding model, however, the objective for the management and control system is to maintain the expected levels of risk of error (at payment and at closure) below the materiality threshold of 2% on an annual basis. The Commission aims to apply the lump sum funding model for the Euratom Programme where appropriate. The main driver to adopt lump sum funding will not be reduction of the error rate, but the achievement of the objectives of the programme.

Note: this section only concerns the process of grant management (in the different management modes), for administrative and operational expenditure implemented through public procurement processes the risk of error at payment and closure should be below 2%.

2.3. **Measures to prevent fraud and irregularities**

The services charged with the implementation of the research and innovation budget are determined to fight against fraud at all stages of the grant management process.

They have developed, and are implementing, common and sectorial anti-fraud strategies, including an enhanced use of intelligence, especially using advanced IT tools, training and information for staff, and awareness-raising presentations towards grant beneficiaries and National Contact Points. These efforts will continue and anti-fraud and risk assessment activities will be further enhanced thanks to the current development by central services of the corporate ARACHNE risk-scoring tool. Overall the measures proposed should continue to have a positive impact on the fight against fraud, especially the greater emphasis on risk based controls that will continue under the new Programme, and reinforced scientific evaluation and control. The research and innovation common Anti-Fraud Strategy of the Commission services, Executive Agencies and Joint Undertakings responsible for the implementation of the R&I Programmes, covering grants, has been updated to cover risks related to simplified cost options and will be further updated based on lessons learnt and closed OLAF cases. It should be underlined that detected fraud has continuously been very low in proportion to the total research and innovation expenditure, nevertheless the services charged with the implementation of the research and innovation budget remain fully committed to combat it. The legislation will ensure that audits, reviews, and investigations can be carried out by the Commission services, including the European Anti-Fraud office (OLAF), as well as the European Public Prosecutor Office (EPPO), using the standard provisions already in use under Horizon Europe.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- New budget lines requested

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.	from EFTA countries	from candidate countries and potential candidates	from other third countries	other assigned revenue
2	04 01 03 - Support expenditure for EURATOM/ITER	No-Diff	NO	YES	YES	NO
2	04 04 01 EURATOM/ITER	Diff	NO	YES	YES	NO
2	04 04 01 01 Fusion research	Diff.	NO	YES	YES	NO
2	04 04 01 03 Fission research	Diff.	NO	YES	YES	NO
2	04 04 01 02 ITER - Construction, operation and exploitation of the ITER facilities — European Joint Undertaking for ITER — and the Development of Fusion Energy	Diff	NO	YES	YES	NO
2	04 04 01 04 - Nuclear direct actions of the Joint Research Centre	Diff	NO	YES	YES	YES

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

- ☐ The proposal/initiative does not require the use of operational appropriations
- ☒ The proposal/initiative requires the use of operational appropriations, as explained below

3.2.1.1. Appropriations from voted budget

EUR million (to three decimal places)

Heading of multiannual financial framework	Number	2
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			Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	TOTAL MFF 2028- 2032
04 04 01 01 Fusion research	Commitments	(1a)	355	302	258	221	242	1,379
	Payments	(2a)	pm	pm	pm	pm	pm	pm
04 04 01 02 ITER - Construction, operation and exploitation of the ITER facilities — European Joint Undertaking for ITER — and the Development of Fusion Energy	Commitments	(1b)	946	848	762	676	721	3,953
	Payments	(2b)	pm	pm	pm	pm	pm	pm
04 04 01 03 Fission research	Commitments	(1a)	152	130	111	94	104	590
	Payments	(2a)	pm	pm	pm	pm	pm	pm
04 04 01 04 Nuclear direct actions of the Joint Research Centre ¹	Commitments	(1a)	146	154	156	152	152	760
	Payments	(2a)	pm	pm	pm	pm	pm	pm
04 01 03 - Support expenditure for EURATOM/ITER		(3)						pm
TOTAL appropriations	Commitments	=1a+1b+3	1,599	1,434	1,287	1,143	1,219	6,682
	Payments	=2a+2b+3	pm	pm	pm	pm	pm	pm

¹ Part of the allocation for 'Nuclear direct actions of the Joint Research Centre' shall also cover costs of JRC staff implementing decommissioning activities outside Heading 4, in line with the practice in the 2021-2027 MFF.

			Year	Year	Year	Year	Year	Year	TOTAL MFF 2028- 2032
			2028	2029	2030	2031	2032		
TOTAL operational appropriations	Commitments	(4)	pm	pm	pm	pm	pm	pm	pm
	Payments	(5)	pm	pm	pm	pm	pm	pm	pm
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	pm	pm	pm	pm	pm	pm	pm
TOTAL appropriations under HEADING 2	Commitments	=4+6	1,599	1,434	1,287	1,143	1,219	6,682	
of the multiannual financial framework	Payments	=5+6	pm	pm	pm	pm	pm	pm	pm

			Year	Year	Year	Year	Year	Year	TOTAL MFF 2028- 2032
			2028	2029	2030	2031	2032		
• TOTAL operational appropriations (all operational headings)	Commitments	(4)	pm	pm	pm	pm	pm	pm	pm
	Payments	(5)	pm	pm	pm	pm	pm	pm	pm
• TOTAL appropriations of an administrative nature financed from the envelope for specific programmes (all operational headings)		(6)	pm	pm	pm	pm	pm	pm	pm

TOTAL appropriations Under Heading 1 to 3	Commitments	=4+6	1,599	1,434	1,287	1,143	1,219	6,682
of the multiannual financial framework (Reference amount)	Payments	=5+6	pm	pm	pm	pm	pm	pm

Heading of multiannual financial framework	4	'Administrative expenditure' ²
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EUR million (to three decimal places)

		Year	Year	Year	Year	Year	TOTAL MFF 2028-2032
		2028	2029	2030	2031	2032	
TOTAL appropriations under HEADINGS 1 to 4	Commitments	pm	pm	pm	pm	pm	pm
	of the multiannual financial framework	pm	pm	pm	pm	pm	pm

– 3.2.2. Estimated output funded from operational appropriations (not to be completed for decentralised agencies)

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs	Year 2028	Year 2029	Year 2030	Year 2031	Enter as many years as necessary to show the duration of the impact (see Section 1.6)	TOTAL
OUTPUTS						

2 The necessary appropriations should be determined using the annual average cost figures available on the appropriate BUDGpedia webpage.

↓	Type ³	Average cost	0N	Cost	0N	Cost	0N	Cost	0N	Cost	0N	Cost	0N	Cost	0N	Total cost
SPECIFIC OBJECTIVE No 1 ⁴ ...																
- Output																
- Output																
- Output																
Subtotal for specific objective No 1																
SPECIFIC OBJECTIVE No 2 ...																
- Output																
Subtotal for specific objective No 2																
TOTALS																

³ Outputs are products and services to be supplied (e.g. number of student exchanges financed, number of km of roads built, etc.).

⁴ As described in Section 1.3.2. ‘Specific objective(s)’

3.2.3. Summary of estimated impact on administrative appropriations

- ☐ The proposal/initiative does not require the use of appropriations of an administrative nature
- ☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below

3.2.3.1. Appropriations from voted budget

VOTED APPROPRIATIONS	Year	Year	Year	Year	Year	TOTAL 2028 - 2032
	2028	2029	2030	2031	2032	
HEADING 4						
Human resources						pm
Other administrative expenditure						pm
Subtotal HEADING 4						pm
Outside HEADING 4						
Human resources	92,610	94,040	95,456	97,115	97,162	476,383
Other expenditure of an administrative nature	0,000	0,000	0,000	0,000	0,000	0,000
Subtotal outside HEADING 4	92,610	94,040	95,456	97,115	97,162	476,383
TOTAL	92,610	94,020	95,476	97,075	97,162	476,383

3.2.4. Estimated requirements of human resources

- ☐ The proposal/initiative does not require the use of human resources
- ☒ The proposal/initiative requires the use of human resources, as explained below

3.2.4.1. Financed from voted budget

Estimate to be expressed in full-time equivalent units (FTEs)¹

TOTAL STAFF		Year	Year	Year	Year	Year
		2028	2029	2030	2031	2032
20 01 02 01 (Headquarters and Commission's Representation Offices)		0	0	0	0	0
20 01 02 03 (EU Delegations)		0	0	0	0	0
(Indirect research)		104	106	109	112	112
(Direct research)		353	353	353	353	353
Other budget lines (specify)		0	0	0	0	0
20 02 01 (AC, END from the 'global envelope')		0	0	0	0	0
20 02 03 (AC, AL, END and JPD in the EU Delegations)		0	0	0	0	0
Admin. Support line	- at Headquarters	0	0	0	0	0

¹ Please specify below the table how many FTEs within the number indicated are already assigned to the management of the action and/or can be redeployed within your DG and what are your net needs.

[XX.01.YY.YY]	- in EU Delegations	0	0	0	0	0
(AC, END - Indirect research)		8	10	10	11	11
(AC, END - Direct research)		140	152	164	178	178
Other budget lines (specify) - Heading 4		0	0	0	0	0
Other budget lines (specify) - Outside Heading 4		0	0	0	0	0
TOTAL		605	621	636	654	654

The staff required to implement the proposal (in FTEs):

	To be covered by current staff available in the Commission services	Exceptional additional staff*		
		To be financed under Research	To be financed from BA line	To be financed from fees
Establishment plan posts	430	35	N/A	
External staff (CA, SNEs, INT)	136	53		

Description of tasks to be carried out by:

Officials and temporary staff	Policy analysis, development and implementation of the Programme's funding through direct or indirect management, international negotiations, stakeholder engagement and implementation of direct research actions. Assistants fulfil executive or technical roles, providing support in a variety of fields such as finance, communication, administration, research, IT or policy implementation,
External staff	Contract staff carry out a number of administrative and equivalent technical tasks, as well as executive and clerical tasks, performed under the supervision of officials or temporary staff. They may provide additional capacity in specialised fields where an insufficient number of officials is available.

3.2.5. Overview of estimated impact on digital technology-related investments

Policy IT expenditure should represent 0,5% of the total expenditure of the programme.

TOTAL Digital and IT appropriations	Year	Year	Year	Year	Year	TOTAL MFF 2028 - 2032
	2028	2029	2030	2031	2032	
HEADING 4						
IT expenditure (corporate)	0	0	0	0	0	0
Subtotal HEADING 4	0	0	0	0	0	0
Outside HEADING 4						

Policy IT expenditure on operational programmes	0	0	0	0	0	0
Subtotal outside HEADING 4	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

3.2.6. *Compatibility with the current multiannual financial framework*

The proposal/initiative:

- ☐ can be fully financed through redeployment within the relevant heading of the multiannual financial framework (MFF)
- ☐ requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation
- ☐ requires a revision of the MFF

3.2.7. *Third-party contributions*

The proposal/initiative:

- ☐ does not provide for co-financing by third parties
- ☒ provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	Year	Year	Year	Year	Year	Total
	2028	2029	2030	2031	2032	
Specify the co-financing body						
TOTAL appropriations co-financed	pm	pm	pm	pm	pm	pm

3.3. *Estimated impact on revenue*

- ☐ The proposal/initiative has no financial impact on revenue.
- ☒ The proposal/initiative has the following financial impact:
 - ☐ on own resources
 - ☒ on other revenue
 - ☐ please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative ²				
		Year 2028	Year 2029	Year 2030	Year 2031	Year 2032
Article						

Budget revenue line:	Impact of the proposal/initiative				
	2028	2029	2030	2031	2032
Item	p.m.	p.m.	p.m.	p.m.	p.m.

For assigned revenue, specify the budget expenditure line(s) affected.

01.02XX Appropriations accruing from contributions from third parties

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

Third countries may contribute to the programme through association agreements. The conditions determining the level of financial contribution will be laid down in association agreements with each country and shall ensure an automatic correction of any significant imbalance compared to the amount that entities established in the associated country receive through participation in the programme, taking into account the costs in managing the programme.

4. DIGITAL DIMENSIONS

Similarly to Horizon Europe, the Euratom Programme will use the corporate tools described in the Legal, Financial and Digital Statement of the European Competitiveness Fund, which is cross-referenced for all the digital dimensions.

² As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20% for collection costs.



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COMMISSION

Brussels, 3.9.2025
COM(2025) 594 final

ANNEX

ANNEX

to the

Proposal for a COUNCIL REGULATION

establishing the research and training programme of the European Atomic Energy Community for the period 2028-2032, complementing Horizon Europe, the Framework Programme for Research and Innovation, and providing for the Community's contribution to the ITER project, and repealing Regulation (Euratom) 2025/1304

{SWD(2025) 594 final} - {SWD(2025) 595 final}

ANNEX

The general and specific objectives referred to in paragraphs 1 and 2 of Article 3 shall be pursued across the 2028-2032 Euratom programme, according to the broad lines of activity described in this Annex.

Specific objectives 2(a) and 2(b)

In relation to fusion, the scope of the Programme is the implementation of the EU Fusion Strategy, including ITER construction and operation, the Broader Approach and IFMIF/DONES. The Programme will be implemented through a combination of complementary fusion research activities and relevant EU instruments, effective involvement of industry and other stakeholders and support to the emergence and development of startups.

The following actions will be supported under these specific objectives:

- (i) maintain EU leadership in the ITER project by active participation in its governance and supervising Fusion for Energy, in particular for timely delivery of EU components as in-kind contributions;
- (ii) continue collaboration with the ITER Organization and partners to ITER related activities;
- (iii) support research and innovation to close the key technology gaps standing in the way of the realisation of fusion pilot power plants;
- (iv) exploit existing fusion facilities and contribute to the design and development of future facilities in the EU, relying on lessons learned from ITER;
- (v) support an effective involvement of industry, aiming to develop fusion technologies, to advance mature technologies towards market readiness, to create business opportunities and to consolidate a European fusion supply chain;
- (vi) widen support to include inertial confinement fusion, while keeping focus on magnetic confinement as the most mature approach;
- (vii) support European fusion startups to scale up and attract private investments in the EU;
- (viii) build competence and skills on fusion energy in the EU and implement a focussed and coordinated education and training programme in addition to activities mentioned under specific objective 2(d);
- (ix) support scientific and technological collaboration in the framework of Euratom's international bilateral agreements and other relevant international cooperation schemes.

Specific objective 2(c)

- (i) Safety and security of supply
Safety of reactor systems and fuel cycles in use in the Community and for reactor types and their fuel cycles which may be used in the future, while ensuring R&I in a resilient nuclear supply chain and security of nuclear supplies, including the development of alternative fuels and spare parts;
- (ii) Nuclear safeguards, non-proliferation and nuclear security (to be implemented by JRC)

Research, innovation, analytical and in-field support to Euratom safeguards implementation, including training of safeguards inspectors. R&D and support on strategic trade control and technical contributions to strengthen the international non-proliferation regime. Capacity building for frontline officers and other security agents to respond to illicit traffic of nuclear material and to other unconventional Chemical, Biological, Radiological and Nuclear (CBRN) threats. Research and analytical methods to enhance detection of nuclear and radioactive material out of regulatory control, nuclear forensics

(iii) Radiation protection

Research and innovation in radiation protection to improve understanding and mitigating the health risks from the ionising radiation, and to enhance emergency preparedness:

- Effects and risks of ionising radiation from industrial, medical or environmental exposure;
- Emergency preparedness and response for radiological emergencies, environmental radioactivity monitoring and research on radioecology;

(iv) Innovative use of ionising radiation, including in the medical sector

Research and innovation in non-power applications, with a focus on enhancing public health, safety, sustainability and European competitiveness:

- Innovative applications of ionising radiation, including medical radionuclides, for diagnostics and treatments of cancer and other diseases;
- Security of supply and safe use of radionuclides
- Other innovative applications of ionising radiation and nuclear materials

(v) Nuclear data

Development and use of modelling techniques, including simulation codes, tools and data to validate the safety, security and safeguards of nuclear systems.

(vi) Safe spent fuel and radioactive waste management

Research into innovative and sustainable solutions for the safe management of radioactive waste and spent fuel and in particular pre-disposal activities and disposal of intermediate- and high-level radioactive waste and spent nuclear fuel, and of other radioactive waste streams and types for which industrially mature processes currently do not exist or could be improved; radioactive waste minimisation and reducing the radiotoxicity of this waste; the management and transfer of knowledge and competences between generations and across Member States' programmes in radioactive waste and spent fuel management;

(vii) Decommissioning

Research for the evaluation, development and deployment of technologies for decommissioning and environmental remediation of nuclear facilities; support

for sharing best practices and knowledge and preserving the competences in the field of decommissioning;

Specific objective 2(d)

- (i) education, training and mobility, including schemes implemented in synergy with Horizon Europe Framework Programme;
- (ii) promotion of innovation, knowledge management, dissemination and exploitation of nuclear science and technology;
- (iii) support for technology transfer from the research to industry, strengthening the European industrial capacity and competitiveness;
- (iv) support to Member States in developing their nuclear skills and workforce strategy;
- (v) support for the long-term sustainability, availability, access and optimal use of nuclear research infrastructures, including those operated by the European Commission, complementing Member States capacities.

Specific objective 2(e)

- (i) support to the Union's policy on nuclear safety, radioactive waste and spent fuel management, radiation protection, nuclear security and safeguards, as well as other relevant legislation with independent scientific and technical evidence and expertise;
- (ii) harmonisation of radioactivity measurements with certified reference materials and methods, as well as contribution to international nuclear data libraries;