FUSION FOR ENERGY

The European Joint Undertaking for ITER and the Development of Fusion Energy
The Governing Board

DECISION OF THE GOVERNING BOARD ADOPTING THE SINGLE PROGRAMMING DOCUMENT (SPD) OF THE EUROPEAN JOINT UNDERTAKING FOR ITER AND THE DEVELOPMENT OF FUSION ENERGY

THE GOVERNING BOARD OF FUSION FOR ENERGY,

HAVING REGARD to the Statutes annexed to Council Decision (Euratom) No 198/2007 of 27 March 2007 establishing the European Joint Undertaking for ITER and the Development of Fusion Energy (hereinafter "Fusion for Energy") and conferring advantages upon it[3] (hereinafter "the Statutes") and in particular Article 9 (a) thereof, last amended on 10 February 2015[4] by Council Decision Euratom 2015/224;

HAVING REGARD to Council Decision (Euratom) No 198/2007 establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it, last amended on 22 February 2021 by Council Decision (Euratom) No 2021/281[5];

HAVING REGARD to the Financial Regulation of Fusion for Energy[6] adopted by the Governing Board on 10 December 2019 (hereinafter "the Financial Regulation"), and in particular Title III thereof;

HAVING REGARD to the Commission Delegated Regulation (EU) 2019/715[7] of 18 December 2018 on the framework financial regulation for the bodies set up under the TFEU and Euratom Treaty and referred to in Article 70 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council, and in particular Title III thereof.

HAVING REGARD to the endorsement by the Governing Board of the draft SPD in accordance with Article 32 (1) of the Financial Regulation.

WHEREAS:

(1) The Director shall, in accordance with Article 11 of the Statutes, prepare each year the submission of the project plan to the Governing Board, the resource estimates plan and the detailed annual work programme, now merged in the Single Programming Document;

(2) The Administration and Management Committee shall, in accordance with Article 8a (2) of the Statutes, comment on and make recommendations to the Governing Board on the proposal for the project plan, the work programme, the resource estimates plan, the staff establishment plan, the staff policy plan and other related matters, now part of the Single Programming Document drawn up by the Director;

(3) The Technical Advisory Panel, in accordance with Article 6 (1) of the Statutes, shall advise the Governing Board on the adoption and implementation of the project plan and work programme, now part of the Single Programming Document;

(4) The Governing Board, in accordance with Article 6 (3) (d) of the Statutes, shall adopt the project plan, work programme, resource estimates plan, the staff establishment plan and the staff policy plan, now part of the Single Programming Document;

HAS ADOPTED THIS DECISION:

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[3] O.J. L 90, 30.03.2007, p. 58.
[4] O.J. L 37 , 13.02.2015, p.8.
[5] OJ L 62, 23.2.2021, p. 41
[6] F4E (19) GB45 21.1 adopted on 10.12.2019.
[7] OJ L 122, 10.5.2019, p. 1–38.

Article 1

The SPD 2026-2030 of Fusion for Energy annexed to this Decision is hereby adopted.

Article 2

The Governing Board hereby delegates to the Director of Fusion for Energy the power to make non-substantial amendments to the annual Work Programme approved by the Governing Board.

Amendments are considered to be “non-substantial” if they do not cause the financial resources allocated to the Action concerned in Table 2 of the annual Work Programme to increase by more than EUR 1 million or 10%, whichever is higher.

In any event, the increase of the financial resource of an action shall not exceed 3% of the total budget of the annual Work Programme for the given year.

In addition, any related changes to the scope of the annual Work Programme shall not have significant impact on the nature of the Actions or on the achievement of objectives of the multiannual Project Plan.

Non-substantial amendments shall not lead to any increase in the total operational expenditure for Title 3 of the annual Budget approved by the Governing Board.

Article 3

This Decision shall have immediate effect.

Done in Cadarache, 12 December 2025.

For the Governing Board

Dr. Carlos Alejaldre

Chair of the Governing Board

[Signed electronically in IDM]

For the Secretariat

Romina Bemelmans
Secretary of the Governing Board

[Signed electronically in IDM]

Annex: Single Programming Document 2026-2030

FUSION FOR ENERGY

Single Programming Document

Years 2026-2030

F4E_D_3C73QE

THE EUROPEAN JOINT UNDERTAKING FOR ITER AND THE DEVELOPMENT OF FUSION ENERGY

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Fusion for Energy

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Foreword

Welcome to Fusion for Energy's (F4E) Single Programming Document for the period 2026-2030 that will be one of the most challenging periods for F4E!

F4E will contribute towards bringing the ITER Organisation and F4E closer together to improve the execution of the project. As supported by the ITER Council, F4E will be working against the proposed baseline 2024 and use this reference for F4E's performance monitoring.

During this period, F4E should finish most of the buildings and deliver, among others, the vacuum vessel sectors, and many other key components.

At the same time F4E will continue working closely with Japan on the Broader Approach projects allowing for the restart of operations using the JT-60SA tokamak for the benefit of our scientific community and as a preparation to ITER operation.

Last but not least, F4E will put the knowledge gained from its projects to the use of the next phase of its mission – preparing Europe for the construction of a demonstration fusion reactor. Supporting the DONES project is a first step towards this goal that you find in this Single Programming Document.

Let me conclude by thanking all our stakeholders for supporting the ambitious plan set on in this document.

Marc LACHAISE
Director

Section I. General Context

Introduction

Purpose of the Annual and Multi-Annual Programming document

According to Article 32 (Single Programming Document) of the Fusion for Energy (F4E) Financial Regulation (F4E(19)-GB45-21.1 Adopted on 10/12/2019), the F4E Single Programming Document (SPD) contains:

1. The Project Plan (PP),
2. The Financial Resource Estimates Plan (financial REP),
3. The Human Resource Estimates Plan (human REP),
4. The annual Work Programme (WP).

According to the F4E Statutes and Financial Regulation, the final Single Programming Document shall be adopted by the Governing Board (GB). The first step of the adoption process requests the preparation of a draft Single Programming Document for the year N – N+4 to be sent in January of the year N-1 to Commission, GB Chair, EU Parliament and Council.

In line with a recommendation from the MAP Ad Hoc Group[1] adopted by Governing Board 45, the Single Programming Document is built in a modular approach with a "Main text" that is complemented by 4 sets of annexes:

SPD_figure 1 . Structure of SPD document

[1] F4E_D_2JK4U6

The budgetary sections in SPD2026-2030 for years 2026 and 2027 comply with the thresholds set by MFF 2021-2027 for EURATOM contribution according to Council Decision (2021)281 amending F4E constituent act. For year 2028 to 2030, the figures for the EURATOM contribution to F4E budget are indicative and in line with the Commission proposals COM (2025)5702 and COM (2025)5943 under the next Multiannual Financial Framework 2028-2034.

The reference date for the planning information in the present document is end of April 2025 and for the budgetary information is the reference date is end of September 2025.

Due to the above-mentioned cut-off date, the document is not capturing any subsequent evolutions, including the decisions taken at the recent ITER Governance meetings.

F4E's vision, overall mission and values

"*Bringing the power of the sun to earth*".

The following vision considers recent input including the mission letter from the GB to the Director, draft F4E-IO Integration Plan[6], the Report of the Industrial Policy Working Group, presentations made during the first Strategic Governing Board and the outcome of a series of ten "Vision Labs" conducted with around 200 staff from F4E who were given the opportunity to express their views in an open and participative setting.

1. We commit as top priority to the successful construction and operation of the ITER, Broader Approach, DONES and other fusion projects through:

a. Working in close partnership with the ITER Organization to:

i. Deliver EU contributions to the ITER project to the required quality, within the agreed budget and schedule.

ii. Improve the efficiency of the ITER project through integration of teams with shared culture, pooled expertise, joint processes, databases, etc.

iii. Jointly own and equitably govern a feasible project baseline consistent with the capabilities of F4E and with adequate contingencies.

iv. Actively engage in all phases of the ITER project including assembly, commissioning, and operations.

b. Delivering EU contributions to JT-60SA and IFMIF-EVEDA Broader Approach projects including enhancements together with the Voluntary Contributors.

c. Supporting EUROfusion and European Fusion Laboratories in exploitation of the JT-60SA and return of experience to the ITER project.

d. Contributing to the construction and future phases of the DONES materials testing facilities leveraging experience gained from the Broader Approach.

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[2] Commission Communication COM(2025) 570 from 16 July 2025 on a dynamic EU Budget for the priorities of the future - The Multiannual Financial Framework 2028-2034 (Annex, pages 30-31)

[3] Legislative Financial and digital statement to the Commission Proposal COM (2025)594 from 5 September 2025, establishing EURATOM and the Community's contribution to the ITER project for the period 2028-2032 (pages 30-38)

[6] F4E_D_375CY6

2. We develop the fusion talent and knowledge base for the future development of commercially viable fusion power plants in Europe though:

a. Learning lessons and retaining the knowledge gained from F4E's involvement in the ITER and the Broader Approach projects.

b. Developing strategic fusion technologies with EUROfusion and European Fusion Laboratories by providing the "value chain integration" towards industry.

c. Attracting and growing the next generations of fusion talent through outreach and training activities in collaboration with EUROfusion.

d. Driving the engineering design and validation activities for DEMO in close collaboration with EUROfusion, European Fusion Laboratories and industry.

3. We pave the way for a transition from the research to the industrial sector, and the creation of a competitive European industrial fusion sector through:

a. Lowering entry barriers for industry, especially Small Medium Entreprises (SMEs), to work with F4E and moving from "customer-supplier" to new models of public-private partnership.

b. Developing geographically broad and sustainable supply chains capable to construct power plants in Europe and to export strategic fusion technologies.

c. Supporting growth of European private sector fusion start-ups, including possible incentivising programmes and maximisation of return of investment.

d. Actively supporting the European Commission and other stakeholders in the development of fusion specific regulation, codes, and standards.

F4E's values, as described in "F4E's Charter of Engagement"[7], are the following:

- Value 1: We care for individuals and trust their competence,
- Value 2: We achieve our objectives with uncompromising integrity,
- Value 3: We deliver our projects with respectful teamwork,
- Value 4: We focus on contribution and achievement,
- Value 5: We encourage flexibility and innovation.

F4E's major fusion R&D projects

ITER[8]

The task of F4E, as the Euratom Domestic Agency for ITER, is to discharge Euratom's obligations to deliver its share of in-kind components and cash contributions to the ITER project, about 45% of the total value of the project in the construction phase and 34% of the cost of operation and decommissioning (comprising decontamination and dismantling) of the facility as well as preparing the site in Cadarache.

BROADER APPROACH (BA)

The Broader Approach agreement, concluded between Euratom and Japan, includes activities which support and complement the ITER project by developing and operating some advanced research infrastructures and technologies necessary for future demonstration reactors. The Euratom resources for the implementation of the BA were provided in the past in part by several participating European

[7] F4E_D_2Q8X5P

[8] Info on ITER can be found on www.iter.org and https://f4e.europa.eu/understandingfusion/iter.aspx

states (Belgium, France, Germany, Italy, Spain and, Switzerland) as well as EUROfusion[9]. In BA Phase II, the Voluntary Contributors continue to provide personnel, while EUROfusion has an increased role by providing both hardware and personnel.

DEMO

The task of F4E is to prepare and coordinate a programme of activities in preparation for the construction of a demonstration fusion reactor, the successor of ITER.

Key Performance Indicators

F4E is using specific Key Performance Indicators (KPI) in order to measure how effectively the organisation achieves the targets set in different areas (i.e. schedule, cost, quality, budget consumption, etc.). SPD_table 4 and SPD_table 5 list the Corporate KPIs that are complemented by internal and programme specific KPIs.

Reporting

Fusion for Energy produces a dashboard on progress and performance against the Project Plan and the Work Programme that is sent regularly to the Governing Board and its committees.

[9] www.euro-fusion.org

General background

Since its creation in 2007, Fusion for Energy (F4E) is responsible to provide Europe's contribution to ITER, the Broader Approach (BA) and the Demonstration Fusion Power Reactor (DEMO) projects.

2.1 ITER

ITER aims to produce a significant amount of fusion power to allow scientists to study "burning" plasma (i.e. heated by fusion reactions rather than by external heating systems) and also to test many of the key technologies needed for future fusion reactors. Euratom (represented by the European Commission) is one of the seven parties to ITER that represent half the world's population together with the Russian Federation, Japan, China, India, South Korea and the United States.

ITER is being built near Cadarache in the south of France. F4E's task, as the Euratom Domestic Agency for ITER, is to discharge Euratom obligations to deliver its share of in-kind components and cash contributions to the ITER project, about 45% of the total value of the project in the construction phase and 34% of the cost of operation and decommissioning (comprising decontamination and dismantling) of the facility as well as preparing the site.

The main characteristic of ITER is that the most significant part of the project is built by in-kind contributions distributed among the seven parties through the ITER Agreement to achieve the agreed level of contribution from each of them. The design, coordination, integration, commissioning and operations are managed by the Central Team of the ITER Organization (IO).

The project will reach its ultimate operational configuration [the so-called Deuterium-Tritium (DT) operation] via a series of intermediate configurations of gradually increasing capability. This is referred to as the staged approach and reflects the approach commonly adopted on complex developments with a progressive step-by-step assembly and commissioning process, validating each phase before moving on to the next.

At the 36th ITER Council in June 2025 "The Council reviewed the phased approach to the baseline proposed in June 2024, which prioritizes the start of substantial research operations as rapidly as possible. The ITER Organization will continue to execute according to Phase 1 of Baseline 2024, which will extend through the end of 2028."[10]

Although the 2024 baseline will be approved in phases, F4E is already using the 2024 baseline as schedule reference and the Single Programming Document may need to be revised in line with Phase approval.

The two major F4E responsibilities are:

(a) Europe, as host, is providing components (including all buildings) representing 45 % of ITER's nominal value; European industries manufacture and provide them to the ITER Project as 'in kind' contributions. These are progressively delivered in line with the ITER assembly schedule, completing with the final deliveries for the DT phase components.

[10] 36th Iter Council press release available on www.iter.org/press-releases

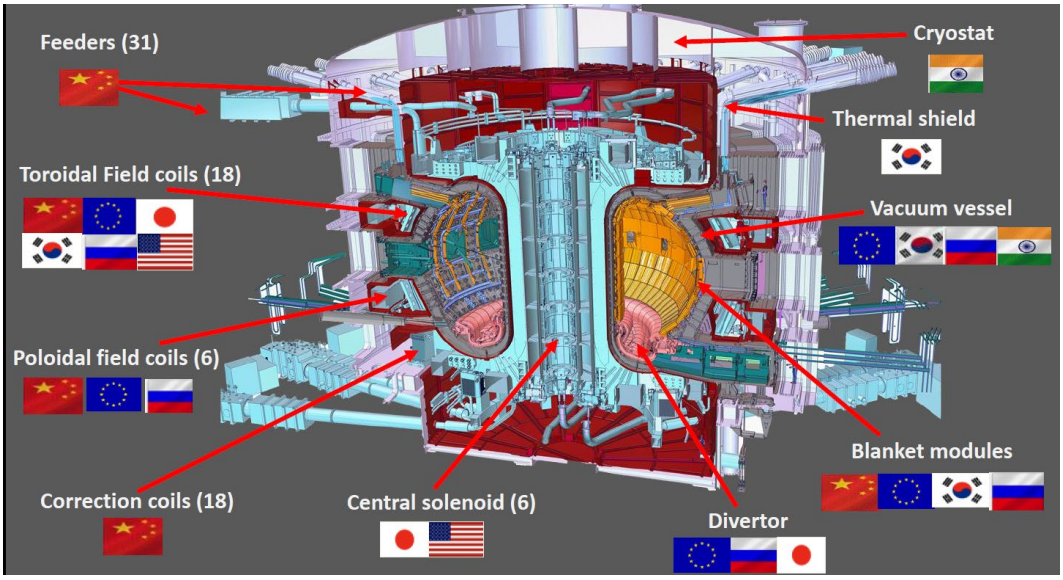
(b) the payment of an annual cash contribution to IO to fund the IO internal activities and the tasks subcontracted directly by IO. The cash contributions cover the four major phases of the ITER project:
- ITER **construction phase** through to the configuration of the machine for the final DT configuration
- ITER **operations phase** running from Start of Research Operation (SRO) through to the scheduled end of operation in 2037[11]
- ITER **deactivation phase** from 2037 until the end of the ITER Agreement in October 2042. During this phase the ITER machine is returned to a safe state following its operation with the DT fuels.
- Finally the **decommissioning phase** which starts in 2042, aimed to dismantle the machine and return the ITER site to green-field. Since this phase falls outside the timeframe of the ITER Agreement, F4E and the other Domestic Agencies will make the corresponding cash contributions to a decommissioning fund during the ITER operations phase.

During these phases the main F4E role is to provide the agreed in-kind and cash contribution. However, F4E is also increasingly providing technical support to IO during machine assembly and it is anticipated that F4E will have a support role during commissioning and operations. The type and level of support, and mechanism to provide this support is not yet defined.

ITER Construction Phase	Overall cost IC-35 (kIUA)	EU share (kIUA)	EU share already released (kIUA)
In-kind	2842.62	1109.37	654.34
In-kind cash to Japan	*NA*	227.65	193.35
In-cash	4903.58	2184.41	1359.17
Total	**7746.2**	**3521.43**	**2206.86**

SPD_table 1. Summary table of European contribution to ITER (Reference IC-35 contribution end of December 2024)

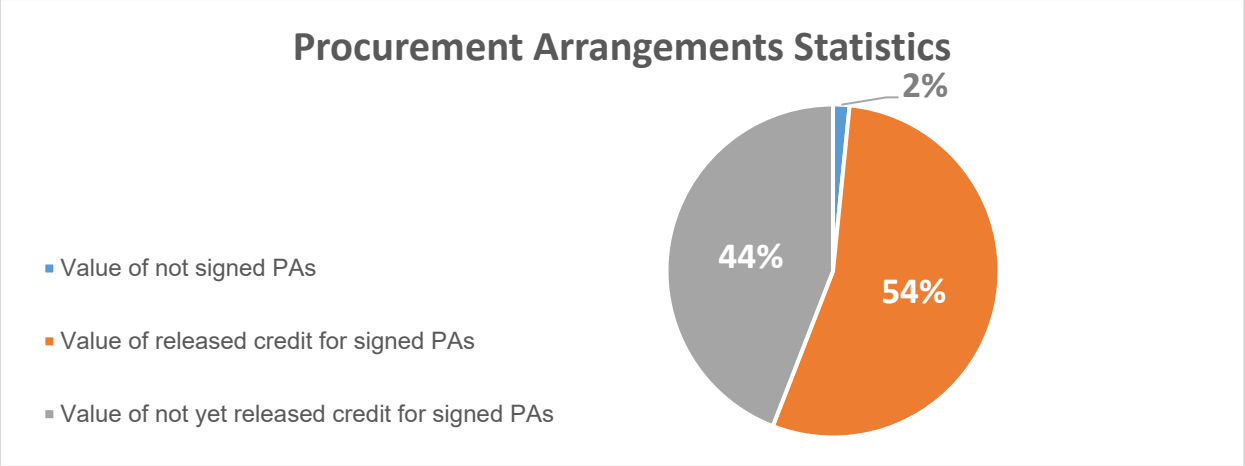
[11] To be noted that the ITER parties plan to discuss starting in 2033 a possible extension of the Agreement beyond 2042. Such decision, if taken, would impact the duration of the operation phase and the dates of deactivation and dismantling phases.



SPD_figure 2 . Main DAs obligations towards IO

IN KIND CONTRIBUTIONS TO ITER

The Procurement Arrangements (PAs), progressively signed between the ITER Organization and each DA, define the specifications of the components to be provided in-kind. The level of detail of those specifications may vary depending on the level of development of the components. In some cases, Build-to-Print specifications will be provided, whilst in others, Detailed Design or only Functional Specifications will be available. These PAs are the basis for F4E to start the procurement procedures to competitively tender for the work. Once a contract is awarded, the work of the supplier can start. Each component has its development and manufacturing process with predefined stages and phase gates when F4E and IO will review and approve the design or manufacturing progress in order to determine the readiness to move to the next stage. The following table provides the state of play of the EU deliverables.



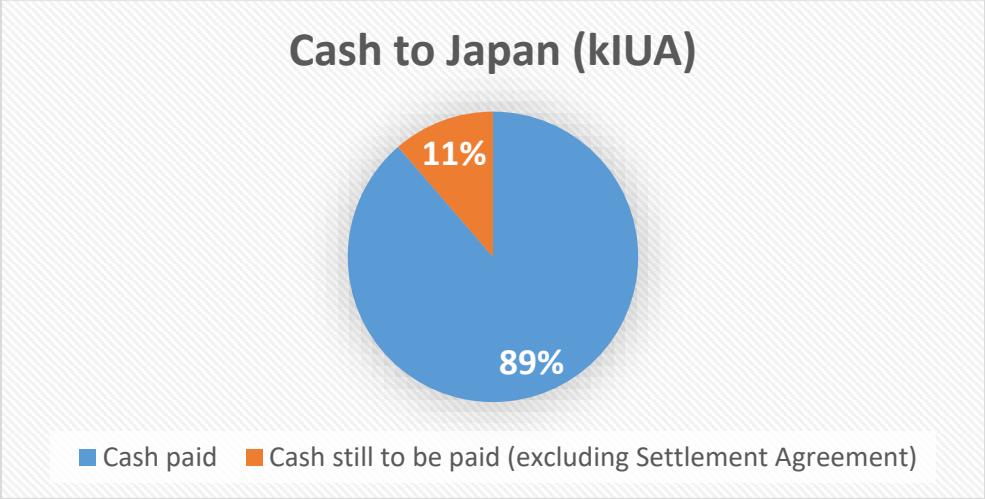
SPD_figure 3 . PA Credits of in-kind contribution in percentage: value of PA Signed & credit released / PA Signed & credit to be released / not Signed EU PA (status end April 2025)

CASH CONTRIBUTION TO ITER ORGANIZATION

F4E delivers to ITER International Organization (IO) annual in cash contribution in accordance with the ITER Agreement[12] and under the terms approved by ITER Council[13].
By the end of April 2025, F4E has provided 1,296.47 kIUA credits (excluding "short in-kind contribution") to ITER Organization in the form of cash contributions to ITER Construction Phase.

According to the ITER Agreement, 10% of in-kind procurement arrangements (PA) equivalent to 227.65183 kIUA credits shall be transferred from Euratom to Japan under the supervision of the ITER Organization[15]. This is financed through cash contribution paid by F4E (EU DA) to Japanese Domestic Agency (JA DA).

F4E provides a yearly payment based on progress reports and according to the agreed payment schedule.



SPD_figure 4. Cash paid to Japan / cash still to be paid to Japan (status end April 2025)
(excluding settlement agreement[16])

[12] Article 8 "Resources of ITER Organization" (ITER Agreement 2006)

[13] According to Article 9 of ITER Agreement, the ITER Project Resource Management Regulations (PRMR Regulations) shall govern the administration of the resources of the ITER Organization. It provides a detailed description of the applicable rules for contributions in kind, cash income, commitments and payments for the ITER Organization. The final figures are approved or modified by the ITER Council.

[15] Decision 12 of Interim ITER Council, Tokyo, 11-12 July 2007 on transfer of procurement responsibilities from Euratom to Japan

[16] Excluding the settlement agreement signed in 2015 between EU and Japan, under which F4E committed an additional cash contribution to Japan, equivalent to EUR 75 million valued at 10 February 2014.

RECENT CHANGES AND DEVELOPMENT AT OVERALL ITER LEVEL WHICH AFFECT F4E's OPERATIONS

As mentioned earlier in this document, at the 36th ITER Council in June 2025 "The Council reviewed the phased approach to the baseline proposed in June 2024, which prioritizes the start of substantial research operations as rapidly as possible. The ITER Organization will continue to execute according to Phase 1 of Baseline 2024, which will extend through the end of 2028."[17]

This 2024 baseline (scope, schedule and cost) is split into several phases that will be presented to the ITER Council meetings for decision upon successful completion of a previous phase. This is impacting some of the F4E in-kind delivery programs, including for example the Blanket First Wall, the Hot Cell Complex building, ECH and the Diagnostics programmes. Although the 2024 baseline will be approved in phases, F4E and the other DAs are supporting the ITER Organization in this challenge by re-defining in kind scope and procurement strategies to match the new configuration and delivery dates. At the same time F4E is also supporting initiatives to further integrate F4E and IO teams, to increase the overall efficiency and performance of the project.

The 2024 Baseline introduces significant changes to the scope of the ITER Project, departing from the Staged Approach defined in the 2016 Baseline. Notably, it eliminates the First Plasma milestone—which involved operating an incomplete Tokamak without in-vessel components—and replaces it with a new milestone: the Start of Research Operations (SRO).

This new phase marks the operation of a fully assembled Tokamak and includes H-H and D-D plasma campaigns. These campaigns initiate nuclear operations within the 25-year timeframe authorized by ASN in 2012 and will be conducted at full magnetic energy and a plasma current of 15 MA.

The updated baseline also defines a new machine configuration, which includes:

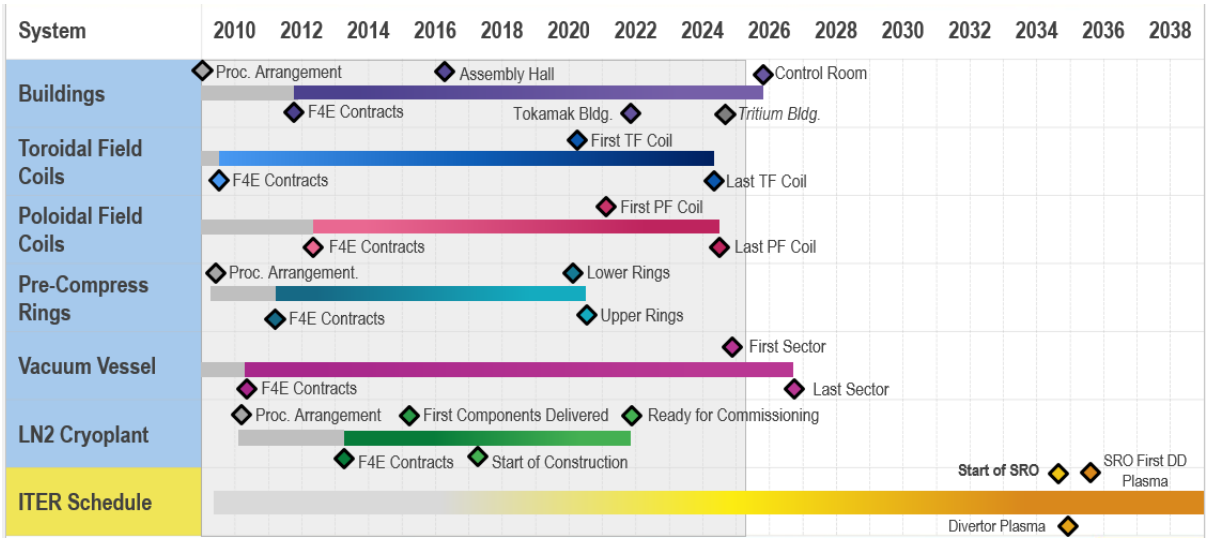
- Replacing the first wall (FW) armour material from beryllium to tungsten,
- Introducing an inner-wall boronization system to act as an oxygen getter,
- Enhancing the plasma heating strategy.

Following the Start of Research Operations (SRO), the next operational phase in ITER will be the DT-1 phase. This phase will initiate D-T fusion reactions but at only 1% of the nominal neutron fluence compared to the 2016 Baseline. This reduced fluence enables the adoption of an alternative nuclear maintenance strategy. The DT-1 phase is designed to achieve a fusion gain of Q ≥ 10—fulfilling the ITER Project Objective—while also serving as a critical platform to validate control systems and characterize neutron distribution profiles. These insights will support the transition to the DT-2 phase, which targets full neutron fluence under enhanced regulatory assurance and with more robust safety margins.

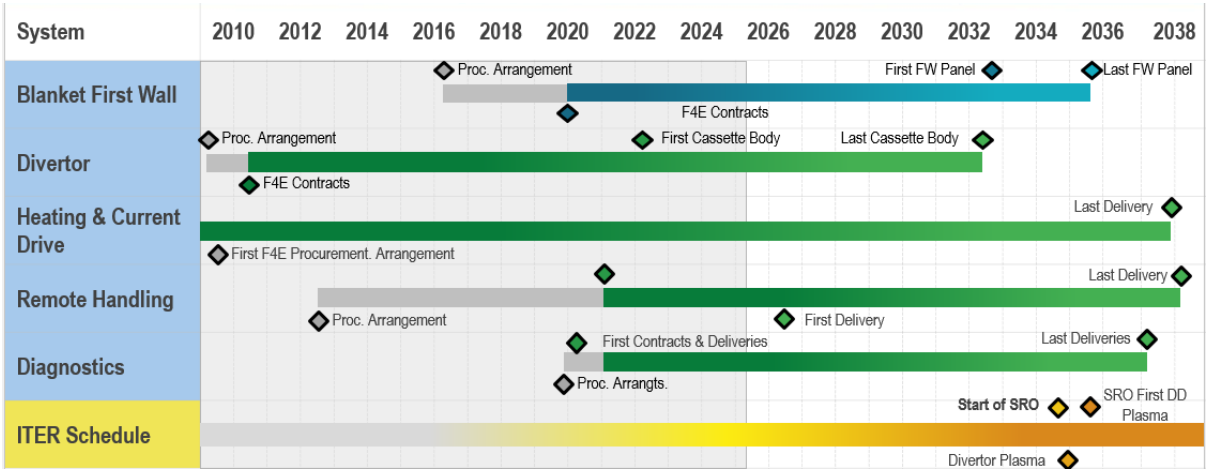
ASN has acknowledged this approach, which appears suitable given ITER's exploratory nature as stated in its licensing decree. However, ASN notes that this approach may carry industrial risks if the technical choices and knowledge gained in earlier phases do not ultimately allow the operator to demonstrate adequate control over nuclear safety and radiation protection for subsequent stages.

[17] 36th Iter Council press release available on www.iter.org/press-releases

Based upon the updated ITER baseline schedule, F4E's own top-level baseline schedule (fig. 6), known as "Level 0", outlines the most important ITER and F4E activities.



SPD_figure 5 . Top level schedule for Start Researching Operations (status end of April 2025)



SPD_figure 6 . Top level schedule for other Systems (status end of April 2025)

Note that the dates are subject to change depending on the optimisation of the assembly sequence and that Hot Cell will be planned at a later time.

2.2 Broader Approach

Fusion for Energy is the Implementing Agency for the Euratom contribution to the three BA projects, designated by the European Commission to discharge its responsibilities as defined in the BA Agreement. In particular, F4E is the organisation delegated to agree and execute Procurement Arrangements (PAs) with the Japanese Implementing Agency (QST).

The first phase of BA activities covered the construction of facilities and the provision of equipment. All BA Phase I credits have been achieved.

The second phase of the BA activities, the so called "BA Phase II", started from April 2020 on the basis of the Joint Declaration by the representatives of the Government of Japan and the European Atomic Energy Community for the further joint implementation of the Broader Approach activities agreed on 2nd March 2020. This new phase is focussed largely on enhancements as well as operation of the jointly

developed infrastructures, and resources will mainly be provided by Fusion for Energy with a substantial contribution from European Laboratories channelled through the EUROfusion consortium. For BA Phase II, both Parties pledge to contribute a certain amount of credit on an annual basis and subject to budget availability.

The BA Projects, while having some important differences, share the common feature of being based on a collaboration in which the Parties contribute both to the definition of the overall integrated design and to the detailed design and realization.

The table below defines the planned contribution in summary and the already released credit for BA Phase II.[18]

[18] Not all PAs are signed yet.

Further details are available in PP_table 11 of Annexes to Project Plan.

		BA EU Scope April 2020 - December 2029		
Actions	**Name**	**Commitment Credit (kBAUA)**	***Of which Committed (signed PAs)***	***Of which completed***
14-Broader Approach	Satellite Tokamak (JT-60SA)	347.00	112.88	55.02
	IFMIF/EVEDA	87.03	63.44	28.00
	IFERC[19]	28.80	15.11	13.74

SPD_table 2 . Correspondence between Actions, WBS and WP ref for BA

CHANGES AND DEVELOPMENT OVER THE LAST YEAR THAT AFFECT BROADER APPROACH OPERATIONS

- **Satellite Tokamak (JT-60SA):**

After the successful campaign in late 2023, the tokamak has been shut down, warmed up and vented in preparation for the first Maintenance and Enhancement Phase 1 (M/E-1). In this phase all the necessary systems to bring the experiment close to full performance will be installed, inside and outside of the Cryostat Vessel Body (CVB).

From January 2024, installation of the common stages extensions has commenced. In parallel, assembly teams of local contractors coordinated by QST have installed many in-vessel components, including Inertially Cooled Divertor (ICD) pedestals, Fast Plasma Position Control Coil (FPPC) and Error Field Correction Coils (EFCC) supports. Several CVB and Vacuum Vessel (VV) ports have been prepared for their use in OP-2, removing sealing plates and installing port stubs. Massive components like the stabilizing plates have been installed in the VV on their supports, as well as the EFCC. In particular, the winding of the two large FPPC coils has been tried in autumn 2024 in preparation for the execution in the VV in early 2025. Most spectacularly the re-installation of the large Neutral Beams tanks has started in late 2024.

During 2024, the magnet system has been thoroughly tested and its electrical insulation improved, in particular for the Equilibirum Field coils, where all the accessible internal joints have been reinforced, based on comprehensive qualifications carried out on full scale mockups in Naka. For the Central Solenoid, full scale mockups have been built in Europe and Japan to test the in-situ insulation reinforcement technique, which will be applied in summer 2025. In parallel the cryogenic system has passed all the mandatory inspections, and several sub-systems have been refurbished or replaced with spares.

Many diagnostic and heating systems have been prepared and delivered both from Europe and Japan, including Edge Thomson Scattering System, Vacuum Ultra Violet spectrometer, Waveguide components, Diamond windows, RF Dummy loads and many ancillary vacuum components. In parallel,

[19] Until March 2030 for IFERC as per decision of the Broader Approach Steering Committee

the conditioning of Gyrotron systems has been carried out, in preparation for the tests with the new ECRF PS planned for early 2025.
The transition to Tungsten activities have also moved steadily forward with the definition of the operating scenarios, the heating and pumping requirements, the preparatory research activities to be performed during the carbon phase of the machine, and the technological progress in the manufacturing of the tungsten vertical target elements, which culminated in a successful high heat flux test in December 2024.

SPD_figure 7 . JT-60SA device receives the Guinness World Record for the Largest Tokamak

- **IFMIF/EVEDA:**

LIPAc made significant progress in 2023 and entered 2024 focused on finalizing Phase B+ and preparing for SRF Linac integration.

Challenges persisted with radio frequency quadropole (RFQ) brazed couplers, leading to a Working Group's investigation and new conditioning protocols. A cooperation agreement between CERN and F4E, to develop improved couplers based on the initial design in a timely manner, was signed, and an additional procurement for back-up couplers started.

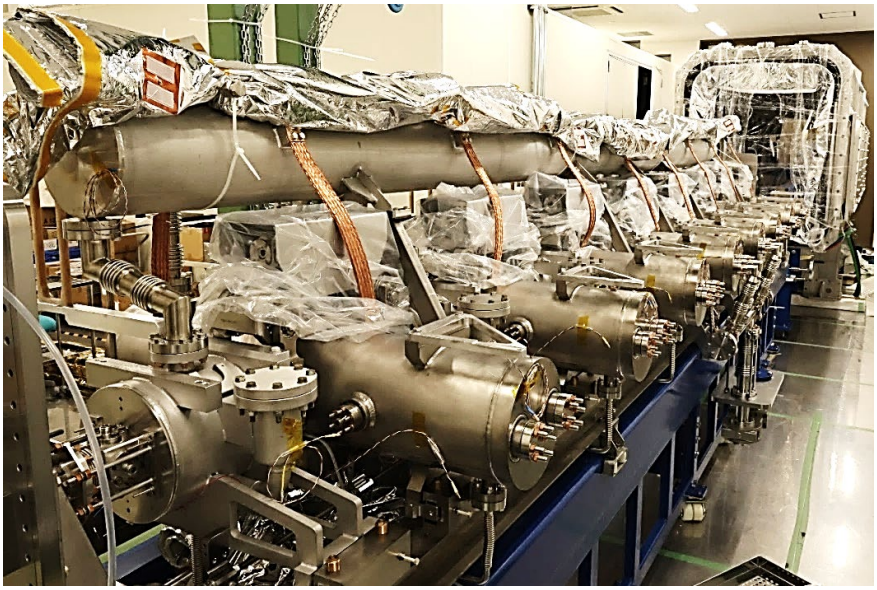
The SRF Linac assembly resumed in April 2024 and was further delayed from January 2025 due to issues on incoming components. Preparations to transfer the SRF Linac into the vault, proceeded as planned.

Starting in November 2024, an injector campaign achieved stable 24-hour beam operation with excellent beam characteristics, which was required to be in a position to proceed to phases C and D of operation.

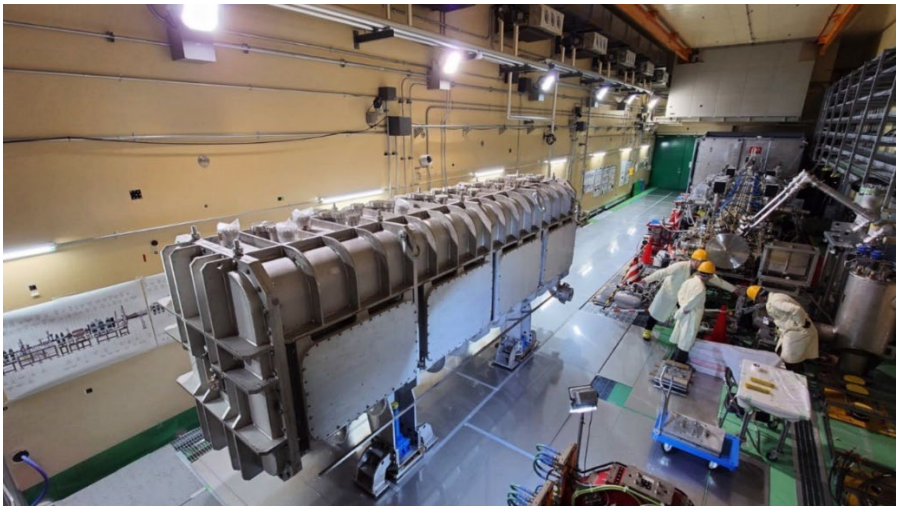
Overall, Phase B+ yielded excellent results which will now be integrated into the IFMIF-DONES Commissioning Plan. Care will be taken to incorporate all lessons learned and design enhancements already initiated within the commonalities between the two projects.

The work on LIPAc enhancements, aiming to improve the machine's availability, reliability, and maintainability for high-duty-cycle operation, continued in 2024. In addition obsolescence studies progressed. The Factory Acceptance Tests of the Machine Protection System (MPS) were successfully passed as planned in July 2024.

Significant progress was made on both European and Japanese activities on the Fusion Neutron Source engineering design in 2024.



SPD_figure 8 . Cold mass of the SRF Linac with a close view on the Half Wave Resonators in December 2024.



SPD_figure 9 . LIPAc cryomodule in the accelerator vault after its transfer in March 2025.

- **IFERC:**

The IFERC project comprises three activities, DEMO design and R&D activities, CSC (Computational Simulation Centre) and REC (Remote Experimentation Centre).
The CSC activities have concentrated in managing the exploitation of computer resources in support of ITER, JT-60SA and DEMO, and the 5th simulation campaign (FY2024) was successfully launched in 2024.
For DEMO Design Activity (DDA), each task showed good progress, and the activities toward the final report of the current Procurement Arrangement (PA) were implemented. Two research fields, namely divertor and breeding blanket, were selected as the EU/JA joint research fields in a new PA. In the DEMO R&D activities, each task showed good progress, and the activities toward the final report of the current PAs were implemented. The preparation of PAs started in 2024.
In REC, the collaboration with IO (preparation of CODAC (Control, Data Access and Communication) terminal in IO, test of CODAC application, test on data transfer with upgraded connection IO-REC), IFMIF/EVEDA (improvement of remote participation, update of the REC firewall configuration, etc.) and JT-60SA (technical discussions on RP system for JT-60SA and formulation of WP 2025 in collaboration with STP) continued in 2024.

2.3 DEMO

F4E's task is to prepare and coordinate a programme of activities in preparation for the construction of a demonstration fusion reactor and related facilities. F4E is working closely on DEMO with EUROfusion (a European consortium of fusion laboratories) and will increase its involvement as the construction of ITER will be progressively completed.
In particular, as first programmes of ITER in kind delivery ramp down during the period of this SPD, F4E will ensure that the know-how gained in these programmes benefits the DEMO research and design activities. F4E will increase its involvement by partly or fully making available a few key persons from those programmes.

DONES

DONES (DEMO-Oriented Neutron Source) will be a facility to provide a source of neutrons to test materials under conditions expected in fusion reactors so as to evaluate their lifetime.
F4E's role in relation to DONES is to support the host state in its preparations for the project and to support negotiations between Euratom and Japan on the possible implementation of this project in the frame of an international collaboration. Fusion for Energy will contribute to the construction of DONES with the delivery of the main Accelerator Systems which F4E is currently engaged in testing of with the full-scale prototype in the IFMIF/EVEDA project of the Broader Approach (Rokkasho – Japan) and other systems, which F4E is currently developing for ITER, such as remote handling.
In July 2024, the Governing Board approved the decision on F4E's contribution to DONES with a financial ceiling of EUR 202 million Euro (2021 value) for the construction and commissioning phase, subject to annual budgetary appropriations.
The baseline was assessed by an external group in October 2023 and the recommendations were presented at the F4E Governing Board in December 2023 and at the DONES Steering Committee in March 2024.
During the DONES Steering Committee meeting held on 14th March 2024, the DONES Steering Committee acknowledged the progress made, the achievement of the tasks assigned to the DONES Mobilization Working Group. The DONES Steering Committee also agreed to implement the DONES Programme Team and to appoint an interim Programme Manager to maintain the momentum and to proceed with the signature of the first Procurement Arrangement. F4E takes a leading role of the management of the DONES Programme.

On 20th May 2025, Japan joined the DONES Programme at the 5th Steering Committee, following the Memorandum of Cooperation signed with Spain on 19th May.
In July 2025, the F4E Governing Board approved the release of the F4E financial contribution, with a ceiling of EUR 202 million (2021 values), for the construction and commissioning phase of the DONES Programme. Additonally, the Governing Board approved the Multilateral International Dones Agreement (MIDA), in line with the recommendations made by the AMC, and delegated to the Bureau the authority to accept the non-substantial changes proposed by Japan. The signing of MIDA is expected to take place during the 6th DONES Steering Committee, scheduled for 21 November 2025 in Madrid.

Technology Development Programme (TDP)

The Technology Development Programme aims to periodically identify and assess the fusion key enabling technologies (critical technologies mapping) and support European industry to develop and test those technological capacities for ITER, DONES, DEMO and other fusion projects of European interest, such as plasma heating and exhaust systems, advanced materials, tritium breeding and handling, remote handling, magnets, and diagnostics.

The Technology Development Programme represents F4E's commitment to foster a culture of excellence and innovation. By focusing on key enabling technology development, we are ensuring that F4E remains at the cutting edge of fusion technology, contributing to a sustainable energy future and reinforcing Europe's leadership in this transformative field. For further details, please refer to the report of the Industrial Policy Working Group F4E_D_33QZZ5.

Section II. Project Plan 2026-2030

In accordance with the Financial Regulation of F4E, this programming document is composed of a Project Plan (PP) that lays down an overall strategic programing foreseen to cover five years (i.e. 2026-2030). The Resource Estimate Plan (REP) complements it and covers the same period.

Challenges

F4E is facing a number of significant challenges in technical, procurement, budget and human resource areas.

Technical and Procurement challenges

The most significant challenges for F4E are related to its major task of delivering the EU in-kind contributions to ITER. The nature of the F4E activities with respect to ITER is changing throughout its lifecycle. While at the beginning the focus was on the launching of the procurement of the EU in-kind components, the work has evolved into the follow-up of the manufacturing activities and will further evolve in the coming years with a higher degree of involvement in the assembly and testing of the machine.
The next years, represent a period of high uncertainty and significant changes for the organisation.. An updated F4E schedule baseline will also need to be developed once the new ITER Project Baseline is approved by the ITER Council including the additional scope from the 2024 baseline that F4E could receive from IO such as additional heating buildings, ECH (Electron Cyclotron Heating) and power supplies. F4E will face the parallel activities of launching a large number of new contracts, while at the same time managing the ongoing delivery of the running contracts and supporting ITER IO with assembly.

IO and F4E are jointly launching one of ITER's most complex procurements, the "Hot Cell Facility Project". It is highly challenging in terms of integration, cost, and schedule. A Memorandum of Understanding governs their collaboration during the prequalification and competitive dialogue phase, with a call for nominations planned by IO in mid-2025.

The expected outcome is a single, fixed-price "design and build" contract covering all trades up to DT-1. The contractor will take full lifecycle responsibility under an incremental development model and a strict design-to-cost approach with a firm cost cap. Final contracting arrangements will depend on the outcome of the dialogue

Budgetary challenges

The F4E budget for the period 2021–2027 has been reduced by EUR 1,052 million. This reduction is mainly due to slower budget implementation at the start of the MFF, which resulted from technical challenges in the ITER project - including the revision of the 2016 ITER Baseline, necessary repairs, and a temporary halt in assembly.

Now that the ITER project has regained momentum, new budgetary challenges have emerged. While the available financing in the current MFF was considered sufficient to support the adoption of Phase I of the 2024 ITER Baseline, F4E must now implement effective contract management strategies to

ensure that the remaining project scope is delivered within the available Euratom contribution (including the full use of unused appropriation within this MFF).

Human Resources challenges

There are many projects and tasks in the horizon linked to the HR strategy. In order to be successful, the main challenge will be to set up priorities and accomplish the tasks within the agreed timeline.

Following the 2023 IAS audit on HR management[21], the key strategic priority that emerged for F4E to strengthen its HR capabilities consisted in the development of a comprehensive HR strategy. The other important focus area is the establishment of a robust methodology for assessing overall staff needs, which will support more effective workforce planning.

In addition, attention will be directed toward setting up the necessary mechanisms for a centralised workforce planning function and improving the digital tools used to manage External Service Providers (ESPs). These efforts aim to reinforce risk mitigation related to assimilation, and to better ensure the proper classification and cost-effectiveness of the external resources F4E depends on.

While integration does not inherently require staff relocation, the movement of personnel across different sites will need to be thoughtfully coordinated. Should enhanced collaboration between F4E and IO lead to a higher frequency of reassignments, this may present a challenge from a human resources perspective.

Collectively, these priorities are intended to support a more effective alignment between the stringent demands of the regulatory framework and the flexibility required to adapt to the project's evolving resource needs.

Schedule challenges

The dates provided in this document are according to the F4E Detailed Work Schedule (DWS) at the end of April 2025.

[21] Ref. Ares(2024)500407 – 23/01/2024

1. PROJECT EVOLUTION

1.1 ITER

At the 35th ITER Council (IC) in November 2024, “the ITER Council discussed the new baseline presented by the ITER Organization at IC-34 in June 2024, prioritizing the start of substantial research as rapidly as possible. The ITER Council endorsed the approach proposed for Baseline 2024. The ITER Council requested the IO, in cooperation with the Domestic Agencies, to continue their efforts to reduce the risks of the project and optimize costs, through the determination of project phases and gates, with appropriate milestones”[22].

At the 36th ITER Council in June 2025 “The Council reviewed the phased approach to the baseline proposed in June 2024, which prioritizes the start of substantial research operations as rapidly as possible. The ITER Organization will continue to execute according to Phase 1 of Baseline 2024, which will extend through the end of 2028.”[23]

F4E is requested to operate with two different approaches: the classical project management approach, focused on time, cost and quality, for the F4E deliveries not impacted by the 2024 ITER Project re-baselining, and a more elastic approach for those deliveries impacted by the re-baseline and for which F4E supports to IO is key for the successful implementation of the new staged approach and machine and plant system configurations. This requires a continual balance of prioritisations made at management level, and in the daily work of all the staff.

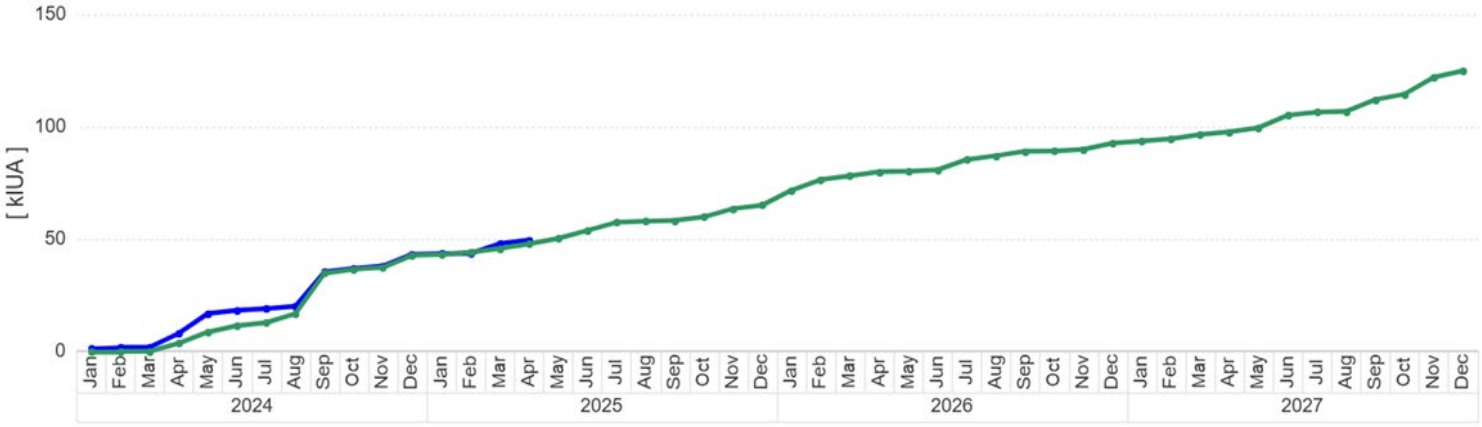
F4E is progressing with delivery of the various components under its responsibility to IO. The success of this will be critically dependent upon several factors:

- The performance of the various suppliers, and their ability to overcome the inevitable technical challenges and maintain the schedule and quality through the delivery;
- F4E’s management of the suppliers, working with them to ensure a good performance in terms of schedule, quality and cost;
- The avoidance of changes in requirements, design and/or interfaces of the various components to ensure a smooth progression into production and test without perturbations. This has been a significant problem in the past, and considerable efforts have been devoted by both the IO and F4E to achieving a stability in requirements and design.
- In light of the current rebaseline exercise, IO and F4E should jointly focus on reducing complexity.

[22] 35th Iter Council press release available on www.iter.org/press-releases

[23] 36th Iter Council press release available on www.iter.org/press-releases

The graph in Fig. 11 shows the ITER credit achieved until end of April 2025, and the forecast, compared to the new baseline.



SPD_figure 10 . Credit Graph for all EU in-kind procurements (end April 2025 data)

SPD_table 3 hereafter shows the progress, for all actions for ITER in kind deliveries, in terms of both achieved and released credits against the baseline as well as the forecast of credits for the next five years.

While the total credit value per action is largely stable as modifications would need the approval of the ITER Council through the Overall Project Cost (OPC) document, the credit profile over the years is prone to changes due to many reasons (e.g. delays in the schedule, change of strategy in specific procurements or modification of the IO assembly sequence).

	Action	Baseline to end April 2025 (kIUA)	Achieved Credit (kIUA)	Released Credit (kIUA)	2026 (kIUA)	2027 (kIUA)	2028 (kIUA)	2029 (kIUA)	2030 (kIUA)	2031+ (kIUA)
		751.08988	**752.78923**	**661.07043**	**29.57598**	**31.83994**	**33.97912**	**28.07897**	**62.06931**	**172.27673**
Action 1	Magnets	185.87481	185.87481	185.87476	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Action 2	Vacuum Vessel	76.37094	76.37094	60.54947	8.49535	0.00000	0.00000	0.00000	0.00000	0.00000
Action 3	In Vessel- Blanket	1.10000	0.50000	0.20000	1.00000	0.20000	0.00000	0.00000	1.48600	40.91869
Action 4	In Vessel- Divertor	4.05050	3.97900	3.62000	1.58100	3.62200	3.23450	3.77550	4.04100	4.31550
Action 5	Remote Handling	5.14000	5.14000	2.90000	0.55434	2.44200	2.66000	1.50000	3.02000	24.97447
Action 6	Cryoplant and Fuel Cycle	34.40400	35.69499	31.72584	0.79826	0.00000	0.00000	2.30000	0.00000	0.00000
Action 8	Heating & Current Drive	53.19443	54.16240	48.26240	2.26652	10.18720	10.74295	7.10096	4.15588	17.55290
Action 9	Diagnostics	8.35893	8.35893	5.53539	3.36405	0.75092	2.58663	2.55860	4.66687	7.66987
Action 11	Buildings and Site Equipment	382.59627	382.70816	322.40257	11.51646	14.63782	14.75504	10.84391	44.69956	76.84530

* Action 7, Action 10 TBM, action 12 Cash Contributions, action 13 Technical Support Activities, action 15 DEMO_IFMIF-DONES and action 16 DEMO_TDP are not listed in the above table since no kIUA are associated to these actions. Action 14 Broader Approach uses kBAUA instead of kIUA (see full table under PP_table 7).

SPD_table 3 . Credit per Action[24]

[24] **Achieved credit** corresponds to milestones completed by F4E. **Released credit** corresponds to milestones for which F4E received the associated credits (in IUA) from IO.
Figures in column **Baseline** correspond to “Total credit initially planned to be achieved at the end of March 2024”,
Figures in column **Achieved** Credit correspond to “Total achieved credit at the end of March 2024”.

The maturity of each component evolves through a series of phases from design to delivery as normal for any development project. The transition from one phase to the next is authorized through gates where the maturity of the component to move to the next phase is assessed by an independent panel and approved by the internal project governance including IO actors.

While the design phases and the related reviews could be competence of either the ITER Organization or F4E, depending on the agreed level of detail of the specific Procurement Arrangement (i.e. functional specifications, detailed design, build-to-print), the reviews for cost and manufacturing are always a F4E responsibility. A policy for the management of the phase gates across F4E has been approved and is being implemented.

Implementation of F4E IO Integration plan

In 2026 the Integration with IO will progress along the Integration Plan as endorsed by Governing Board in July 2024 (F4E_D_375CY6).

1. Reinforce and extend the project scope integration, focusing on those tasks with a high level of interdependence between IO and F4E and on the critical or near critical path to SRO.

a. Vacuum Vessel: in 2026 the last 3 EU sectors of ITER vacuum vessel (sectors 9, 3 and 2) are planned for delivery in Cadarache. The sectors manufacturing contract is managed by F4E in close integration with the IO Construction Project, and the sectors' Field Joint Repair (FJR) activities are allocated to either the manufacturer's premises or the ITER premises depending on the most cost and time efficient choice. At the beginning of 2026 F4E will sign with the manufacturer for the remaining portion of FJR to be performed at their premises (for sectors 3 and 2). This is an SRO critical path activity.

2026 integration objectives:
- *Signature of S3 and S2 FJR scope*
- *Delivery of S9, S3 and S2*

b. Hot Cell Facility (HCF): after the successful integration of the Civil Works and Buildings Services activities, the main focus in 2026 will be the progress on the Hot Cell Facility joint procurement with IO, which is performed by an integrated team composed of both IO and F4E staff. Conclusion of the competitive dialogue and signature of the joint contract is planned for 2027. This is a DT1 critical path activity.

2026 integration objectives:
- *Launch of HCF competitive dialogue with candidates (late 2025 or early 2026)*
- *First intermediate submission from candidates*

c. In Vessel Assembly Tools: the main objective for 2026 will be the integration with IO of the scope pertaining to the assembly of In Vessel components, for which F4E has the responsibility of supplying some of the tools. This scope was originally part of F4E's Nuclear Remote Handling programme, and it was extracted in 2025 to prepare for the integration. The integration of In Vessel Assembly scope was delayed in 2025 by the redefinition of the in vessel assembly strategy, that triggered redesigns for several interfaces and assembly tools. The definition of an integrated project

Figures in column **Released** Credit correspond to "Total released credit at the end of March 2024".
Figures in columns **Forecast** correspond to the "yearly credit to be achieved".

(governance, scope, budget, resources) will remain a key integration objective, with a target for the first half of 2026. These tools are part of an SRO critical path activity.

2026 integration objectives:
- Finalisation of integrated In Vessel Assembly project
- Freezing of requirements/design for divertor assembly tools

d. Neutral Beam Heating: in 2026 the integration focus will be for the Neutral Beam Cell assembly, including the captive components that must be installed before SRO although only used in DT1. In this area of the tokamak building F4E is responsible for tools and installation activities, that require full coordination with IO and other DAs due to significant co-activity. The definition of an integrated project for NBC assembly (governance, scope, budget, resources) is ongoing since the beginning of 2025 and will be finalised in 2026. These tools and tasks are part of an SRO critical path activity.

2026 integration objectives:
- Finalisation of integrated Neutral Beam Cell Assembly project (including definition of scope transfers to/from F4E to streamline interfaces)

e. Electron Cyclotron Heating (ECH): in this area the main integration activity is devoted to the joint work to complete the design and demonstration of the Upper Luncher (UL) and Ex-Vessel Waveguides (EW). A task force with joint F4E and IO resources was started in 2025 to support the UL-EW final design review (FDR) and will conclude its activities in mid 2026. This is an SRO near critical path activity.

2026 integration objectives:
- Conclusion of joint task force activities supporting FDR
- Closure of UL-EW FDR for SRO operation

f. Blanket Cooling Manifolds: the manufacturing of this Build To Print component was suspended in 2026 to allow for a complete redesign to allow for simplification of the manufacturing and installation. A joint effort is ongoing, with the involvement of the F4E supply chain, to complete the new design and demonstrate the necessary manufacturing steps, with the objective of resuming series manufacturing by the end of 2026. This is an SRO near critical path activity.

2026 integration objectives:
- Finalisation of new BtP design

g. Divertor Rails: the scope transfer of the rails (to simplify interfaces) from F4E to IO is approved and will be signed at the end of 2025 or beginning 2026.

2026 integration objectives:
- Signature of scope transfer agreement

h. Additional preparatory discussions are ongoing in relation to the integration of activities in the area of divertor components manufacturing (cassettes and Inner Vertical Targets), Diagnostic Ports, cryoplant commissioning.

2. Accelerate and conclude transversal enabling factors and tools, to facilitate the scope integration as per (1) and more in general to streamline all in-kind procurement activities by a closer collaboration with IO.

a. Schedule and risk management: after the completion in 2025 of the project for the integrated management of technical documentation between IO, F4E and F4E's contractors, in 2026 the focus will be on furthering the progressive integration of schedule databases and risk management processes and joint risk reviews. Joint activities are also ongoing in the areas of cost estimates and cost containment.

b. Procurement: F4E and IO will work on joint management of strategic suppliers (Key Accounts) at ITER Project level, implement joint performance management programme, implement joint negotiation approach on strategic procurements and contracts, benchmark commercial risk management practices and cost estimation methods throughout the contract lifecycle at F4E and IO, implement joint procurement teams for joint procurement needs and develop integrated procurement and contract management procedures (e.g., Hot Cell Facility), share best practices and lessons learned during the contract lifecycle, share vision on upcoming trends (e.g. supply chain sustainability and the use of artificial intelligence in procurement and contract management), work on procurement and Contract Management Professional Certification Programme for Big Science Organizations addressing the needs of the ITER Project.

c. Legal: F4E and IO will raise awareness, knowledge sharing and enhanced collaboration on legal topics of common interest; harmonise the legal tools used by both organisations; co-draft of contracts in case of joint procurements.

2026 integration objectives:
- complete the integration with P6 cloud and extended the pilot on schedule integration

3. Progress in the reallocation of additional scope from the 2024 baseline: new scope to optimise project management is under discussion with IO in the areas of Temporary First Wall, buildings, NBH installation and remote handling equipment, and Diagnostics. The new scope is allocated to DAs through a competitive process, to achieve the most cost and schedule effective result. In this respect the integration objective for F4E remains to ensure the best possible participation of the EU supply chain, in areas with high technological and industrial added value and not increasing the F4E's total in-kind plus in-cash cost at completion.

1.2 Broader Approach and TBM

All BA projects are now in an advanced implementation stage. The strategy defined in the early stages to implement these projects has proven successful and hence continues to be employed. This is underpinned by the very close collaboration with the Japanese Implementing Agency QST and all other European stakeholders. The management model follows an agreed Common Quality Management System, defining resources and processes crossing the lines between all involved organisations. Such an approach has allowed to control costs and hence will continue to be pursued.

For **JT-60SA**, the same strategy is planned for the period when the facility will be jointly operated and enhanced by the EU and JA. After the experience of the EF incident F4E is taking a more active role in on-site maintenance & repair in support of QST, in the overall interest of the project. This will continue in the next years to ensure the best chance of success of the JT 60SA project.

For **IFMIF/EVEDA**, the R&D results planned to be achieved thanks to the finalization of LIPAc's construction, checkout tests and the beam commissioning will provide solid grounds when its full experimental phase is carried in 2026. These results are pivotal for the development of the accelerator of the future fusion neutron sources facilities such as DONES and A-FNS.

For **IFERC**, F4E will continue to rely on the full support of EUROfusion for DEMO design activities, R&D activities in materials, and High Power Computing exploitation. F4E will continue to take the lead in Remote Experimentation (REC) activities with IFMIF-EVEDA, ITER and JT-60SA.

For **TBM**, the activities will focus on finalizing the design and complete the design gates. The collaboration with the European Fusion Laboratories will continue, and the joint activities with Breeding

Blanket will further progress. The collaboration with Korean Domestic Agency will continue in the Helium Cooled TBM system.

1.3 DEMO

EUROfusion is currently carrying out the DEMO-related activities. It is foreseen that F4E will play a stronger role once ITER activities decrease. In particular, it is desirable that F4E gradually becomes more involved on key design decisions, and cost & schedule parameters during the DEMO conceptual design phase. F4E should be linked to the EUROfusion Project Governance of the DEMO design activities and other associated supporting technology projects (e.g., ITER TBM and DEMO breeding blanket work packages).
As a step in this direction, a DEMO Programme Steering Board has been established at the end of 2017, to coordinate the DEMO Programme between EUROfusion and F4E, ensuring consistency between design activities and high-level milestones (i.e. IFMIF/DONES, DEMO Design, TBM/BB, BA etc.). F4E is represented by its Director and the Chairman of the Governing Board and EUROfusion is represented by the Programme Manager and the Chair of the General Assembly. In addition, the two Directorates of the EU Commission that are involved in Fusion, namely Research & Technology Development (RTD) and Energy policy (ENER) are represented in this Board together with Industry.

1.3.1 DONES

Considering the F4E contribution to the DONES Programme, early procurements process of essential equipment for DONES for risk mitigation using LIPAc as testing facility have been initiated.
These procurements are essential to validate the final design of key components, integrating the design improvement as feedback of the ongoing LIPAc engineering validation phases, and also to increase the availability of LIPAc during the commissioning phases by providing spare parts.

It is worth underlining that:
- these commissioning phases are identified in the DONES Programme milestones as interface points with the construction phase of the IFMIF-DONES facility (i.e. validation of the RFQ in high duty cycle and SRF Linac at low duty cycle),
- the activities will be performed within the commonalities/interfaces programme agreed between the two projects, in complement of the enhancements already planned within the IFMIF/EVEDA Project (BA), such as the enhancement of the Injector and the RF Power System; this will ensure a matching of the updated designs of LIPAc and the DONES requirements, and will also help to define properly the manufacturing process to avoid duplication,
- the engineering activities will be performed through insourcing contracts.

The scope of the equipment to be procured and manufactured early will be of the same nature (if not the same components) as the potential new in-kind contribution. During the procurement and manufacturing of the early components, F4E will focus in acquiring the preparatory knowledge to limit as much as possible setbacks for the future contribution (e.g. RF couplers, SC Cavities, etc.). F4E will then be able to monitor progress and swiftly assess whether the procurement and manufacturing of the future contribution will need to be modified. Hence, the risk of overcosts and schedule slippage will be minimized substantially.

1.3.2 Technology Development Programme

This Programme was launched in 2024 as one of the branches of the F4E Industrial Policy in line with the Governing Board's mandate.

According to F4E's renewed vision, F4E must play a fundamental role for supporting Fusion European Supply Chain and ensure its competitiveness in the promising fusion energy sector. This enhanced scope is to support both the technology needs of F4E projects, and the technological demands recognized in the roadmap to fusion power plants, mitigating risks associated with future European fusion endeavors.

1.4 Other project evolutions

Cash contribution to Japan

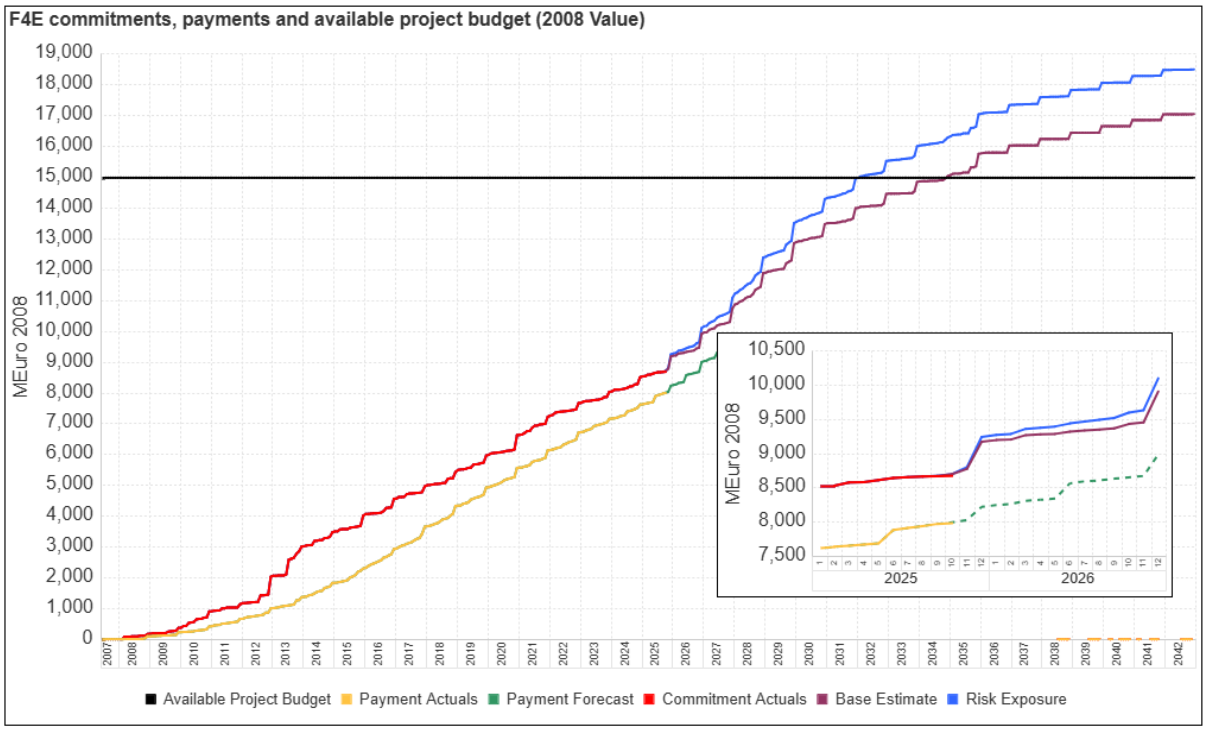
According to the ITER Agreement, there is a transfer of 10% of in-kind procurement responsibility from Euratom to Japan under the supervision of the ITER Organization. This is financed through a cash contribution from EU to Japan paid by F4E.

Collaboration with EUROfusion

A collaboration with EUROfusion has been implemented on the activities of the ITER Test Blanket Module (TBM) Systems and the BA Projects (i.e. the Satellite Tokamak Programme JT-60SA, IFMIF/EVEDA and IFERC). A Memorandum of Understanding (MoU) between F4E and EUROfusion was signed in the areas of their respective fusion research and development activities, on the basis of mutual benefit and overall reciprocity. The collaboration activities within each specific fusion research and development area are further specified in a Multiannual Programme Plan, drawn up and agreed by the Parties. In 2025, an increased coordination is being implemented, with the collaboration extended to coordination of training programmes, technology transfer and other fields.

1.5 F4E financial evolution

The F4E financial evolution is described in the below chart, with achieved values up to September 2025.



SPD_figure 11. Project Budget, Payments, Actual commitments and EAC.

The “available budget” is the budget that F4E assumes will be made available for all activities (including Broader Approach, F4E administration and Cash Contributions to IO and Japan) until 2034.

The Payment Actuals represent the cash disbursement to honor legal obligation.

The Payment Forecast represents the most likely value of all payments in period to be done.

The Commitment Actuals represent the total amount of legal obligations already signed.

EAC Base is computed as the sum of Actual Commitments and the Estimate to Complete Base. Within F4E it does not include Risk Exposure.

The “Estimate to complete Base” are the future planned Commitments.

The “Risk Exposure” is the possible Commitment impact of the risks(s) multiplied by the probability of the risk(s) associated to a given activity.

2. Objectives

This section of the document describes the strategic medium-term objectives of F4E and the way the progress in their achievement is monitored.

F4E has a number of key corporate objectives covering important areas, in particular Health & Safety, nuclear safety and some related to stakeholder satisfaction. The ones included here are the most relevant ones to measure the progress of the projects.

F4E's operative objectives are divided in two types:

- Multiannual objectives;
- Annual objectives.

2.1 Selection Criteria

It is important to select objectives which are not only top-level ones but also representatives of the work to be performed in the forthcoming years. Therefore milestones relevant to design, manufacturing, assembly and commissioning are the ideal candidates.
At the same time, it is important to establish a link between the long-term (i.e. Project Plan) planning and the short-term (i.e. work programme) activities. Therefore, as it can be seen in the work programme annex of this document, the multiannual objectives are mirrored on the annual milestones selected as the predecessors of the long-term ones. Such milestones in the short-term will act as an alert against the increasing risk of missing any critical and near-critical path milestones in the longer term.

Regarding the annual objectives, F4E has selected them to monitor those activities that have been identified during the last years as being most relevant for F4E stakeholders, both external (Commission, EU Member States, IO, etc.) and internal. Some of them have been defined after specific request from the Commission.

2.2 Multiannual objectives for ITER project

There are 7 multiannual objectives for the ITER Project:

- Deliver contribution to ITER within schedule,
- Deliver contribution to ITER within cost,
- Close NCRs in timely manner,
- Procure in timely manner,
- Pay contractors in timely manner,
- Optimise the use of F4E's headcount,
- Increase staff engagement in learning & development.

These multiannual objectives are monitored through the following KPIs

Area	KPI	Target definition	Target value
Schedule	EVM-CAS SPI	SPI above a defined value	SPI ≥ 0.95
Costs	EVM CPI	CPI above a defined value	CPI ≥ 0.95
Quality	NCRs – Closure Time	Measures F4E's capacity to close NCRs in line with project requirements	≥ 0.80
Schedule	Time To Procure	Measures F4E's capacity to procure on-time in line with the project schedule.	Between Directive threshold and 2 M€: KPI ≤ 180 days Between 2 and 10 M€: KPI ≤ 270 days
Schedule	Time To Pay	Measures F4E's capacity to pay contractors within the contractual time limit after the associated technical reports have been approved	Administrative expenditure: KPI ≤ 30 days Operational expenditure: KPI ≤ 60 days
Human resources	Vacancy Rate	Shows the utilization of F4E's available headcount/resources to perform delivery activities. Vacancy rate to be less than a defined value by end of the year.	≤ 0.04 by the end of the year
Human resources	Staff engagement in learning & development	Reflects employee engagement with development opportunities and helps identify interest levels, trends, and gaps in training outreach or awareness.	≥ 0.15

SPD_table 4. Multiannual objectives

2.3 Multiannual objectives for Broader Approach

Since 2020, the Broader Approach focuses on enhancing, operating and exploiting the facilities that have been jointly developed with Japan. As ITER is approaching its own tokamak assembly and commissioning phases, teams working on the Broader Approach will work ever more closely with ITER to ensure that it moves forward as smoothly as possible – the collaboration has been underpinned by an agreement between IO, F4E and QST concluded in 2019.
The technical objectives defined for the period up to December 2029 are listed in PP_tables 7, 8, and 9 of the Annexes to the Project Plan. These simplified tables are largely based on the grouping of the relevant project milestones, originally defined and valorized in the EU (draft or already signed) relevant Procurement Arrangements.

2.4 Multiannual objectives for DEMO

The revised DEMO development plan foresees three phases:

(i) a Pre-Concept Design Phase;
(ii) a Conceptual Design Phase; and
(iii) an Engineering Design Phase.

Specific activities have been identified to be carried out by EUROfusion up to 2025. Some of them are also partially conducted as part of the BA effort.

2.5 Annual objectives

In addition to the multiannual objectives, annual objectives are identified and are constantly monitored by F4E and are reported upon during the year. The annual objectives are the following ones:

- Implement the Commitment appropriation
- Implement the Payment appropriation
- Reduce EAC

These annual objectives are monitored through the following KPIs

Area	KPI	Target definition	Target
Costs	Annual commitment budget implementation	Measures F4E's capability to implement the Commitment appropriations requested through the annual Work Programme	≥ 0.95
Costs	Annual payment budget implementation	Measures F4E's ability to implement the Payment appropriations requested through the annual Budget	≥ 0.95
Costs	Annual EAC variance	Measures the EAC fluctuation during the year Incentivises cost savings in the organization	Reduction of 25M€ in a year

SPD_table 5. Annual objectives

2.6 Key Performance Indicators

A Key Performance Indicator (KPI) is defined for each of the annual and multiannual objectives. The RAG status (Red, Amber, Green status) associated to each of these KPIs is described in the Project Plan.

As of 01.01.2026, F4E will start monitoring internally a set of 3 additional KPIs covering:

- F4E Critical Path related activities
- Quality
- Stability of technical requirements

2.7 Implementation of the F4E strategy to achieve the objectives and define recovery plans

The achievement of the objectives is based on defined strategies. The schedule has been reorganized so as to minimize the risks of delay for the delivery of the components on the critical path. Furthermore, resources have been redistributed to better support the areas where more effort is needed.
The forum for reviewing project progress and taking any necessary actions/decisions to maintain or recover the project status is the Project Steering Meeting (PSM), held once a month with the participation of both senior and middle management. On top of scheduled presentations on progress, KPIs and milestones trend analyses, the Programme managers who have identified a specific issue in their areas are requested to present the reason of the issue and to propose a strategy to recover it. The proposal is discussed and an immediate decision is taken.
Actions are assigned to support the decision taken and due dates for the actions are agreed.
The record of recovery plans and issues arising from KPIs are the Record of Decisions (RoD) of the PSM.

Section III. Resource Estimates Plan

The Resource Estimates Plan sets out the indicative human and financial resources deemed necessary for the implementation of the Project Plan and the Annual Work Programme of the Joint Undertaking for the following five financial years[25].

FINANCIAL RESOURCE ESTIMATES PLAN

The EURATOM contribution to ITER for the whole period 2021 to 2027 amounted to EUR 5 614 million of which EUR 5 560 million (in current prices) for F4E were authorised by the last amendment to F4E Constituent act in 2021[27]. The current F4E budgetary envelope for MFF 2021-2027 has been reduced by EUR 1 052 million (18.9%) for budget years 2023,2024 and 2025.

The figures for EURATOM contribution to F4E budgets 2028-2030 correspond to the MFF communication[28] and Commission proposal establishing the EURATOM[29] contribution to ITER project, after deduction of the EC support administrative expenditure[30]. They are indicative, subject to the outcome of the MFF negotiations by the EU budgetary authority.

The ITER Host State and Membership contributions are complementing the EURATOM contribution to F4E budget .

1. Overview of the past and the current situation

1.1 Execution of Budget 2024

The execution rate of F4E's final available budget for 2024 is 92% in commitments and 93% in payments, as shown on the table below:

[25] Article 32 of the F4E Financial Regulation and Communication from the Commission on the Guidelines for Programming Documents for decentralised agencies

[27] COUNCIL DECISION (Euratom) 2021/281 of 22 February 2021 amending Decision 2007/198/Euratom establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it (OJ L62/41 of 23.2.2021)

[28] A dynamic EU budget for the priorities of the future – The Multiannual Financial Framework 2028-2034 COM(2025) 570, from 16 July 2025

29 Legislative financial and digital statement to the Commission Proposal COM (2025)594 from 5 September 2025, establishing EURATOM and the Community's contribution to the ITER project for the period 2028-2032

[30] Estimated from the Draft EU Budget 2026 and applying standard 2% inflation rate

Commitments	**92% execution of the final available budget**		
	Final Budget: 811.83	Execution: 746.05	EUR million
	111% compared to the original budget		
	Original Budget: 670.27	Execution: 746.05	EUR million
	99% without additional revenue from ITER IO		
	Standard Budget: 749.09	Execution: 738.05	EUR million
	100% in individual commitments		
	Execution: 746.05	Ind. Commit.: 744.05	EUR million
Payments	**93% execution of the final available budget**		
	Final Budget: 693.70	Execution: 642.31	EUR million
	101% compared to the original budget		
	Original Budget: 636.66	Execution: 642.31	EUR million
	99% without additional revenue from ITER IO		
	Standard Budget: 643.72	Execution: 635.97	EUR million

SPD_figure 12 Budget Implementation 2024

The execution rate of F4E's final available budget for 2024 is 99% in commitments and in payments, without additional assigned revenue from ITER IO.

The execution of the original budget in commitments exceeding it by 11% is due to the recognition and use of commitment appropriations carried over from previous year.

The main factors impacting F4E's ability to fully execute the 2024 Budget in payments, were linked to recognition and cashing of assigned revenue from ITER IO, which will be needed in the future to pay F4E contractors for implementing Project Change Requests approved by ITER IO.

1.2 Budget 2025

F4E budget 2025 was originally adopted to the F4E Governing Board in its December 2024 meeting and includes EUR 1 010.7 million in commitment and EUR 777.6 million in payment appropriations.

A first amendment to F4E Budget 2025 was adopted by the Governing Board in its meeting in July 2025 with the purpose to approve (i) the decrease of EUR 57.8 million in Euratom contribution due to adjustment in the unused appropriations made available again, (ii) the increase in the ITER Host State contribution by EUR 6.8 million in commitment coming from the adjustment following the final execution of the 2023 Budget and (iii) the miscellaneous revenue of EUR 0.01 million, cashed by the end of April 2025 linked to liquidated damages on F4E operational contract, in commitments and in payments.

A second amendment to F4E Budget 2025 is proposed to the Governing Board for its meeting in December 2025 with the purpose to approve (i) the EUR 1.75 million increase of EURATOM contribution in commitments and payments, coming from the EC support expenditure for the ITER line and (ii) the miscellaneous revenue of EUR 0.19 million cashed by the end of September 2025 linked to liquidated damages on F4E operational contracts, in commitments and in payments.

2. FINANCIAL OUTLOOK FOR 2026 – 2030

2.1 Assumptions

For the period 2026-2027

For 2026, the figures correspond to the Commission proposal for Euratom contribution to F4E Budget as published in Working Document III to EU general budget 2026[35] and in line with the final adoption of the general EU Budget.

The F4E operational expenditure for 2026 will be covered by the dedicated EURATOM contribution and by the ITER Host State contribution. The biggest part of the operational budget for 2026 will be spent for the provision of the cash contribution to ITER which is due for year 2027. Other significant expenditures include those related to Building and Site Equipments for the ITER site in Cadarache, Broader Approach and In Vessel Blanket.

The F4E administrative expenditure for 2026 will be covered by the dedicated EURATOM contribution, and by the membership contributions to the Joint Undertaking. The administrative expenditure 2026 is based on the following main assumptions:

- Annual salary adjustment for 2026: 4.0%[36] based on cost of living in Brussels as reference with a correction coefficient for Spain,
- Vacancy rate in 2026: 4.6%,
- Inflation coefficient on other administrative expenditure: 2.0%,
- Other salary factors: allowances, annual travel expenses, promotions, advancements in step.

The total EURATOM contributions until 2027 are in line with the updated MFF programming. However, the internal allocation of EURATOM operational and administrative contributions does not fully correspond to the updated MFF figures to ensure that the administrative expenditure is covered by the EURATOM contribution and F4E's membership contributions.

The planned needs for 2027 are based on the data available as of end of September 2025. Expenditure profiles for the main projects have been adjusted to align with the budgetary ceilings in the current MFF. It is anticipated that the estimated EUR 227.6 million available from the unused appropriations at the end of 2025 will be fully committed in 2027, thus will be fully spent within the current MFF.

Financial contributions to F4E Budget for years 2026-2027 are subject to the outcome of the respective budgetary procedures of the F4E contributors (EURATOM, ITER Host State and Members).

For the period 2028-2030

The figures for 2028-2030 correspond to the MFF proposals for EURATOM contribution to ITER Project, submitted by the European Commission on 16 July 2025 and 5 September 2025, after deduction of the EC support administrative expenditure. They are indicative subject to the outcome of (i) the MFF

[35] Draft General EU Budget 2026, Working Document III for EU Bodies, COM(2025) 300 - June 2025

[36] Includes 0.6% from April 2026. The 4.0% increase is in addition to the salary adjustments for 2024 of 7.2% and for 2025 of 5.8% (including 1.2% from April 2025)

negotiations by the EU budgetary authority and (ii) the outcome of the respective budgetary procedures of the F4E contributors (EURATOM, ITER Host State and Members).

The tables below show the status for 2024 and 2025, and the Estimates of Revenue and Expenditure for the next five years, from 2026 to 2030. The explanatory notes of the Estimates for revenue and expenditure are provided in the annexes.

2.2 Estimate of Revenue in Commitment Appropriations for next five years

REVENUE Commitment appropriations (EUR)	2024 Executed	2025 Budget AM2	2025 Forecast	2025 VAR 2025/24	2026 Budget	2026 VAR 2026/25	2027 Planned needs	2027 VAR 2027/26	2028 Planned needs	2028 VAR 2028/27	2029 Planned needs	2029 VAR 2029/28	2030 Planned needs	2030 VAR 2030/29
1 REVENUE FROM FEES AND CHARGES														
2. EU CONTRIBUTION	**437,498,571**	**481,415,795**	**481,415,795**	**10.0%**	**845,064,339**	**75.5%**	**654,732,051**	**-22.5%**	**937,236,340**	**43.1%**	**839,061,067**	**-10.5%**	**752,882,288**	**-10.3%**
Administrative (To Title 1 and 2)	*72,781,757*	*73,213,274*	*73,213,274*	*0.6%*	*77,653,253*	*6.1%*	*80,565,602*	*3.8%*	*83,718,538*	*3.9%*	*87,375,614*	*4.4%*	*91,457,850*	*4.7%*
Operational (To Title 3)	*355,220,669*	*406,873,795*	*406,873,795*	*14.5%*	*766,306,339*	*88.3%*	*574,166,449*	*-25.1%*	*853,517,802*	*48.7%*	*751,685,453*	*-11.9%*	*661,424,438*	*-12.0%*
Recovery from previous years administrative	*957,743*	*1,328,726*	*1,328,726*	*38.7%*	*1,104,747*	*-16.9%*								
Recovery from previous years operational	*8,538,402*													
3 THIRD PARTIES CONTRIBUTION	**97,473,155**	**93,822,230**	**93,822,230**	**-3.7%**	**178,570,000**	**90.3%**	**120,630,000**	**-32.4%**	**175,110,000**	**45.2%**	**165,970,000**	**-5.2%**	**162,610,000**	**-2.0%**
Of which ITER Host State contribution	*89,273,155*	*85,622,230*	*85,622,230*	*-4.1%*	*169,670,000*	*98.2%*	*111,730,000*	*-34.1%*	*165,910,000*	*48.5%*	*156,270,000*	*-5.8%*	*152,510,000*	*-2.4%*
Of which Membership contribution	*8,200,000*	*8,200,000*	*8,200,000*	*0.0%*	*8,900,000*	*8.5%*	*8,900,000*	*0.0%*	*9,200,000*	*3.4%*	*9,700,000*	*5.4%*	*10,100,000*	*4.1%*
Of which Other contributions														
4 MISCELLANOUS REVENUE	**329,351**	**207,963**	**207,963**	**-36.9%**										
5 ADMINISTRATIVE OPERATIONS														
6 REVENUES FROM SERVICES RENDERED AGAINST PAYMENT														
7 CORRECTION OF BUDGETARY IMBALANCES														
8 INTERESTS GENERATED														
9 UNUSED APPROPRIATIONS FROM PREVIOUS YEARS - CARRIED OVER	**55,593,632**	**12,294,339**	**12,294,339**	**-77.9%**										
9 BIS UNUSED APPROPRIATIONS FROM PREVIOUS YEARS - MADE AVAILABLE AGAIN	**155,192,675**	**386,242,241**	**386,242,241**	**148.9%**			**227,627,041**							
TOTAL REVENUE	**746,087,385**	**973,982,568**	**973,982,568**	**30.5%**	**1,023,634,339**	**5.1%**	**1,002,989,092**	**-2.0%**	**1,112,346,340**	**10.9%**	**1,005,031,067**	**-9.6%**	**915,492,288**	**-8.9%**
ADDITIONAL REVENUE	**65,737,718**	**75,754,208**	**75,754,208**	**15.2%**	**p.m.**		**p.m.**		**p.m.**		**p.m.**		**p.m.**	
Revenue from ITER Organization	*33,135,298*	*16,522,849*	*16,522,849*	*-50.1%*	*p.m*		*p.m*		*p.m*		*p.m*		*p.m*	
Revenue from ITER Organization carried over	*29,602,774*	*55,379,728*	*55,379,728*	*87.1%*										
Other Assigned Revenue														
Other Assigned Revenue carried over	*52,150*	*52,150*	*52,150*	*0.0%*										
Recoveries	*2,702,283*	*1,677,546*	*1,677,546*	*-37.9%*										
Recoveries carried over	*245,213*	*2,121,935*	*2,121,935*	*765.3%*										
TOTAL REVENUE AVAILABLE	**811,825,102**	**1,049,736,775**	**1,049,736,775**	**29.3%**	**1,023,634,339**	**-2.5%**	**1,002,989,092**	**-2.0%**	**1,112,346,340**	**10.9%**	**1,005,031,067**	**-9.6%**	**915,492,288**	**-8.9%**

Note 1: the 2026-2030 breakdown is only indicative subject to the outcome of the budget procedure

Note 2: The EU contribution - recovery from previous years operational in 2024 corresponds to the regularisation of extraordinary assigned revenue from ITER Organization

VAR: Variation compared to the previous budget

SPD_table 6 Revenue in Commitment Appropriations for 2024-2030

2.3 Estimate of Revenue in Payment Appropriations for next five years

REVENUE Payment appropriations	2024 Executed	2025 Budget AM2	2025 Budget AM2 (including admin carry over)	2025 Forecast (including admin carry over)	2025 VAR 2025/24	2026 Budget	2026 VAR 2026/25	2027 Planned needs	2027 VAR 2027/26	2028 Planned needs	2028 VAR 2028/27	2029 Planned needs	2029 VAR 2029/28	2030 Planned needs	2030 VAR 2030/29
1 REVENUE FROM FEES AND CHARGES															
2. EU CONTRIBUTION	**564,897,902**	**637,147,490**	**637,147,490**	**637,147,490**	**12.8%**	**924,858,000**	**45.2%**	**817,965,602**	**-11.6%**	**897,718,538**	**9.8%**	**885,375,614**	**-1.4%**	**888,257,850**	**0.3%**
Administrative (To Title 1 and 2)	*72,781,757*	*73,213,274*	*73,213,274*	*73,213,274*	*0.6%*	*77,653,253*	*6.1%*	*80,565,602*	*3.8%*	*83,718,538*	*3.9%*	*87,375,614*	*4.4%*	*91,457,850*	*4.7%*
Operational (To Title 3)	*482,391,497*	*562,437,405*	*562,437,405*	*562,437,405*	*16.6%*	*845,426,355*	*50.3%*	*737,400,000*	*-12.8%*	*814,000,000*	*10.4%*	*798,000,000*	*-2.0%*	*796,800,000*	*-0.2%*
Recovery from previous years administrative	*957,743*	*1,328,726*	*1,328,726*	*1,328,726*	*38.7%*	*1,104,747*	*-16.9%*								
Recovery from previous years operational	*8,766,905*	*168,085*	*168,085*	*168,085*	*-98.1%*	*673,645*	*300.8%*								
3 THIRD PARTIES CONTRIBUTION	**68,200,000**	**142,200,000**	**142,200,000**	**142,200,000**	**108.5%**	**162,400,000**	**14.2%**	**176,500,000**	**8.7%**	**165,200,000**	**-6.4%**	**191,700,000**	**16.0%**	**183,300,000**	**-4.4%**
Of which ITER Host State contribution	*60,000,000*	*134,000,000*	*134,000,000*	*134,000,000*	*123.3%*	*153,500,000*	*14.6%*	*167,600,000*	*9.2%*	*156,000,000*	*-6.9%*	*182,000,000*	*16.7%*	*173,200,000*	*-4.8%*
Of which Membership contribution	*8,200,000*	*8,200,000*	*8,200,000*	*8,200,000*	*0.0%*	*8,900,000*	*8.5%*	*8,900,000*	*0.0%*	*9,200,000*	*3.4%*	*9,700,000*	*5.4%*	*10,100,000*	*4.1%*
Of which Other contributions															
4 MISCELLANOUS REVENUE	**329,351**	**207,963**	**207,963**	**207,963**	**-36.9%**										
5 ADMINISTRATIVE OPERATIONS															
6 REVENUES FROM SERVICES RENDERED AGAINST PAYMENT															
7 CORRECTION OF BUDGETARY IMBALANCES															
8 INTERESTS GENERATED															
9 UNUSED APPROPRIATIONS FROM PREVIOUS YEARS - CARRIED OVER	**7,179,136**	**166,825**	**6,496,288**	**6,496,288**	**-97.7%**										
TOTAL REVENUE	**640,606,390**	**779,722,278**	**786,051,741**	**786,051,741**	**21.7%**	**1,087,258,000**	**39.4%**	**994,465,602**	**-8.5%**	**1,062,918,538**	**6.9%**	**1,077,075,614**	**1.3%**	**1,071,557,850**	**-0.5%**
ADDITIONAL REVENUE	**53,096,087**	**49,059,126**	**49,059,126**	**49,059,126**	**-7.6%**	**p.m.**		**p.m.**		**p.m.**		**p.m.**		**p.m.**	
Revenue from ITER Organization	*33,714,489*	*3,503,044*	*3,503,044*	*3,503,044*	*-89.6%*	*p.m.*		*p.m.*		*p.m.*		*p.m.*		*p.m.*	
Revenue from ITER Organization carried over	*16,263,115*	*43,634,906*	*43,634,906*	*43,634,906*	*168.3%*										
Other Assigned Revenue	*388,991*	*52,150*	*52,150*	*52,150*	*-86.6%*										
Recoveries	*2,702,283*	*1,677,546*	*1,677,546*	*1,677,546*	*-37.9%*										
Recoveries carried over	*27,208*	*191,481*	*191,481*	*191,481*	*603.8%*										
TOTAL REVENUE AVAILABLE	**693,702,477**	**828,781,404**	**835,110,867**	**835,110,867**	**19.5%**	**1,087,258,000**	**31.2%**	**994,465,602**	**-8.5%**	**1,062,918,538**	**6.9%**	**1,077,075,614**	**1.3%**	**1,071,557,850**	**-0.5%**

Note 1: The 2026-2030 breakdown is only indicative subject to the outcome of the budget procedure.

Note 2: The ITER Host State contribution for 2025 includes 5 Meur agreed as reimbursement of the 2024 cut

Note 3: The ITER Host State contribution for 2026 includes 20.5 Meur as reimbursement of the 2024 cut

Note 4: The EU contribution - recovery from previous years operational in 2024 corresponds to the recovery of the outturn plus the regularisation of extraordinary assigned revenue from ITER Organization

VAR: Variation compared to the previous budget

SPD_table 7 Revenue in Payment Appropriations for 2024-2030

2.4 Expenditure in Commitment Appropriations for next five years

EXPENDITURE In Commitment Appropriations (EUR)	2024	2025			2026		2027		2028		2029		2030	
	Executed	Budget AM2	Forecast	VAR 2025/24	Budget	VAR 2026/25	Planned needs	VAR 2027/26	Planned needs	VAR 2028/27	Planned needs	VAR 2029/28	Planned needs	VAR 2030/29
Total Title 1 & Title 2 Administrative Expenditure	**77,747,777**	**82,930,366**	**82,930,476**	**6.7%**	**87,658,000**	**5.7%**	**89,465,602**	**2.1%**	**92,918,538**	**3.9%**	**97,075,614**	**4.5%**	**101,557,850**	**4.6%**
Title 1 Staff Expenditure	**66,452,826**	**70,374,829**	**69,489,116**	**5.9%**	**75,913,000**	**7.9%**	**77,486,602**	**2.1%**	**80,700,538**	**4.1%**	**84,613,614**	**4.8%**	**88,847,850**	**5.0%**
Salaries & allowances	58,512,123	61,756,477	61,193,516	5.5%	67,310,000	9.0%	68,535,602	1.8%	71,385,538	4.2%	74,915,614	4.9%	78,745,850	5.1%
Establishment plan posts	*45,117,123*	*47,774,477*	*47,396,343*	*5.9%*	*52,256,000*	*9.4%*	*52,900,832*	*1.2%*	*55,083,737*	*4.1%*	*57,828,458*	*5.0%*	*60,769,760*	*5.1%*
External staff	*13,395,000*	*13,982,000*	*13,797,173*	*4.4%*	*15,054,000*	*7.7%*	*15,634,771*	*3.9%*	*16,301,801*	*4.3%*	*17,087,156*	*4.8%*	*17,976,090*	*5.2%*
Expenditure relating to Staff recruitment	844,197	929,083	819,800	10.1%	873,000	-6.0%	890,000	1.9%	908,000	2.0%	926,000	2.0%	945,000	2.1%
Mission expenses	1,180,233	664,976	800,000	-43.7%	800,000	20.3%	816,000	2.0%	832,000	2.0%	849,000	2.0%	866,000	2.0%
Socio-medical infrastructure	674,565	882,500	882,500	30.8%	827,000	-6.3%	844,000	2.1%	861,000	2.0%	878,000	2.0%	896,000	2.1%
Training	937,000	818,000	818,000	-12.7%	900,000	10.0%	918,000	2.0%	936,000	2.0%	955,000	2.0%	974,000	2.0%
External Services	660,000	1,150,257	1,150,000	74.3%	733,000	-36.3%	748,000	2.0%	763,000	2.0%	778,000	2.0%	794,000	2.1%
Receptions, events and representation	3,000	5,000	2,000	66.7%	5,000	0.0%	5,000	0.0%	5,000	0.0%	5,000	0.0%	5,000	0.0%
Social welfare	71,000	61,000	53,000	-14.1%	71,000	16.4%	72,000	1.4%	73,000	1.4%	74,000	1.4%	75,000	1.4%
Other Staff related expenditure	3,570,708	4,107,536	3,770,300	15.0%	4,394,000	7.0%	4,658,000	6.0%	4,937,000	6.0%	5,233,000	6.0%	5,547,000	6.0%
Title 2 Infrastructure and operating expenditure	**11,294,951**	**12,555,537**	**13,441,360**	**11.2%**	**11,745,000**	**-6.5%**	**11,979,000**	**2.0%**	**12,218,000**	**2.0%**	**12,462,000**	**2.0%**	**12,710,000**	**2.0%**
Rental of buildings and associated costs	1,506,611	2,189,097	2,006,000	45.3%	1,906,000	-12.9%	1,944,000	2.0%	1,983,000	2.0%	2,023,000	2.0%	2,063,000	2.0%
Information, communication technology and data processing	6,353,260	5,980,000	7,463,800	-5.9%	6,307,000	5.5%	6,433,000	2.0%	6,562,000	2.0%	6,693,000	2.0%	6,827,000	2.0%
Movable property and associated costs	111,727	461,000	335,000	312.6%	111,000	-75.9%	113,000	1.8%	115,000	1.8%	117,000	1.7%	119,000	1.7%
Current administrative expenditure	2,124,356	2,155,000	1,947,600	1.4%	2,149,000	-0.3%	2,192,000	2.0%	2,236,000	2.0%	2,281,000	2.0%	2,327,000	2.0%
Postage / Telecommunications	519,700	588,909	555,000	13.3%	486,000	-17.5%	496,000	2.1%	506,000	2.0%	516,000	2.0%	526,000	1.9%
Meeting expenses	417,598	858,000	790,960	105.5%	512,000	-40.3%	522,000	2.0%	532,000	1.9%	543,000	2.1%	554,000	2.0%
Running costs in connection with operational activities		14,531												
Information and publishing	10,000	40,000	34,000	300.0%	20,000	-50.0%	20,000	0.0%	20,000	0.0%	20,000	0.0%	20,000	0.0%
Of which Studies														
Other infrastructure and operating expenditure	251,699	269,000	309,000	6.9%	254,000	-5.6%	259,000	2.0%	264,000	1.9%	269,000	1.9%	274,000	1.9%
Total Title 3 & Title 4 Operational Expenditure	**668,300,604**	**966,806,409**	**916,637,443**	**44.7%**	**935,976,339**	**-3.2%**	**913,523,489**	**-2.4%**	**1,019,427,802**	**11.6%**	**907,955,453**	**-10.9%**	**813,934,438**	**-10.4%**
Title 3 Operational expenditure	**519,376,976**	**796,935,113**	**796,935,002**	**53.4%**	**766,306,339**	**-3.8%**	**801,793,489**	**4.6%**	**853,517,802**	**6.5%**	**751,685,453**	**-11.9%**	**661,424,438**	**-12.0%**
ITER construction including site preparation	455,846,018	728,535,113	728,535,002	59.8%	685,116,339	-6.0%	654,476,301	-4.5%	639,015,967	-2.4%	601,917,593	-5.8%	586,524,438	-2.6%
Technology for ITER and DEMO	6,969,333	6,000,000	6,000,000	-13.9%	12,000,000	100.0%	10,917,188	-9.0%	11,301,835	3.5%	13,167,860	16.5%	24,400,000	85.3%
Technology for Broader Approach	22,131,408	25,000,000	25,000,000	13.0%	25,000,000	0.0%	50,900,000	103.6%	111,700,000	119.4%	67,400,000	-39.7%	5,700,000	-91.5%
Technology for DONES	1,962,983	500,000	500,000	-74.5%	4,190,000	738.0%	50,300,000	1100.5%	55,500,000	10.3%	32,400,000	-41.6%	7,200,000	-77.8%
External Support Activities	28,870,321	30,500,000	30,500,000	5.6%	31,000,000	1.6%	26,200,000	-15.5%	27,000,000	3.1%	27,800,000	3.0%	28,600,000	2.9%
Other Operational Expenditure	3,596,913	6,400,000	6,400,000	77.9%	9,000,000	40.6%	9,000,000	0.0%	9,000,000	0.0%	9,000,000	0.0%	9,000,000	0.0%
Title 4 Earmaked Expenditure	**148,923,628**	**169,871,297**	**119,702,441**	**14.1%**	**169,670,000**	**-0.1%**	**111,730,000**	**-34.1%**	**165,910,000**	**48.5%**	**156,270,000**	**-5.8%**	**152,510,000**	**-2.4%**
ITER construction- from ITER host state contribution	140,929,621	97,916,569	97,916,569	-30.5%	169,670,000	73.3%	111,730,000	-34.1%	165,910,000	48.5%	156,270,000	-5.8%	152,510,000	-2.4%
Activities linked to ITER Organization	7,994,007	71,902,577	21,785,871	799.5%	p.m.		p.m.		p.m.		p.m.		p.m.	
Other Earmarked expenditure		52,150												
TOTAL EXPENDITURE	**746,048,381**	**1,049,736,775**	**999,567,920**	**40.7%**	**1,023,634,339**	**-2.5%**	**1,002,989,092**	**-2.0%**	**1,112,346,340**	**10.9%**	**1,005,031,067**	**-9.6%**	**915,492,288**	**-8.9%**

Note 1: The difference between the 2024 executed figures compared to the 2024 Annual Account is due to the decommitments that have taken place.
VAR: Variation compared to the previous budget

SPD_table 8 Expenditure in Commitment Appropriations for 2024-2030

2.5 Expenditure in Payment Appropriations for next five years

EXPENDITURE In Payment Appropriations (EUR)	2024	2025				2026		2027		2028		2029		2030	
	Executed (1)	Budget AM2	Budget AM2 (including admin carry over)	Forecast (including admin carry over)	VAR 2025/24	Budget	VAR 2026/25	Planned needs	VAR 2027/26	Planned needs	VAR 2028/27	Planned needs	VAR 2029/28	Planned needs	VAR 2030/29
Total Title 1 & Title 2 Administrative Expenditure	**75,995,621**	**82,930,366**	**89,259,829**	**89,259,940**	**9.1%**	**87,658,000**	**5.7%**	**89,465,602**	**2.1%**	**92,918,538**	**3.9%**	**97,075,614**	**4.5%**	**101,557,850**	**4.6%**
Title 1 Staff Expenditure	**65,829,062**	**70,374,829**	**72,585,331**	**71,699,618**	**6.9%**	**75,913,000**	**7.9%**	**77,486,602**	**2.1%**	**80,700,538**	**4.1%**	**84,613,614**	**4.8%**	**88,847,850**	**5.0%**
Salaries & allowances	58,336,383	61,756,477	62,085,906	61,522,946	5.9%	67,310,000	9.0%	68,535,602	1.8%	71,385,538	4.2%	74,915,614	4.9%	78,745,850	5.1%
Establishment plan posts	*45,085,523*	*47,774,477*	*47,854,477*	*47,476,343*	6.0%	*52,256,000*	9.4%	*52,900,832*	1.2%	*55,083,737*	4.1%	*57,828,458*	5.0%	*60,769,760*	5.1%
External staff	*13,250,860*	*13,982,000*	*14,231,429*	*14,046,603*	5.5%	*15,054,000*	7.7%	*15,634,771*	3.9%	*16,301,801*	4.3%	*17,087,156*	4.8%	*17,976,090*	5.2%
Expenditure relating to Staff recruitment	578,559	929,083	1,212,197	1,102,914	60.6%	873,000	-6.0%	890,000	1.9%	908,000	2.0%	926,000	2.0%	945,000	2.1%
Mission expenses	844,018	664,976	1,053,819	1,188,843	-21.2%	800,000	20.3%	816,000	2.0%	832,000	2.0%	849,000	2.0%	866,000	2.0%
Socio-medical infrastructure	535,705	882,500	1,106,474	1,106,474	64.7%	827,000	-6.3%	844,000	2.1%	861,000	2.0%	878,000	2.0%	896,000	2.1%
Training	795,853	818,000	1,451,602	1,451,602	2.8%	900,000	10.0%	918,000	2.0%	936,000	2.0%	955,000	2.0%	974,000	2.0%
External Services	559,061	1,150,257	1,330,932	1,330,675	105.7%	733,000	-36.3%	748,000	2.0%	763,000	2.0%	778,000	2.0%	794,000	2.1%
Receptions, events and representation	1,185	5,000	6,815	3,815	321.9%	5,000	0.0%	5,000	0.0%	5,000	0.0%	5,000	0.0%	5,000	0.0%
Social welfare	14,702	61,000	119,447	111,447	314.9%	71,000	16.4%	72,000	1.4%	73,000	1.4%	74,000	1.4%	75,000	1.4%
Other Staff related expenditure	4,163,596	4,107,536	4,218,139	3,880,903	-1.3%	4,394,000	7.0%	4,658,000	6.0%	4,937,000	6.0%	5,233,000	6.0%	5,547,000	6.0%
Title 2 Infrastructure and operating expenditure	**10,166,559**	**12,555,537**	**16,674,499**	**17,560,322**	**23.5%**	**11,745,000**	**-6.5%**	**11,979,000**	**2.0%**	**12,218,000**	**2.0%**	**12,462,000**	**2.0%**	**12,710,000**	**2.0%**
Rental of buildings and associated costs	1,477,777	2,189,097	2,568,868	2,385,771	48.1%	1,906,000	-12.9%	1,944,000	2.0%	1,983,000	2.0%	2,023,000	2.0%	2,063,000	2.0%
Information, communication technology and data processing	5,627,820	5,980,000	8,369,172	9,852,972	6.3%	6,307,000	5.5%	6,433,000	2.0%	6,562,000	2.0%	6,693,000	2.0%	6,827,000	2.0%
Movable property and associated costs	191,562	461,000	484,398	358,398	140.7%	111,000	-75.9%	113,000	1.8%	115,000	1.8%	117,000	1.7%	119,000	1.7%
Current administrative expenditure	1,853,622	2,155,000	2,949,617	2,742,217	16.3%	2,149,000	-0.3%	2,192,000	2.0%	2,236,000	2.0%	2,281,000	2.0%	2,327,000	2.0%
Postage / Telecommunications	392,688	588,909	849,456	815,547	50.0%	486,000	-17.5%	496,000	2.1%	506,000	2.0%	516,000	2.0%	526,000	1.9%
Meeting expenses	412,865	858,000	1,026,642	959,602	107.8%	512,000	-40.3%	522,000	2.0%	532,000	1.9%	543,000	2.1%	554,000	2.0%
Running costs in connection with operational activities		14,531	14,531												
Information and publishing	4,414	40,000	47,325	41,325	806.2%	20,000	-50.0%	20,000	0.0%	20,000	0.0%	20,000	0.0%	20,000	0.0%
Of which Studies															
Other infrastructure and operating expenditure	205,811	269,000	364,491	404,491	30.7%	254,000	-5.6%	259,000	2.0%	264,000	1.9%	269,000	1.9%	274,000	1.9%
Total Title 3 & Title 4 Operational Expenditure	**566,317,911**	**745,851,038**	**745,851,038**	**703,445,318**	**31.7%**	**999,600,000**	**34.0%**	**905,000,000**	**-9.5%**	**970,000,000**	**7.2%**	**980,000,000**	**1.0%**	**970,000,000**	**-1.0%**
Title 3 Operational expenditure	**498,305,196**	**564,494,114**	**564,494,114**	**564,494,003**	**13.3%**	**846,100,000**	**49.9%**	**737,400,000**	**-12.8%**	**814,000,000**	**10.4%**	**798,000,000**	**-2.0%**	**796,800,000**	**-0.2%**
ITER construction including site preparation	443,828,222	500,951,787	500,951,787	500,951,677	12.9%	773,200,000	54.3%	646,900,000	-16.3%	713,000,000	10.2%	662,000,000	-7.2%	726,800,000	9.8%
Technology for ITER and DEMO	2,659,296	6,138,400	6,138,400	6,138,400	130.8%	8,000,000	30.3%	9,000,000	12.5%	10,000,000	11.1%	12,000,000	20.0%	11,000,000	-8.3%
Technology for Broader approach	23,562,574	30,000,000	30,000,000	30,000,000	27.3%	24,900,000	-17.0%	43,000,000	72.7%	39,000,000	-9.3%	67,000,000	71.8%	26,000,000	-61.2%
Technology for DONES	1,600,000	315,000	315,000	315,000	-80.3%	1,000,000	217.5%	3,500,000	250.0%	10,000,000	185.7%	30,000,000	200.0%	6,000,000	-80.0%
External Support Activities	22,699,853	22,158,742	22,158,742	22,158,742	-2.4%	31,000,000	39.9%	26,000,000	-16.1%	33,000,000	26.9%	18,000,000	-45.5%	18,000,000	0.0%
Other Operational Expenditure	3,955,251	4,930,185	4,930,185	4,930,185	24.6%	8,000,000	62.3%	9,000,000	12.5%	9,000,000	0.0%	9,000,000	0.0%	9,000,000	0.0%
Title 4 Earmarked expenditure	**68,012,715**	**181,356,925**	**181,356,925**	**138,951,315**	**166.7%**	**153,500,000**	**-15.4%**	**167,600,000**	**9.2%**	**156,000,000**	**-6.9%**	**182,000,000**	**16.7%**	**173,200,000**	**-4.8%**
ITER construction- from ITER host state contribution	61,333,175	134,166,825	134,166,825	134,166,825	118.8%	153,500,000	14.4%	167,600,000	9.2%	156,000,000	-6.9%	182,000,000	16.7%	173,200,000	-4.8%
Activities linked to ITER Organization	6,342,699	47,137,949	47,137,949	4,784,490	643.2%	p.m.		p.m.		p.m.		p.m.		p.m.	
Other Earmarked expenditure	336,841	52,150	52,150												
TOTAL EXPENDITURE	**642,313,532**	**828,781,404**	**835,110,867**	**792,705,258**	**29.0%**	**1,087,258,000**	**31.2%**	**994,465,602**	**-8.5%**	**1,062,918,538**	**6.9%**	**1,077,075,614**	**1.3%**	**1,071,557,850**	**-0.5%**

(1) including execution on administrative carry over
VAR: Variation compared to the previous budget

SPD_table 9 Expenditure in Payment Appropriations for 2024-2030

HUMAN RESOURCE ESTIMATES PLAN

HUMAN RESOURCES – OUTLOOK FOR 2026-2030

Recruitment policy

The Fusion for Energy personnel structure consists of EU Officials, Temporary Agents and Contract Agents.

All F4E recruitments are consistent with article 53 of the Condition of Employment of Other Servants for Temporary Agents and article 80 of Condition of Employment of Other Servants for Contract Agents, as well as their Model Decision on the engagement and use of Temporary staff under article 2.f.

The tasks related to the operational mission of F4E require highly specialised profiles especially in the core areas related to the ITER and Broader Approach projects. This is also true for many of the staff working in the support functions as the project complexity and amount of capital involved are considerable.

EU Officials (FO) and Temporary Agents (TA) may be recruited under two function groups:

- Administrator (AD) profiles for senior and non-senior technical/legal/financial/procurement officers, contract managers, etc.
- Assistant (AST) profiles for senior and non-senior assistant positions.

Contract Agents (CA) work under the supervision of EU Officials and/or Temporary Agents and may be recruited under four function groups (from FGI to FGIV). However, F4E typically recruits the majority of its contract agents at the level of:

- FGII, who are in charge of clerical and secretarial tasks;
- FGIII, who are in charge of administrative and financial tasks in various support and operational units (e.g. Team Assistants); and
- FGIV, who are mainly specialized technical staff (e.g. Technical Support Officers, Project Management Support Officers) and qualified specialists in administrative fields (e.g. human resources, procurement, project management, legal, finance, etc.).

In terms of contract duration, F4E distinguishes between (1) long-term and (2) short-term employment contracts as follows:

1. Long-term employment

EU Officials (FO) – appointed by F4E from reserve lists or transferred from other EU institutions.

Temporary Agents (TA) - recruited on five-year renewable contracts which can be extended once for another period of five years and which are then followed by an indefinite duration contract if extended beyond the end of the first extension. The employment contract of the F4E Director falls under the short-term category as it cannot be extended more than once and is hence limited to a maximum period of two consecutive 5 year periods.

Contract Agents (CA) - recruited on a three-year renewable contract which can be extended once for a further period of four years, and which is then followed by an indefinite duration contract if extended beyond the end of the first extension.

Following the request from Fusion for Energy for staff reinforcement in the Strategic Resource Plan 2021-2027, the Commission has granted 10 new Temporary Agents positions and 15 conversions of Contract Agent posts into Temporary Agents posts. This reinforcement is effective from 2023 and must be followed by a reduction of 15 FTEs (9 Temporary Agents and 6 Contract Agents) before 2027. In addition, the Commission accepted the conversion of 5 CA FGII into 5 CA FGIII.

2. Atypical employment.

Following the agreement between F4E and the Commission to reinforce the F4E staff from 2023, out of the existing 31 short-term posts at the end of 2022, 16 were converted in long-term posts.

As part of the reinforcement agreement, F4E is to return 15 posts by 31 December 2026. The offset may come from the remaining 15 short-term posts.

3. Seconded National Experts

Fusion for Energy may also employ **Seconded National Experts** (SNE). These are seconded to F4E for an initial maximum period of two years, renewable for another period of two years and up to a total maximum period of four years. SNEs are paid by the seconding organisation (although F4E may reimburse the annual emoluments to the seconding organisation) and receive a daily allowance and monthly allowance paid for by F4E.

	Staff population and its evolution, overview of all categories of staff									
	Authorised under 2023 EU budget	Actually filled as of 31.12.2023	Authorised under 2024 EU budget	Actually filled as of 31.12.2024[1]	Requested in 2025	Envisaged in 2026	Envisaged in 2027	Envisaged in 2028	Envisaged in 2029	Envisaged in 2030
Subtotal FO/TA	305	272	305	283	305	305	296	296	296	296
Subtotal CA	155	157	155	155	155	155	149	149	149	149
Subtotal SNE	7	5	7	4	7	7	7	7	7	7
TOTAL	467	434	467	442	467	467	452	452	452	452

[1] Of which 1 job offer accepted for Temporary Agent and 6 job offers accepted for Contract Agent

SPD_table 10. Overview of staff population and its evolution

The staff numbers indicated in the above table for the years 2026-2030 are subject to the outcome of the respective budgetary procedures as well as the outcome of the discussions on the next Multiannual Financial Framework.

As part of the agreement with the Commission for the staff reinforcement from 1.01.2023, F4E has to return 15 posts (9 Temporary Agent and 6 Contract Agent) at the end of 2026.

For a more detailed view on staff see HR_table 01 of the annexes to HR REP.

Management of ESPs

1) DIFERENTIATION BETWEEN THE TASKS OF ESP AND F4E'S STAFF

Category	Internal Staff Member	External Service Provider (ESP)
Legal Status	Employee of F4E under EU Staff Regulations	External contractor, not covered by Staff Regulations
Managerial Control	F4E has full managerial control (tasks, working time, conduct, discipline)	F4E cannot give managerial instructions, only technical guidance allowed

Role in Decision-Making	Can make decisions independently and represent F4E	Cannot make substantial or independent decisions; only support F4E staff
Task Ownership	Can fully own and be responsible for core functions/tasks	Must not be responsible for core tasks; only support functions can be outsourced
Similarity of Tasks	May perform any task related to F4E's mission	Cannot perform tasks identical or too similar to those of F4E staff, especially core tasks
Representation of F4E	May represent F4E to third parties (e.g., tenders, negotiations)	Must not represent F4E vis-à-vis contractors, third parties, or appear to assume F4E identity
Accountability	Subject to internal reporting, appraisal, and disciplinary processes	Accountable only via contract; not subject to F4E disciplinary procedures
Task Clarity	Tasks may evolve with internal flexibility	Scope must be clearly defined in contract; cannot require ongoing managerial instructions
Location of Work	Works on F4E premises	Remote or hybrid preferred; on-site presence must be technically justified
Integration with Team	Fully integrated into F4E structures and workflows	Must remain clearly external; risk of assimilation must be avoided
Training and Oversight	F4E manages directly	A designated F4E staff member must act as the interface; ESPs require oversight to ensure boundaries
Duration of Engagement	Can be indefinite/permanent	Limited to a maximum of 5 consecutive years of service to F4E
Ethical & Moral Obligations	Bound by EU ethics, loyalty, and conduct standards	Not subject to same ethics rules; cannot be disciplined by F4E under staff regulations
Financial Tasks	Can commit F4E financially and access full systems	ESPs may only input data; cannot take financial responsibility or legal commitment
Hiring/Selection	Recruited via formal F4E/EU selection procedures	Chosen by contractor; F4E cannot conduct interviews beyond compliance, H&S, or security checks
Core missions	As defined by job description, mission for which F4E Staff is accountable towards F4E management	ESP not responsible /accountable for core mission, may support by providing some/ delivering some tasks

Key principles:

- ESP services must be clearly distinct from internal F4E functions to avoid legal and reputational risks.
- Assimilation risk is a red flag that may invalidate or risk the externalization process.
- ESP involvement is only support-based: responsibility, decision-making, and authority must remain with F4E staff.
- F4E must retain full control over strategy, quality, and final decisions (never the ESP).

2) TRAJECTORY FOR A REDUCTION OF THE ESPs NUMBER

In 2025, F4E has agreed with the Commission to maintain the number of ESPs at the end of 2025, at the level of the end of 2024. In addition, it has been agreed to reduce the ESP headcount by 10% from 2026.

For the years to come, F4E elaborated one trajectory based on a needs assessment. When comparing this with the trajectory resulting of reducing the ESP number of 2025 by 10%, we obtained the following gaps:

	End 2025	2026	2027	2028	2029	2030
Trajectory based on needs assessment	353	370	369	356	343	307
Trajectory with 10% reduction on 2024-2025 agreed level (from 2026 onwards)	329	296	296	296	296	296
% difference	-7%	-20%	-20%	-17%	-14%	-4%

In addition to the 10% reduction by end of 2026, the Commission has asked for further cuts which F4E will implement through a 10% decrease by the end of 2030.

	2025	2026	2027	2028	2029	2030	2031
ESP number	329	296	296	296	296	266	266

3) MEASURES TO MITIGATE THE RISK OF ASSIMILATION

In August 2024, the policy on External Support for F4E tasks was approved with the purpose of:

- defining which tasks may be externalised and which tasks may not be externalised because they are reserved for F4E staff by the Financial Regulation (Section 2.1.1)
- providing guidance on how to avoid assimilation of ESPs active on F4E premises (intra muros) with F4E staff (Sections 2.1.2, 2.3 and the Annex).

In order to address the risk of assimilation between internal staff and external service providers (ESPs), the policy ensures a clear distinction between their roles and responsibilities, explicitly prohibiting ESPs from performing missions similar to core F4E functions. It ensures that external service providers only offer support, without assuming decision-making authority or taking on responsibilities typically reserved for internal staff.

To further mitigate the risk of assimilation, F4E introduced a request and due diligence form, which helps assess whether outsourced tasks might overlap with internal roles. This proactive approach enables F4E to carefully monitor the nature of externalized services and ensure they remain within legal and operational boundaries.

As part of its strategy, F4E is also evaluating the possibility of transitioning certain services from the time-and-means model (currently supported by ESPs) to a deliverable-based model. This model externalizes specific services as clear, outcome-based deliverables with defined results, rather than ongoing support. These fully externalized services no longer fall under the ESP policy. By making this transition, F4E reduces the risk of assimilation, as the focus shifts from continuous ESP involvement to the delivery of concrete, time-bound outcomes.

At the same time, F4E recognizes that not all services can be fully externalized. As a result, both the time-and-means model (through ESPs) and the deliverable-based model will coexist, each serving distinct needs. To reinforce safeguards, F4E ensures that the scope of services provided by ESPs remains distinct and well-defined. The policy outlines that ESPs must not engage in activities that could lead to integration with internal teams, such as representing F4E in external negotiations or making substantial decisions. The request and due diligence form ensures that only tasks which do not blur the lines of internal responsibilities are outsourced. Through this dual approach, maintaining the clarity of externalized tasks and implementing a shift to deliverable-based models, F4E is able to leverage external expertise while safeguarding the integrity of its internal structures.
Finally, F4E is putting in place the following set of measures:

- The new Framework Contracts will clarify the adherence to the ESP policy in relation and prevention of risks by assessing the tasks to be done by ESPs towards the so called ‘core missions. They implement more risk mitigation measures against assimilation within contractual conditions such as deliverable-based approach, place of execution of the services, resources provided by F4E, etc.
- Interaction via a contract manager of the ESP employer who give the instructions directly to the ESPs.

- Separate and clearly identifiable emails.
- ESP are not invited in general staff activities.
- In meetings or events, their participation is clearly identified as a Third Party to F4E.
- Trainings given by LSU to promulgate the new policy provisions. This is an important step to improve F4E‘s management of contracts with ESP.
- Centralised contract management: regular meetings of F4E staff receiving services of ESP to share contract management best practices (management of deliverables, TAR, Task description amendment, implementation of penalties for service discontinuity, monthly verification of access (badge and/or IT account), etc
- Recovery of amounts in case of resources provided by F4E such as laptop, etc.

Section IV. Work Programme 2026

This Work Programme 2026 offers an overview of the objectives of the European Joint Undertaking for ITER and the Development of Fusion Energy (F4E) for 2026 and also identifies the financial decisions for the actions that are planned to be carried out in 2026 with the available budget.
It covers the work on both ITER and Broader Approach (BA) according to the tasks entrusted to the organisation.

The WP2026 objectives, the main milestones and the allocation of the human resources provide a good idea of the complexity of the tasks to be carried throughout the year and of the technical challenges they entail.

The table below provides a quick overview of the expected results in 2026 in terms of achieved credit for ITER in kind deliveries.

	Action	Baseline to end April 2025 (kIUA)	Achieved Credit (kIUA)	Released Credit (kIUA)	2026 (kIUA)
		751.08988	**752.78923**	**661.07043**	**29.57598**
Action 1	Magnets	185.87481	185.87481	185.87476	0.00000
Action 2	Vacuum Vessel	76.37094	76.37094	60.54947	8.49535
Action 3	In Vessel- Blanket	1.10000	0.50000	0.20000	1.00000
Action 4	In Vessel- Divertor	4.05050	3.97900	3.62000	1.58100
Action 5	Remote Handling	5.14000	5.14000	2.90000	0.55434
Action 6	Cryoplant and Fuel Cycle	34.40400	35.69499	31.72584	0.79826
Action 8	Heating & Current Drive	53.19443	54.16240	48.26240	2.26652
Action 9	Diagnostics	8.35893	8.35893	5.53539	3.36405
Action 11	Buildings and Site Equipment	382.59627	382.70816	322.40257	11.51646

* Action 7, Action 10 TBM, action 12 Cash Contributions, action 13 Technical Support Activities, action 15 DEMO_IFMIF-DONES and action 16 DEMO_TDP are not listed in the above table since no kIUA are associated to these actions. Action 14 Broader Approach uses kBAUA instead of kIUA (see full table under PP_table 7).

SPD_table 11[39]: Expected 2026 results in terms of discharge of Euratom obligations to ITER (status: end of April 2025)

[39] **Achieved credits** corresponds to milestones completed by F4E. **Released credits** corresponds to milestones for which F4E received the associated credits (in IUA) from IO.
Figures in column **Baseline** correspond to "Total credits initially planned to be achieved at the end of April 2025",
Figures in column **Achieved** Credit correspond to "Total achieved credits at the end of April 2025".
Figures in column **Released** Credit correspond to "Total released credits at the end of April 2025".
Figures in column **2025** correspond to the "Credits to be achieved in year 2025".

WP2026 Executive summary

The work programme 2026 is mostly focused on the following activities:

- **Magnets**: The Magnets Programme has delivered all its contribution to the ITER Project and the remaining activities consist in closing the contracts and handing over the ITER workshop (B55) to IO. In 2026, the Magnets Programme may finalise the remaining amendments and potential claims.
- **Vacuum Vessel:** All 3 remaining Vacuum Vessel sectors are scheduled to be delivered to the ITER site during 2026. If the need for final machining of the Field Joints is detected for S3 or for S2, the delivery of those sectors might be delayed accordingly, and especially S2 could possibly slip into 2027. Commitments will be signed with the main contractor for the transportation of the remaining sectors to Cadarache and for the eventual repairs of the field joints of Sector 3 and/or Sector 2, should the need arise. Furthermore, extensions, modifications or amendments to the existing contract and arrangements, including possible continuation of incentive schemes, may have to be signed. Also, Specific Contracts for support activities, like Inspectors, Documentation Support, Engineering and Analysis, Project Management support and Experts will continue to be issued depending on the project needs.
- **In-Vessel [Blanket System** and **Divertor]**:

  Blanket Systems

  During 2026 all the 4 In Vessel Projects will be in series production. For the Blanket First Wall, the two main workshop will focus the activities on the series of the panel structures and the final acceptance tests will be executed for the first panels of row 13. Tungsten qualification mock-ups will be produced and the first qualification tests will start.
  For the manifolds, the chimney pipes will enter in the series production after the Manufacturing Readiness Review completion and the materials production will be completed. Qualification activities for the bundles will be
  completed and the contracts for the upper ports and branch pipes will be signed.

  Divertor Systems:

  Divertor projects will enter into series production phase after the completion of the first of a kind Cassette Bodies and Inner Vertical Targets pre-series. Transportation to the Divertor Integration site may take place, depending on the IO needs for the Integration.
- **Remote Handling:** Final design activities will continue together with some manufacturing depending on the system. Divertor Remote Handling systems (DRHS) will continue the development on final design and derisking activities by internal work and launching new specific contracts under the main contractual tool for non-nuclear 1st assembly systems that is a multi-framework contract with reopening of competition (F4E-OMF-1609), supported in some areas by laboratory tests and prototyping.

  Cask & Plug RH systems (CPRHS) will continue final design development and derisking activities of Cask Platform for Divertor (CPD) by internal work and launching new specific contracts under F4E-OMF-1609, supported in some areas by laboratory tests and prototyping. Manufacturing of EPP/UPP cask platforms will continue followed by testing and delivery under existing and new contracts.
  Neutral Beam Remote Handling systems (NBRHS) pre-SRO related components (Monorail Crane System (MCS) and Top Lid Opening Mechanism (TLOM)) will continue preliminary and final design development and moving towards manufacturing through launching new specific contracts under F4E-OMF-1609 and existing contracts, supported in some areas by laboratory tests and prototyping.
  In-Vessel Viewing systems (IVVS) will focus on final design activities and moving towards manufacturing of First-of-a-kind (FOAK) system, by amending and releasing options in existing

specific contracts, supported in some areas by laboratory tests and prototyping.
Complementary RH technology activities will be implemented (design and tests) aiming at prototyping/manufacturing of first components (e.g. rad hard cameras, electronics and manipulator arms) to be integrated in the RH systems.

- **Cryoplant and Fuel Cycle**

  For Vacuum Pumping, Leak detection system will focus on the call for tender process for manufacturing, assembly, testing and delivery of the systems. Neutral Beam cryopumps preparation of procurement arrangement and procurement activities is planned.

  In the area of Cryoplant, commissioning for LN2 Plant and Auxiliary Systems components should be completed.

  For Tritium plant, Water detritiation system will focus on the activities to sign the contract for reception and purification system and preparation of procurement arrangement. Isotope separation system will focus on preparation of PA signature , design activities and tendering activities for helium refrigeration system contract.

  REMS (Radiation and Environmental Monitoring Systems) will focus on design activities, preparation of PA amendment signature and framework preparation activities for the qualification and procurement of monitors and samplers.

- **Heating and Current Drive**:

  For the Electron Cyclotron (EC) systems (SRO), commissioning and site acceptance tests at site of the power supplies will continue. The procurement of the EC Gyrotrons will focus mainly on the manufacturing design activities moving gradually towards manufacturing. In the area of the Electron Cyclotron Launchers, manufacturing activities for Ex-Vessel Waveguides and Upper Launcher system will also start subject to successful closure of the multiple Manufacturing Readiness Reviews. For the EC control system, activities will be mainly devoted to debugging the system on real operation and collecting data to prepare for the design of the system to be able to drive the full plant.

  For the Heating Neutral Beam (HNB) mechanical components, the procurement procedures for the Supply of the ITER NB magnetic shielding for the HNB1 and HNB2 including the Passive Magnetic Shield (PMS) and Acceleration, Correction and Compensation Coils (ACC Coils) will be completed. In parallel, design activities will proceed for some of the tools of HNB assembly pre-SRO phase up to final design review and manufacturing activities for the Neutral Beam Vessels will continue. For the Drift Ducts, the contract for the manufacturing design, manufacturing, testing and delivery will kick off. For the Absolute Valves, the IO/F4E joint procurement will start after completion of the feasibility studies and conceptual design.
  Meanwhile, assembly, factory testing and delivery of the last NB power supplies will proceed, and installation will progress. Finally, for the Neutral Beam Test Facility (NBTF), F4E plans to start the installation of Beam Line Components and Beam Source, and complete the development of MITICA diagnostics as well as MITICA CODAS, Interlocks and Safety via dedicated specific tasks.

- **Diagnostics**: The Diagnostics Programme will complete the delivery of all in-vessel cables to ITER. It will continue with the manufacturing of several SRO components, such as electrical feedthroughs and components of the low
  field side collective Thomson scattering system, visible/IR wide-angle viewing system, fission chambers and radial neutron cameras. It will also initiate the manufacturing of several more components, such as the bolometers cameras and pressure gauges. The closure of final design and manufacturing readiness of several other components is also foreseen. The tender process for the integration of systems into ITER ports under F4E responsibility will be ongoing.

- **Test Blanket Systems**: The activities will focus on the end of the preliminary design and the first step of the final design of the two TBM Sets, Ancillary Systems, Safety Studies, and Accidental

Analyses. The collaboration with EUROfusion and European Fusion Laboratories will continue to be reinforced, and the joint activities with Breeding Blanket will progress. The collaboration with Korean Domestic Agency will progress further in the Helium Cooled TBM system.
The codification of the database of EUROFER in RCC-MRx will continue. Some activities could be executed under the ITER TBM Project Team Funding scheme. The collaboration with EUROfusion will continue in the R&D area. The collaboration with Korean DA is expected to continue in the Helium Cooled TBM system.

- **Buildings and Site Equipment**: The focus of the Buildings works will be to continue progressing installation and testing activities in the Emergency Power Supply Buildings (B44, B46) and Medium Voltage Distribution Buildings (B45, B47); the Load Centers LC01, LC02, LC15 & LC16 and the Medium Voltage MV04, MV05 & MV06.

  In the scope of Building Services, to continue progressing on design activities for the Tritium building DT phase, and procurement of the equipment (HVAC, piping, electrical, instrumentation and control, fire detection / protection) necessary for the Tokamak, Diagnostic, and Tritium building installation schedule with IO contractors.

- **Cash contribution:** The activities in 2026 will focus on the commitment of the agreed cash contribution to ITER Organization for 2027.

- **Technical Support Activities** includes all Fusion Technology & Engineering unit domains activities: Mechanical Engineering, Project Engineering, CAD & Data Management, Materials, Manufacturing & Metrology, Engineering Analysis, Plasma Engineering & System Qualification, Electrical Engineering – I&C, RAMI & Assembly. Engineering procurement activities will aim at providing technical resources and services to ITER and Broader Approach & Roadmap Projects based on Programmes' priorities through the establishment of a broad range of Framework Contracts and related specific contracts.

  Technical Support Activities also include Transportation of all ITER Components from the port/airport of entry to ITER site with the aim to deliver the EU obligation for the transportation that covers as well other Domestic Agencies' components.

  Moreover, Technical Support Activities includes Safety & Quality activities which embrace as well Quality & Documentation Management and Occupational Health & Safety Coordination, Project Performance Management and Systems Integration and Performance activities, these last ones devoted to the systematic assessment of the Project Change Requests (PCRs) on the F4E in kind contributions (PAs) baselines while safeguarding EURATOM's investment in ITER as well as through the strengthen of configuration management processes inside the ITER Configuration Control Boards. The Systems Integration and Performance group will keep overseeing the coordination of technical activities across different Project Teams to ensure smooth integration of F4E in-kind contribution and to support clear understanding of project scope. Systems Integration and Performance activities include also the development and implementation of Systems Engineering practices, processes and tools and to support their correct deployment by the Project Teams.

  Other Technical Support Activities are Project Management and Control, Supply Chain operational support services activities, insurance and expenditures of administrative nature provided by digital transformation unit (DTU), corporate services and logistics, legal and financial services.
- **Broader Approach (BA)**: Concerning the Broader Approach (BA), the EU activities are carried out in the frame of the Agreement, concluded between Euratom and Japan, consisting of activities which complement the ITER project and accelerate the realisation of fusion energy towards DEMO. Activities in 2026 will be based on the Project Plans agreed by the BA Steering Committee in April 2025.

- **DEMO_IFMIF-DONES:** Concerning the F4E DONES Programme, the F4E activities will be carried out in the frame of the decision taken at the July 2024 GB and the work packages agreed between F4E and IFMIF-DONES España consortium. Activities in 2026 will be based on the DONES

Programme Plan expected to be agreed by the DONES Steering Committee in spring 2026 and the DONES Work Programme 2026 to be agreed at the DONES Steering Committee in fall 2025.

- **DEMO_Technology Development Programme (TDP):** According to F4E's renewed vision, F4E must play a fundamental role for supporting Fusion European Supply Chain and ensure its competitiveness in the promising fusion energy sector. This enhanced scope is to support both the technology needs of F4E projects, and thetechnological demands recognized in the roadmap to fusion power plants, mitigating risks associated with future European fusion endeavors. The Technology Development Programme aims to periodically identify and assess the fusion key enabling technologies (critical technologies mapping) and support European industry to develop and test those technological capacities for ITER, DONES, DEMO and other fusion projects of European interest, such as plasma heating and exhaust systems, advanced materials, tritium breeding and handling, remote handling, magnets, and diagnostics. The Technology Development Programme represents F4E's commitment to foster a culture of excellence and innovation. By focusing on key enabling technology development, we are ensuring that F4E remains at the cutting edge of fusion technology, contributing to a sustainable energy future and reinforcing Europe's leadership in this transformative field.

In addition, amendments, indexation and release of options of existing contracts in all areas will need to take place. Quality control inspection services will be necessary for the majority of the areas through available framework contracts.

See details of the Work Programme 2026 in the annexes to Work Programme.

Section V. Other information

1. Barcelona Office Building Policy

#	Building Name and type	Location	SURFACE AREA (in m²)			RENTAL CONTRACT					Host country (grant or support)	Building present value (€)
			Office space	non-office	Total	RENT (€/year)	Duration of the contract	Type	Breakout clause Y/N	Conditions attached to the breakout clause (if applicable)		
1	TDL B3	Barcelona	9000	750	9750	0 € *	Long term rent lease agreement until 2042 Short term rent lease agreements for additional space covered by the Host State as of 01/01/2022.		Y	no longer applicable	Rent paid by Spain for 9750 m2	N/A
TOTAL						0 €						

* Community charges are imputed to F4E budget.

SPD_table 12 . F4E building

In accordance with Article 7 of the Host Agreement signed between F4E and Spain (Host State), the latter shall provide F4E with permanent premises in Barcelona. Further to the negotiations to agree on such permanent solution the Spanish Government offered in April 2016 to establish F4E's permanent premises at its current location. This offer consisted of a long-term lease agreement for the current premises until the year 2042 including approximately 1 000m2 of additional space, for which the Host State would also cover the refurbishment costs. In May 2016, the long-term agreement was signed between Spain, the building owner, and F4E.

Following the mandate given by the GB to the Host State/F4E Working group in 2021, an agreement was reached on the terms of the refurbishment of F4E premises, which has been split into two phases:

a) the refurbishment of the additional office space allocated to F4E, which has been finished in 2023 and funded by the Host State;

b) to be followed by the refurbishment of all other floors assigned to F4E, including the ground floor. The cost of the refurbishment shall be borne by Spain (80%) and F4E (20%) as agreed at the December 2021 GB meeting.

As a result of the discussions of the Working Group, the Spanish authorities agreed to take charge of the rent (from 1 January 2022 and until the finalization of the refurbishment) of some additional office modules needed to secure space for the staff occupying the floors being refurbished.

During the year 2021 the CIEMAT (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas) carried out the refurbishment of one of the floors (12th floor) as agreed.

Early 2024 the Spanish authorities expressed their will to resume the discussions about the refurbishment of F4E's premises to fine tune the scope of the works and to allow them earmarking the necessary funds to initiate the works as soon as possible.

At present, the proposals under discussion are the following:

a) The Spanish authorities' commitment to build a dedicated facility for F4E is reaffirmed.

or

b) F4E assumes the responsibility for planning and executing the office renovations, releasing the Host State from these obligations, provided that the following commitments are met:

1. Approval of the estimated renovation cost (€11M approximately), to be covered proportionally

2. The Host State assumes the costs associated with hiring a dedicated team at F4E, architectural and technical design, procurement, financial and legal administration and project management.

3. Shared responsibility for hiring a LEED consultant to obtain LEED Gold certification for the project to improve the sustainability efficiency of F4E's premises.

4. Ministry of Science, Innovation and Universities supports in securing the budget and establishing the financial and legal mechanisms necessary for the timely transfer of funds according to project requirements.

To assist in decision-making, F4E has compiled a report that includes a technical-financial analysis, the scope, and the responsibility of the renovation works required for the permanent headquarters of F4E in Torre Diagonal Litoral B3 in Barcelona. The project entails the renovation of several floors (PB, 2, 8, 9, 10, 11, and 13), the disassembly of others (3 and 7), and the optimization of certain spaces.

Discussions are ongoing. It is unlikely that a final decision can be presented to the GB of December 2025.

2. Privileges and immunities

Joint undertaking privileges	Privileges granted to staff	
	Protocol of privileges and immunities / diplomatic status	Education / day care
As provided by the Host State, according to the Seat Agreement: - VAT exemptions - Building free of charge	Diplomatic status only for the Director, and the person appointed to replace him in his absence - The Protocol of Privileges and Immunities (PPI) applies to all staff - VAT reimbursements on goods and furniture during the first year. - Purchase of one motor vehicle without taxes. - Exemption of import tax registration for vehicles (if done through the Spanish Ministry of Foreign Affairs)	- No privilege granted regarding education/day care

SPD_table 13 . Privileges and Immunities

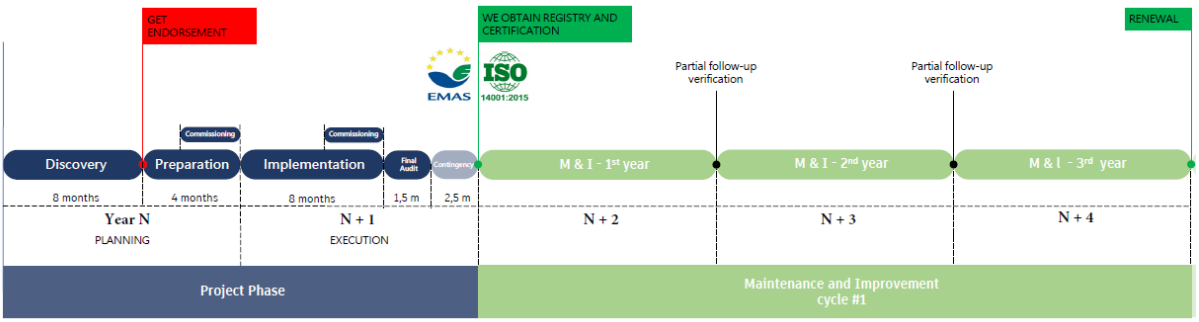
3. Environment management

The premises hosting F4E benefit from a LEED (Leadership in Energy and Environmental Design) certification that demonstrates the high environmental quality of the building. Such certification relies on the following criteria:

- Sustainable Sites: Eco-friendly site selection, stormwater management
- Water Efficiency: Low-flow fixtures, rainwater harvesting
- Energy & Atmosphere: Efficient HVAC, renewable energy, energy metering
- Materials & Resources: Recycled content, waste diversion, low-carbon materials
- Indoor Environmental Quality: Ventilation, daylighting, low-emission materials
- Innovation: Unique sustainable strategies
- Regional Priority: Credits tailored to local environmental priorities

Following the Host State's decision to fix F4E's permanent premises at its current location, F4E has explored some options to increase the sustainability of its premises including assessing the feasibility of an EMAS certification and ISO 14001.

The adoption of these standards would span approximately five years and would be executed in two phases. The initial two years would focus on the registry and certification processes for EMAS, followed by three years dedicated to the implementation of ISO 14001:2015. The adoption of these standards is however contingent upon the availability of appropriate resources. Experience from other organizations indicates that successful implementation of sustainability principles necessitates both dedicated resources and firm commitment.



As part of the refurbishment of the premises, F4E plans to engage a LEED Consultant to provide advice and guidance to the design and construction teams to ensure that the project meets the requirements for Platinum LEED certification, rather than the current Gold LEED certification. The successful implementation of this initiative depends on the Spanish authorities' ongoing commitment to advancing the refurbishment project.

Further measures are implemented in the daily management of F4E premises to minimise the carbon footprint. For example, the closure of the premises during extended holidays forms part of a broader sustainability strategy, aligned with practices observed by EU agencies and Commission building policies. The three-week closure in August 2024 had positive results, prompting an even longer closure

for 2025 to achieve greater savings. This initiative aims to reduce energy consumption associated with lighting, HVAC systems, and equipment, while also promoting work-life balance.

F4E is an active participant in the European Union Agencies Network (EUAN) and aligns with its objectives to enhance sustainability, environmental responsibility, and digital transformation through improved efficiency and knowledge-sharing. In line with the network, F4E is considering the global sustainable initiative 'The EU Agencies and JUs towards a Sustainable Future' as well as the 'Charter on GHG Reduction and Responsible Environmental Management'. To support these goals, F4E engaged Tzvetan Zafirov from the European Institute of Innovation and Technology during the first quarter of 2025 to assess the conditions necessary for implementing a draft sustainability strategy within the Agency.

Since mid-2022, F4E has started to gradually include sustainability considerations in its procurement procedures (technical specifications, selection and award criteria). Also, in its contract clauses, F4E is starting to embed environmental and social responsibility obligations for its supply chain. Examples of this are clauses ensuring diversity and inclusion in the workforce, minimizing waste, reducing CO2 emissions, and adopting standards such as ISO 14001. These initiatives aim at driving F4E suppliers to adopt more sustainable practices. The benefits of this include reduced environmental impact, enhanced social responsibility, improved cost efficiency and alignment with EU sustainability goals. In addition, it fosters innovation, reliability and long-term value creation ensuring that ITER's complex deliveries are managed sustainably and effectively.

F4E organised the "F4E Supply Chain Sustainability Day" on 1st October 2025 bringing F4E together with its supply chain to review the results of the F4E Sustainability Survey, share best practices regarding sustainability in general and to collaboratively exchange ideas to further enhance environmental, social, and economic sustainability of F4E requirements and procurement criteria. The day emphasized that sustainability requirements and criteria are not just to be complied with but are a strategic opportunity for the F4E supply chain to increase their competitiveness and resilience in the fusion market. The event featured an expert keynote speaker, participatory workshops, and networking opportunities.

4. Strategy for achieving efficiency gains and synergies

F4E Improvement framework

F4E manages its corporate improvement projects through the direction of its leadership team, monitoring the improvement results and proposing corrective actions if needed.

The F4E Improvement framework defines the frame of activities to enhance performance and has seven principles: Continual Improvement approach; Business Process Management (implementation and monitoring), Improvement Methodology, Annual Focus on Areas of Improvement, Leadership Involvement on Improvement, Internal Control Strategy and Continuous Improvement Action Plan (BPM Rolling Plan).

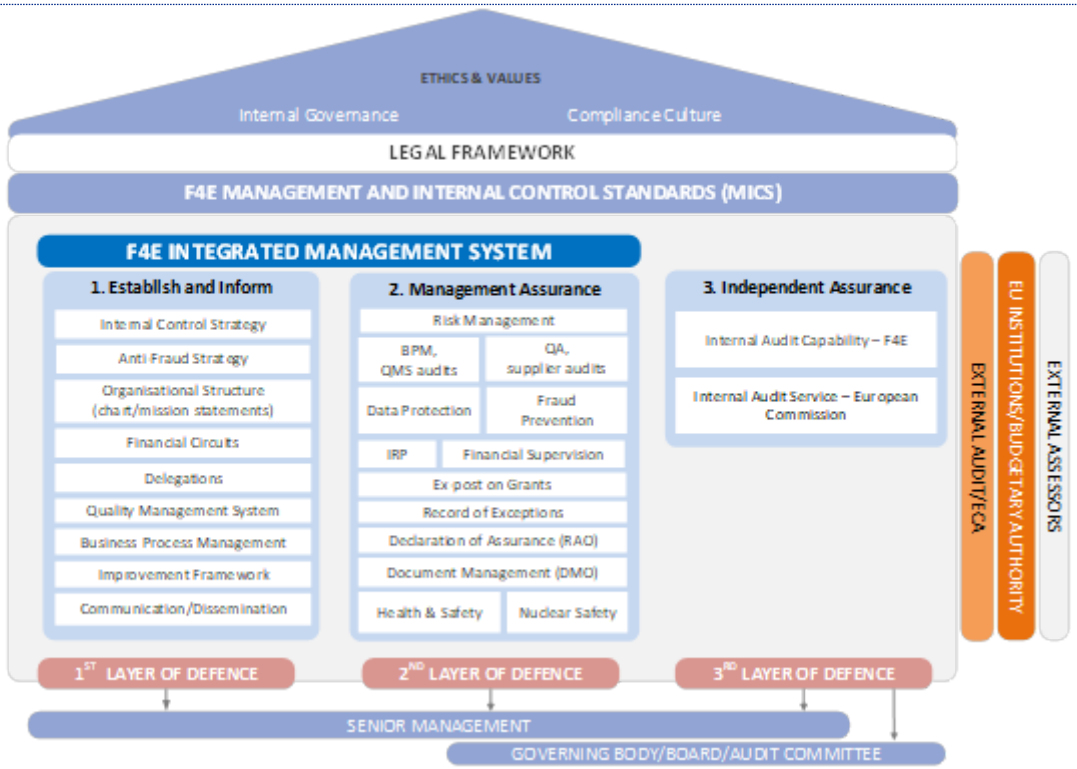
These principles ensure the standardisation of the system implemented to enhance performance in F4E, to ensure compliance with the Internal Control framework and overall maintenance of the Integrated Management System.

Continual improvement is achieved through the use of the Quality policy, BPM policy, audit results, data analysis, stakeholders' feedback, continuous training, corrective and preventive actions and the leadership monitoring.

Continual Improvement approach in F4E is based on the following concepts: Improvement Inputs; Evidence-based decision, Activity Owner validation; Learning and Development Culture; Improvement is made in measurable projects; and Results must be disseminated.

F4E, in the context of its reorganisation is setting up a new governance structure, focused on organisational excellence and is in parallel focusing on simplification of working procedures and documentation.

5. Strategy for organisational management and internal control systems including their anti-fraud strategy



The Internal Control System comprising F4E's Integrated Management System is based on the 3 layers of defence of the IIA (Institute of Internal Auditors) and combines the two control environments within which F4E operates - the ITER-wide quality system which is intended to ensure the performance of ITER and the compliance with the nuclear safety requirements, and the European Commission Internal Control Framework which is inspired in the internationally recognised COSO framework.

The F4E Management and Internal Control Standards (MICS) are central to the assessment of the effectiveness of this system. F4E makes an Annual Assessment, in line with the EC Internal Control Framework and methodology which determines the functioning of its F4E's 20 MICS covering the five components: control environment, risk assessment, including risks of fraud, control activities, information and communication and monitoring activities.

F4E identifies deficiencies which affect the effective functioning of any of the MICS and adopts a corrective action plan to ensure follow-up. The main elements supporting the assurance of the F4E Director are the following:

- *1st LAYER (1st LINE OF DEFENCE) ESTABLISH AND INFORM*: Internal controls as defined by F4E's Management for application by all F4E Staff and providing adequate training and raising awareness.
- *2nd LAYER (2nd LINE OF DEFENCE) MANAGEMENT ASSURANCE*: The Management (in its role of 1st line of defence) puts in place the 2nd layer of defence by establishing risk management and assurance functions to help build and/or monitor the first line-of-defence controls.

- *3rd LAYER (3rd LINE OF DEFENCE) INDEPENDENT ASSURANCE* The internal auditor (IAS) and the IAC, who provide the governance bodies and the Leadership Team with risk-based and objective assurance, advice and insight and help the Joint Undertaking to accomplish its objectives by bringing a systematic, disciplined approach in order to evaluate and improve the effectiveness of risk management, control and governance processes.

The F4E Internal Control Strategy defines internal control roles and responsibilities, and outlines how the Internal Control System provides reasonable assurance of achieving the following objectives (based on Article 30 of the F4E FR):

1.1. effectiveness, efficiency and economy of operations;

1.2. reliability of reporting;

1.3. safeguarding of assets and information;

1.4. prevention, detection, correction and follow-up of fraud and irregularities;

1.5. adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multi-annual character of programmes as well as the nature of the payments concerned.

The Anti-Fraud (OLAF) and Ethics Officer promoted and coordinated the implementation of the F4E Anti-Fraud Strategy and the accompanying Anti-Fraud Action Plan. The current Strategy adopted in 2023 runs for four years and following the new Commission 2023 revision of its Anti-Fraud Strategy Action Plan, includes actions to strengthen cooperation with OLAF and the Commission.

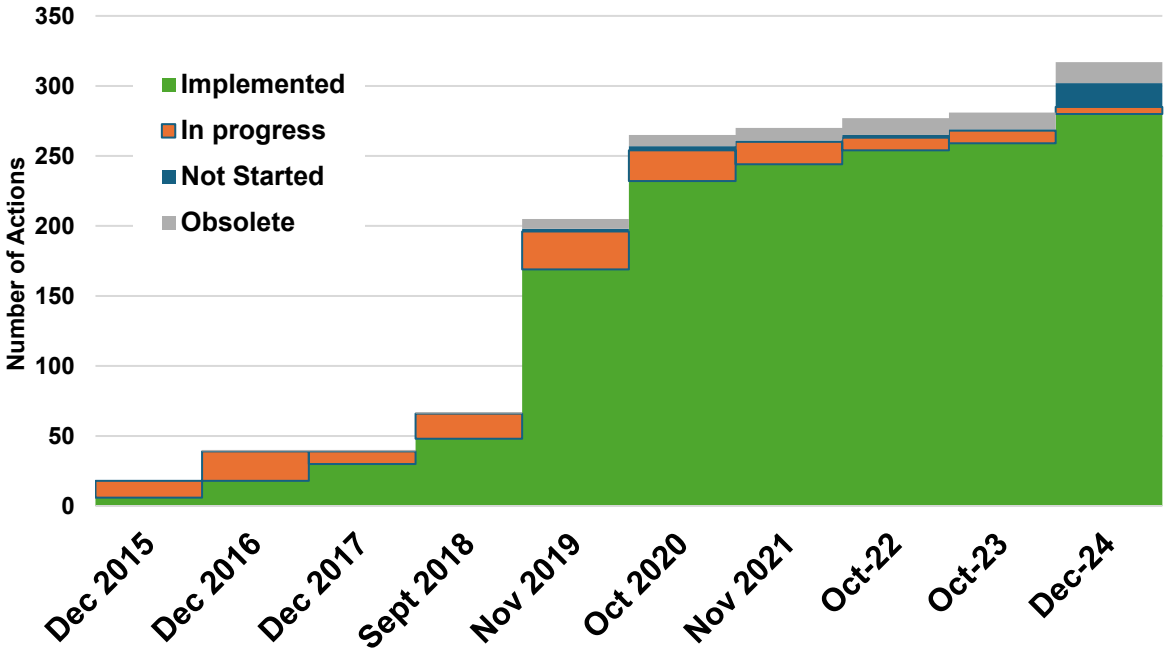
The Anti-Fraud and Ethics Officer monitors the execution of the actions foreseen in the Anti-Fraud Action Plan for the year under review by means of targeted communications, individual meetings with action owners as well as transversal compliance-oriented meetings and meetings of the Audit Committee.

The implementation of actions arising from audit recommendations, corporate risk actions and other sources as well as the Anti-fraud Action Plan is systematically monitored through a dedicated database (RAPID) which details the scope of each action, the action owner, and the target date for its implementation.

6. Evaluations

The Corporate Action Plans respond to recommendations from Annual Assessments and Ad-Hoc Groups of the Governing Bodies, Governing Board Actions and also own-initiative actions.

During the period until end-2024, the total number of actions increased to 317, due to the new actions in response to the 11th Annual Assessment of F4E. The total percentage level of implemented actions was 93%.



SPD_figure 13: Evolution of the implementation of F4E's corporate level actions

The April 2018 Council Conclusions on the reformed ITER project state that "the independent annual assessments of the progress of ITER have to be continued and intensified with a focus on the performance and project management, including cost containment, schedule project control as well as risk management".

At the F4E's Governing Board meeting in December 2023, it was agreed that the European Commission mid-term (interim) evaluation of F4E would be in line with the scope of the annual assessment of F4E requested by the Council of the EU and should therefore be considered to constitute the 12th annual assessment of F4E to be conducted in 2024. The conclusions of this evaluation has been transmitted to the Governing Board and subsequently published on the Commission's website on 25 January 2025[40]

In December 2024, the Governing Board approved the Terms of Reference for the 13th Annual Assessment to be performed in 2025, with a focus on the economic and industrial impact of F4E's activities in alignment with evolving EU industrial policy, providing evidence to support the next Multiannual Financial Framework (MFF) negotiations.

Regarding the status of actions in response to the 11th assessment recommendations, all actions within F4E's scope of responsibility have been fully implemented. The remaining actions are under the responsibility of IO.

[40] INTERIM EVALUATION STUDY OF THE IMPLEMENTATION OF THE COUNCIL DECISION (Euratom) 2021/281 amending decision 2007/198/Euratom establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it.

7. Strategy for cooperation with third countries and/or international organisations

The F4E Statutes endow F4E with a prominent international role and all F4E's objectives have an international dimension:

1. *International Cooperation Projects*

a. ITER

F4E has been created with the main objective to provide Euratom's contribution to the ITER project in an international collaboration to demonstrate the scientific and technological feasibility of fusion energy for peaceful purposes. Euratom has formally designated F4E as the EU domestic agency for ITER under the ITER International Agreement.[41]

While Euratom is formally represented at the ITER Governance level by the European Commission (DG-ENER), the further implementation of Euratom's contribution to ITER is realised through F4E's cooperation with the ITER International Organization (IO) as well as with bodies nominated by the ITER parties, the domestic agencies of the other ITER partners, China, India, Japan, Korea, Russia and the United States.

b. Broader Approach

The second main objective the Statutes entrust to F4E is to carry out the Broader Approach activities with Japan (https://fusionforenergy.europa.eu/other-projects/). The purpose of the Agreement between Euratom and Japan for the Joint Implementation of the Broader Approach Activities in the Field of Fusion Energy Research[42] is to provide a framework for activities aiming to complement the ITER project and accelerate the development of fusion energy. F4E has been formally designated by Euratom as the implementing agency to discharge its commitments for the implementation of the Broader Approach Activities vis-à-vis Japan. In this capacity, F4E cooperates with Japan on 3 projects:

a) IFMIF/EVEDA: In order to find and qualify new advanced materials for the plasma-facing components in future fusion reactors will use a fusion neutron source test facility "International Fusion Materials Irradiation Facility" (IFMIF). The Engineering Design and Engineering Validation Activities (EVEDA) aim to produce an integrated engineering design of the IFMIF plant as well as the data necessary for decisions on the construction, operation, exploitation and decommissioning of the future Fusion Neutron Source. (See PP_table 8. Multiannual objectives IFMIF/EVEDA for further details)

b) JT-60SA: In order to support the operation of ITER as well as the investigation into how to optimise the operation of fusion power plants after ITER by addressing key physics issues, project JT60SA comprises the upgrade of the JT-60 Tokamak experimental equipment owned by the Japanese Implementing Agency to an advanced superconducting Tokamak and its subsequent exploitation. (See PP_table 7. Multiannual objectives JT-60SA for further details)

[41] Agreement on the Establishment of the ITER International Fusion Energy Organization for the Joint Implementation of the ITER Project, 21 November 2006.

[42] Cf. Council Decision 2007/614/Euratom of 30 January 2007 concerning the conclusion, by the Commission, of the 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.

c) IFERC: The International Fusion Energy Research Centre supports the other joint fusion projects (ITER, IFMIF/EVEDA, JT60-SA) and contributes to the development of the next generation of fusion devices after ITER, such as DEMO. (See PP_table 9. Multiannual objectives IFERC for futher details).

The Broader Approach Steering Committee can authorise collaborations with third parties and BA Projects at research institution level following the domestic approval procedures of each party.

c. DEMO_IFMIF-DONES.

In order to bring fusion energy research to the threshold of a prototype fusion reactor opening the way to its industrial and commercial exploitation, different conceptual DEMO projects are under consideration by all ITER Members (China, EU, India, Japan, Korea, Russia and, to a lesser extent, the United States).

The third main objective the Statutes entrust to F4E is to prepare and coordinate a programme of activities in preparation for the construction of a demonstration fusion reactor (DEMO) and related facilities including the international fusion materials irradiation facility (IFMIF).

The International Fusion Materials Irradiation Facility (IFMIF) is a projected materials test facility in which candidate materials for the use in an energy producing fusion reactor can be fully qualified. The IFMIF project was started in 1994 as an international scientific research program, carried out by Japan, the European Union, the United States and Russia, and managed by the International Energy Agency. Since 2007, it has been pursued by Japan and F4E under the Broader Approach Agreement in the field of fusion energy research (see Section 1.b above), through the IFMIF/EVEDA project, which conducts Engineering Validation and Engineering Design Activities for IFMIF.

The IFMIF-DONES (Demo Oriented NEutron Source) facility is a simplified version of IFMIF with one particle accelerator instead of two. The objective of the DONES Programme is to establish a neutron irradiation facility capable of testing and qualifying materials for use in future fusion power plants, such as DEMO. This programme will be executed within a multilateral institutional collaboration, involving the participation of third countries, including Japan, to collectively achieve the Construction, Commissioning, and Operation Phases of the DONES Programme

d. TBM

F4E's participation in the Test Breeding Modules (TBM) Programme falls under F4E's first statutory objective (see section 1.a above). The TBM Programme, however, has some particular features.

The Programme aims to test tritium breeding module concepts in the ITER reactor, so that future (DEMO) reactor could achieve tritium self-sufficiency, the extraction of high grade heat and electricity production. TBM are formally not part of the ITER facilities. The Programme is covered by the ITER Agreement as "*any other activities that are necessary to achieve its* [i.e. the ITER Organization's] *purpose*" (Article 3.1.d of the ITER Agreement).

European collaboration in the TBM Programme is based on the detailed TBM Arrangements signed between F4E and the ITER Organization. The implementation of the TBM activities involves F4E cooperation with the European fusion laboratories participating in the EUROfusion consortium.

F4E entered also into a long-term partnership with the Korean Domestic Agency (ITER Korea) for the joint supply of the Helium Cooled Ceramic Pebble (HCCP) Test Blanket Module System for the operation of the ITER machine. Following the signature of the partnership arrangement between F4E and ITER Korea, both parties concluded a trilateral TBM Arrangement with the ITER Organization. (See PP_table 10. Multiannual objectives of the TBM project for further details).

e. CERN

In 2025, Fusion for Energy signed an international agreement with CERN regarding the "Design, Manufacturing, and Support for the Conditioning of 10 Radio Frequency Power Couplers for the linear IFMIF Prototype Accelerator (LIPAc)." This agreement marks a significant step in our collaboration with CERN. Furthermore, Fusion for Energy and CERN are currently considering entering into a Framework Collaboration Agreement. This prospective agreement aims to extend F4E-CERN collaboration to additional areas, thereby strengthening our partnership and broadening the scope of our joint efforts.

f. Validation process

The objectives of F4E cooperation with third countries and international organisations are clearly defined in its Statutes as outlined above.[45] F4E cooperation with these international partners takes place within the boundaries set out in the F4E Statutes and is enshrined in international agreements and arrangements which translate the F4E objectives set out in its Statutes and define the details of cooperation with F4E's international partners.

All F4E collaboration international agreements and arrangements require the formal approval by the F4E Governing Board in accordance with Article 6(3)(n) of the F4E Statutes: *"The Governing Board shall … approve the conclusion of agreements or arrangements regarding cooperation with third countries and with institutions, undertakings or persons of third countries or with international organisations with the exception of the procurement arrangements with the ITER IO."* [46]

The only exceptions are the so-called Procurement Arrangements, between F4E and the ITER IO for the ITER project, and between F4E and QST for BA projects, which spell out the details of the technical implementation of the Euratom contribution to the ITER Project and the Broader Approach Projects, as pre-defined in the ITER International Agreement and the Broader Approach Agreement respectively.

Furthermore, the F4E Governing Board confirmed the power of the F4E Director to conclude any arrangement on additional cash compensation with the ITER Organization, which modifies a Procurement Arrangement between the ITER Organization and Fusion for Energy. The power is subject to specific financial thresholds.

In all other cases, prior F4E Governing Board approval is mandatory before F4E enters into international obligations.

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[45] Cf. Article 3 F4E Statutes annexed to the Decision of the Council of the EU Council Decision of 27 March 2007 establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it.

[46] The Governing Board delegated approval of the non-strategic international cooperation agreements to the Administration and Management Committee.

In this context, it should be kept in mind that Euratom has *"the right to make a reservation to a decision by the Governing Board, when it considers that that decision may be contrary to Community law, including notably its international commitments arising from the ITER International Agreement. Euratom shall give due legal justification to such reservation. In this case the decision shall be suspended and the matter referred to the Commission for a review of its legality, together with the view of the Governing Board, including representatives of Euratom, must be consulted."*

Consequently, the mechanism requiring prior Governing Board approval of international agreements and arrangements concluded by F4E constitutes a safeguard ensuring that F4E remains within the mandate and institutional framework defined in its Statutes and does not appear as representing the European Union beyond its statutory remit.

2. Relations with Switzerland

Taking into account that Switzerland concluded cooperation agreement with Euratom in the field of controlled nuclear fusion that associates its respective research programmes with the Euratom programme (Euratom Research and Training programme) with provisional effect as of 01/01/2026 and expressed its wish to become Member of F4E, Switzerland will re-join F4E as from 01/01/2026. Switzerland ceased being an F4E member in December 2020, when the previous cooperation agreement in the field of controlled nuclear fusion expired. In 2022, F4E concluded an agreement with the Ecole Polytechnique Fédérale de Lausanne regarding scientific and technological co-operation.

3. Relations with the Russian Federation following the Russian aggression in Ukraine

The EU has condemned the Russian Federation's military aggression of Ukraine in violation of international law and has responded with restrictive measures, severing most ties with the Russian Federation, including in the area of research and innovation.

Against this background, F4E is working in close cooperation with Euratom (represented by the Commission) to determine the course of action regarding the last of the remaining agreements with Russian entities, namely a trilateral, binding Memorandum of Understanding between the ITER Organization, Russian Domestic Agency and Fusion for Energy on Port Plug Test Facility. Equally, F4E is refraining from entering into any new agreements with Russian entities and from any direct contacts with representatives of the Russian administration.

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List of Acronyms

ASN	Autorité de Sûreté Nucléaire (French Nuclear Regulator)
BA	Broader Approach
BAUA[47]	Broader Approach Unit of Account.
BA SC	Broader Approach Steering Committee
C-O	Close-Out
CD	Current Drive
CDR	Conceptual Design Review
CQMS	Common Quality Management System
CODAC	Control, Data Access and Communication
COSO	Internal Control standard
CXRS	Core plasma charge-exchange Recombination Spectroscopy
DA	Domestic Agency
DEL	Delivery
DEMO	Demonstration fusion reactor
DIV	Divertor
DT	Deuterium Tritium
DWS	Detailed Work Schedule
EAC	Estimate at Completion
EB	Electron Beam
EC	Electron Cyclotron
EC UL	Electron Cyclotron Upper Launcher
ECH	Electron Cyclotron Heating
Euratom	The European Atomic Energy Community
F4E	Fusion for Energy
FAT	Factory Acceptance Test
FDR	Final Design Review
FP	First Plasma
FW	First Wall
GB	Governing Board
HCLL	Helium Cooled Lithium-Lead
HCPB	Helium Cooled Pebble Bed
H&CD	Heating & Current Drive
HHF	High Heat Flux
HV	High Voltage
HVD	High Voltage Deck
IC	Ion Cyclotron or ITER Council
I&C	Instrumentation and Control
ICH	Ion Cyclotron Heating
IFERC	International Fusion Energy Research Center

[47] 1,000 BAUA equal to EUR 678,000 (value 5 May 2005).

IFMIF	International Fusion Materials Irradiation Facility
INB	Installation Nucleaire de Base
IO	ITER Organization
IR	Infra-Red
IRS	Internal Reporting system
ISEPS	Ion Source and Extraction Power Supplies
ISS	Isotope Separation System
ITA	ITER Task Agreement
ITER	International Thermonuclear Experimental Reactor
IUA[48]	ITER Unit of Account.
IVT	Inner Vertical Target
IVVS	In-Vessel Viewing System
KPI	Key Performance Indicator
LIPAc	Linear IFMIF Prototype Accelerator
MV	Medium Voltage
NB	Neutral Beam
NBI	Neutral Beam Injector
NBTF	Neutral Beam Test Facility
PA	Procurement Arrangement
PBS	Product Breakdown Structure
PCR	Project Change Request
PDR	Preliminary Design Review
PE	Plasma Engineering
PF	Poloidal Field
PIC	Protection Important Components
PM	Project Management
PMP	Project Management Plan
PP	Project Plan
QA	Quality Assurance
QC	Quality Control
QST	Japanese Implementing Agency
R&D	Research & Development
REC	Remote Experimentation Centre
REM	Radiological Environmental Monitoring
RF	Radio Frequency
RFCU	Radio Frequency Control Unit
RFE	Ready For Equipment (when access is granted to IO)
RFIOC	Ready for IO Contractors
RFOC	Ready for other contractors (when civil work is complete enough to enable access to other contractors)
RFQ	Radio Frequency Quadrupole
RH	Remote Handling

[48] In 2008, the IUA exchange rate approved by the ITER Council corresponded to EUR 1498.16.

RWM	Resistive Wall Mode
SAT	Site Acceptance Test
SC	Specific Contract
SME	Small Medium Entreprise
SR2FP	Straight Road to First Plasma
SRF	Superconducting Radio Frequency
SRO	Start Researching Operations
SS	Steady State
STP	Satellite Tokamak Programme
STIK	Short Term In-Kind
TBM	Test Blanket Module (Tritium breeding blanket)
TDP	Technology Development Programme
TF	Toroidal Field
TFC	Toroidal Field Coils
TO	Technical Officer
VAR	Variation
VC	Voluntarily Contribution
VCDIS	Voluntarily Contribution Design Institutions
Vis	Visible
VV	Vacuum Vessel
WAVS	Wide Angle Viewing System
WBS	Work Breakdown Structure
WDS	Water Detritiation System
WP	Work Programme

SPD2026_ANNEXES TO PROJECT PLAN

The ITER Procurement Arrangements and their status

This table shows the credit value that F4E should have earned up to end of April 2025 (baseline) against the credit that F4E has actually achieved and the credit that the IO has already released to F4E as acknowledgement of the achieved milestones F4E has formally declared as such to the IO. It provides all details per PA with the yearly forecast credit up to end 2030 and the cumulative value for the years beyond.

Once a CAS milestone is achieved, before F4E can formally declare its achievement to the IO, all necessary data, reports and other information has to be collected from the supplier and then submitted to the IO. This information is linked to the delivery by the supplier of all the necessary contractual deliverables that have to be formally approved by F4E before being sent to the IO. Then, it will be the turn of the IO to revise and validate the whole set of documents provided in order to confirm such achievement and release the credit through its SAP tool.
For this reason, the process can last some months.

Action	PA	Baseline to end April 2025 (kIUA)	Achieved Credit (kIUA)	Released Credit (kIUA)	2026	2027	2028	2029	2030	2031+
		751.08988	752.78923	661.41925	29.57598	31.83994	33.97912	28.07897	62.06931	172.27673
Action 1 Magnets	PA 1.1.P1A.EU.01 Procurement of Toroidal Field Magnets	89.79600	89.79600	89.79595	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 1.1.P2A.EU.01 Pre Compression Rings	0.60000	0.60000	0.60000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 1.1.P3A-B.EU.01 Poloidal Field Magnets 2,3,4,5,6	40.86000	40.86000	40.86000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 1.1.P6A.EU.01 Toroidal Field Conductors	43.39000	43.39000	43.39000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 1.1.P6C.EU.01 Poloidal Field Conductors	11.22881	11.22881	11.22881	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Action 2 Vacuum Vessel	PA 1.5.P1A.EU.01 Vacuum Vessel - Main Vessel	76.37094	76.37094	60.54947	8.49535	0.00000	0.00000	0.00000	0.00000	0.00000
Action 3 In Vessel- Blanket	PA 1.6.P1A.EU.01 Blanket First Wall	0.10000	0.10000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000	38.97568
	PA 1.6.P6.EU.01 Blanket Manifolds	1.00000	0.40000	0.20000	0.00000	0.20000	0.00000	0.00000	1.48600	1.94301
Action 4 In Vessel- Divertor	PA 1.7.P1.EU.01 Cassette Body	0.66300	0.59650	0.53000	0.59850	1.33950	0.48450	0.75050	0.74100	0.46550
	PA 1.7.P2B.EU.01 Inner Vertical Target	3.38750	3.38250	3.09000	0.98250	2.28250	2.75000	3.02500	3.30000	3.85000
Action 5 Remote Handling	PA 2.3.P2.EU.01 Divertor Remote Handling System	1.40000	1.40000	0.00000	0.00000	0.00000	0.62000	0.50000	0.00000	7.30000

	PA 2.3.P3.EU.01 Cask and Plug Remote Handling System	0.80000	0.80000	0.80000	0.55434	0.35200	0.80000	0.00000	2.52000	12.01134
	PA 2.3.P5.EU.01 Neutral Beam Remote Handling System	0.46000	0.46000	0.30000	0.00000	0.51000	1.24000	0.00000	0.50000	3.29000
	PA 5.7.P1.EU.01 In-Vessel Viewing System	2.48000	2.48000	1.80000	0.00000	1.58000	0.00000	1.00000	0.00000	2.37313
Action 6 Cryoplant and Fuel Cycle	PA 3.1.P1.EU.03 Torus and Cryostat Cryopumps	3.47891	4.76990	3.47891	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 3.1.P1.EU.04 Neutral Beam Cryopumps	1.20000	1.20000	1.20000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 3.1.P1.EU.01 Warm Regeneration Lines	0.20000	0.20000	0.20000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 3.1.P1.EU.02 Front End Cryopump Distribution Cold Valve Boxes and Warm Regeneration Box	0.61199	0.61199	0.61199	0.14069	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 3.1.P3.EU.01 Primary and Cryostat Leak Detection System	0.70000	0.70000	0.00000	0.00000	0.00000	0.00000	2.30000	0.00000	0.00000
	PA 3.1.P3.EU.01 Primary and Cryostat Leak Localisation System (phase II - 1st Amendment)	0.68500	0.68500	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 3.2.P5.EU.01 Water Detritiation System - Tanks	3.25200	3.25200	3.25200	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 3.4.P1.EU.01 Liquid Nitrogen Plant and Auxiliary Systems	24.27610	24.27610	22.98294	0.65757	0.00000	0.00000	0.00000	0.00000	0.00000
Action 8 Heating & Current Drive	PA 5.2.P1B.EU.02 Electron Cyclotron Upper Launcher	1.27943	0.74740	0.74740	2.26652	2.02980	3.04121	2.99742	2.65388	0.00000
	PA 5.2.P3.EU.01 Electron Cyclotron Gyrotrons	0.00000	0.00000	0.00000	0.00000	1.53502	2.33502	2.03502	0.80005	0.00000
	PA 5.2.P4.EU.01 Electron Cyclotron High Voltage Power Supply	10.46500	10.46500	10.46500	0.00000	1.87872	0.00000	0.00000	0.00000	0.00000
	PA 5.2.P1B.EU.01 Electron Cyclotron Control System	1.10000	1.10000	1.00000	0.00000	0.00000	0.00000	0.40000	0.00000	0.00000
	PA 5.3.P1.EU.01 Neutral Beam Assembly and Testing	0.00000	0.00000	0.00000	0.00000	0.22886	0.00000	0.05721	0.41195	3.10198
	PA 5.3.P4B1.EU.01 Heating Neutral Beam Vessel	0.00000	0.00000	0.00000	0.00000	0.96480	0.83238	0.85131	0.00000	0.00000
	PA 5.3 P4 Common Activities	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.16000	5.72521
	PA 5.3.P4B2.EU.01 Heating Neutral Beam Drift Duct (Amendment)	0.00000	0.00000	0.00000	0.00000	0.05000	0.00000	0.76000	0.13000	0.00000
	PA 5.3.P6.EU Neutral Beam Power Supply	18.86000	18.86000	14.56000	0.00000	3.50000	4.53434	0.00000	0.00000	8.72571
	PA 5.3.P9.EU.01 Neutral Beam Test Facility Components	21.49000	22.99000	21.49000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Action 9 Diagnostics	PA 5.5.P1.EU.02-16-17-19 Diagnostics - Magnetics	0.88928	0.88928	0.88928	0.03145	0.00000	0.00000	0.00000	0.00000	0.00000
	PA 5.5.P1.EU.03 Diagnostics - Bolometers	0.35400	0.35400	0.35400	0.70801	0.00000	0.17700	0.00000	1.65203	0.05873
	PA 5.5.P1.EU.07 Diagnostics - Pressure Gauges	0.19160	0.19160	0.19160	0.00000	0.00000	0.00000	0.48857	0.06706	0.01907

	PA 5.5.P1.EU.18 Diagnostics - Tokamak Services	1.30793	1.30793	1.30793	0.26399	0.15754	0.40708	0.15572	0.22263	0.00000
	PA 5.5.P1.EU.15 Diagnostics - Radial Neutron Camera/Gamma Spectrometer	0.35406	0.35406	0.13769	0.07868	0.00000	0.29506	0.00000	0.59012	0.64915
	PA 5.5.P1.EU.08 Diagnostics - CPTS 55.C1	0.88840	0.88840	0.00000	0.53304	0.00000	0.31982	0.10661	1.52805	0.13082
	PA 5.5.P1.EU.09 Diagnostics - Low Field Side Collective Thomson Scattering	0.33499	0.33499	0.33499	0.16281	0.00000	0.57524	0.02170	0.00000	0.00000
	PA 5.5.P1.EU.04 Diagnostics - Core-Plasma Charge Exchange Recombination Spectrometer	0.20550	0.20550	0.20550	0.61650	0.20550	0.20550	0.68499	0.00000	1.50696
	PA 5.5.P1.EU.06 Diagnostics - Equatorial Visible/Infrared Wide-Angle Viewing System	0.44829	0.44829	0.22759	0.55175	0.27588	0.60693	0.27588	0.60698	0.00000
	PA 5.5.P1.EU.10-11-12-13-14-21 Diagnostics - Port Engineering Systems	2.88488	2.88488	1.38681	0.00000	0.00000	0.00000	0.82513	0.00000	5.30514
	PA 5.5.P1.EU.01 Diagnostics - Magnetics Electronics & Software	0.50000	0.50000	0.84882	0.41782	0.11200	0.00000	0.00000	0.00000	0.00000
Action 11 Buildings and Site Equipment	MAIN MILESTONES	23.10000	23.10000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	COMMON	54.52865	54.52865	56.05795	4.34446	0.70555	0.00000	1.74304	3.10000	4.03810
	TOKAMAK COMPLEX	89.68422	90.18422	77.60163	2.72400	0.00000	8.32832	3.99321	38.24353	7.13013
	AUX BUILDINGS TB03/TB04	58.43916	58.43916	58.43916	0.00000	0.00000	3.55800	0.00000	0.00000	0.00000
	AUX BUILDINGS D&B TB05 & TB22	14.55000	14.55000	14.30000	0.00000	0.00000	0.70156	0.00000	0.00000	0.00000
	AUX BUILDINGS D&B TB06	9.55000	9.55000	9.43000	0.00000	0.00000	0.01027	0.00000	0.00000	0.00000
	AUX BUILDINGS D&B TB07	6.40850	6.40850	6.03420	0.00000	0.00000	0.18769	0.00000	0.00000	0.00000
	HCF BUILDINGS TB09/TB10/TBYY	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	49.75800
	AUX BUILDINGS D&B TB12	33.93477	33.54666	28.79666	0.00000	0.00000	0.00000	0.94500	1.16000	0.34500
	AUX BUILDINGS D&B TB13	0.00000	0.00000	0.00000	4.17200	1.21500	1.90000	0.00000	0.00000	0.11500
	LOAD CENTERS	4.30800	4.30800	3.66800	0.27600	4.66600	0.00000	0.00000	0.00000	5.26600
	INTERCONNECTING ACTIVITIES	30.81297	30.81297	10.79497	0.00000	8.05127	0.00000	2.69393	0.00000	1.06893
	AUX BUILDINGS D&B TB17	0.00000	0.00000	0.00000	0.00000	0.00000	0.06920	1.46873	0.17000	2.85500
	AUX BUILDINGS D&B TB24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	3.94500
	COMMON CONTRACTUAL ACTIVITIES	43.43000	43.43000	43.43000	0.00000	0.00000	0.00000	0.00000	0.00000	2.10000
	PA 6.2.P2.EU.06 Headquarters Building	13.85000	13.85000	13.85000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	AUX BUILDING TBXX	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.02603	0.22414

* Action 7 Plasma Engineering & Operations, action 10 TBM, action 12 Cash Contributions, action 13 Technical Support Activities, action 15 DEMO_IFMIF DONES and action 16 DEMO_TDP are not listed in the above table since no kIUA are associated to these actions. Action 14 Broader Approach uses kBAUA instead of kIUA (see full table under PP_table 7).

PP_table 1. Credits per Procurement Arrangement

BA Overall Information

The Satellite Tokamak Programme (aka JT-60SA project)

The mission of the JT-60SA project is to contribute to the early realisation of fusion energy by supporting the exploitation of ITER and research towards DEMO by addressing key physics issues associated with these machines, in particular by designing, constructing and operating a device:

- capable of confining break-even equivalent class high-temperature deuterium plasmas lasting for a duration longer than the timescales characteristic of plasma processes;
- pursuing full non-inductive steady-state operation with high plasma beta close to and exceeding no-wall ideal stability limits;
- establishing ITER-relevant high density plasma regimes well above the H-mode power threshold.

The primary reference for the Satellite Tokamak Programme is the Project Plan for the next five-year-period revised and submitted for endorsement to the BA Steering Committee [1].

The first phase of Maintenance and Enhancements (ME 1), which started at the beginning of 2024, is progressing well and will continue until mid-2026. During this period, the machine will be further repaired, with particular emphasis on the improvement of the central solenoid ground insulation via in-situ resin spray, and many machine enhancements and plasma diagnostics will be installed inside and outside of the machine. This will include the first batch of in-vessel components, in-vessel coils and heating systems which will progressively be installed, until the full heating power that is expected for operation phase 5.

Meanwhile, the physics and technology advancement in preparation for the transition to Tungsten is progressing at a steady pace. Already in late 2024 the first mockups of vertical divertor targets of the tungsten monoblock design were tested successfully and the manufacturing of the other tungsten PFCs will start in early 2025. The physics program to be carried out within the carbon environment is also tailored to better prepare for the Tungsten transition. The detailed schedule for the transition to Tungsten will be defined by the end of 2025.

F4E is supported heavily by EUROfusion in areas of diagnostics and the preparation for machine exploitation.

From April 2020 till end of 2029 the total commitment for the EU amounts to 347 kBAUA. The sharing of activities with Japan, which leads to this associated total credited budget, was agreed by the BA Steering Committee in April 2025 in the form of endorsement of the document: ‘Satellite Tokamak Programme Project Plan’.

In broad terms the F4E activities for this period will include the following machine enhancements (in-kind):

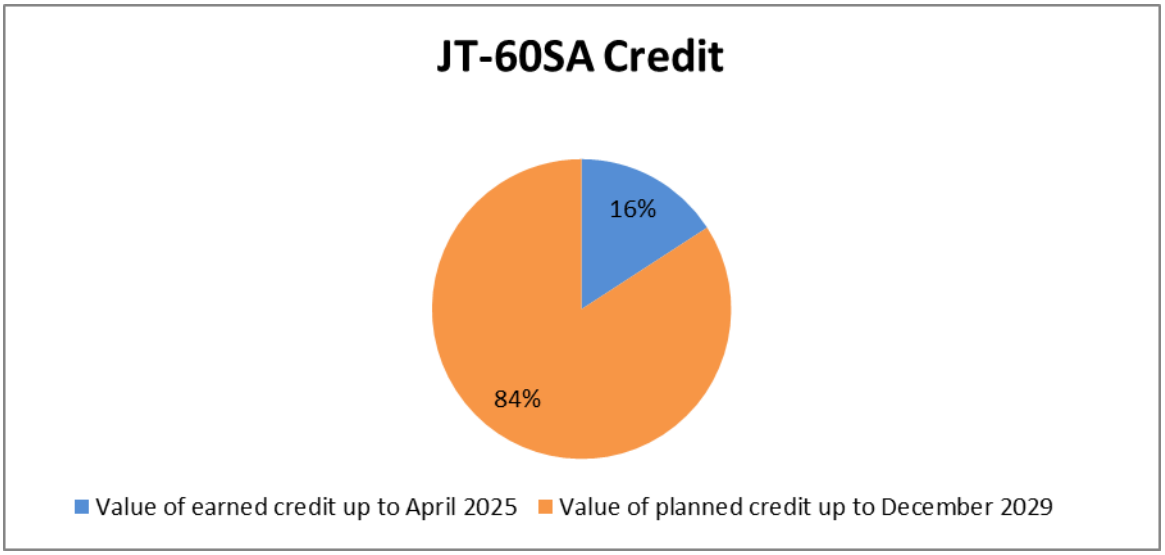
- In-vessel Components (Tungsten Actively Cooled Divertor and first wall, Cryopumps, Pellet Launching System).
- Heating & CD Systems (Electro Cyclotron Resonance Heating Power Supplies and Transmission Lines Components).
- Plasma Diagnostics (Thomson Scattering, Fast Ion Loss Detector, VUV).
- Cryogenic System (Cryoplant Enhancements, Spare parts and Nitrogen Storage).
- Magnet and Power Supply (Power Supply Enhancements, Spare parts, Error Field Correction Coil Power Supplies).
- Control System (Sensors and Tokamak Simulator Development).
- EU Personnel in support of Integrated Commissioning and Operation.
- Power Supplies Spare parts, industrial support and expertise.

[1] The Project Plans for the BA Phase II (from 2025-2029) for all three projects were approved by the Broader Approach Steering Committee in April 2025.

- Remote Handling studies, including trials and tests

It is noted that in two cases, contracts established with Russian Federation entities have produced delays due to the necessity to find alternatives for procurement of critical components.

In addition, a share of the EU contribution is provided by F4E through cash transfer to a dedicated fund, primarily dedicated to consumables (electricity, helium, nitrogen etc.), IT infrastructures, maintenance & repair and support to EU on-site personnel.



PP_figure 1. JT-60SA: percentage of earned/planned credits for BA Phase II[2] EU part (Status April 2025)

The IFMIF/EVEDA

The IFMIF/EVEDA Project (Engineering Validation and Engineering Design Activities for IFMIF), started in June 2007, with a goal to provide a detailed, complete and fully integrated engineering design of the IFMIF facility and all data necessary for future decisions on the construction, commissioning, operation, maintenance, and decommissioning of such a fusion neutron source. In order to fulfill this commitment, the IFMIF/EVEDA project consists of two parallel mandates: the Engineering Design Activity (EDA) which was completed in December 2013 and the Engineering Validation Activity (EVA).
Within the EVA mandate, three key technologies are developed, namely:

- the Accelerator Facility ("LIPAc"),
- the Lithium Target Facility,
- the Test Facilities.

Both the Lithium Target Facility and the Test Facility were successfully completed in 2017, so the only outstanding activity is the LIPAc Facility, which continues in Rokkasho, Japan. LIPAc's objective is to demonstrate that he IFMIF accelerator concept is feasible. The accelerator's feasibility is tested through the design, manufacturing, installation, and commissioning of a 1:1-scale prototype accelerator until the first cryomodule. This is the most challenging part from a beam dynamic standpoint, for at higher energy the space charge repulsive forces that tend to disrupt the beam weakens as the beam gets relativistic.
There is a phased approach to the LIPAc operation, with the accelerator reaching a intermediate targets before moving to the next phase. The following phases are already successfully complete:

- Phase A: successful injector performance at 140-mA D+ beam with the required characteristics for RFQ injection. Completed in 2017.

[2] The credits related to BA Phase I amounting to 236.413 kBAUA have all been awarded.

- Phase B: validation of beam dynamics of the RFQ, Medium Energy Beam Transport line (MEBT) and diagnostics. Completed in August 2019.
- Phase B+: included the installation of the High Energy Beam Transport (HEBT) and temporary Medium Energy Beam Transport (MEBT) transfer line. A number of operational phases of the LIPAc were completed culminating in Continuous Wave operation of a 119 mA deuteron beam at over 8% Duty Cycle with 90% transmission in June 2024.

During these phases, many issues were encountered, and solutions developed to successfully resolve them, paving the way to a successful move to the next phases of operation. Highlights include:

- Validation of most of the key diagnostics.
- Significant improvements to the RFQ conditioning
- Improved understanding of RFQ coupler thermal issues
- Improved understanding of beam dynamics during all operating conditions, leading to more refined modelling.

All of these improvements will be applied directly for DONES and A-FNS applications.

The next phases, require the installation of the cryomodule, for which the assembly started in early 2019. After some manufacturing issues, the assembly of the cryomodule resumed in April 2024 and was largely completed by the end of 2024. Preparation for the integration of the SRF Linac into the beam line and checkout tests are planned until at least 2026, before beam operations phases C and D will be start. This period of operation is expected to continue until at least 2028, with the goal of proving the LIPAc concept for application in the DONES facility.

Operation will then continue with a focus on optimising accelerator features for DONES or A-FNS operation. Important areas which will be considered include maintenance operations, reliability and availability studies and exploration of the operational limits of the accelerator. This period is expected to extend to at least 2035.

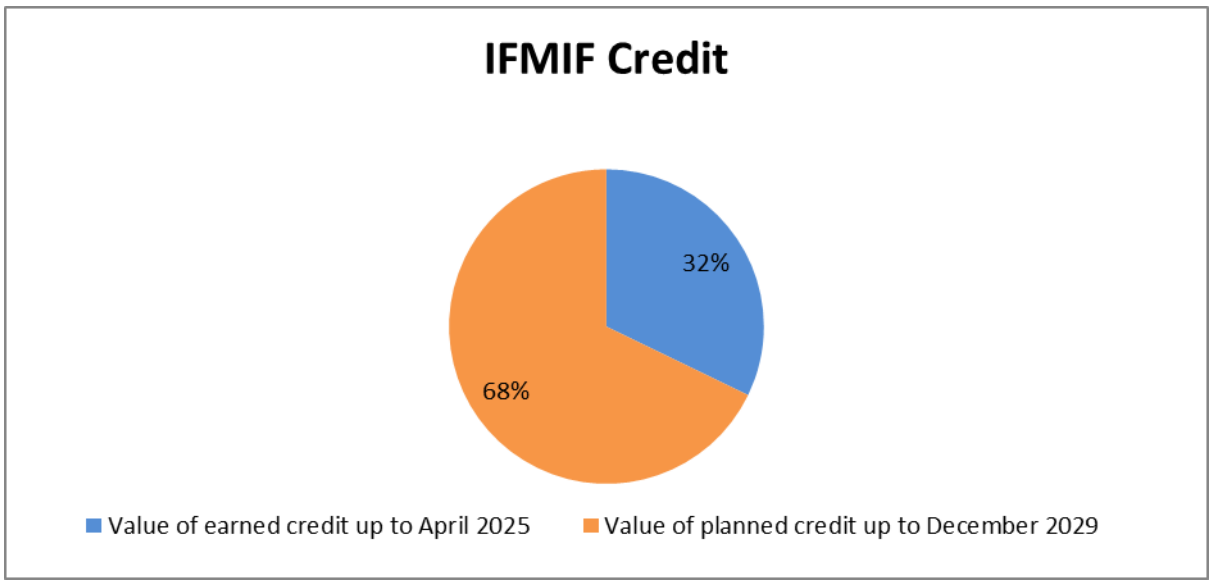
In collaboration with EUROfusion, work also continued on the Fusion Neutron Source engineering design and the Lithium Target Facility engineering validation activities as described in the 2020 work plan. The activities are devoted to the enhancement of the design of the Lithium loop and the update of the Fusion Neutron Source Design focusing on the design activities for safety and accidental scenarios. Most of the reporting will be delivered in 2025, but it is now planned to continue these activities beyond the completion of the running procurement arrangements, however the scope is not yet defined in detail by the implementing agencies, and will depend on the decisions that will be made for the DONES and A-FNS projects.

From April 2020 till end of 2029 the total commitment for the EU corresponds to 87.03 kBAUA.

The sharing of activities with Japan, which leads to this associated total credited budget, was agreed in April 2025 by the BA Steering Committee in the form of the document: “IFMIF/EVEDA Project Plan’.

In broad terms, the F4E activities for this period will focus on achieving:

- The full performance of the LIPAc facility, through the completion of assembly of the superconducting Linac, beam commissioning and operation, provision of expertise, enhancements, consumables as well as spare parts.
- Support to the preparations for the IFMIF/DONES neutron source.



PP_figure 2. IFMIF/EVEDA: percentage of earned/planned credits for BA (Phase II) (Status April 2025)

The IFERC

While in BA phase I, a large part of the effort was to establish the IFERC as a research centre in Rokkasho and to initiate the various research collaborations, in BA phase II the work of IFERC has refocused to support the projects ITER, JT-60SA, and IFMIF/EVEDA.

The EU contribution to DEMO Design work continues, concentrating on five key areas, prioritised in terms of direct relevance to ITER and JT-60SA exploitation, and aiming to integrate lessons learned towards the construction of future machines.

The IFERC activities include three sub projects:

- DEMO Design and R&D,
- the establishment and operation of a Computer Simulation Centre (CSC) and
- the establishment and operation of a Remote Experimentation Centre (REC).

The objective of the DEMO R&D activities is to contribute to the materials database and handbooks for future reactors and to continue to support ITER in issues related to Tritium retention in first wall materials.

CSC activities are generally focused on managing the HPC resources provided by Japan (Rokkasho Fusion Institute) and EU (Cineca, ENEA) in order to advance high priority simulation studies for ITER, JT-60SA and fusion reactors in general (e.g. DEMO).

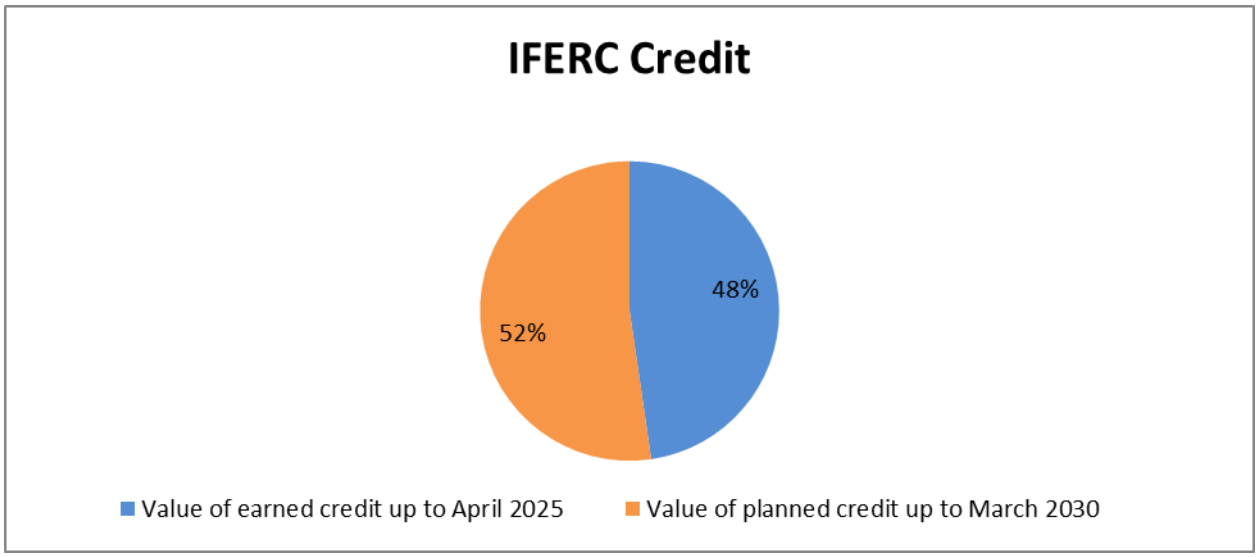
The Remote Experimentation Centre in Rokkasho aims to facilitate broad participation of scientists into ITER experiments. The activities concentrate on collaborative activities with ITER, the IFMIF/EVEDA LIPAc accelerator and JT-60SA.

From April 2020 till March 2030 the total planned commitment for the EU corresponds to 28.8 kBAUA.

The sharing of activities with Japan, which leads to this associated total credited budget, was agreed in April 2024 by the BA Steering Committee in the form of the document: “IFERC Project Plan’.

In broad terms, the F4E activities for this period will focus on supporting JT-60SA, LIPAc and ITER by:

- Developing remote experimentation/participation tools for the three projects (i.e. so called REC project),
- Maintaining the provision of high performance computer resources and Furthering the consolidation of tokamak design and licensing through the DEMO activities carried out in collaboration with EUROfusion and QST.



PP_figure 3 . IFERC: percentage of earned/planned credits for BA (Phase II) EU part (Status April 2025)

DONES

The DONES Construction phase started on 16 March 2023 with the holding of the first DONES Steering Committee.

The mission of the DONES Programme is to develop a database of fusion-like neutron irradiation effects in the materials required for the construction of fusion power reactors, and for benchmarking of radiation response of materials. To do so, a neutron source producing high-energy neutrons at sufficient intensity and irradiation volume must be built.

The main objectives of the DONES Programme are:

a) to provide a neutron source producing fusion-like neutrons at sufficient intensity and irradiation volume;
b) to generate materials irradiation test data for the design, licensing, construction and safe operation of a fusion demonstration power reactor;
c) to set up a database for benchmarking of radiation responses of materials hand in hand with computational material science;
d) to develop a complementary experimental work programme relevant for other scientific and technological areas.

This DONES Mobilisation Working Group, created in 2023, concluded its preliminary work in March 2024. It was chaired by an F4E representative and involved F4E staff and representatives of interested Parties, with the mandate to:

(i) prepare to take ownership, and consolidate the preparatory work for DONES,
(ii) assess the proposed baseline,
(iii) plan and prepare the initial steps of the Programme ramp-up, and
(iv) define the selection procedure for the Programme Manager.

The DONES Steering Committee nominated an interim Programme Manager responsible for implementing the overall programme and managing the Integrated Programme Team. The formal selection of the Programme Manager will take place once all the DONES contributors are defined.

In July 2024 the Governing Board of F4E agreed with the provision of F4E's contribution, with the caveats that:

- Spain must secure the full amount of the construction costs of the DONES Programme,
- There must be an in-kind contribution of essential components for DONES to be tested on LIPAc in advance as a risk mitigation action and for the development of the supply chain and
- There must be a cash contribution for personnel in advance.

The main activities of F4E in 2024, with the completion of the Phase B+, included the integration of the LIPAc validation activities in the current design of key DONES components to be procured by F4E. With the development of the RFQ Coupler for DONES, to be tested on LIPAc, work was also carried out with a view also to increasing the availability of LIPAc during the commissioning phases. Additionally, to consolidate the F4E contribution to the DONES Programme, external support was contracted to provide support for the integrated activities during the ramp-up in addition to assignment of F4E staff to the DONES Programme Team.

Notable progress has been made on the ramp-up of the DONES Programme and consolidation of the baseline, and negotiations with potential stakeholders continue. Agreements were reached concerning the Intellectual Property of the DONES Programme (Construction Phase), the STAC Rules of Procedure, the Procurement Arrangement for hardware, and the Procurement Arrangement assignment of experts.

The main focus in the period 2026-2030 will be on the procurement of hardware for the Injector, Cryomodules, Accelerator Ancillaries, the Radio Frequency Power System, Lithium Jet Diagnostic and Remote Handling, and the procurement of materials including EUROFER and Lithium. During this period, F4E will also contribute to the DONES Programme Team.

More information regarding credits will be available in the second half of 2025, once the preparation of Procurement Arrangements starts.

Objectives and KPIs

Multiannual objectives for the ITER Project

There are 7 multiannual objectives for the ITER Project which are listed under SPD_table 4 Multiannual objectives.

In order to show the close link between the long-term (i.e. Project Plan) planning and the short-term (i.e. Work Programme) activities, F4E is tracking in the Work Programme some selected existing technical milestones leading to the "F4E deliveries to IO" (i.e. the predecessors). Therefore such milestones in the short-term will act as an alert against the increasing risk of missing an "SPD multiannual milestones" (see below table PP_table 2).

All dates below are from IO Master Schedule (and by extension F4E) baseline dates and might be subject to modifications due to changes to assembly sequences and following the project evolution.

WP Action	Milestone Name	Master Schedule Baseline Date
Action 8 Heating & Current Drive	Electron Cyclotron Launchers Final Design Approved	Q3 2025[a]
Action 2 Vacuum Vessel	Delivery of Vacuum Vessel Sector 9	Q1 2026
Action 11 Buildings and Site Equipment	Building B71S Combined Preliminary & Final Design Approved	Q4 2026[b]
Action 2 Vacuum Vessel	Delivery of Vacuum Vessel Sector 3	Q2 2026
Action 6 Cryoplant and Fuel Cycle	Commissioning of 80k Loop System Completed	Q2 2026
Action 5 Remote Handling	Delivery of Upper Port Plug First Assembly Cask to ITER Site	Q3 2026
Action 2 Vacuum Vessel	Delivery of Vacuum Vessel Sector 2	Q3 2026
Action 4 In-Vessel Divertor	Delivery of first (1st) Standard Cassette body	Q4 2026
Action 4 In-Vessel Divertor	Delivery of first (1st) Inner Vertical Target unit	Q4 2026
Action 6 Cryoplant and Fuel Cycle	Commissioning of Quench System Completed	Q4 2026

[a] *Milestone from 2025 that is pending closure. Joint IO-F4E task force to assess current design solution and configuration. As consequence changes to the baseline planning might be required at later stage.*

[b] *Building 71 Design is under review and changes to the baseline planning will be implemented following relevant PCR.*

PP_table 2. 2026 SPD milestones

WP Action	Milestone Name	Master Schedule Baseline Date
Action 3 In-Vessel Blanket	Manufacturing approved for Series Manufacturing of Pipe Bundles - Task 2	Q2 2027[c]
Action 9 Diagnostics	Delivery of Equatorial Visible/IR Wide Angle Viewing System (EQ12) to IO Site	Q2 2027
Action 5 Remote Handling	Neutral Beam Cell Monorail Crane Final Design Approved	Q3 2027
Action 5 Remote Handling	Cassette Toroidal Mover Simplified System Final Design Approved	Q3 2027[d]
Action 8 Heating & Current Drive	Delivery of 1st Set (1MW) of Gyrotrons Tubes to ITER Site	Q3 2027
Action 8 Heating & Current Drive	Electron Cyclotron Power Supplies (Baseline) System Commissioning - Phase 1 Completed	Q4 2027

[c] *Blanket Manifolds are currently under re-design phase. As consequence changes to the baseline planning will be required at later stage.*

[d] *Divertor Assembly Tooling is currently under design assessment by joint IO-F4E working group. As consequence, changes to the baseline planning will be required at later stage.*

PP_table 3. 2027 SPD milestones

WP Action	Milestone Name	Master Schedule Baseline Date
Action 11 Buildings and Site Equipment	Building B71S Civil works contract Signed	Q2 2028
Action 11 Buildings and Site Equipment	Building B71S Construction Design Approved	Q2 2028[e]
Action 3 In-Vessel Blanket	Qualification of New Tungsten Armour (first panels) completed	Q3 2028[f]
Action 4 In-Vessel Divertor	Delivery of twentieth (20th) Standard Cassette body	Q3 2028[g]
Action 9 Diagnostics	Manufacturing approved for EQ10 Structure, Components and DSMs by MRR panel	Q3 2028

[e] *Reflects the current master schedule baseline that does not implement the latest EAC containment strategy. As consequence, changes to the baseline planning will be required at later stage.*

[f] *PA change notice as approved to be implemented in ITER Master schedule Baseline*
[g] *Delivery Installation sequence at Divertor Integrator (DCAI) currently under discussion and the need dates or order of deliveries may be subject to changes.*

PP_table 4. 2028 SPD milestones

WP Action	Milestone Name	Master Schedule Baseline Date
Action 8 Heating & Current Drive	Delivery of Ex-vessel Waveguides for first Electron Cyclotron Upper Launcher	Q1 2029
Action 8 Heating & Current Drive	Delivery of 1st Electron Cyclotron Upper Launcher from EU-DA to IO	Q2 2029
Action 3 In-Vessel Blanket	Delivery of Manifold Chimney Pipes & Pipe 10-11 T Pieces by EU-DA to ITER Site	Q3 2029
Action 4 In-Vessel Divertor	Delivery of first (1st) non-standard Cassette body	Q3 2029
Action 11 Buildings and Site Equipment	Contract signed for Hot Cell Complex Civil works - Excavation	Q3 2029
Action 9 Diagnostics	Delivery of In-V Elec Feedthroughs for Upper Ports Batch 2 by EU-DA to IO ITER Site - Batch 4	Q3 2029
Action 5 Remote Handling	All Monorail Crane Mounting Pads Delivery	Q4 2029
Action 11 Buildings and Site Equipment	Contract signed for Hot Cell Complex - Civil works	Q4 2029
Action 11 Buildings and Site Equipment	Building B71S Execution Design Approved	Q4 2029[h]
Action 8 Heating & Current Drive	Delivery of NBI-1 Ion Source Vessel Delivered to ITER Site	Q4 2029
Action 8 Heating & Current Drive	Delivery of NBI-2 Ion Source Vessel Delivered to ITER Site	Q4 2029
Action 8 Heating & Current Drive	Delivery of NBI-1 Beam Line Vessel Delivered to ITER Site	Q4 2029
Action 8 Heating & Current Drive	Delivery of NBI-2 Beam Line Vessel Delivered to ITER Site	Q4 2029

[h] *Reflects the current master schedule baseline that does not implement the latest EAC containment strategy. As consequence, changes to the baseline planning will be required at later stage.*

PP_table 5. 2029 SPD milestones

WP Action	Milestone Name	Master Schedule Baseline Date
Action 11 Buildings and Site Equipment	Building B71S Ready for Equipment (RFE)	Q1 2030
Action 11 Buildings and Site Equipment	Building B71S Equipment Qualification Completed	Q1 2030
Action 11 Buildings and Site Equipment	Building B71S Construction - Civil Works Completed	Q1 2030[i]
Action 8 Heating & Current Drive	Upper Launchers and Ex-Vessel Waveguides (Baseline Scope) Manufacturing Completed	Q2 2030[j]
Action 5 Remote Handling	Delivery of Divertor first Simplified Cassette Toroidal Mover to ITER site	Q2 2030[k]
Action 11 Buildings and Site Equipment	Hot Cell Complex Final Design Approved by Steering Committee	Q3 2030
Action 3 In-Vessel Blanket	Delivery of Manifolds Inboard Pipe bundles - Batch #1 from EU-DA to ITER Site	Q4 2030[l]

[i] *Reflects the current master schedule baseline that does not implement the latest EAC containment strategy. As consequence, changes to the baseline planning will be required at later stage.*

[j] *Joint IO-F4E task force to assess current design solution and configuration. As consequence changes to the baseline planning might be required at later stage.*

[k] *Divertor Assembly Tooling is currently under design assessment by joint IO-F4E working group. As consequence, changes to the baseline planning will be required at later stage.*

[l] *Blanket Manifolds are currently under re-design phase. As consequence changes to the baseline planning will be required at later stage.*

PP_table 6. 2030 SPD milestones

Multiannual objectives for the Broader Approach

The technical objective for the European part of the BA projects for Phase II, as presently defined in the Project Plan approved by the BA Steering Committee and supported by signed PAs, is the achievement on time of the milestones that are listed, project by project, in the tables below in which the achievements are shown in pale green.
These simplified tables are largely based on the grouping of the relevant project milestones, originally defined and valorized in the EU relevant Procurement Arrangements. The technical objectives are defined based on the Project Plans 2025-2029 for all three projects [3].

Related PA (BA)	Description	Baseline Achievement Date - Year	Credit Allocation (kBAUA)
Power Supplies Spare Parts – Part 1 (PSSP01)	Delivery of Power Supplies spare parts and provision of support during first plasma operation	2024	2.840
EF Correction Coils (EFCC PS)	Design and Procurement of the Error Field Correction Coils including acceptance test on site	2024	3.580
Thomson Scattering (TSCC)	Fabrication and Tests – All hardware delivered	2025	6.070
ECRH PS Spare Parts (ECRFPS 02)	Electro Cyclotron Resonance Heating –Acceptance Tests on Site	2026	0.419
Cryopumps (CRPUM)	Divertor cryopumps - delivery on site – (10 units)	2024	1.500
Vacuum Monitoring System (VMS)	Delivery of the vacuum monitoring system	2026	1.51
ECRH Transmission (ECRFTL)	Electro Cyclotron Resonance Heating Transmission lines – Delivery of all components on site	2026	2.633
Actively Cooled Divertor Part 1(DIV-1)	High Heat Flux Elements 1st stage completion	2026	2.720
Actively Cooled Divertor Part 1(DIV-1)	High Heat Flux Elements 2nd stage completion	2027	9.030
Actively Cooled Divertor Part 2 (DIV-2)	All Normal Heat Flux Elements and Cassettes delivered to the integration facility	2027	16.586
Magnet PS (MSMPS)	Maintenance Support for Magnet PS	2028	5.000
Cryogenics (MS)	On-site Support for Maintenance of Cryogenic System 2025-2029	2029	5.500

PP_table 7 . Multiannual objectives JT-60SA

[3] The Project Plans were approved by the BA Steering Committee in April 2025.

Related PA (BA)	Description	Baseline Achievement Date - Year	Credit Allocation (kBAUA)
Injector Spare parts (AF02-3)	LIPAc injector upgrade – delivery to Rokkasho	2028	5.300
SRF Linac (AF4-2)	SRF Linac – Assembly of the LIPAc cryomodule and supply of high sensitivity beam loss Monitors	2026	3.700
RF Power System (AF6-2)	RF Power System – Refurbished PSYS (protection system), spare parts delivered and report on maintenance completed	2027	5.130
RF Power System (AF6-3)	RF Power System - Validation of the Solid State Power Amplifier (SSPA) prototype for the IFMIF/EVEDA Project	2025	3.370
RF Power System (AF6-4)	RF Power System - Manufacturing and Validation of the SSPA series for LIPAc for the IFMIF/EVEDA Project	2029	5.560
Control System (AF8-3)	Control System LIPAc Control System Development for the IFMIF/EVEDA Project	2026	2.390
LF Enhancement (LF6-2)	Completion of all reports for Fusion Neutron Source Target Research & Development	2026	3.800
FNS Engineering Design (ED6-2)	Completion of all reports for Fusion Neutron Source Engineering Design	2025	3.800

PP_table 8. Multiannual objectives IFMIF/EVEDA

Related PA (BA)	Description	Baseline Achievement Date - Year	Credit Allocation (kBAUA)
Demo Design Activities and DEMO R&D (5 PAs)	Complete planning with EUROfusion of DEMO design and DEMO R&D activities from 2021-2024 EU	2021	1.279
CSC-EU	Computer resources and joint simulation projects contribution 2020-2023	2023	0.600
REC-EU	Supply of the implementing plan for the ITER Remote Experimentation Centre	2021	0.050
DEMO Design Activities	Summary report of activities	2025	4.686
DEMO R&D	Structure material development for in-vessel components	2025	1.874
DEMO R&D	Database for material corrosion	2025	0.469
DEMO R&D	Neutron irradiation experiment of breeding functional materials	2027	2.109
DEMO R&D	Tritium technology for collection and inventory evaluation	2025	0.937
DEMO Design Activities	Divertor design and plasma exhaust and Breeding Blanket (BB) design	2027	2.340
DEMO R&D	Structure material development for in-vessel components 2025-2026	2027	0.934
DEMO R&D	Database for material corrosion 2025-2026	2027	0.236
DEMO R&D	Tritium technology for collection and inventory evaluation 2025-2026	2027	0.470
CSC-EU	Computer resources and joint simulation projects contribution 2024	2024	0.200
CSC-EU	Computer resources and joint simulation projects contribution 2025-2026	2027	0.586
REC-EU	Supply of the equipment for tests of remote experiment with ITER, LIPAc and JT-60SA and the support of remote experiments for the ITER Remote Experimentation Centre	2027	1.550

PP_table 9. Multiannual objectives IFERC

Multiannual objectives for the Test Blanket Module (TBM)

The work carried out on the Test Blanket Module (TBM) Systems is not covered by a standard Procurement Arrangement, but by specific TBM Arrangements (TBMA) signed with ITER Organization. Through a TBMA, F4E is committing to deliver Test Blanket Systems – or a part of it (after delivery a new TBMA must be signed for the follow-up activities), in case of a collaboration with another DA (see below) – and the associated equipment/tools to the ITER Site according to an agreed schedule.

Initially two independent European TBM Systems were to be tested in ITER, a Helium-cooled Lead-Lithium (HCLL) and a Helium-cooled Pebble-Bed (HCPB). Two TBMAs were signed with the IO in 2014 for that purpose.

In 2018, in line with a recommendation of the working group for the realignment of the TBM and DEMO Breeding Blanket programmes, F4E decided to replace the development of one of the two helium-cooled TBM System with a water-cooled lead-lithium (WCLL-TBS) one. An amendment to the HCLL-TBS TBMA was signed with IO, now constituting the WCLL-TBS TBMA. In addition, F4E is entered in a close collaboration with EUROfusion for the execution of its large TBM R&D program.

F4E is contributing solely to the water-cooled lead-lithium WCLL-TBS and in collaboration with Korea for a second HCCP-TBMA

In 2020, as a follow-up action of the reduction of the number of TBM test ports in ITER, F4E and ITER Korea decided to join their effort to develop and deliver the helium-cooled Pebbled Bed TBM System. It was renamed the Helium-Cooled Ceramic Pebble (HCCP) TBM System. The former HCPB TBMA was terminated, and a tripartite F4E-ITER Korea-IO new TBMA was signed for the HCCP-TBS in 2023. F4E and ITER Korea signed a Partnership Arrangement ruling their collaborative effort toward the IO. In this collaboration, F4E is responsible for delivering only 40% of the HCCP-TBS (and ITER Korea 60%).

The following milestones of the TBM programme complement the set of Technical Objectives for the ITER project.

Reference	Action	Milestone	Date
TBM01	10-Test Blanket Module	Initiation of the official process for changing one European TBM System and preparation of a new TBM Arrangement	2018-Achieved
TBM02	10-Test Blanket Module	Signature of the WCLL TBM Arrangement	2020-Achieved
TBM03	10-Test Blanket Module	WCLL TBS Conceptual Design Review (CDR)	2020-Achieved
TBM04	10-Test Blanket Module	Signature of the HCCP TBM Arrangement and Partnership Arrangement	2023-Achieved
TBM05	10-Test Blanket Module	WCLL TBS and HCCP TBS Preliminary Design Review (PDR)	Q1 2026
TBM06	10-Test Blanket Module	Signature of FD and procurement of WCLL and HCCP ancillary systems	Q1 2027
TBM07	10-Test Blanket Module	WCLL TBS and HCCP TBS Final Design Review (FDR)	Q3 2028
TBM08	10-Test Blanket Module	Signature of procurement of WCLL TBM and HCCP TBM sets	Q1 2029

TBM09	10-Test Blanket Module	Delivery of WCLL and HCCP ancillary systems to ITER site	2036
TBM10	10-Test Blanket Module	Delivery of WCLL and HCCP TBM sets to ITER site	Q3 2035

PP_table 10 . Multiannual objectives of the TBM project

Multiannual objectives for DONES

Precise and detailed multiannual objectives will be defined for DONES once the formal involvement of F4E is decided, and the content of the Procurement Arrangements is defined.

Multiannual objectives for DEMO

No separate technical objectives are set for DEMO considering the current limited involvement of F4E in such activities.

Annual Objectives

In addition to the multiannual objectives, annual objectives are identified and are constantly monitored by F4E and are reported upon. These Annual Objectives are listed under SPD_table 5 Annual objectives.

Definition of the F4E Key Performance Indicators (KPIs) and their thresholds

Multiannual KPI

Equation 1: EVM-CAS SPI

$$\frac{\text{EV}}{\text{PV}} = \frac{\text{Achieved Credit (KIUA)}}{\text{Baseline Credit to date (KIUA)}}$$

Equation 2: EVM CPI

$$\text{CPI (Cost Performance Index)} = \frac{\text{EV}}{\text{AC}} = \frac{\text{Achieved Credit [Euros 2008]}}{\text{Payments to date [Euros 2008]}}$$

Equation 3: NCRs closure time

$$\frac{\text{Number of open NCR respecting the target date for NCR closure}}{\text{Number of open NCR}}$$

Equation 4: Time to Procure = Aggregated average in calendar days, from approved Call Procurement Strategy to contract signature

Equation 5: Time to Pay = Average ("Duration between the reception date of an invoice and the reception date of the payment in the bank account of the supplier") MINUS "Suspensions days".

Equation 6: Vacancy rate

$$\frac{\text{Number of vacant posts}}{\text{Total authorised posts in the Establishment Plan (FO, TA) and Contract Agents}}$$

Equation 7: Staff Engagement rate in Learning & Development

$$\frac{\text{Number of Unique Staff Requesting Training}}{\text{Total Staff in Place}}$$

Annual KPI:

Equation 8: Annual Commitment budget implementation

$$\frac{\text{Actual commitment executed to the end of the previous month}}{\text{Latest approved commitment budget to date}}$$

Equation 9: Annual payment budget implementation

$$\frac{\text{Actual payment executed to the end of previous month}}{\text{Latest approved payment budget to date}}$$

Equation 10: Annual EAC variance

Cumulative variation = EAC total from end of month reporting period – EAC total from end of December (Year-1)

KPI Thresholds

Each KPI has thresholds:

Green	The KPI is within the accepted range.
Amber	The KPI is at risk of moving outside of the accepted range.
Red	The KPI is outside of the accepted range.

A project manager may choose to flag a KPI as at risk whenever there is a risk that the KPI may move outside of the accepted range. This step should be reflected in the identification of specific risks in the risk log with a consequent tracking and mitigation actions.

The objective of the KPIs is to ensure that the project is proceeding in line with the overall plan so that:

1. The long-term project schedule and deliverables are on schedule.
2. The project costs are under control.
3. The project quality management process is functioning as planned.
4. The Establishment Plan and External Personnel is being utilized effectively.

List of main KPIs monitored during the year and associated thresholds

- EVM-CAS SPI

Green	KPI ≥ 0.95
Amber	0.95 > KPI ≥ 0.83
Red	KPI < 0.83

- EVM CPI

Green	KPI ≥ 0.95
Amber	0.95 > KPI ≥ 0.80
Red	KPI < 0.80

- NCRs closure time

Green	KPI ≥ 0.80
Amber	0.80 > KPI ≥ 0.60
Red	KPI <0.60

- Time to Procure

Between Directive threshold and 2M€

Green	KPI ≤ 180
Amber	180 < KPI ≤ 278
Red	KPI > 278

Between 2M€ and 10M€

Green	KPI ≤ 270
Amber	270 < KPI ≤ 425
Red	KPI > 425

- Time to pay

Administrative expenditure

Green	KPI ≤ 30
Amber	30 < KPI ≤ 35
Red	KPI > 35

Operational expenditure

Green	KPI ≤ 60
Amber	60 < KPI ≤ 65
Red	KPI > 65

- Vacancy rate

Green	KPI ≤0.04
Amber	0.04<KPI<0.07
Red	KPI ≥ 0.07

- Staff Engagement rate in Learning & Development

Green	KPI ≥ 0.15
Amber	0.15 > KPI ≥ 0.10
Red	KPI < 0.10

- Annual Commitment implementation

Green	KPI ≥ 0.95
Amber	0.90 ≤ KPI < 0.95
Red	KPI < 0.90

- Annual Payment Budget implementation

Green	KPI ≥ 0.95
Amber	0.95 > KPI ≥ 0.90
Red	KPI < 0.90

- Annual EAC variance

Green	KPI ≤ -25M€
Amber	-25M€ < KPI ≤ 100M€
Red	KPI > 100M€

Detailed break-down of credits for the period April 2020-December 2029 for Broader Approach

Title	BA EU Commitment (kBAUA)
Enhancements in-kind	
In-vessel Components	128.372
Heating & CD Systems	71.902
Plasma Diagnostics	9.660
Magnet and Power Supply	5.580
Other Tokamak Systems	21.910
EU on-site personnel	14.712
Operation / Maintenance / Assembly	
Consumables	68.984
Maintenance & Assembly	17.340
IT infrastructure	8.540
JT-60SA (Total)	**347.000**
Engineering Design Optimisation	4.800
Lithium Target Facility	4.800
RF couplers new set	2.640
LIPAc-Injector	5.300
LIPAc-SRF Linac	3.700
LIPAc-RF Power System	14.360
LIPAc-Control System	3.030
Common Expenses	2.300
Common Fund	19.530
Engineering support and HW acquisition for M&O	0.900
Maintenance and Control System Refurbishment	3.860
On site personnel (Europe)	21.000
Computerized Maintenance Management System	0.810
IFMIF/EVEDA (Total)	**87.030**
DEMO Design	11.175
DEMO R&D	11.185
CSC	2.696
REC	2.200
Project Team	1.544
IFERC (Total) [4]	**28.800**

PP_table 11 . Detailed break-down of credits for the period April 2020-December 2029 for Broader Approach [5]

[4] As agreed by the BASC the credits for the IFERC project are planned based on the Japanese fiscal year, so the figures reflect the period April 2020-March 2030.

[5] As not all PAs are signed, the PAs have been summed up based on topics, to show the total credit values planned up to December 2029.

Action number	Action name	PMP delivery status
Action 1	Magnets	No PMP forecasted since Programme is finishing
Action 2	Vacuum Vessel	Delivered
Action 3 & 4	In Vessel - Blanket and Divertor	Delivered
Action 5	Remote Handling	Delivered
Action 6	Cryoplant and Fuel Cycle	Delivered
Action 7		On-hold[6]
Action 8	Heating and Current Drive	Delivered
Action 9	Diagnostics	Delivered
Action 10	Test Blanket Module	Delivered
Action 16	Technology Development Programme	Q3 2026

PP_table 12 . State of play on Project Management Plans preparation

[6] **F4E is reworking the scope of Action 7. It currently foresees to change this action into "Support to operations' first for JT60 then for ITER. The action is foreseen to be updated in SPD2027-2031.**

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ANNEX TO SECTION III “RESOURCE ESTIMATES PLAN”

The REP for F4E Financial Resources includes the Estimate of Revenue and Expenditure for the following five years according to:

- Estimate of Revenue from the Contributors (EURATOM, ITER Host State and Members),
- Estimate of Expenditure in Commitments according to the corresponding Work Programme for the current year and estimates of needs until 2030,

Estimates of expenditure in payments according to detailed Payment Forecasts for 2025 and 2026 and estimates based on commitment needs until 2030.

Assumptions of the Resource Estimates Plan

The REP is based on the general assumptions introduced in the Single Programming Document 2026-2030 and on the following specific budget assumptions.

1. Estimate of Revenue

The F4E revenue is made up of:

- EURATOM contribution,
- ITER Host State contribution,
- Other contributions
    - Membership contributions from members other than EURATOM
    - Possible Other contributions
- Additional Revenues, for tasks requested by ITER Organization, from Other Assigned Revenue (Japan/UP#10), and from recoveries,
- Unused commitment appropriations made available again,
- In kind contribution to F4E

1.1 EURATOM contribution

The contribution from EURATOM constitutes the main source of revenue for F4E. This revenue is divided in contribution to F4E operational and administrative expenditure. The latter covers the main part of the F4E administrative costs.

The breakdown of the annual EURATOM contribution until 2027 is included in the Legislative Financial Statement[1] accompanying the Council Decision (2021) 281, which can be further adjusted during the annual budgetary procedures based on updated EC Statement of Estimates and final approval by EU budgetary Authority.

The breakdown of the annual EURATOM contribution after 2027 corresponds to the MFF communication[2] and Commission proposal establishing the EURATOM[3] contribution to ITER project, after deduction of the EC support administrative expenditure[4]. They are indicative, subject to the outcome of the MFF negotiations by the EU budgetary authority.

1.2 ITER Host State Contribution (IHS)

The contribution from the ITER Host State constitutes the second source of revenue for F4E. France as the ITER Host State covers 9.09% of the total costs of the ITER construction phase, this is equivalent to 20% of the total European participation to the construction of ITER. It is calculated on the EURATOM contribution to F4E minus the domains of exclusion as agreed in the exchange of letter[5] and defined as follows:

- Administrative expenditure,
- Test Blanket Modules cost,
- DONES cost,
- Broader Approach cost,
- The Transportation cost.

Other activities of F4E not directly related to the construction phase of ITER may in the future be excluded from the scope of calculation by agreement between France and the Commission. Currently it is assumed that France will not contribute specifically to the Technology Development Programme, as it has the same nature as the other domains of exclusion.

[1] Legislative financial statement to Commission proposal COM (2013) 607 for a Council Decision amending Decision 2007/198/Euratom establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it

[2] A dynamic EU budget for the priorities of the future – The Multiannual Financial Framework 2028-2034 COM(2025) 570, from 16 July 2025

3 Legislative financial and digital statement to the Commission Proposal COM (2025)594 from 5 September 2025, establishing EURATOM and the Community's contribution to the ITER project for the period 2028-2032

[4] Estimated from the Draft EU Budget 2026 and applying standard 2% inflation rate

5 Contribution financière française à la construction d'ITER : Lettre du Haut Représentant Français pour ITER (formal exchange of letters on 17 June 2022 and 29 July 2022 between France and the European Commission).

1.3 Membership Contributions

The Annual Membership Contributions are composed of:

- A minimum contribution of 0.1% of the total amount of annual membership contributions and,
- Additional contribution calculated in proportion to the EURATOM financial participation (excluding JET) in the Member's expenditure in the framework of the Community Fusion Research Programme in year N-2.

The contributions are established and adopted annually within the F4E budget. The calculations correspond to 10% of the F4E draft administrative budget prepared in year N-2.

The revenue from the Membership contributions is not assigned. As from 2016 onwards, the breakdown by Member is established by EURATOM based on the figures provided by EUROfusion, in compliance with the frame defined in F4E statutes.

1.4 Other contributions

Revenue resulting from the annual contributions from third countries to F4E budget and ITER project received from EURATOM based on their cooperation agreements with the European Commission.

1.5 Additional Revenues (Revenue from ITER Organization, Other Revenue and Recoveries)

The revenue from the ITER Organization (IO) [6] is covering the tasks implemented by F4E at IO request:

- For the implementation of the Project Change Requests originating from IO that have been introduced after 5 March 2015 according to the terms of reference of IO Reserve Fund,
- In the frame of resolution of non-conformities on request of IO DG,
- For tasks requested by IO DG for the general interest of the project, considering the capacity of F4E suppliers.
- The Other Assigned Revenue is revenue coming from Other Domestic Agencies covering the transfer of specific tasks to be implemented by F4E.
- Miscellaneous revenue according to F4E financial Regulation includes liquidated damages or administrative fees.
- The Recoveries include revenues from undue payments which are returned to the budget.

[6] Article 6e and Article 20 of F4E Financial Regulation in accordance with art. 4(2) and art. 12 (1e) of the F4E Council Decision and Statutes

1.6 Implementation of unused commitment appropriations

The F4E Financial Regulation foresees the possibility of making the unused appropriations[7] available again as revenue in subsequent budgetary years according to the F4E operational needs. This financial mechanism does not apply to the assigned revenue received from ITER Host State (France) and from ITER Organization and to F4E administrative expenditure as they follow specific rules. The table below gives the global overview of the commitment appropriations cancelled and made available again since 2007.

Commitment Appropriations Current Value MEUR	2007-2013 FP VII	B-2014 Executed	B-2015 Executed	B-2016 Executed	B-2017 Executed	B-2018 Executed	B-2019 Executed	B-2020 Executed
Cancelled	536.342	292.87	85.974	6.491	37.955	6.759	17.277	74.477
Made available again	9.760				96.000	120.007	149.170	390.697
Total CA still to be made available again	**526.582**	**819.457**	**905.430**	**911.922**	**853.877**	**740.630**	**608.737**	**292.518**

Commitment Appropriations Current Value MEUR	B-2021 Executed	B-2022 Executed	B-2023 Executed	B-2024 Executed	B-2025 Budget AM2	B-2026 Budget	B-2027 Estimation	*TOTAL*
Cancelled	101.806	191.684	169.873	13.181				**1,534.695**
Made available again	-	-	-	155.193	386.242	-	227.627	**1,534.695**
Total CA still to be made available again	**394.325**	**586.009**	**755.881**	**613.869**	**227.627**	**227.627**	**0.000**	**0.000**

Financial_table 1 Implementation and forecast of unused commitment appropriations

By the end of September 2025, the cancelled appropriations amount to EUR 613.9 million, with a projected EUR 227.6 million by the end of 2025. These figures remain subject to change with the final implementation and with potential decommitments that may occur.

These cancelled appropriations resulting from decommitments will create additional capacity for further commitments in 2027.

1.7 In kind contribution to F4E

There is no in-kind contribution to the F4E Budget, with the sole exception of the premises hosting F4E's headquarters in Barcelona. The office building is made available free of charge by the Host Country, Spain.

For year 2024 this service in-kind amounts to EUR 3.2 million.

[7] according to Chapter 2 of F4E Financial Regulation (Principle of annuality), the unused appropriations at the end of each year are cancelled, as well as the de-commitments (cancellation of budgetary commitments).

2. Estimate of Expenditure

The F4E expenditure is divided in:

- Administrative expenditure covering the staff and operating costs
- Operational expenditure covering the needs of F4E projects

2.1 Administrative Expenditure

The F4E administrative expenditure is composed of F4E staff and operating costs, mainly related to staff remuneration and building infrastructure.

2.2 Operational Expenditure

The operational expenditure corresponds to F4E tasks discharging EURATOM obligations with regard to:

A. EURATOM contribution to ITER Organization (IO), in accordance with the ITER Agreement[8],

B. EURATOM contribution to the Broader Approach (BA) activities, in accordance with the BA Agreement with Japan[9],

C. Coordination of a programme of activities in preparation of the construction of a demonstration fusion reactor (DEMO).

The F4E activities are grouped under two headings (projects):

1. ITER project that represents the main activity of F4E and consists of:
   (a) Tasks related to the ITER construction phase according to the Procurement Arrangements and ITER Tasks Arrangements signed with IO,
   (b) Contribution in cash to ITER Organization to ensure the financing for its management, the research and development and for the participation to the ITER fund,
   (c) Contribution in cash to Japan within the frame of the transfer of procurement responsibilities from EURATOM to Japan,
   (d) ITER site support activities.
2. Technology projects that cluster the R&D activities necessary for ITER and Broader Approach:
   (a) Technology for ITER and DEMO, to allow extra R&D activities, in particular related to the completion of specification for ITER and the preparation of DEMO,
   (b) Technology for BA corresponding to the EURATOM contribution managed by F4E for IFMIF-EVEDA, the IFERC at Rokkasho and the JT-60SA Tokamak,
   (c) Technology for DONES/IFMIF construction.

Additional Earmarked operational expenditure are dedicated to:

[8] Final Report of Negotiations on ITER Implementation, 1 April 2006 (Attachment 2_C)
[9] Broader Approach Agreement F4E_D_22FTK5

1. Tasks executed on request of ITER Organization, mainly amendment to existing contracts related to Project Change Requests initiated by IO and approved for financing from the IO Reserve Fund and other tasks requested and financed from IO Budget.
2. Other appropriations accrued from Third parties to specific items of expenditure, other than ITER Organization, in accordance with Article 4 (2) of F4E Constituent Decision, Article 12 (1) (e) of the F4E Statutes, mainly activities with other Domestic Agencies within the ITER project.

2.3 Monitoring of implementation of Expenditure in Commitment Appropriations (current value)

The table below shows the expenditure for the period 2007-2030.

	Current Value MEUR	< 2007 Final Execution	Total 2007-2013	2014 Executed	2015 Executed	2016 Executed	2017 Executed	2018 Executed	2019 Executed	2020 Executed	Total 2014-2020	Total 2007-2020
Commitment Appropriations	**ITER Construction**	**42.129**	**2,968.434**	**547.708**	**318.261**	**382.385**	**458.039**	**604.104**	**611.258**	**703.803**	**3,625.558**	**6,593.992**
	Technology		**48.092**	**16.007**	**14.007**	**12.901**	**14.391**	**11.516**	**5.607**	**19.444**	**93.873**	**141.964**
	Technology for ITER and DEMO		27.499	9.521	6.739	6.694	4.445	7.951	1.433	0.777	37.561	65.060
	Technology for Broader Approach		20.592	6.486	7.268	6.207	9.946	3.565	4.174	18.667	56.312	76.904
	Technology for DONES		-									-
	Other Expenditure		**5.058**	**1.518**	**2.340**	**1.722**	**4.170**	**4.808**	**11.199**	**14.579**	**40.335**	**45.393**
	F4E Administration		**183.982**	**42.625**	**44.028**	**47.668**	**51.873**	**55.388**	**56.530**	**58.801**	**356.914**	**540.896**
	F4E Total Budget	**42.129**	**3,205.565**	**607.859**	**378.636**	**444.676**	**528.474**	**675.816**	**684.593**	**796.627**	**4,116.680**	**7,322.245**
	Tasks from ITER Organization		**-**	**-**	**1.078**	**13.422**	**1.403**	**3.158**	**18.273**	**9.302**	**46.636**	**46.636**
	Other Earmarked expenditure										-	-
	F4E Total Expenditure	**42.129**	**3,205.565**	**607.859**	**379.713**	**458.098**	**529.876**	**678.974**	**702.866**	**805.930**	**4,163.316**	**7,368.881**

	Current Value MEUR	2021 Executed	2022 Executed	2023 Executed	2024 Executed	2025 Budget AM2	2026 Budget	2027 Planned needs	Total 2021-2027	2028 Planned needs	2029 Planned needs	2030 Planned needs	Total 2028-2030	Total <2007-2030
Commitment Appropriations	**ITER Construction**	**842.397**	**515.942**	**399.564**	**588.475**	**826.452**	**854.786**	**766.206**	**4,793.822**	**804.926**	**758.188**	**739.034**	**2,302.148**	**13,732.091**
	Technology	**15.308**	**19.055**	**36.225**	**30.900**	**31.500**	**41.190**	**112.117**	**286.295**	**178.502**	**112.968**	**37.300**	**328.770**	**757.029**
	Technology for ITER	5.373	3.394	3.870	6.831	6.000	12.000	10.917	48.385	11.302	13.168	24.400	48.870	162.315
	Technology for Broader Approach	9.934	15.661	32.356	22.106	25.000	25.000	50.900	180.958	111.700	67.400	5.700	184.800	442.662
	Technology for DONES			-	1.963	0.500	4.190	50.300	56.953	55.500	32.400	7.200	95.100	152.053
	Other Expenditure	**20.572**	**35.644**	**23.938**	**31.756**	**36.900**	**40.000**	**35.200**	**224.010**	**36.000**	**36.800**	**37.600**	**110.400**	**379.803**
	F4E Administration	**61.765**	**76.018**	**72.740**	**77.840**	**82.930**	**87.658**	**89.466**	**548.417**	**92.919**	**97.076**	**101.558**	**291.552**	**1,380.865**
	F4E Total Budget	**940.042**	**646.658**	**532.468**	**728.971**	**977.782**	**1,023.634**	**1,002.989**	**5,852.544**	**1,112.346**	**1,005.031**	**915.492**	**3,032.870**	**16,249.788**
	Activities linked to ITER Organization	**4.701**	**23.869**	**14.442**	**7.994**	**71.903**	**-**	**-**	**122.909**	**-**	**-**	**-**	**-**	**169.545**
	Other Earmarked expenditure	**1.347**							**1.347**				-	**1.347**
	F4E Total Expenditure	**946.091**	**670.527**	**546.910**	**736.965**	**1,049.737**	**1,023.634**	**1,002.989**	**5,976.853**	**1,112.346**	**1,005.031**	**915.492**	**3,032.870**	**16,420.732**

Note 1: The past executed figures in this REP can differ from the figures in previous REP due to the impact of de-commitments and recoveries, accounted in the year of origin of the initial commitment.

Financial_table 2 Annual Expenditure in Commitment Appropriations (current value)

3. Additional information

Budget outturn and cancellation of appropriation

The budget outturn[10] for 2024 amounts to EUR 1.778 million.

Budget outturn	2022	2023	2024
Revenue actually received (+)	830,998,712.60	554,248,551.71	661,979,268.23
Payments made (-)	761,886,274.22	592,105,732.66	637,722,937.66
Carry-over of appropriations (-)	77,350,912.48	32,396,853.72	50,287,115.40
Cancellation of appropriations carried over (+)	950,730.26	1,307,602.47	1,088,541.83
Adjustment for carry over of assigned revenue appropriations from previous year (+)	8,468,314.19	70,439,373.81	26,717,717.71
Exchange rate differences (+/-)	5,675.67	3,869.95	2,917.47
Adjustment for negative balance from previous year (-)	-	-	-
Total	**1,186,246.02**	**1,496,811.56**	**1,778,392.18**

Financial_table 3 Budget outturn for the years 2022, 2023 and 2024

[10] The budget outturn for year N-1 shall be returned to EURATOM and subsequently reintroduced into the budget for year N+1. It is calculated as the total revenue actually cashed minus the total payments made during the year and further reduced by the appropriations carried over to the following year. It represents the unused payment appropriations, cancelled at the year-end.

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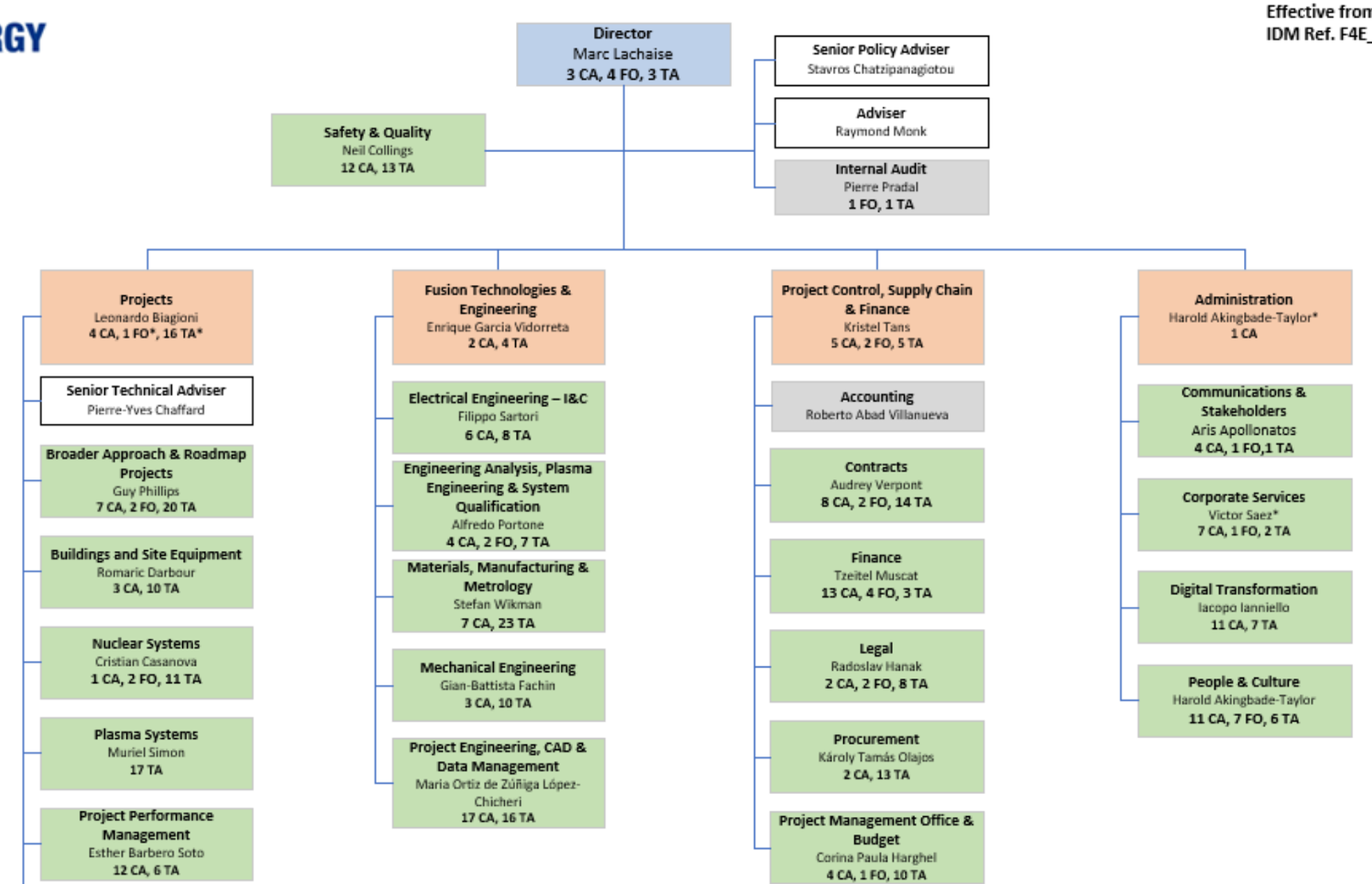
SPD2026_ANNEXES TO HR REP

1. Organization chart

FUSION FOR ENERGY

Organisational Chart
Effective from 1 October 2025
IDM Ref. F4E_D_2PCCXS



*Including 2 secondments to IO

Legend

Department	Unit	Statutory function also reporting to Governing Board	* Acting

Direct reporting to Director:	Walter Schuster – **Data Protection Officer** Raquel Raspall Infante – **Internal Control Coordinator**

2. Human Resources per action 2026-2030

The allocation of F4E staff varies according to the project needs, depending on the nature of the work, its complexity and the required expertise.

The allocation of staff in the forthcoming years will be made with a rolling wave approach. This means staff figures may vary based on changes of requirements for each programme.

The staff reduction in 2027 reflects the return of 15 posts that F4E had obtained as part of the agreement reached with the Commission in March 2022. To achieve this offset, F4E will return to the Commission vacant posts previously set aside and/or not renew contracts of the staff employed on short-term positions. This ramp down for some of these posts may occur sooner than January 2027.

Main assumptions for the ESP trajectory described in HR_table 1 Resources allocation per activity 2025-2030*:*

The ESP definition is aligned with the current F4E ESP policy:

- Personnel (individuals) of the ESP-contractor that require access to the working tools/environment of F4E staff to deliver the service to F4E and have:
- Permanent access to F4E's office premises; and/or
- Login credentials for F4E's Internal Information Systems.

DONES and BA activities:

- ESP request for DONES activities, contingent on GB's decision regarding F4E's role in DONES, has not been included
- Ramp-up of DONES is only partially included and not to the extent dimensioned by DONES
- Reinforced need for follow-up of other BA activities is only partially covered

TDP & Other fusion projects:

- Baseline assumption as of 31/12/2024 - Contribution to TDP and other fusion projects is not included
- The outcome of the strategic Governing Board meeting in July 2025 may impact F4E's needs in this area

ITER assembly, commission and operation

- Baseline assumption as of 31/12/2024 - Contribution to ITER assembly, commissioning and operation is not explicitly captured and is only considered to the extent currently baselined by the programmes

As described in HR_Table 1 below, F4E will reduce by 10% the number of ESPs by end of 2026 and will reduce the number of ESPs by an additional 10% by end of 2030. F4E also commits to develop a resource-loaded plan and will confirm the ESP trajectory in the SPD2027-2031 taking into account recommendations from the ESP Expert group report.

Action #	Action	2025				2026				2027				2028				2029				2030			
		FO/TA	CA/SNE	ESP**	Budget allocated	FO/TA	CA/SNE	ESP**	Budget allocated	FO/TA	CA/SNE	ESP**	Estimate	FO/TA	CA/SNE	ESP**	Estimate	FO/TA	CA/SNE	ESP**	Estimate	FO/TA	CA/SNE	ESP**	Estimate
1	Magnets	2.6	0.5	0.7	€ 209,912	3.3	0.6	0.6	€ -	3.2	0.6	0.6	€ -	2.5	0.5	0.6	€ -	2.5	0.5	0.6	€ -	2.5	0.5	0.6	€ -
2,3,4,10*	Main Vessel	73.6	37.7	88.4	€ 115,361,372	67.7	36.8	79.4	€ 68,406,862	57.4	32.9	79.1	€ 112,813,886	55.8	32.4	79.1	€ 90,950,215	58.2	32.7	79.5	€ 56,400,322	57.9	32.7	71.5	€ 55,235,626
5	Remote Handling	28.4	13.4	40.3	€ 4,969,397	26.8	9.3	36.2	€ 20,322,083	27.1	9.1	36.1	€ 19,832,919	27.7	9.3	36.1	€ 32,627,496	28.9	9.4	36.3	€ 47,838,223	29.6	9.7	32.6	€ 68,815,030
6	Cryoplant & Fuel Cycle	22.3	9.0	23.3	€ 5,570,547	24.3	8.9	21.0	€ 21,822,196	24.0	8.5	20.9	€ 36,635,526	23.5	8.4	20.9	€ 96,702,329	23.4	8.2	21.0	€ 90,469,015	23.0	8.2	18.9	€ 13,971,608
7	Plasma Engineering & Operations																								
8	Heating and Current Drive	48.9	23.4	53.0	€ 112,396,151	51.2	24.8	47.7	€ 16,441,716	49.8	23.7	47.5	€ 23,040,422	48.8	23.3	47.5	€ 73,701,833	48.6	22.6	47.7	€ 60,715,024	47.7	22.5	42.9	€ 27,061,017
9	Diagnostics	26.7	16.8	48.1	€ 21,144,145	30.9	18.7	43.2	€ 18,597,545	32.5	19.1	43.0	€ 37,133,351	31.8	18.7	43.0	€ 111,842,027	31.7	18.1	43.3	€ 5,254,647	31.1	18.0	38.9	€ 37,338,171
11	Building and Site Equipments	37.8	17.1	31.1	€ 165,820,540	33.4	16.0	28.0	€ 131,097,822	32.6	15.5	27.8	€ 97,252,415	33.4	15.4	27.8	€ 265,946,791	33.5	15.2	28.0	€ 353,467,709	33.2	15.2	25.2	€ 208,813,126
12	Cash Contributions	1.4	1.1	0.0	€ 432,415,917	1.4	1.1	0.0	€ 478,621,391	1.4	1.1	0.0	€ 492,098,551	1.4	1.1	0.0	€ 578,029,853	1.5	1.1	0.0	€ 546,358,046	1.5	1.1	0.0	€ 476,301,356
13	Technical Support Activities	21.1	17.9	3.9	€ 31,956,575	25.9	17.4	3.5	€ 45,815,273	25.7	17.0	3.5	€ 18,212,595	25.6	17.0	3.5	€ 36,491,392	23.3	16.9	3.5	€ 28,344,555	25.5	16.6	3.1	€ 15,070,848
14	Broader Approach	31.5	25.8	23.3	€ 23,720,823	34.6	24.2	20.9	€ 25,028,925	35.0	23.6	20.9	€ 35,967,112	35.8	24.3	20.9	€ 111,689,619	37.2	24.5	21.0	€ 67,371,091	36.5	24.3	18.8	€ 5,685,723
15	DEMO-Dones	3.7	5.2	17.0	€ 1,090,900	3.7	4.0	15.2	€ 790,000	5.5	4.6	16.7	€ 35,536,712	8.0	4.9	16.7	€ 55,531,075	5.8	6.0	15.2	€ 32,365,924	6.2	6.5	13.6	€ 7,212,170
16	DEMO-Technology Development Programme	1.0	0.1	0.0	€ 1,981,276	1.7	0.2	0.2	€ 5,000,000	1.8	0.3	0.0	€ 5,000,000	1.6	0.4	0.0	€ 5,000,000	1.4	0.6	0.0	€ 5,000,000	1.2	0.8	0.0	€ 5,000,000
	Sub-totals Ressource allocation per activity	**299.0**	**168.0**	**329.0**	**€ 916,637,553**	**305.0**	**162.0**	**296.0**	**€ 831,943,813**	**296.0**	**156.0**	**296.0**	**€ 913,523,489**	**296.0**	**156.0**	**296.0**	**€ 1,458,512,630**	**296.0**	**156.0**	**296.0**	**€ 1,293,584,556**	**296.0**	**156.0**	**266.0**	**€ 920,504,676**
	ESP in Full Time Equivalent (FTE)			**314.0**				**282.0**				**282.0**				**282.0**				**282.0**				**254.0**	
Stemming from cancelled appropriations to be entered in the estimate of revenue and expenditure of the following financial years as per Art.12.1 FR									€ 104,032,526																
Stemming from appropriations corresponding to external assigned revenue from ITER IO as per Art.12.4.b FR					€ 50,116,706				p.m.				p.m.				p.m.				p.m.				p.m.
Stemming from appropriations corresponding to other assigned revenue as per Article 12.4.b FR					€ 52,150				p.m.				p.m.				p.m.				p.m.				p.m.
Estimated surplus (+) / deficit (-)																	-€ 439,084,828				-€ 385,629,103				-€ 106,570,238
	Sub-total Operational Expenditure/Budget				**966,806,409**				**935,976,339**				**913,523,489**				**1,019,427,802**				**907,955,453**				**813,934,438**
Administrative expenditure					€ 82,930,366				€ 87,658,000				**89,465,602**				€ 92,918,538				€ 97,075,614				€ 101,557,850
	GRAND TOTAL Reconciliation with Budget				**€ 1,049,736,775**				**€ 1,023,634,339**				**€ 1,002,989,092**				**€ 1,112,346,340**				**€ 1,005,031,067**				**€ 915,492,288**
	Of which ESP Budgetary Expenditure				*€ 33,305,108*				*€ 30,823,201*				*€ 31,747,897*				*€ 32,700,334*				*€ 33,681,344*				*€ 31,249,242*

Notes/assumptions:

*	The sub-Actions of Vacuum Vessel, In-Vessel Blanket, In-Vessel Divertor and Test Blanket Module are presented merged in one single line due to commercial sensitive information
**	Individuals, draft figures
1	The ESP trajectory inlcudes a 10 % reduction of the number of ESP at the end of 2026 and an additional reduction of 10% of number of ESPs at the end of 2030. The reduction in FTEs will depend on the working patern (e.g. part time, 80%) of the ESP. The ESP budgetary expenditure is calculated based on the average salary as of the end of 2024, with an annual indexation of 3%
2	2025 figures corresponds to the budget allocated for the Work Programme Amendment 2
3	2026 figures corresponds to the budget allocated for the Original Work Programme.
4	2027 figures are generated by applying a correction to the forecast to allow the full commitment of the 2028 cash contribution to IO in 2027, condition for the EU to approve the Stage 1 of the 2024 ITER baseline at ITER Council.
5	2027-2030: the budgets and the future financial and staffing needs will be subject to the outcome of the next MFF, the ITER Council decisions and respective budgetary procedures of stakeholders
6	Figures are normally limited to operational budget (administrative expenditure is temporarily included for reconciliation purpose only). All figures in other parts of the SPD regarding the Work Programme contain exclusively operational budget and thus can be reconciled with the resource table figures
7	9 TA posts and 6 CA posts are to be returned in 2027
8	7 SNE post during the whole period
9	The total staff figures per contract (FO/TA and CA/SNE) for 2025 do not match the number of posts per type of contract because some CA positions are still pending of conversion into TA positions
10	A minimum capacity of operational staff and administrative support is envisaged in Magnets and Vacuum Vessel at the end of their manufacturing phases

HR_table 1. Resources allocation per activity 2025-2030

3. HR Quantitative

3.1. Statutory staff, SNE and other staff

Human Resources	Year 2024			Year 2025	Year 2026	Year 2027 [2]	Year 2028	Year 2029	Year 2030
ESTABLISHMENT PLAN POSTS	Authorised Budget	Filled as of 31/12/2024[1]	Occupancy rate (%)	Requested staff	Envisaged staff	Envisaged staff	Envisaged staff	Envisaged staff	Envisaged staff
Administrators (AD)	256	241	94%	257	257	254	254	254	254
Assistants (AST)	49	42	86%	48	48	42	42	42	42
Assistants/Secretaries (AST/SC)	-	-	-	-	-	-	-	-	-
TOTAL ESTABLISHMENT PLAN POSTS	305	283	93%	305	305	296	296	296	296
EXTERNAL STAFF	Authorised Budget	Executed FTE as of 31/12/2024	Execution Rate %	Requested staff	Envisaged FTE	Envisaged FTE[2]	Envisaged FTE	Envisaged FTE	Envisaged FTE
Contract Agents (CA)	155	148.4	96%	155	155	149	149	149	149
Seconded National Experts (SNE)	7	4.0	57%	7	7	7	7	7	7
TOTAL EXTERNAL STAFF	162	152.4	94%	162	162	156	156	156	156
TOTAL STAFF	467	435.4	93%	467	467	452	452	452	452

OTHER HUMAN RESOURCES	In place as of 31/12/2024	Total FTE
External Service Providers[3]	329	
Interim staff		7.9

[1] The figure of 'Filled in' - Administrators - includes 1 job offer

[2] Return of 9 TA and 6 CA posts. The 3 AD and 6 AST posts to be returned are indicative numbers.

[3] In accordance with the F4E policy on External Support for F4E Tasks only Contractor staff having being granted access to F4E internal information systems or access to F4E premises are considered to be ESPs.

HR_table 2. Statutory staff, SNE and other staff

3.2. Multiannual staff policy plan Year N+1, Year N+2, Year N+3, Year N+4, Year N+5

A. Staff in Establishment Plan

Function group and grade	Year 2024				Year 2025		Year 2026		Year 2027		Year 2028		Year 2029		Year 2030	
	Authorised Budget		Actually filled as of 31/12/24		Authorised Budget[1]		Requested[2]		Envisaged[3]		Envisaged[4]		Envisaged[5]		Envisaged	
	Perm. Posts	Temp. posts	Perm. Posts	Temp. posts	Perm. Posts	Temp. posts	Perm. Posts	Temp. posts	Perm. Posts	Temp. posts	Perm. Posts	Temp. posts	Perm. Posts	Temp. posts	Perm. Posts	Temp. posts
AD 16																
AD 15												1		1		1
AD 14	4	4	2	1	4	4	3	2	3	2	3	1	3	1	4	2
AD 13	6	7	3	3	5	9	7	10	6	11	5	13	6	15	5	16
AD 12	9	26	10	27	7	27	5	30	4	35	5	43	4	52	7	62
AD 11	1	28		26	4	34	6	40	7	47	7	49	7	49	5	47
AD 10	8	53	9	56	5	54	4	50	3	42	2	37	3	35	2	33
AD 9	1	42	1	29		41	0	30	0	35	1	34	0	29	0	26
AD 8		29		29	1	22	1	20	1	16	0	17	0	23	0	28
AD 7	2	16	1	10	1	13	0	22	0	30	0	32	1	22	1	13
AD 6		20	1	33		26	1	26	1	11	1	3	0	3	0	2
AD 5																
AD TOTAL	**31**	**225**	**27**	**214**	**27**	**230**	**27**	**230**	**25**	**229**	**24**	**230**	**24**	**230**	**24**	**230**
AST 11	2		1		2											
AST 10	1		1		2		2		2		2		1		2	
AST 9	3	1	4		2	1	2	2	2	2	2	2	2	3	1	3
AST 8	1	1		2	1	2		5	1	7	1	8	2	7	2	8
AST 7	1	10		7		9	1	8	1	7	1	6	1	7	2	6
AST 6	2	8	1	6	2	8	2	5	1	4	1	5	1	5		6
AST 5	2	8	2	6	1	5	1	6	1	7	1	7		8		8
AST 4		3	1	3		6		6		6		5		5		4
AST 3		6		8		7		8		1		1		0		
AST 2																
AST 1																
AST TOTAL	**12**	**37**	**10**	**32**	**10**	**38**	**8**	**40**	**8**	**34**	**8**	**34**	**7**	**35**	**7**	**35**
AST/SC 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AST/SC 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AST/SC 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AST/SC 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AST/SC 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AST/SC 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AST/SC TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL	**43**	**262**	**37**	**246**	**37**	**268**	**35**	**270**	**33**	**263**	**32**	**264**	**31**	**265**	**31**	**265**
GRAND TOTAL	**305**		**283**		**305**		**305**		**296**		**296**		**296**		**296**	

[1] Conversion of 4 FO AD and 2 FO AST posts respectively into 5 TA AD and 1 TA AST posts in view of the departure of six officials.

[2] Conversion of 2 FO AST post into 2 TA AST post in view of the departure of two officials.

[3] Return of 9 TA posts (indicatively 3 AD and 6 AST) as part of the agreement with the Commission services for the staff reinforcement from 2023.
This is indicative and will depend on the final decision on the function groups of the positions to be returned.
Conversion of 2 FO AD into 2 TA AD posts in view of the departure of two officials

[4] Conversion of 1 FO AD post into 1 TA AD in view of the departure of one official

[5] Conversion of 1 FO AST post into 1 TA AST in view of the departure of one official

HR_table 3. Multi-annual staff policy Plan 2026-2030 – Staff in Establishment Plan

B. External personnel

Contract agents	Authorised Budget 2024	Executed FTE as of 31/12/2024	Headcount as of 31/12/2024[1]	FTE requested for 2025	FTE corresponding to the authorised budget 2026	FTE corresponding to the authorised budget 2027[2]	FTE corresponding to the authorised budget 2028	FTE corresponding to the authorised budget 2029	FTE corresponding to the authorised budget 2030
Function Group IV	88	85.8	86	88	88	86	86	86	86
Function Group III	49	49.6	50	49	49	47	47	47	47
Function Group II	18	13.0	13	18	18	16	16	16	16
Function Group I	-	-	-	-	-	-	-	-	-
TOTAL	155	148.4	149	155	155	149	149	149	149

Seconded National Experts	Authorised Budget 2024	Executed FTE as of 31/12/2024	Headcount as of 31/12/2024	FTE requested for 2025	FTE corresponding to the authorised budget 2026	FTE corresponding to the authorised budget 2027	FTE corresponding to the authorised budget 2028	FTE corresponding to the authorised budget 2029	FTE corresponding to the authorised budget 2030
TOTAL	7	4.0	5	7	7	7	7	7	7

[1] Staff in place only. It may differ from the recruited/filled in figure reported in table 2.2. External Staff of the FIFI as it does not include job offers

[2] Return of 6 CA posts as per agreement with the Commission services in March 2022. The number of returned FGII, FGIII and FGIV is only indicative.

HR_table 4. Multi-annual staff policy Plan 2026-2030 – External personnel

C. Additional external staff expected to be financed from grant, contribution or service-level agreements

Human Resources	Year N	Year N+1	Year N+2	Year N+3	Year N+4	Year N+5
	Envisaged staff	Envisaged staff	Envisaged staff	Envisaged staff	Envisaged staff	Envisaged staff
Contract Agents (CA)	-	-	-	-	-	-
Seconded National Experts (SNE)	-	-	-	-	-	-
TOTAL	0	0	0	0	0	0

HR_table 5. Staff financed from grant, contribution or SLA

D. Selection procedures

F4E applies the General Implementing Provisions (GIP) on the Procedure governing the Engagement and use of Temporary Agents and those specific to Contract Agents. For the selection and use of EU Officials, F4E follows the rules applied by the Commission, by analogy. In agreement with the Commission and following a verification exercise by the European Personnel Selection Office (EPSO) of the F4E selection procedures, F4E has been selecting staff on the basis of both interviews and written tests since April 1st, 2013 for all long-term employment contracts.

Vacancy announcements have typically been advertised on the career opportunities section of F4E's website. Various other job portals and specialized media are also used to attract applicants from as wide a geographical basis as possible. The increased reliance on social media is part of a sourcing strategy emphasizing a more tailored approach to filling vacancies.

1. Selection of Established Officials

Vacant permanent posts intended to be occupied by already established Officials and/or candidates on reserve lists, are filled in conformity with the Staff Regulations. Interviews are conducted by a Panel (composed by a representative of the administration and a representative of the concerned department) using pre-defined criteria stipulated in the corresponding vacancy notice and a standard evaluation grid based on the aforementioned criteria.

Since 2007, F4E has launched 64 publications for FO positions. However, in an effort to harmonize its workforce structure and in keeping with the time limited mandate of F4E, a decision was taken to stop expanding the F4E FO staff complement. This decision was taken in 2015 and provides that whenever FO positions become vacant, they shall be replaced by equivalent or lesser graded TA positions.

2. Selection of Temporary Agents

These are typically organized on the basis of the following grade brackets:

- AST3 – AST4 for Assistant (technical and administrative) positions;
- AD5 – AD12 for Administrators (technical and administrative) profiles;
- AD9 – AD14 for Middle Management positions;
- AD12 – AD14 for Middle Management (Heads of Department[1]) positions.
- AD14 for the F4E Director.

E. Recruitment forecasts 2026 following retirement/mobility

Below are the selections expected for 2026 according to the information available.

Job title in the Agency	Type of contract (Official, TA or CA)		TA/Official Function group/grade of		CA
	Due to foreseen retirement/mobility	New post requested due to additional tasks	Internal (brackets)	External (single grade)	Recruitment Function Group (I, II, III or IV)
Senior Project Officer	FO/TA	-	AD 5-12	6	-
Senior Technical Officer	FO/TA	-	AD 5-12	6	-
Senior Technical Officer	FO/TA	-	AD 5-12	6	-
Head of Unit	FO/TA	-	AD 9-14	9	-
Head of Unit	FO/TA	-	AD 9-14	9	-
Project Engineer	FO/TA	-	AST 1-9	3	-

HR_table 6. Recruitment forecast

[1] While the model Implementing Rule on middle management applicable to agencies only considers management to be senior as of grade AD14, F4E considers the role of Head of Department as an intermediate step between the Director (senior management) and the Heads of Unit.

4. HR Qualitative

4.1. Implementing Rules on recruitment policy

Implementing rules in place		Yes	No	If no, which other implementing rules are in place		
Engagement of CA	Model Decision C(2019)3016	X			Decision of the Administration and Management Committee on the use and engagement of contractual agents (15 November 2019)	https://f4enet.f4eda.local/sectionMyF4E/HR/About_us/Documents/decision_final_use%20and%20engagement%20of%20CA%20with%20annexes_signed.pdf
Engagement of TA	Model Decision C(2015)1509	X			Decision of Administrative and Management Committee of F4E on general implementing provisions governing the engagement and use of temporary staff under Article 2(f) of the CEOS (15 October 2015).	https://f4enet.f4eda.local/sectionMyF4E/HR/Staff_regulations/Documents/Article_2f.pdf
Middle management	Model decision C(2018)2542	X			Decision of the Administration and Management Committee of F4E on middle management staff (13 June 2018).	https://f4enet13.f4eda.local/ourorganisation/SiteAssets/Pages/OurOrg/AMC%20middle%20management_signe.pdf
Type of posts	Model Decision C(2018)8800	X			Decision of the Administration and Management Committee on types of post and post titles (14 June 2019), complemented by an Amendment	https://f4enet.f4eda.local/sectionMyF4E/HR/career/my_contract/Documents/AMC%20decision%20type%20of%20post%20final%20signed.pdf https://f4enet.f4eda.local/sectionMyF4E/HR/Staff_regulations/rules/Documents/07_AMC_amending_Decision_of_F4E_D_2F7MJ6_of_14_June_2019_on_types_of_post_and_p_2WCLM9_v1_2.pdf

HR_table 7. Adopted Implementing Rules

4.2. Appraisal and reclassification/promotion

A. Performance management

Staff performance is assessed annually to manage organisational performance and identify and address skills gaps promptly. The key constituent parts of the mechanism are:

1. Establishment of agreed performance objectives.
2. Self-assessment by the staff member.
3. Performance review and dialogue with the line manager.
4. Definition of career development and training objectives addressing agreed areas of improvement and career aspirations. The assessment period coincides with the calendar year and runs from January 1st to December 31st. In keeping with the Staff Regulations, the appraisal assesses three main areas of competence as follows: efficiency, ability and conduct in the service. The use of languages and the level of responsibility exercised are two additional constituent components of the merit rating. F4E's competency model outlines desirable and undesirable behaviours for soft skills under 'efficiency' and 'conduct in service'.

Looking ahead, and in keeping with its project nature, F4E will continue improving and optimizing the way it manages performance with a view to enhancing the effectiveness of its matrix organisation. Illustratively, one such area with potential for enhancement is the manner with which dual reporting feedback is captured. Another objective is to better cascade the corporate objectives down to individual objectives and to implement mid-year performance reviews.

In terms of implementing performance rewards, F4E mainly relies on promotions and reclassifications.

Such career advancement is for officials, temporary agents and contract agents who have completed a minimum of two years in their grade.

Promotion/reclassification takes place on the 1 January of the year of the exercise (N) (or on the first day of the month following that in which the 2 years seniority are acquired). In recognition of the need to be in alignment with the promotion rates foreseen in the staff regulations and relevant implementing rules, F4E will continue endeavouring to align its promotion/reclassification rates with the average duration foreseen in the applicable legal framework.
The Tables below provide an overview of the number of promotions awarded in each grade during the last exercise.

B. Implementing Rules in place

Implementing rules in place		Yes	No	If no, which other implementing rules are in place		
Reclassification of TA	Model Decision C(2015)9560	x			Decision of Fusion for Energy Administration and Management Committee laying down general implementing provisions regarding Article 54 of the Conditions of Employment of Other Servants of the European Union (reclassification of	https://f4enet.f4eda.local/ourorganisation/SiteAssets/Pages/OurOrg/54.pdf
Reclassification of CA	Model Decision C(2015)9561	x			Decision of Fusion for Energy Administration and Management Committee on general implementing provisions regarding Article 87(3) of the Conditions of Employment of Other Servants of the European Union (reclassification of Contract Agents, 9	https://f4enet.f4eda.local/ourorganisation/SiteAssets/Pages/OurOrg/87.pdf

HR_table 8. Adopted Implementing Rules

C. Reclassification of TA / promotion of officials

Reclassification of Temporary Agents / Promotion of Officials							
Grades	**Year 2020**	**Year 2021**	**Year 2022**	**Year 2023**	**Year 2024**	**Actual average over 5 years**	**Average over 5 years (Annex IB SR)**
AD 13	10.0	9.0				9.5	**6.7**
AD 12	11.8	11.0				**11.43**	**6.7**
AD 11	4.0	4.8	5.3	4.0	4.2	**4.47**	**4.0**
AD 10	3.9	3.7	3.7	4.0	4.0	**3.84**	**4.0**
AD 9	3.4	4.4	4.0	4.0	4.0	**3.98**	**4.0**
AD 8	2.9	3.1	3.0	3.1	3.0	**3.01**	**3.0**
AD 7	2.5	2.3	2.8	3.0	3.0	**2.73**	**2.8**
AD 6	3.2	3.3	3.5	5.0	3.2	**3.64**	**2.8**
AD 5							**2.8**
AST 11							
AST 10							**5.0**
AST 9							**N/A**
AST 8				4.0		**4.0**	**4.0**
AST 7			4.0		4.0	**4.0**	**4.0**
AST 6	3.5			4.0	4.0	**3.8**	**4.0**
AST 5	3.4	3.7	4.0	4.0	4.0	**3.8**	**4.0**
AST 4	4.3	3.9	3.0	3.3	3.0	**3.5**	**3.0**
AST 3	3.0	3.2	4.1	4.1	9.8	4.8	**3.0**
AST 2							**3.0**
AST 1							**3.0**

HR_table 9. Reclassification of TA / promotion of officials

D. Reclassification of contract agents

Function Group	Grade	Staff in activity at 01.01.2023	How many staff members were reclassified in 2024	Average number of years in grade reclassified staff members in 2024	Average number of years in grade of reclassified staff members according to decision C(2015)9561
CA IV	17	12			6 - 10
	16	26	5	5.4	5 - 7
	15	36	10	4.3	4 - 6
	14	23	4	3.5	3 - 5
	13	1			3 - 5
CA III	12	6			
	11	21	2	6.0	6 - 10
	10	21	3	5.3	5 - 7
	9	5			4 - 6
	8				3 - 5
CA II	7	2			
	6	6	1	6.0	6 - 10
	5	5			5 - 7
	4				3 - 5
CA I	3				
	2				
	1				

HR_table 10 . Reclassification of contract staff

4.3. Gender representation

The figures are consistent with workforce statistics in the industry sectors related to the core tasks of the Agency and show a predominance of male colleagues in the technical functions. Conversely female colleagues are predominantly represented in administrative and support roles. Progress has been made in increasing the representation of women in managerial roles, and F4E remains dedicated to strengthening efforts to further enhance the presence of female staff in leadership positions and across all areas.

A. Statutory staff (only officials, AT and AC)

Staff distribution per type of contract, category and gender at 31.12.2024									
		Officials		Temporary Agents		Contract Agents		Grand Total	
		Staff	%	Staff	%	Staff	%	Staff	%
Female	Administrator	8	21.6%	56	22.9%			64	14.8%
	Assistant	6	16.2%	10	4.1%			16	3.7%
	GFII, FGIII, FGIV					83	55.7%	83	19.3%
	Total female	**14**	**37.8%**	**66**	**26.9%**	**83**	**55.7%**	**163**	**37.8%**
Male	Administrator	19	51.4%	157	**64.1%**			176	40.8%
	Assistant	4	10.8%	22	**9.0%**			26	6.0%
	GFII, FGIII, FGIV					66	44.3%	66	15.3%
	Total male	**23**	**62.2%**	**179**	**73.1%**	**66**	**44.3%**	**268**	**62.2%**
Grand Total		**37**		**245**		**149**		**431**	

HR_table 11. Gender representation Officials, AT and AC on 31/12/2024

B. Evolution over 5 years of the Middle and Senior management

	2019		2023		2024	
	Number	%	Number	%	Number	%
Female Managers	4	**13%**	6	**24%**	5	**26%**
Male Managers	28	**88%**	19	**76%**	14	**74%**
Total Managers	**32**		**25**		**19**	

	2019		2023		2024	
	Number	**%**	**Number**	**%**	**Number**	**%**
Female Senior Managers	0	0	1	17%	2	40%
Female Middle Managers	4	100%	5	83%	3	60%
Total Female	**4**		**6**		**5**	
Male Senior Managers	7	25%	2	11%	3	21%
Male Middle Managers	21	75%	17	89%	11	79%
Total Male	**28**		**19**		**14**	

HR_table 12. Gender evolution of Senior and Middle management

4.4. Geographical balance

The table below shows the geographical distribution of staff in place as of 31/12/2024.

The over representation of Spanish nationals follows from the Agency being headquartered in Spain. A diversity policy is being developed to address the imbalance. Looking forward F4E will continue to strike a balance between ensuring a broad geographical distribution of staff and the non-discrimination principle enshrined in its selection and recruitment policies.

A. Statutory staff per nationality

Country	AD + CA FGIV		AST/SC - AST + CA FGI/FGII/FGIII		Total	
	Number	% of total staff in AD and FGIV categories	Number	% of total staff in AST/SC, AST, CA FGI, FGII and FGIII categories	Number	% of total staff
Belgium	8	2.5%	9	2.8%	17	3.9%
Bulgaria	3	0.9%	1	0.3%	4	0.9%
Croatia	1	0.3%		0.0%	1	0.2%
Czechia	2	0.6%	2	0.6%	4	0.9%
Estonia	1	0.3%		0.0%	1	0.2%
Finland	4	1.2%	1	0.3%	5	1.2%
France	64	19.6%	16	4.9%	80	18.6%
Germany	8	2.5%	6	1.8%	14	3.2%
Greece	6	1.8%	3	0.9%	9	2.1%
Hungary	6	1.8%		0.0%	6	1.4%
Ireland	6	1.8%	2	0.6%	8	1.9%
Italy	55	16.9%	19	5.8%	74	17.2%
Lithuania	0	0.0%	3	0.9%	3	0.7%
Malta	1	0.3%		0.0%	1	0.2%
Netherlands	4	1.2%		0.0%	4	0.9%
Poland	5	1.5%		0.0%	5	1.2%
Portugal	10	3.1%	1	0.3%	11	2.6%
Romania	7	2.1%	1	0.3%	8	1.9%
Slovakia	1	0.3%		0.0%	1	0.2%
Slovenia	1	0.3%		0.0%	1	0.2%
Spain	123	37.7%	38	11.7%	161	37.4%
Sweden	3	0.9%		0.0%	3	0.7%
United Kingdom	7	2.1%	3	0.9%	10	2.3%
Grand Total	**326**		**105**		**431**	

HR_table 13. Nationalities of staff

B. Evolution over 5 years of the most represented nationality

Most represented nationalities	2019		2023		2024	
	Number	% of total staff	Number	% of total staff	Number	% of total staff
Spain	138	31.6%	154	36.6%	161	37.4%
France	85	19.5%	76	18.1%	80	18.6%
Italy	88	20.1%	82	19.5%	74	17.2%
Belgium	18	4.1%	17	4.0%	17	3.9%
Germany	17	3.9%	13	3.1%	14	3.2%
Portugal	11	2.5%	11	2.6%	11	2.6%
United Kingdom	14	3.2%	10	2.4%	10	2.3%
Greece	8	1.8%	9	2.1%	9	2.1%
Romania	10	2.3%	9	2.1%	8	1.9%
TOTAL F4E	437		421		431	

HR_table 14. Evolution over 5 years of the most represented nationalities

4.5. Staff mobility

A. Internal mobility

F4E supports staff aspirations and continuously updates its practices to ensure staff remain motivated and equipped with the necessary skills and knowledge to excel in their roles. The annual performance dialogue serves as a starting point for discussions on mobility and professional development, with internal mobility being one of the effective tools to offer staff an enriching career at F4E. The different mechanisms to implement internal mobility are various, such as re-assignment, internal selection procedures, calls for expression of interest, secondment and job-shadowing, ensuring flexibility to meet the constantly changing resource needs of the projects, contributing to organizational effectiveness and employee engagement.

There has been a general increase in internal mobility. Last year the increase rose by 12.3%, indicating the re-organisation offered more opportunities to staff, in comparison to 2023 where the figure was 7.5%. The current internal mobility mechanisms have facilitated the effective implementation of the reorganization within the set deadline. The 7.7% figure for April 2025 indicates a promising development reflecting the new Leadership Team's commitment to staff mobility and operating in a more agile manner.

B. Inter-agency job Market

It will predominantly concern support and administrative profiles rather than operational and technical staff. Where necessary and deemed useful F4E will use the Interagency Job Market to publish its vacancy notices.

4.6. Schooling

In the absence of a European School in F4E's Barcelona and Cadarache work sites, the Agency established Service Level Agreements with a number of international schools located in and around these two sites. Under these agreements, F4E staff enjoys easier access to school registration and enrolment for their dependent children. The agreements also provide a framework for the direct settlement of school fees by the Agency. The number of international schools making up the F4E schooling offer has gradually grown

over the years and is currently a prominent part of F4E's employee value proposition. In addition, F4E continues to be involved in the governance of the International School of Manosque where it is part of the international Advisory Council and where it strives to uphold the interests of its staff with dependent children in that establishment. While, F4E does not currently envisage any further actions at this time, it will endeavor to maintain its appeal in this domain for both existing and prospective staff members.

Taken together, Service Level Agreements have been established with 24 international schools of which 21 in the area of Barcelona and 3 in Cadarache (France).

Agreement(s) in place with School(s)				
Contribution agreements signed with the EC on type I European schools	Yes		No	**X**
Contribution agreements signed with the EC on type II European schools	Yes		No	**X**
Number of service contracts in place with international schools:	**24**			

HR_table 15. Service Level Agreements with International schools

List of Tables

SPD2026_ANNEXES WORK PROGRAMME 2026

1. DEFINITIONS, ASSUMPTIONS AND SUPPORTING INFORMATION TO WP2026

The 2026 Work Programme takes into account to the extent possible the European Commission's guidelines for the Programming document as requested by the Financial Regulation. It comprises a general overview of the progress of work and the procurement activities that will be committed during 2026, detailed objectives, expected results, and targets for each WP Action.

Main assumptions

The following assumptions are considered as the basis of the Work Programme 2026:

- The F4E schedule used for the preparation of this document is the one submitted to IO at the end of April 2025.
- The F4E schedule takes into account:
  - ✓ The latest input and developments of the schedules from the F4E suppliers, taking into account the agreed fabrication routes and showing the real development of the work.
  - ✓ The most realistic assumption of Procurement Arrangement (PA) signature dates based on the current status of the design of components and on the forecasted dates of the required design reviews prior to the PA signature.
  - ✓ The available manpower in F4E, taking into account bottlenecks in specific areas where staffing is not sufficient to grant a prompt process of the work. In specific cases, F4E foresees to satisfy its manpower needs by using external contractors.
  - ✓ The most realistic assumptions on the input data availability from IO to take into account the existing delays and the agreed dates of data delivery.
  - ✓ The information provided by the other DAs through their monthly Detailed Work Schedule to take into account any possible delay in the delivery of items to F4E that can cause delays to the EU in-kind procurements.
- The budget figures are based on the MFF 2021-2027 approved by the Council on 22/02/2021 plus ITER Host State and Membership contributions. The budget summary table of Work Programme 2026 (WP_table 1) reflects the current status of the budget for the 2026 financing decision.
- In order to achieve an improvement of the quality of the PAs that need still to be signed, a common F4E/IO effort is still in progress to better identify the requirements that are linked to the specific procurement.
- Technically and commercially complex procurements will be implemented whenever appropriate through the competitive dialogue procedure or through the negotiated procedure, in order to improve the alignment of supply chain response to F4E needs and to proactively adopt cost containment measures. This will be done in compliance with F4E's Financial Regulation.
- Grants related to recurring and sequential R&D activities, with a well-defined development path eventually leading to an EU procurement package, will be implemented whenever appropriate, through Framework Partnership Agreements (FPA), in order to streamline and channel R&D funding, improve its effectiveness, and decrease the administrative burden to beneficiaries and F4E alike.
- Procurements which require a very close coordination between F4E and other entities will be implemented, whenever appropriate, through the Joint Procurement procedure.
- All the activities described in the overview of each Action and the list of contracts in WP_Table 3 are intended as credited by PA or ITA. If an Action is not credited, then it is explicitly mentioned in the overview. This is not applicable for the Action "Broader Approach" (i.e. not credited).

- F4E endorsement of the Japanese Procurement Arrangement that foresees an EU financial contribution will be preceded by a budgetary commitment for the entire amount of the F4E contribution.
- Changes originated by IO, or other DA's, will be fully compensated by the IO Reserve Fund.
- The Art. 5 of the F4E Statutes states that the Joint Undertaking may award grants and prizes in accordance with the rules of its financial regulation. In this regard, Essential selection, award criteria and Upper funding limits are defined in these annexes.
- Article 74 (2) of F4E's financial regulation in conjunction with Article 1(5) of Annex III to the F4E Statutes provides for the possibility to make use of annual instalments for actions extending over more than one financial year. An annual instalment consists in breaking down a budgetary commitment into annual instalments. Annual instalments can be implemented according to the forecast of annual payment due, the forecast of progress in the implementation of the contract, or annual budget availability.

Definitions and supporting information

1. "Action" for the purposes of Work Programme means "a coherent area of action with objectives and resources". The list of the Actions and their definition is defined in the main text of the SPD.

2. Each Action of WP2026 comprises:

(a) **General overview** that is split into two parts. The "Progress of Work" part aims at providing the information concerning the activities foreseen during 2026 in that area. The "Procurement Activities" part instead focuses on the legal commitments foreseen during the year and to be covered by the financial decision and to be financed under the budget 2026. Furthermore, it includes (even if not explicitly mentioned):

i. Provisions for urgent general support tasks as cost/risk analysis, engineering support/analysis, I&C develop and support, experts, quality assurance and quality control, nuclear safety, CE marking analysis, transportation, storage, material characterization and qualification activities, resolution of non-conformities (in line with the mechanism agreed at ITER level), metrology, low value purchase orders and external legal support, cost of legal proceedings and alternative dispute settlement, including arbitration, as needed[1]. These tasks will be mainly implemented through specific contracts under existing framework contracts.

ii. Provisions for payment of liquidated damages, late payment interests, cost escalation, claims, release of options, indexation and other financial compensations that F4E may be obliged to pay under its contracts.

iii. Provisions for amendments to ongoing contracts covered by a previous financing decision(s) in accordance with the Implementing Rules.

iv. Provisions for new contracts and contractual modifications related to expiry of Switzerland co-operation agreement

v. Provisions for specific cash compensations to IO required in case of transfer of activities from F4E to IO approved by the ITER Management Advisory Committee.

vi. Provisions for contract modifications and new contracts linked to the new ITER baseline.

(b) **Annual objectives** defined as the achievement on time of the following milestones:

i. F4E Delivery to IO in 2026 (IPL- Iter Project Link);

[1] In accordance to F4E WBS implementation rules, whenever a procurement activity is in support of a specific WBS L3, the related procurement should be implemented under the mentioned WBS L3. This is not the case for general technical support activities to multiple WBSs (e.g. external resource to support overall risk management, etc.). In this case, they are included under Action 13

ii. Milestones that will lead to the achievement of future “F4E deliveries to IO” from the following years (defined as predecessor of future “F4E deliveries to IO” (if applicable).

iii. Key milestones marking significant schedule progress (only in the event that none of the above are applicable).

iv. Link with the ITER Project multi-annual objectives (defined as the whole set of “F4E deliveries to IO”): when a WP annual objective is a predecessor of a multi-annual objective (F4E delivery to IO), it is clearly identified to which milestone is linked in the column “type of milestone”.

(c) The **expected results** define the main outcomes of the Actions.

(d) The **target** is defined as the annual EVM-CAS SPI or M-SPI reaching a minimum value.[2]

(e) **Human resources** (see HR_Table 1 of annexes to HR REP annexes). The table shows an indicative estimate of the Full Time Equivalent (FTE) staff assigned to the specific action to cover all the activities carried out in the next five years and broken down by type of contract (FO/TA and CA/SNE), as well as the total estimate of ESPs (individuals & Full Time Equivalent) in each year. It also shows the budget allocated to the specific actions.

(f) **Procurement plan**:

i. Main Procurement Initiatives (see WP_Table 3 of these annexes): these are, per Action, the list of the foreseen main contracts with value higher than 143,000 Euros[3]. Amendments, claims, reimbursement, indexation, late interest and budget reserve are grouped together due to the sensitivity of this information. The list is based on the current information at the time of writing the Work Programme. During the implementation of the Work Programme activities, F4E may identify the need for new calls, group more activities in a single call or split one activity in more calls. This will in any case be performed preserving the scope and objective presented in WP2026. Contracts that do not fulfill the Work Programme scope identified for each Action are not covered by this financial decision and therefore will not be authorized. A change to this list shall be considered as a non-substantial for the purposes of the Article 32 point 4 of the F4E Financial Regulations if not affecting the available budget for 2026 within the limit of the flexibility rule and if any related changes to the scope of the annual Work Programme do not have significant impact on the nature of the Actions or on the achievement of objectives of the multiannual Project Plan.

ii. Value per Action: WP_Table 2 presents an indicative value of financial resources corresponding to each Action. F4E has evaluated the level of commitments planned for the Actions in 2026 by taking into account the progress of the project and the available manpower. A good implementation of the annual commitment is one of the objectives for F4E (see PP_Table 7 in Annexes to Project Plan). Any additional budget required and exceeding the currently available one will consist of unused appropriations adjusted to match the final needs.

iii. Indicative timeframe for launching the procurement and type of procedure/contract: the foreseen time of publication of calls and type of contracts is shown in WP_Table 5 of these annexes. The dates are indicative only and based on the present understanding of the project development. For specific contracts and specific grants or use of Joint Procurements the foreseen time of publication of calls is not included as no formal publication will take place (the signature date is used to give anyway an indication of time). Publication of the call for tender is intended as the date of publication on the Industry Portal (for open procedures/call for proposals) and the date of the Invitation letter to be sent out to the Suppliers (for negotiated procedures). For restricted procedures and competitive dialogues this milestone refers to the date of the call for expression of interest (first phase of the procedure).

iv. The plan may cover some activities moved from previous years into WP2026 due to changes in the overall planning and priorities.

v. The plan does not (and cannot) include the consequences for the Action of PCRs and deviations approved by the IO Director General or his delegates in the frame of Reserve Fund Management Plan. As a result, these will be implemented under the budget line 4.2. For information, F4E will present to the final meeting of the GB each year, in an amendment to the Work Programme, a

[2] For Action 12 Cash Contributions and Action 13 Technical Support Activities Annual M-SPI is not applicable.

[3] The threshold has been selected so to be in line with the FR.

summary of the PCRs agreed within the year and the activities that the PCRs (including those agreed in previous years) have funded.

vi. Grants and specific Grants are clearly identified and information is provided to fulfill art.58 of the Financial Regulation (see WP_Table 4 of these annexes).

vii. Framework Partnership Agreements (FPA) or Framework Contracts (FWC) are included in the year of signature for clarification purposes only and do not constitute part of the financing decision.

3. Some of the Work Programme activities refer to provision for recurrent activities with the same ultimate objective of supporting the final achievement either of the design (e.g. CAD support, engineering analyses, etc.), the manufacturing process (e.g. QA/QC Inspectors, engineering support for deviations analyses, CE marking, etc.) as requested in ITAs/PAs, or the site support services (access control and security, Facility Management Services, etc.). Therefore the description in terms of the financing decision does not change significantly from one year to the next.

2. OBJECTIVES AND KEY PERFORMANCE INDICATORS

Work Programme objectives

The Work Programme objectives are the achievement on time of a selected number of milestones. A minimum of 4 objectives is provided per Action as described in below section 3.

There is a close link between the long-term planning (i.e. Project Plan) and the short-term activities (i.e. work programme). In the Work programme, F4E is tracking as Work Programme objectives some selected existing milestones leading to the IC/GB ones (i.e. the predecessors) and in the chain of all critical and near-critical paths. Therefore such milestones in the short-term will act as an alert against the increasing risk of missing any critical and near-critical path milestones in the longer term.

Work Programme target

F4E will use EVM-CAS SPI as Work Programme target for each Work Programme action to which it is applicable. Annual M-SPI will be used as target for other Work Programme actions.

EVM-CAS SPI

$$\frac{\text{EV}}{\text{PV}} = \frac{\text{Achieved Credit (KIUA)}}{\text{Baseline Credit to date (KIUA)}}$$

Annual M-SPI

$$\frac{\text{Number of milestones with Status} = \text{Completed}}{\text{Number of milestones with reference date} \leq \text{Current month}}$$

LIST OF WP2026 ACTIONS

Action 1. Magnets

Action 1	Magnets

Progress of works

The Magnets Programme has delivered its contribution to the ITER Project and may finalise the remaining amendments and potential claims. It may continue to support ITER on site activities and/or future magnets developments beyond ITER.

Procurement Activities

Finalisation of amendments and closure of potential claims. Some new contracts may be signed to contribute to ITER on site activities and/or to future developments beyond ITER.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope description	Forecast Achievement Date	Type of Milestone	PA/ITA

Not applicable

EXPECTED RESULTS

The main expected results for this action are:

1-Finalisation of amendments and closure of potential claims

TARGET

Not applicable

Action 2. Vacuum Vessel

Action 2	Vacuum Vessel

Main Vessel

Progress of Work

All 3 remaining Vacuum Vessel sectors are scheduled to be delivered to the ITER site during 2026. If the need for final machining of the Field Joints is detected for S3 or for S2, the delivery of those sectors might be delayed accordingly, and especially S2 could possibly slip into 2027 in that case.

Procurement Activities

Provisions will be made for the transportation of the remaining sectors to the ITER site, resolution of non-conformities if required (including, but not limited to possible out of tolerances, e.g. Field

Joints), possible continuation of incentive schemes and/or other actions for schedule stabilization, inspectors, additional ANB support and the possibility to add specialized resources to the project. Contractual options for the Main VV contract may be released, as needed.

Specific Contracts for support activities, like on-site Inspectors, Documentation Support, Engineering and Analysis, Project Management support and Experts will continue to be issued depending on the project needs.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU15.1A.12520	IPL > Delivery of Sector 3 by EU-DA to ITER Site	Q2 2026	F4E Delivery	PA 1.5.P1A.EU.01 Vacuum Vessel - Main Vessel
EU15.1A.14480	IPL > Delivery of Sector 2 by EU-DA to ITER Site	Q3 2026	F4E Delivery	PA 1.5.P1A.EU.01 Vacuum Vessel - Main Vessel
EU15.1A.16440	IPL > Delivery of Sector 9 by EU-DA to ITER Site	Q1 2026	F4E Delivery	PA 1.5.P1A.EU.01 Vacuum Vessel - Main Vessel
EU15.1A.3122190	S2 - All welds completed and conform	Q3 2026	Predecessor of IPL EU15.1A.14480	PA 1.5.P1A.EU.01 Vacuum Vessel - Main Vessel

EXPECTED RESULTS

The main expected results for this action are:

1. Delivery of Sector 9
2. Delivery of Sector 3
3. Delivery of Sector 2
4. Completion of all welding activities on Sector 2

TARGET

The target for 2026 is “EVM-CAS SPI ≥ 0.95”

Action 3. In Vessel – Blanket

Action 3	In Vessel - Blanket

Blanket First Wall

Progress of Work

During 2026 the two main workshops under the contracts F4E-OMF-900 continue with the manufacturing of the series of the panel structures for rows 13 and 6, while engineering activities will be in progress for the panels included in the contracts awarded with the first reopening of competition (i.e. rows 11, 12, 14 and 15) in preparation for the manufacturing readiness review (MRR) gates. The first FAT activities for row 13 are planned to start by Q4-2025 and continue into 2026, leading to the completion of the first of a kind panel structures in 2026. Tungsten qualification mock-ups will be manufactured and activities for the procurement for W tiles procurement and the first W bonding trials will start. New FWC contract for the HHFT tests will be signed in 2026. Standard parts are in production following a successful MRR.

Procurement Activities

The procurement activities will focus on the new Tungsten qualification programme (including preliminary operations to apply the W armour on Pre-Series panels) and supporting contracts, as well as the re-opening of competition for additional panel structure rows. This will include the material contracts (OMF-1019), service contracts for the financial audits, site inspections, specialised NDTs and finite element analysis, metrology materials characterization and other services to support the manufacturing and quality control. The framework contract for the HHFT will be signed in 2026 and first task orders may be signed in the same year, depending on the progress of the mock-ups manufacturing. Commercial indexation and options will be executed as planned.

Blanket Cooling Manifolds

Progress of Work

For the Manifolds, the chimney pipes will enter in the series production after the MRR completion and the materials production will be completed. Qualification activities for the bundles will be completed and the contracts for the upper ports and branch pipes will be signed.

Procurement Activities

The procurement activities will be focussed the reopening of competition for the remaining scope under the Framework OMF-1080. It will include the signature of the re-opening of the tasks 5&6 (upper ports and branch pipes and connectors), completion of the qualification under the task 1 and launch of the reopening for the series production under the tasks 2&4. Material production will be completed and options for the storage may be released.

Service contracts for the site inspections, specialised NDTs and analysis, metrology and other type of services to support the manufacturing and quality control will be put in place.

Commercial indexation and options will be executed as planned

WORK PROGRAMME OBJECTIVES				
Milestone ID	**Scope description**	**Forecast Achievement Date**	**Type of Milestone**	**PA/ITA**

EU15.2A.100960	MS#2.1B MRR approved for Manufacturing of Pipe Bundles - Task 1B by MRR panel - Simic	Q2 2026	WP26 objective	PA 1.6.P6.EU.01 Blanket Manifolds
EU16.01.12435160	First Panel Ready for Delivery FW13A - AAC	Q3 2026	WP26 objective	PA 1.6.P1A.EU.01 Blanket First Wall
EU16.01.12447240	First Panel Ready for Delivery FW13A - FBL	Q3 2026	WP26 objective	PA 1.6.P1A.EU.01 Blanket First Wall
EU16.02.12430	MS#2.1B MRR approved for Manufacturing of Pipe Bundles - Task 1B by MRR panel Altrad	Q2 2026	WP26 objective	PA 1.6.P6.EU.01 Blanket Manifolds

EXPECTED RESULTS

The main expected results for this action are:

1. Completion of the first panel structures for both Blanket First Wall Contractors
2. Completion of the MRR for the manifolds (tasks 1B)

TARGET

The target for 2026 is “EVM-CAS SPI ≥ 0.95”

Action 4. In Vessel – Divertor

Action 4	In Vessel – Divertor

Progress of Work

Divertor projects will enter into series production phase after the completion of the first of a kind CBs and IVTs pre-series.

The first set of the CBs procured under contract F4E-OMF-444-01-01 will be completed and ready for delivery and the final acceptance tests will start for the first CB under contract F4E-OMF-444-03-01. Engineering will be completed for the F4E-OPE-1700 and manufacturing of the first CB will start.

For the IVT, the first IVT for the Contract F4E-OMF-1139-01-01 is expected to be finalized and ready for delivery, while the HHFT and FAT will progress for the other pre-series IVTs under the same contract. For the contract F4E-OMF-1139-02-01 the manufacturing readiness review will be completed and the manufacturing of the first IVTs will start.

On IO side the Divertor Integration is expected to complete the qualification facility and readiness reviews in view of the first integration activities planned by the end of 2026. Transportation to the Divertor Integration site may take place, depending on the IO needs for the Integration.

Collaboration agreements between F4E and QST are being discussed as risk mitigation action for the unavailability of the HHFT facility in Russia for the IVT and OVT.

Procurement Activities

The procurement activities will include procurement of additional IVTs (under OMF-1139) to meet the required delivery pace by Divertor Integrator. During the year will be put in place service contracts for High Heat Flux testing and facilities maintenance and upgrades, site inspections, specialised NDTs and analysis, metrology and other services to support the manufacturing and quality control. Contracts for transportation to China (Divertor Integrator site) and support for customs and transportation services may be required in 2026.

Commercial indexation and options will be executed as planned.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope description	Forecast Achievement Date	Type of Milestone	PA/ITA
EU17.01.1029700	HPC - Approval of the Demonstration of Conformity of the Packaging (M_CB-03 (CB#18)_S31)	Q4 2026	Predecessor of IPL EU17.01.500 980	PA 1.7.P1.EU.01 Cassette Body
EU17.01.1057200	HPC - Approval of the Hot He Leak Test (M_CB#02_S25)	Q4 2026	Predecessor of IPL EU17.01.504 980	PA 1.7.P1.EU.01 Cassette Body
EU17.2B.984900	Manufacturing approved for the IVT Series by MRR- PFU panel (OMF-1139-02-01)	Q3 2026	WP26 objective	PA 1.7.P2B.EU.01 Inner Vertical Target

EU17.2B.999140	Ready for Delivery Inner Vertical Target IVT-01	Q4 2026	WP26 objective	PA 1.7.P2B.EU.01 Inner Vertical Target

EXPECTED RESULTS

The main expected results for this action are:

1. Completion of the 3rd Cassette Bodies
2. FAT and ready for deliveries of the first Cassette Body and Inner Vertical Target
3. Start of the PFU manufacturing for the 2nd Contractor.

TARGET

The target for 2026 is "EVM-CAS SPI ≥ 0.95"

Action 5. Remote Handling

Action 5	Remote Handling

Divertor Remote Handling System (DRHS)

Progress of Work

For pre-SRO required Divertor Assembly Tool (DAT) the focus will be given to the final design activities via two main development lines that will run in parallel: one for the Cassette Multifunctional Mover (CMM) and the other one for the Cassette Toroidal Mover (CTM). Final design activities might be accompanied with prototyping and tests in some areas.

Procurement Activities

For both of the main development areas and the complementary activities, specific contracts will be launched through existing frameworks and through the new main contractual tool for non-nuclear 1st assembly systems (F4E-OMF-1609). Amendments to existing contracts may be also signed. Contracts or Specific contracts may be signed for studies and de-risking activities. Specific Contracts for support activities like Inspectors, Documentation Support, Engineering and Analysis, I&C support and other activities, Project Management support etc, will continue to be issued depending on the project needs.

Cash compensation with IO for the procurement of services/supplies with IO (art. 89f of the F4E financial regulation/ Memorandum of understanding of non-significant procurements).

Cask and Plug Remote Handling System (CPRHS)

Progress of Work

For pre-SRO required EPP/UPP simplified cask platforms the focus will be given to manufacturing, testing and deliveries through existing and new contracts. For Cask Platform for Divertor (CPD) focus will be given to final design development and derisking activities by internal work and launching new specific contracts under F4E-OMF-1609, supported in some areas by laboratory tests and prototyping.

Procurement Activities

For both of the main development areas and the complementary activities, specific contracts will be launched through existing frameworks and through the new main contractual tool for non-nuclear 1st assembly systems (F4E-OMF-1609). Amendments to existing contracts may be also signed. Contracts or Specific contracts may be signed for studies and de-risking activities. Specific Contracts for support activities like Inspectors, Documentation Support, Engineering and Analysis, I&C support and other activities, Project Management support etc, will continue to be issued depending on the project needs.

Cash compensation with IO for the procurement of services/supplies with IO (art. 89f of the F4E financial regulation/ Memorandum of understanding of non-significant procurements).

Neutral Beam Remote Handling System (NBRHS)

Progress of Work

For pre-SRO related components (Monorail Crane System (MCS) and Top Lid Opening Mechanism (TLOM)) the focus will be given to continue preliminary and final design development and moving towards manufacturing through launching new specific contracts under F4E-OMF-1609 and amendment of existing contracts, supported in some areas by laboratory tests and prototyping.

Procurement Activities

For the main development areas and the complementary activities, specific contracts will be launched through existing frameworks and through the new main contractual tool for non-nuclear 1st assembly systems (F4E-OMF-1609). Amendments to existing contracts may be also signed. Contracts or Specific contracts may be signed for studies and de-risking activities. Specific Contracts for support activities like Inspectors, Documentation Support, Engineering and Analysis, I&C support and other activities, Project Management support etc, will continue to be issued depending on the project needs.

Cash compensation with IO for the procurement of services/supplies with IO (art. 89f of the F4E financial regulation/ Memorandum of understanding of non-significant procurements).

In-vessel viewing system (IVVS)

Progress of Work

Main focus will be given to the completion of final design development to move towards the design reviews and launching the manufacturing of First-of-a-kind (FOAK) system. Final design activities will be prepared/accompanied by prototyping and testing in some areas.

Procurement Activities

For the main development areas and the complementary activities, specific contracts will be launched through existing frameworks and through the new main contractual tool for non-nuclear 1st assembly systems (F4E-OMF-1609). Amendments and options to existing contracts may be also signed/released. Contracts or Specific contracts may be signed for studies and de-risking activities. Specific Contracts for support activities like Inspectors, Documentation Support, Engineering and Analysis, I&C support and other activities, Project Management support etc, will continue to be issued depending on the project needs.

Cash compensation with IO for the procurement of services/supplies with IO (art. 89f of the F4E financial regulation/ Memorandum of understanding of non-significant procurements).

Common activities (transversal)

Progress of Work

Engineering support and expert activities will be performed for the four main operational activities, where needed. Complementary RH technology related design activities, qualification and prototyping will be carried out with a great focus on the field of control system, radiation hard technologies like electronics and cameras. Activities will be implemented (design and tests) aiming at manufacturing of first components (e.g. rad hard cameras and electronics) to be integrated in the RH systems.

Procurement Activities

For the main development areas and the complementary activities, specific contracts will be launched through existing frameworks and through the new main contractual tool for non-nuclear 1st assembly systems (F4E-OMF-1609). Amendments to existing contracts may be also signed. Contracts or Specific contracts may be signed for studies and de-risking activities. Grant or grant amendment may be signed for complementary RH technology related design activities, qualification and prototyping. Specific Contracts for support activities like Inspectors, Documentation Support, Engineering and Analysis, I&C support and other activities, Project Management support etc, will continue to be issued depending on the project needs.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU23.02.14065120	TO signed for Simplified CTM Design & Manufacture	Q3 2026	Predecessor of IPL EU23.02.06750	PA 2.3.P2.EU.01 Divertor Remote Handling System
EU23.03.14044452	IPL > Delivery of Equatorial Port Plug First Assembly Cask to ITER Site	Q1 2026	F4E Delivery	PA 2.3.P3.EU.01 Cask and Plug Remote Handling System
EU23.03.14044472	IPL > Delivery of Upper Port Plug First Assembly Cask to ITER Site	Q2 2026	F4E Delivery	PA 2.3.P3.EU.01 Cask and Plug Remote Handling System
EU23.05.06890	NBRHS Monorail (Incl. other first priority items) FDR Meeting completed	Q4 2026	Predecessor of IPL EU23.05.00580	PA 2.3.P5.EU.01 Neutral Beam Remote Handling System
EU57.01.52550	EU IVVS technical FDR meeting (Measurement Sub-System)	Q3 2026	Predecessor of IPL EU57.01.00275	PA 5.7.P1.EU.01 In-Vessel Viewing System

EXPECTED RESULTS

The main expected results for this action are:

1. Launch of DAT CTM final design activities under F4E-OMF-1609

2. Launch of DAT CMM final design activities under F4E-OMF-1609 3. Launch of CPD final design activities under F4E-OMF-1609 4. Final design review meeting of MCS under OPE-1252 5. Internal final design review meeting under OMF-383
TARGET
The target for 2026 is “EVM-CAS SPI ≥ 0.95”

Action 6. Cryoplant and Fuel Cycle

Action 6	**Cryoplant and Fuel Cycle**

Progress of Work

Fuel cycle

Tritium plant:

For Isotope separation system, the work of the integrated team will focus on design and de-risking activities, signature of specific framework for design and qualification activities for Isotope separation system and water detritiation system, tendering of the helium refrigeration system and preparation of procurement arrangement.

For water detritiation system, the work of the integrated team will focus on preliminary design, de-risking activities, tendering activities for the reception and purification system and preparation of procurement arrangement.

Radiological and Environmental Monitoring Systems:

For REMS, will focus on Design and risk mitigation activities of REMs for Tokamak, tendering process for the specific Framework contract for REMS Tokamak and preparation of the amendment of the procurement arrangement.

For vacuum pumping:

The delivery of the full scope for Neutral Beam Front End Cryodistribution might be completed in early 2026 if not fully achieved by end of 2025.

For Leak Detection system the team will focus on the call for tender process for manufacturing, assembly, testing and delivery of the systems and the negotiations with the potential suppliers up to contract signature. Maintenance plan of already delivered components will be in place.

For Neutral beam cryopumps system, activities will focus on the main tendering process for the procurement of the neutral beam cryopumps and start preparation of the amendment of the procurement arrangement.

Some scope might be implemented for Cryogenic and Vacuum Engineering Services with the signature of the first Specific Contract.

Procurement Activities fuel cycle

- Contract signature for manufacturing and assembly of Leak Detection Systems [4].
- Possible TO or new contract for maintenance and/or testing of Leak Detection components already delivered.
- Possible TO signature under existing FwC for Cryogenic and Vacuum Engineering Services [5].
- Commitment for Cash Transfer to IO related to PCR-001649: PBS66 (Radwaste) transferred from EU-DA to IO [6].
- TO signature under existing FwC of Update Preliminary design of REMS [7].
- TO signature under existing FwC for Final Design of REMS [8].
- Cash transfer for RSUs and Cubicles PIC-SIC[9].
- TO signature under existing FwC for design and manufacturing of Reception and purification system for Water Detritiation system [10].
- Framework contract signature for Design and qualification activities for Isotope Separation system and Water Detritiation System.
- TO signature for PA preparation activities for Isotope Separation system.
- Cash compensation with IO for the procurement of services with IO (art. 89f of the F4E financial regulation/ Memorandum of understanding of non-significant procurements) [11].
- Possible scope transfer to IO for Assembly Tooling for spot leak detection (if PA amendment is approved).
- Contracts or Specific contracts may be signed for studies, de-risking and design activities for Isotope separation system, water detritiation system and radiological and environmental monitoring system.
- Amendment to existing contracts may be signed.
- Specific Contracts for support activities like Inspectors, Documentation Support, Engineering and Analysis, I&C support and other activities, Project Management support etc, will continue to be issued depending on the project needs.

Cryoplant

Progress of Work

[4] At the time of writing the Work Programme, this commitment is planned in 2026 but there is the possibility of postponement to early 2027 due to procedure negotiations. The budget is allocated in 2026.

[5] At the time of writing the Work Programme, it is expected that the FwC will be signed in 2025 but there is a possibility of delay for signature in 2026. FwC signature is required for Task Order signature.

[6] At the time of writing the Work Programme, this commitment is planned beginning 2026 but there is the possibility of advancement to 2025.

[7] At the time of writing the Work Programme, this commitment is planned end 2025 (budget allocated to 2025) but there is the risk of delay to beginning 2026.

[8] At the time of writing the Work Programme, this commitment in planned in 2027 but there is the possibility that it is advanced to end 2026 depending on the progress of previous task order during 2026.

[9] At the time of writing the Work Programme, this cash transfer is planned in 2027 but there is the possibility that it is advanced to 2026.

[10] At the time of writing the Work Programme, there is a possibility that this commitment is signed in 2026 or in 2027 depending on the final strategy agreed and the type of contract used.

[11] At the time of writing the Work Programme, this cash compensation with IO is planned for Beg 2026 but there is the possibility that it is advanced to end 2025.

Commissioning of the remaining of LN2 plant and auxiliary systems will be completed and handed over to operations.

Procurement Activities cryoplant

- Amendments to existing contracts may be signed.
- Specific Contracts for support activities like Inspectors, Documentation Support, Engineering and Analysis, Project Management support etc. will continue to be issued depending on the project needs.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU31.01.12000160	Launch Invitation to Tender - Stage 2 for Heating and Diagnostic Neutral Bem Cryopumps	Q2 2026	Predecessor of IPL EU31.01.12730	PA 3.1.P1.EU.04 Neutral Beam Cryopumps
EU31.01.12102	IPL > Delivery of NB Front End Cryodistribution System and Cryojumpers by EU-DA to ITER Site	Q2 2026	F4E Delivery	PA 3.1.P1.EU.02 Front End Cryopump Distribution Cold Valve Boxes and Warm Regeneration Box
EU32.01.19270	Framework Design for Isotope Separation system signed	Q2 2026	Predecessor of IPL EU32.03.00400	PA 3.2.P3.EU.01 Isotope Separation System
EU64.01.602710	Launch Invitation to Tender - Stage 2 for Framework REMS Qualification and Procurement of monitors	Q3 2026	Predecessor of IPL EU64.01.348910	PA 6.4.P1.EU.02 for Procurement REMS for TKM,HCF and PACB

EXPECTED RESULTS

The main expected results for this action are:

1. Cryoplant OPE-376 technical activities completed.
2. Signature of contract for manufacturing and assembly of Leak Detection Systems.
3. Radiological and environmental monitoring system: Update preliminary design mature enough to start preparation of final Design technical specifications.
4. Neutral Beam cryopumping system: Annex B mature to launch the tender for the procurement of the Neutral Beam cryopumps.
5. Water detritiation system: Technical specification for Reception and purification system completed.
6. Isotope separation system: preliminary PA Annex B completed.

TARGET

The target for 2026 is “EVM-CAS SPI ≥ 0.95”

Action 7. On hold[12]

Action 8. Heating & Current Drive

Action 8	Heating & Current Drive

Electron Cyclotron (EC) System Gyrotrons, Power Sources and Power Supplies (PS), EC Launchers and EC Control System

Progress of Work :

Electron Cyclotron Power Supplies

- Commissioning of EC Power Supplies sets will continue.
- Site acceptance test of 52HV08 will be completed.
- Technical support of the EC Power Supplies will continue.

Electron Cyclotron Gyrotrons

- Manufacturing design activities for EU Gyrotrons (Radiofrequency Sources) will progress towards Manufacturing Readiness Review and manufacturing activities will start upon successful closure of the MRR meeting.
- Preparation activities for the second specific contract for the procurement of the Control System for the EU Gyrotrons will be finalized.

Electron Cyclotron Launchers

- The contractor will proceed with the manufacturing design of Ex-Vessel Waveguides and Upper Launcher (UL) Systems towards Manufacturing Readiness Review(s) subject to successful closure of the Final Design Review.
- Procurement of long lead materials for series production will be completed.
- The design and qualification of the EC isolation valves will be completed.
- The preparation activities for the specific contract signature for the brazing of the diamond disks will be completed.
- Preparation activities for the signature of the contract for the series production of the EC isolation valves will start.

Electron Cyclotron Control System

- Assuming that in 2025 the acceptance tests of ITER gyrotron are started, activities in 2026 will be mainly devoted to debugging the system on real operation and collecting data to prepare for the design phase for the system able to drive the full plant. The EC Plant Controller (ECPC) upgrade will be also completed to include the possibility of operating two gyrotrons sharing the same main power supply.

[12] F4E is reworking the scope of Action 7. It currently foresees to change this action into “Support to operations’ first for JT60 then for ITER. The action is foreseen to be updated in SPD2027-2031.

Procurement Activities

Common activities:

- Additional contracts, contract modifications and ITAs might be signed to cover extra scope on the EC system as a result of the new ITER Baseline.
- Specific contracts might be signed under the framework for engineering support services for EC projects.
- Other contracts are foreseen to support these main activities (e.g., engineering, design, analyses, resources, inspectors, prototyping), most of them specific contracts under existing frameworks.

Electron Cyclotron (EC) Power Supplies:

- Supporting activities for site support and interfaces are foreseen.

Electron Cyclotron (EC) Gyrotrons:

- The specific contract for the procurement of the EU Gyrotrons Control System will be signed.
- Additional contracts to further develop EC gyrotron technology and to prepare for future additional scope resulting from the new ITER baseline might be signed.

Electron Cyclotron (EC) Launchers:

- Specific contracts and additional options covering additional tests and analysis for FDR closure as well as the remaining scope might be signed under the Framework Contract for Design Finalization and Supply of the Electron Cyclotron Upper Launchers and Ex-Vessel Waveguides for ITER.
- A specific contract for the brazing of the diamond disks will be signed under the Framework Contract for Manufacturing of Diamond Disks and Brazing.

Electron Cyclotron Control System:

- Task orders under existing Framework Contracts for the preparation of the technical meeting to develop the EC Plant Controller multi-gyrotron operation will be signed.

Neutral Beam Test Facility, Padua:

Progress of Work

- MITICA Beam Source – Site acceptance tests (SAT) will be performed, and final acceptance will be reached subject to successful delivery of the Beam Source to the NBTF in 2025.
- MITICA Diagnostics – fabrication and assembly will be completed.
- NBTF Assembly - Installation of the Beam Source and Beamline components will start subject to successful SAT of components and availability of MITICA vessel.
- NBTF Control System (CODAS) - Data acquisition system for MITICA Diagnostics will start. MITICA Interlock and Safety will be completed.

Procurement Activities

- MITICA Beam Line Component and Beam Source: supporting tasks for the final acceptance tests will be implemented.

- Other contracts are foreseen to support these main activities (resources, inspectors), most of them specific contracts under existing frameworks.

Neutral Beam for ITER - Cadarache:

Progress of Work

- NB Assembly and Testing: The contractor will proceed with the design of NB Tooling (Batch 1) towards Final Design Review and manufacturing design activities will start subject to successful closure of FDR. The Technical Specifications for the NB assembly works will be completed jointly with IO.
- NB Beam Sources and Beam Line Components – Pre-procurement and pre-PA activities will progress.
- NB Vessels: Manufacturing (welding, NDT, machining) will continue to progress along the year.
- NB Drift-Ducts: The contract will kick-off and manufacturing engineering and procurement activities will start and progress towards MRR completion in 2027.
- NB Absolute Valves: After completion of the feasibility an MOU will be signed with IO for the start of Joint Procurement of the Absolute Valve.
- NB Drift Duct Feedthroughs: Pre-PA activities will progress.
- NB Magnetic Shielding: Procurement procedures related to PA 53.05 will progress up to contract signature.
- NB Power Supplies: Manufacturing design activities for ISEPS will progress towards MRR if contract is resumed in Q3 2025, and FDR is successfully closed. Delivery of the Ground Related Power Supplies to ITER will be completed and installation in B34 will start. Installation of Acceleration Grid Power Supply – Conversion System (AGPS-CS) in B34 will be completed. For High Voltage Deck (HVD) and High Voltage Bushing installation in B37 will also start. Engineering activities for ITER Heating Neutral Beam (IHNB) control system will progress.

Procurement Activities

- Engineering Studies and Engineering Support activities might be performed, including ITAs.
- Specific Contracts under existing Framework Contracts will be signed for insourcing and technical follow-up of the HNB components.
- NB Assembly & Testing: Specific contracts under existing Framework Contracts are foreseen to support the execution of the NB Tooling contract (e.g. CAD support, structural analysis support). Options under the F4E-OPE-1203 Design, Manufacture, Test and Delivery of the Assembly tools for Heating Neutral Beam 1 & 2 Components might be released, covering part of the remaining scope (Batch 3: pre- SRO tools including Drift Duct and High Voltage Bushing tools). An expert contract for the follow up of the NB Assembly works will be signed. A joint IO/F4E call for tender might be launched subject to timely progress on centralization of scope.

- NB Vessels: Task orders related to quality inspection services or production support might be signed to support further the NB Vessels manufacturing activities.
- NB Drift-Ducts: Task orders related to quality inspection services or engineering support will be signed to support the contract execution.

NB Magnetic Shielding: The contract for material procurement will be signed. The Framework Contract for NB Magnetic Shielding (Passive Magnetic Shielding and Active Correction and Compensation Coils) manufacturing design, manufacturing, factory assembly and delivery will be signed as well as the first specific task orders under this Framework Contract to cover the engineering and prototype phase.

- NB Power Supplies: Specific tasks and options will be released, in accordance with the contract implementation status.

Ion Cyclotron Antenna

No activities are foreseen in 2026.

Following agreement between F4E and IO, the IC antenna procurement scope was transferred through a Level-0 PCR (#1271) from the original share of F4E, without contractual impact, since the PA had not yet been signed.

WORK PROGRAMME OBJECTIVES				
Milestone ID	**Scope Description**	**Forecast achievement date**	**Type of milestone**	**PA**
EU52.01.4013400	EC Launchers - M1/M2 Mirrors: MRR Meeting	Q2 2026	Predecessor of IPL EU52.01.100300	PA 5.2.P1B.EU.02 Electron Cyclotron Upper Launcher
EU52.02.12240	OMF-1180 - MRR Meeting for the European Gyrotrons	Q3 2026	Predecessor of IPL EU52.03.117790	PA 5.2.P3.EU.01 Electron Cyclotron Gyrotrons
EU52.03.229120	EC Power Supplies - SCP-52HV08 - SAT Completed (M3.3.5)	Q2 2026	WP26 objective	PA 5.2.P4.EU.01 Electron Cyclotron High Voltage Power Supply
EU53.01.79740	NB Assembly Tooling - FDR Meeting Batch 1 - Pre-SRO (Baseline) Complete	Q3 2026	Predecessor of IPL EU53.01.00535	PA 5.3.P1.EU.01 Neutral Beam Assembly and Testing
EU53.04.10800	Start of MRR meeting phase for HNB-1&2 Drift Duct	Q3 2026	Predecessor of IPL EU53.04.00740	PA 5.3.P4B2.EU.01 Heating Neutral Beam Drift Duct (Amendment)
EU53.05.131240	FwC Signed for NB Magnetic Shielding ACCC & PMS	Q4 2026	Predecessor of IPL EU53.05.11991	PA 5.3.P5.EU.01 NB Magnetic Shielding
EU53.06.21320	IPL > Delivery of 22 kV switchgears for GRPS of IHNB 1&2 to ITER Site by EU-DA	Q1 2026	F4E Delivery	PA 5.3.P6.EU Neutral Beam Power Supply

EU53.TF.15890	Final Acceptance - MITICA Beam Source	Q3 2026	WP26 objective	PA 5.3.P9.EU.01 Neutral Beam Test Facility Components

EXPECTED RESULTS

The main expected results for this action are:
1. The MRRs for the EC Launchers Mirrors, Waveguides and Windows will be held.
2. The contract for the procurement of EC gyrotrons control system will be signed.
3. F4E-OPE -1203 Option 3 for the design, manufacture, test and delivery of the pre- SRO tools included in Batch 3 (Drift Duct and High Voltage Bushing tools) will be released.
4. Signature of the MOU for the joint F4E/IO procurement of the Absolute Valve.
5. Start of material procurement activities for the Drift Duct.
6. The contract for the material procurement for the NB Magnetic Shielding will be signed.
7. Completion of MITICA Interlock and Safety System contracts.
8. Completion of MITICA Diagnostics contract.

TARGET

The target for 2026 is “EVM-CAS SPI ≥ 0.95”

Action 9. Diagnostics

Action 9	Diagnostics

Progress of Work

During 2026 the Diagnostics Programme will complete the delivery of in-vessel cables to ITER.

It will also continue with, or start manufacture of several components or systems for delivery to ITER, including for the low field side collective Thomson scattering system, the vacuum vessel electrical feedthroughs, the visible/IR wide-angle viewing system in equatorial port 12, the radial neutron camera (including fission chambers), Diagnostic pressure gauges and port plug bolometer cameras and sensors. Some of these will be delivered within the year.

Several Diagnostic systems and subsystems will complete their design activities with approval of the final design review, including for port plug components of the core plasma charge exchange recombination spectrometer, the in-divertor electrical services, ex-vessel components of the radial neutron camera, the core plasma Thomson scattering system, vacuum vessel, divertor and port plug bolometer cameras and sensors, and the visible/IR wide-angle viewing system in equatorial ports 3, 9 and 17.

The design of all remaining Diagnostics Programme systems and subsystems will also progress, e.g. for ex-vessel components of the core plasma charge exchange recombination spectrometer.

For integration of systems into ITER ports under F4E responsibility, the tender process will be ongoing, having completed the first phase (expression of interest) and launched the second phase (invitation to tender).

Procurement Activities

Specific contracts will be signed under existing framework contracts for the manufacturing of Diagnostics components (e.g. critical components of the collective Thomson scattering system, ex-vessel components of the visible/IR wide-angle viewing system for equatorial port 12, bolometers sensors and cameras, and Diagnostic pressure gauges).

Several contracts will be signed as well related to the development and delivery of software, instrumentation, electronics and control of several of the diagnostic systems.

Specific support contracts will be signed as well, mainly for external engineering and manufacturing support services (including the preparation of design reviews and manufacturing specs), experts and quality inspectors.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU55.02.108470	FDR Meeting and categorize issues for DIV Cameras	Q1 2026	Predecessor of IPL EU55.02.105230	PA 5.5.P1.EU.03 Diagnostics - Bolometers
EU55.06.699700	IPL > Delivery of in-vessel cables for VV Batch 11 by EU-DA to IO ITER site	Q1 2026	F4E Delivery	PA 5.5.P1.EU.18 Diagnostics - Tokamak Services
EU55.09.102450	Final Design Review Meeting for CPTS (FDR Meeting)	Q2 2026	Predecessor of IPL EU55.09.102700	PA 5.5.P1.EU.08 Diagnostics - CPTS 55.C1
EU55.10.30180	Task Order Signed for F4E for TO02a CTS Manufacture	Q4 2026	Predecessor of IPL EU55.10.100740	PA 5.5.P1.EU.09 Diagnostics - Low Field Side Collective Thomson Scattering
EU55.13.102130	Manufacturing approved for MfG PP EP12 by MRR panel	Q2 2026	Predecessor of IPL EU55.13.100120	PA 5.5.P1.EU.06 Diagnostics - Equatorial Visible/Infrared Wide-Angle Viewing System
EU55.14.613371	Dispatch Invitation to Submit Updated Tender for FWC [Invitation to submit initial tender]	Q2 2026	Predecessor of IPL EU55.14.101505	PA 5.5.P1.EU.10-11-12-13-14-21 Diagnostics - Port Engineering Systems

EXPECTED RESULTS

The main expected results for this action are:

1. Contract signature for the procurement of critical components for the Low Field Side Collective Thomson Scattering (CTS)
2. Invitation to tender issued for the Port Integration contract
3. Delivery of all in-vessel cables.
4. Manufacturing contracts signed for several diagnostics components needed for SRO

TARGET

The target for 2026 is “EVM-CAS SPI ≥ 0.95”

Action 10. Test Blanket Module

Action 10	Test Blanket Module

Progress of Work

The Design and Safety Analysis activities for the TBM Sets and Ancillary Systems will continue for the completion of the preliminary design and the first step of the final design.

The consultancy of an Agreed Notified Body will continue as well as the handling and storage of EUROFER and other steel products.

The activities for the development of the TBM sets Industrial Feasibility and Fabrication Technologies will continue, as well as for the EUROFER semi-finished product. The definition and codification of EUROFER design limits in RCC-MRx design and construction code will continue.

The collaboration with EUROfusion and EFLs will continue to be reinforced, and the joint activities with Breeding Blanket will progress. Possible collaborations with private initiatives could also start.

Procurement Activities

It is planned to initiate procurement procedures or place contracts related to the preliminary and the final design of the TBM sets, ancillary systems. and of the related safety analyses and studies.

F4E will also place contracts for support, and transversal activities such as the consultancy of an Agreed Notified Body, insourcing of external service providers, the storage, handling and, when needed, transportation of steel materials will proceed. Some activities could be executed under the ITER TBM Project Team Funding scheme. Stage II of the supply contract for EUROFER 97-5 finished products is also expected to be released.

The activities under the responsibility of F4E are carried out through specific contracts of existing/new framework contracts or existing/new supply and service contracts. F4E will be continuously supported by experts funded respectively by F4E through expert contracts and specific contracts. Specific contracts for support activities like engineering, inspections and analysis will be issued depending on the project needs.

In addition, specific contracts for support activities like engineering and analysis, experts, project management support, system engineering management and in-sourced staff may be issued depending on the project needs.

Moreover, if requested and approved by the TBM-Project Team Steering Committee, a cash contribution will be transferred to IO in order to execute TBM-PT activities common to several ITER Members.

The Test Blanket Module Systems procurement plan is not in response to PA or ITA but to the TBM Arrangements (TBMAs).

No activities are credited.

WORK PROGRAMME OBJECTIVES				
Milestone ID	**Scope Description**	**Forecast achievement date**	**Type of milestone**	**PA**

EU56.01.1244630	F4E-OFC-1017 TO-11 Signed ANB Consultancy TBS Regulatory documents	Q1 2026	WP26 objective	NA
EU56.02.1242510	F4E-OFC-1063-01 TO-06 Signed for Handling, Cutting Storage Serv for Steel Products related to the EU TBMs	Q2 2026	WP26 objective	NA
EU56.05.1260065	Kick off meeting for TO-03 OFC-1350-01 for Safety Studies in support of TBSs PD & FD	Q1 2026	WP26 objective	NA
EU56.06.80830	Submission of ADP2 TO03 F4E-OMF-1070 T3000-D1 WCLL TBM-shield developments (WPs 3100, 3200, 3300)	Q4 2026	WP26 objective	NA

EXPECTED RESULTS

The main expected results for this action are:

1. Completion of the Preliminary design activities for WCLL TBS and the start-up of Final design phase.
2. Completion of the Preliminary design activities for HCCP TBS in collaboration with KO-DA and the start-up of Final design phase.
3. Transmission to IO of the consolidated set of data in view of the update of the ITER Preliminary safety Report.

TARGET

The target for 2026 is “Annual M-SPI ≥ 0.85”

Action 11. Buildings and Site Equipment

Action 11	Buildings and Site Equipment

Site, Buildings and Power Supplies:

Progress of Work

The focus of the Buildings works will be to continue progressing installation and testing activities in the Emergency Power Supply Buildings (B44, B46) and Medium Voltage Distribution Buildings (B45, B47); the Load Centers LC01, LC02, LC15 & LC16 and the Medium Voltage MV04, MV05 & MV06.

In the scope of Building Services, to continue progressing on design activities for the Tritium building DT phase, and procurement of the equipment (HVAC, piping, electrical, instrumentation and control, fire detection / protection) necessary for the Tokamak, Diagnostic, and Tritium building installation schedule with IO contractors.

The Load Center LC08 equipment will be under manufacture for delivery to ITER site.

The Emergency Power Supply Buildings (B44, B46), Medium Voltage Distribution Buildings (B45, B47) will be operational (Ready for use).

Procurement Activities

Hot Cell Facility Buildings:

- Procurement activities: competitive dialogue for the Hot Cell Facility Buildings Design (as a minimum, depending on IO and F4E's governance agreement) should be running in 2026 for both IO and F4E scopes (DT1 phase).

Specific contracts will be signed under ongoing framework support services and supply/works contracts. This includes, for example, Task Orders, Structural analysis, Building HMI Development, Engineering and Contract Management Consultancy Services (with special respect to cost and schedule assessment) and consultancy for advice on interpretation of French Regulatory Law 2012.

Changes and exercise of options to the ongoing services and construction contracts in relation with PCRs, input data delays, and re-allocation of scope between contracts, will be implemented through amendments to the ongoing contracts in line with the provisions of the Financial Regulation.

Cash contribution will cover the ITER site host agreement and the ITER Site Services Agreement.

Specific cash compensation to IO as required in case of transfer of some activities from F4E to IO.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU62.03.13716	Last delivery PIC and SIC valves and Pumps TO#206A	Q2 2026	WP26 objective	Main Contracts
EU62.03.14298	HP - EU submission of Contractor Construction Design related to B14 DT ventilation & ARL	Q2 2026	Predecessor of IPL EU62.03.14271	Main Contracts
EU62.05.390	IPL > Medium Voltage Distribution Building LC/1A (46) RFE (RFE #16)	Q1 2026	F4E Delivery	MAIN MILESTONES
EU62.05.410	IPL > Medium Voltage Distribution Building LC/2B (47) RFE (RFE #10)	Q1 2026	F4E Delivery	MAIN MILESTONES

EXPECTED RESULTS

The main expected results for this action are:

1. Procurement phase completion for TB21 TO TO#206A
2. Completion of b.Next Construction Design for B14 DT HVAC
3. To deliver the Load Center 1A (B46) to the IO for its suppliers works (ready for equipment - RFE)
4. To deliver the Load Center 2B (B47) to the IO for its suppliers works (ready for equipment - RFE)

TARGET

The target for 2026 is "EVM-CAS SPI ≥ 0.95"

Action 12. Cash Contributions

Action 12	Cash Contributions

Cash contribution to IO

This action covers the EURATOM in-cash contribution that F4E[13] shall deliver to ITER International Organisation (IO) in cash together with its contribution in-kind for the ITER project in accordance with ITER Agreement[14].

The present Work Programme includes the cash contributions to IO due by F4E for the following year N+1. The whole amount is committed in advance based on estimates of the IO draft budget N+1 and under the terms approved by ITER Council[15].

Cash Contribution to Japan

The action also covers the transfer of procurement responsibility from EURATOM to Japan under the supervision of the ITER Organization in accordance with ITER Agreement. This is financed through a cash contribution from EU to Japan paid by F4E. An update of the schedule of payments is provided by the Japanese Domestic Agency (JA DA) twice a year.

WORK PROGRAMME OBJECTIVES

Milestone	Scope Description	Forecast achievement date	Type of milestone	PA
EUCC.01.520	Cash Contributions to ITER Organization 2027	Q4 2026	WP26 objective	Cash Contributions to ITER Organization

EXPECTED RESULTS

The expected result for this Action is to pay the cash contributions to ITER Organization as agreed by the ITER Council and to Japan as defined in the schedule for the relevant credits assigned to JA DA for those components transferred by the EU to them.

The target for 2025 is to commit the cash contribution to IO for 2026 according to the decisions due to be taken by the ITER Council in November 2025.

As far as the cash to Japan is concerned, the target for 2025 is to reinforce the commitment for the escalation revision PA 3.2.PA.JA.01[16] and to reinforce the commitment linked to the Settlement Agreement for offsetting of Upper Port #10[17].

Annual M-SPI NA

[13] F4E is the European Domestic Agency that manages the EURATOM contribution to the ITER project.
[14] Article 8 "Resources of ITER Organization" (ITER Agreement 2006)
[15] According to Article 9 of ITER Agreement, the ITER Project Resource Management Regulations (PRMR Regulations) shall govern the administration of the resources of the ITER Organization. It provides a detailed description of the applicable rules for contributions in kind, cash income, commitments and payments for the ITER Organization. The final figures are approved or modified by the ITER Council.
[16] As per LGA-2021-A-55 Addendum#1
[17] Implementing Arrangement on Additional Cash Contribution between F4E and QST signed 10 December 2020

Action 13. Technical Support Activities

Action 13	Technical Support Activities

The procurement of the supporting activities is mainly performed through Framework contracts and specific contracts.

Technical Support to In-Kind Procurement

Engineering Support activities

Progress of Work:

The Fusion Technology and Engineering Department during 2026 will continue supporting the Projects by offering a combination of services ranging from taking responsibility of the delivery of standardized components and self-contained subprojects, to long-term contributing to the project engineering and finally to helping to address specific and punctual needs. This is accomplished both by directly developing technical solutions to be endorsed by the project teams and by providing technical services and high qualified technical resources in the key domains of fusion technologies and engineering to be matrixed to the project teams according to the needs and the priorities.

The department will provide technical expertise and services in the following areas:
Design office activities, Technical Data Management, System Design, Mechanical Engineering, Multi-physics Engineering Analysis (Mechanical, Structural Dynamics, Civil engineering, Fluid Dynamics, Electromagnetism, Nuclear Analyses), Plasma Engineering, Design Codes and Standards, Electrical Engineering, Instrumentation and Control, CODAC, Project Engineering, Metrology, Reverse Engineering, Manufacturing, Material, Assembly Integration and Validation (AIV) and testing facility (e.g. FALCON). and RAMI (Reliability, Availability, Maintainability and Inspectability), AI for Engineering.

Procurement Activities:

Beyond the preparation of task orders, the procurement activities in the Fusion Technology and Engineering Department will be mainly focused on signing contracts, renewing Framework Contracts for adapting the level of support to the needs of the Programmes. A Grant will be signed for Extension of 2D plasma codes to 3D passive structures and other Grants may be signed for various activities.

Safety & Quality

Progress of Work

The scope of Nuclear Safety includes the oversight of the implementation of all nuclear safety requirements by F4E and its contractors. The Nuclear Safety activities also provide support to the project teams involved in PIC/PIA (Protection Important Components/Activities) to ensure compliance with the necessary regulation. This includes support to nuclear safety management, identification of optimum positions for key nuclear safety issues, review of relevant documentation and nuclear safety inspections in F4E suppliers' premises. Nuclear Safety also includes CE marking support to F4E Project Teams in assessments and reviews, for each PBS, of the compliance with CE marking directives and regulations (mainly Pressure

Equipment Directive, Machinery Directive, Low Voltage Directive, Electromagnetic Compatibility Directive, Explosion Protection and Construction Product Regulation). The Nuclear Safety group also organizes workshops, seminars and other activities to raise and re-enforce the nuclear safety awareness within F4E.

The scope of Quality Assurance includes the support to project teams to ensure that the F4E quality requirements are correctly implemented and managed for the F4E contribution to ITER. In particular, support is provided in both domains of Quality Assurance (QA) and Quality Control (QC). As for QA, support aims at ensuring that F4E's QA processes are properly followed in the development of the different ITER projects and in line with the F4E Quality Management Policy. As for QC, the support to the projects will be provided in the follow-up and control of the activities performed by F4E's contractors.

The scope of Quality Management & Documentation Management includes the support the operational departments and the project teams to ensure that the Quality Management System (including its processes) and the Documentation Management System are maintained and improved, with focus on reporting, digitalisation and simplification.

The S&Q unit is also responsible for Occupational Health & Safety matters, such as conducting risk assessments, investigating occupational accidents, providing health and safety training, delivering personal protective equipment, and informing staff and visitors (if applicable). Additionally, the unit follows the occupational health and safety systems for contractors working under F4E's responsibility, such as at the ITER worksite.

The Safety and Quality Unit will provide support in the activity of alignment of the F4E Management System with the ISO 19443 and in obtaining ISO 19443 certification, should F4E decides to request it.

Procurement Activities

Task Orders and contractual Options of Task Orders already in force, Purchase Orders and Procurement Procedures for Direct Service Contracts will be issued to continue to support the Project Teams at F4E's or at suppliers' premises. F4E will be also supported by experts on Nuclear Safety expertise, funded by F4E through expert contracts.

Systems Integration and Performance

Progress of Work

System Integration and performance supports the Head of Projects Department with respect to the scope of the EU in-kind components for ITER, in representing F4E towards the ITER Organisation and to the scope of Broader Approach and Roadmap projects. Among the main tasks are: the interaction with IO on the project technical baseline, including change control, and participation to the Configuration Control Boards, the management of transversal technical issues impacting several PTs, the coordination of F4E participation to ITER Independent Reviews and working groups focused on technical matters and the assurance of consistency, adequacy and maturity in relevant Design Reviews. The scope includes also the development and implementation of Systems Engineering practices, processes and tools and to support their correct deployment by the Project Teams. To cover this scope, external manpower is contracted across several areas, including Requirements Management and Verification (RMV)

with emphasis on Verification, Design and Manufacturing Readiness Reviews, Interface Management, and other Systems Engineering topics.

Procurement Activities

Task Orders, contractual Options of Task Orders already in force and Procurement Procedures for Direct Service Contracts will be issued to continue to support the F4E Project Teams and to complement the in-house Configuration Management, Technical Integration and Issues Management capabilities with expert support from specialized companies.

Project Performance Management

Progress of Work

The Project Performance Management (PPM) Unit contributes to the delivery of project results by providing project management expertise and qualified project management professionals in the key areas of project management, namely schedule, cost, and risk management. PPM unit is responsible for developing project baselines, identifying risks, issues, and deviations from project baseline, and proposing preventive/corrective actions. It performs the activities of schedule management, risk plan, EAC (maintaining EAC data in the systems) with an independent role for schedule forecast, cost estimation and risk assessment in the programmes/projects, following the Head of Projects' delegation. The unit also coordinates and prepares the performance monitoring and reporting during project execution and drive project decisions ensuring proper consideration of schedule, cost and risk aspects. The preparation and update of the project teams actions as part of the annual and multi-annual programme planning documents is also included.

Procurement Activities

Task Orders and contractual Options of Task Orders already in force will be issued to continue to ensure the maintenance and update of the cost, schedule, risk information in the specific tools.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU.PM.3076310	Framework Contract signed for Project Performance Management Support (cont. OMF-1220)	Q4 2026	WP26 objective	All
EU.ES.03.63580	FWC OMF-1755 Signed for Provision of I&C system development and integration services	Q2 2026	WP26 objective	All

EXPECTED RESULTS

The main expected results for Technical Support to In-Kind Procurement are:

1. Continuation of Implementation of the framework contracts which will allow Fusion for Energy to get external support in the field of I&C Control and Mechanical Engineering.

2. On time signature of the required Task Orders in order to support the F4E Project Teams

3. Provide the requested support to F4E and all Project Teams on the matters described in the Scope of Work. In general, the target for 2026 is to keep safeguarding the EURATOM's investment in ITER while achieving the cumulative credit forecasted for each action in this WP2026 thanks to the support granted to the work under each specific action

3. Signature of a new Framework Contract to continue to provide support services in the area of Systems Engineering.

4. Signature of a new Framework Contract to continue to provide support services in the area of Project Performance Management.

5. On time signature of the required Task Orders in order to support the F4E Project Teams.

6. Provide high quality Project Performance Management services to F4E and all Project Teams.

7. Provide the requested support to F4E and all Project Teams on the matters described in the Scope of Work. In general, the target for 2026 is to keep safeguarding the EURATOM's investment in ITER while achieving the cumulative credit forecasted for each action in this WP2026 thanks to the support granted to the work under each specific action.

Transportation

Progress of work:

During 2026, Transportation project will be in charge of the management, on the F4E side, of the joint procurement with IO for the transportation of ITER components to the site in Cadarache. The scope includes the transportation of all ITER Components from the port/airport of entry (Fos or Marignane) to ITER site.
During 2026, this activity will mainly cover transportation of NON EU loads between Fos and Cadarache (EU-leg). The main cost driver is for Highly Exceptional Loads (HEL) that follow the dedicated ITER itinerary.

Procurement activities:

Task Orders for Transportation of Highly Exceptional Loads between Maritime Port of Marseille and ITER site. Gendarmerie Task Orders to escort the HEL convoys and Task Orders for Management fees and for component transportation with contractor Daher will be signed.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU.TR.3029160	Task Order Signed for TO 24 for Convention 4 for Real Convoys for Gendarmerie Services	Q3 2026	WP26 objective	All
EU.TR.3029280	Task Order Signed for TO 25 for Convention 4 for Real Convoys for Gendarmerie Services	Q4 2026	WP26 objective	All

EXPECTED RESULTS

The main expected results for Transportation are:

1. Transportation of Highly Exceptional Loads between Maritime Port of Marseille and ITER site.

2. Gendarmerie Task Orders to escort the HEL convoys and Task Orders for Management fees and for component transportation with contractor Daher will be signed.

Other Technical Support Activities

Project Management Office

Progress of Work

The main focus of Project Management Office is on performance oversight and reporting, preparation of the annual and multi-annual programme planning documents, scheduling support, change control, the maintenance and update of the cost situation, the continuous integration of risk management into every aspect of the organisation, ensuring that all decisions and processes are aligned with F4E's objectives and risk tolerance, increased standardization of reporting within the organization, the implementation of the Internal Compliance Programme for export control. Overall project management support and support to the use and maintenance of specific tools to support project and program management are also included.

Procurement Activities

Task Orders and contractual Options of Task Orders already in force, Purchase Orders and Procurement Procedures for Direct Service Contracts will be issued to continue to support the F4E Project Management Office and F4E Project Teams.

Technical Support Activities of administrative nature

Progress of Work

A general provision is foreseen for operational support activities and expenditures of administrative nature provided by digital transformation unit (DTU), corporate services and logistics, legal and financial services, communication and events, specific trainings and workshops, market analysis and technology transfer services.

Procurement Activities

The above scope will be implemented mainly by issuing Task Orders under existing/new framework contracts and/or Procurement Procedures for Direct Service Contracts.

Contracts and Procurements (including insurance)

Progress of Work

A general provision is foreseen for operational services to F4E Project Teams in Pre-procurement (this covers Business Intelligence & Market Analysis), Commercial Reporting, Procurement areas and Commercial contract management.

This part also includes insurances related to risk occurring during construction activities on the ITER Site such as All Risk Insurance, Building and property and Third Party liability, Faulty Design insurance. It does not include Decennial insurance, Third Party liability related to the escort of convoys of component transport to ITER Site.

Procurement Activities

The above scope will be implemented mainly by issuing Task Orders under existing/new framework contracts and/or Procurement Procedures for Direct Service Contracts.

Insurances will be mainly implemented via reimbursement of IO according to the Agreement on provision of insurance services signed 20/07/2020 and its renewal/extension. For insurances not falling in the scope of this scheme, such as decennial insurance for buildings, complement to F4E Third Party Liability, they are procured or renewed by F4E directly.

EXPECTED RESULTS

The main expected results for Other Technical Support Activities are:

1. On time signature of the required Task Orders in order to support the F4E Project Teams and Project Management areas.

2. Provide high quality Project Management Support Services to F4E and all Project Teams.

3. Signature of a new Framework Contract to continue to provide Oracle Primavera support services as part of Project Management Systems Support.

4. Provide the requested support to F4E and all Project Teams on the matters described in the Scope of Work. In general, the target for 2026 is to keep safeguarding the EURATOM's investment in ITER while achieving the cumulative credit forecasted for each action in this WP2026 thanks to the support granted to the work under each specific action.

Annual M-SPI NA

Action 14. Broader Approach

Action 14	Broader Approach

JT-60SA

Progress of Work

During Maintenance & Enhancement 1 (M/E1), the additional equipment needed in Operation 2 will be installed. Furthermore, additional actions are proposed to reduce the voltage requirements for the central solenoid (CS), to further reinforce the EF coils and to further reinforce the CS in situ. The vacuum monitoring system for the cryostat will also be enhanced in M/E1 with optimised gauges and control. The improvement of the power supply equipment will be finalised and tested before energising the superconducting magnets.

In 2026 there will be a transition from Maintenance & Enhancement 1 to Operation 2. Some commissioning activities will start while installation activities in other areas continue. Evacuation of the cryostat and vacuum vessel are expected in 2026. Then following many years of construction and extensive enhancements, JT-60SA will finally enter the exploitation phase.

Procurement Activities

Several specific contracts for maintenance and spare parts will be launched. These contracts cover all components supplied by the EU including cryoplant and magnet power supplies. Contracts for additional diagnostics, heating systems and in-vessel components will be placed. The contract for the integration of the tungsten divertor and associated diagnostics will be placed, and those already implemented will enter series production. In addition, additional contracting activities will be started related to the mitigation of risks associated with the central solenoid insulation and cryostat vacuum monitoring. Contracts will also be signed for support to installation, commissioning and early operation of JT60SA.

The activities under the responsibility of F4E are carried out through task orders of existing/new framework contracts or existing/new supply and service contracts. F4E will be continuously supported by experts, and on-site health and safety services to ensure safe operations, funded respectively by F4E through expert contracts and specific contracts. Specific contracts for support activities like engineering, inspections and analysis will be issued depending on the project needs.

Cash contributions on the basis of the STP Work Programme on specific QST call for fund (covering EU Contribution to operation, maintenance and assembly) will also be made.

IFMIF/EVEDA

Progress of Work

In 2026, the LIPAc (Linear IFMIF Prototype Accelerator) activities at Rokkasho will be centered on completing the integration of the superconducting Linac (SRF-Linac), also referred to as the cryomodule, into the accelerator's beamline. This phase follows the successful relocation of the cryomodule to the accelerator vault within the LIPAc accomplished in 2025. Upon completion, the LIPAc accelerator will reach its final configuration, and will subsequently enter an extensive phase dedicated to checkout tests and the warm conditioning of the SRF-Linac power couplers.

Then the first cool down will be carried out. Upon successful completion, further checkout tests and conditioning at an operational temperature of 4K. Then the first steps of the phase C of the beam operation campaigns will start the following year.

Concurrently, enhancement activities for the LIPAc injector, Control System, RFQ power couplers, and RF Power system of the RFQ will be conducted to improve their maintainability, reliability, and availability. Notably, efforts will begin on new power couplers for the RFQ, an enhanced injector design including the LIPAc operational feedback, alongside the manufacturing of a new series of solid-state RF power amplifiers, following the prototype's factory acceptance tests in 2025. The deployment of the injector and new SSPA is scheduled to occur after achieving LIPAc's primary objective, namely the full-scale demonstration of the IFMIF accelerator concept. This entails the acceleration and transport of a 9-MeV, 125-mA deuteron beam in continuous waves, meeting the beam characteristics requirements for a fusion neutron source. The enhancement will also aim to prove the reliability and availability necessary for the future Fusion Neutron Source. Furthermore, to augment LIPAc's availability, a study focusing on obsolescence management and spare parts provisioning is expected to be implemented starting from 2025.

Procurement Activities

Additional contracts will have to be placed for the enhancement of key LIPAc subsystems and components such as the injector, the RF power system, and the control systems, as well as for demonstrating the operation and for optimizing the maintainability of the accelerator and subsequently the beam availability. Further contracts cover procurement of spare parts and services necessary for maintenance and obsolescence management. Activities for the preparation of the LIPAc accelerator in its final configuration for the forthcoming operation phases will continue in 2026. F4E will be continuously supported by experts, and on-site health and safety services to ensure safe operations, funded respectively by F4E through expert contracts, specific contracts, Agreements of Collaboration with European Institutes, including CERN, and a multi annual programme plan signed with EUROfusion. Cash contributions as contribution to Common Fund and Common Expenses will also be made. Contracts will also be signed for support to installation, commissioning and operation of IFMIF/EVEDA.

IFERC

Progress of Work

The IFERC project comprises three activities, CSC (Computer Simulation Centre), REC (Remote experimentation Centre) and DEMO design and R&D:

The CSC objective is to provide high power computer (HPC) resources for JA and EU scientists in order to advance simulation studies for ITER, JT-60SA and fusion reactors in general (e.g. DEMO). CSC fosters collaboration research projects between JA and EU by sharing computer resources and by further jointly developing state-of-the art models. A collaboration with ITER for high priority simulation projects will continue.

REC activities focus on the implementation of the remote collaboration tools agreed with JT-60SA, ITER, and the IFMIF-EVEDA LIPAc accelerator. The collaboration under the ITER BA agreement continues to advance test technologies for remote experiments and data transfer, including remote CODAC application testing, remote data access, live data viewing for ITER, fast data transfer, and secure remote connection.

In the DEMO design activities, priority is given to activities relevant for ITER and JT-60SA exploitation, such as breeding blanket (BB) design and divertor design and plasma exhaust. The objective of activities in fusion materials R&D is to continue to support ITER in issues related to Tritium retention in first wall materials, and to contribute to the materials databases and handbooks for future reactors. All activities are performed in collaboration with EUROfusion.

Procurement Activities

There are contracts to be placed for preparation of remote participation rooms for tests with BA Projects and ITER, and testing activities. F4E will be supported by experts, funded by F4E through expert contracts and specific contracts. Cash contribution will also be made as EU contribution to the Project Team.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU.BA.01.22150	TO placed for F4E-OFC-1725 JT-60SA Pellet Launching System	Q3 2026	WP26 objective	Pellet Injector
EU.BA.01.23990	Completion of Stage I for the Injector upgrade: Work Plan Dossier	Q4 2026	WP26 objective	LIPAc Enhancement - Injector
EU.BA.01.25080	Contract placement for the integration of cassette bodies, HHF and NHF elements of the JT-60SA actively cooled Divertor	Q2 2026	WP26 objective	Divertor for Operation Phase 3
EU.BA.01.25590	Supply the Set of 8 RF Couplers under the Collaboration with CERN completed	Q4 2026	WP26 objective	LIPAc enhancement - RFQ RF Couplers

EU.BA.01.34150	Test bench for RF Power couplers completed	Q4 2026	WP26 objective	LIPAc Enhancement - RF Power System
EU.BA.01.38870	Supply of equipment or services for tests with BA Projects and ITER	Q4 2026	WP26 objective	Collaborative activities with JT-60SA, ITER, and the IFMIF/EVEDA LIPAc accelerator
EU.BA.01.39400	Option 4, signed for Supply of ECRH Power Supplies for two gyrotrons for JT-60SA - Manufacturing and FAT Set B	Q2 2026	WP26 objective	ECRH Power Supplies
EU.BA.01.39680	Completion of the 1st stage of High-Heat-Flux elements for the JT-60SA Actively Cooled Divertor	Q3 2026	WP26 objective	Divertor for Operation Phase 3

EXPECTED RESULTS

The main expected results for this action are:

JT-60SA:

1. Finalisation and test of the improvement of the superconducting magnet power supply
2. Acceptance of all transmission lines components on-site (procured by F4E)
3. Acceptance test for the Thomson scattering system
4. Acceptance test for the vacuum ultraviolet spectroscopy (VUV)
5. Completion of manufacturing of initial sets of cassette frames, normal heat flux elements and full-scale mock ups of the high heat flux elements for the actively cooled divertor

IFMIF/EVEDA

1. Completion of the integration of the cryomodule into the LIPAc beam line with warm conditioning of the power couplers.
2. Design Description and Justification dossier for injector enhancements
3. Machine Protection System (MPS) upgrade accepted on-site

IFERC

1. Functional tests on the newly developed or updated CODAC applications from CODAC Operational Applications from REC under the collaboration REC-IO (Remote data access to ITER Database)
2. End of in-situ tritium release experiments in WWR-K reactor on the Neutron Irradiation experiments of Breeding Functional Materials for the DEMO R&D
3. Report on the T analysis of JET-ILW 2 and JET-ILW 3 tiles and dusts for the analysis of plasma wall interaction using JET DT samples for Evaluation of Tritium inventory and Tritium recovery.
4. Initial assessment of heat-flux and particle erosion of Plasma Facing Components (PFCs) for EU-DEMO divertor for DEMO Design activities (Divertor design and plasma exhaust)
5. Supply of high-performance computer resources and supply of high-level support to make the best use of the computer resources.

TARGET

The target for 2026 is “Annual M-SPI ≥ 0.85”.

Action 15. DEMO_IFMIF-DONES

Action 15	**DEMO_IFMIF-DONES**

Progress of Work

Assuming the full engagement of F4E in the DONES Programme, the work will continue with the preparation of the different technical specifications for the accelerator equipment. Related to the running contract, the first pair of RFQ couplers should be completed and the procurement of the

DONES injector initiated. As DONES Programme Team activities, the involvement of F4E will contribute to the consolidation of the current DONES Baselines and the finalization of the ramp-up.

Procurement Activities

Considering the full engagement of F4E in the DONES Programme, it is expected to continue with the procurement of equipment for DONES such as the cryomodule, radio frequency power system, ancillaries, and raw material. Stage 1 of the RF Power System for DONES - Design phase and Stage 3 of the contract for the RFQ Coupler are also planned to be placed/released in 2026.
The activities are carried out through task orders of existing/new framework contracts or existing/new supply and service contracts. F4E will be continuously supported by experts funded respectively by F4E through expert contracts and specific contracts.
Cash contributions will also be provided for the Project Team and reserve funds.
Fusion for Energy intends to start a collaboration with OECD for the development of the DONES procurement strategies based on the OECD *Support Tool for Effective Procurement Strategies* (STEPS). In this collaboration, the OECD will assist F4E in setting up and applying the STEPS methodology to produce evidence that will support robust procurement strategies for the DONES programme. Through this collaboration, F4E will strengthen its procurement strategies and gain the necessary knowledge from the OECD to independently carry out future STEPS assessments.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EU.DO.00180	Procurement of EUROFER raw material for DONES	Q3 2026	WP26 objective	PA DONES - Steel Eurofer 97
EU.DO.01030	Placement of the contract of the RF Power System for DONES - Stage I Design	Q4 2026	WP26 objective	PA DONES - RF Power system
EU.DO.03940	Completion of Stage 2 of Supply of the RF Couplers for the Radiofrequency Quadrupole for LIPAc	Q3 2026	WP26 objective	RFQ
EU.DO.03950	Approval of Technical Specifications for Accelerator Systems Ancillaries (ASA)	Q3 2026	WP26 objective	PA DONES - System Ancillaries

EXPECTED RESULTS

The main expected results for this action are:

1. Validation of the RF Coupler Prototypes,
2. Finalisation of the Accelerator Ancillaries technical specification,
3. Start of the RF Power System design phase,
4. Procurement of the Lithium raw material.

TARGET

The target for 2026 is “Annual M-SPI ≥ 0.85”.

Action 16. DEMO_Technology Development Programme

Action 16	DEMO_Technology Development Programme

Progress of work:

In 2026, the TDP25 R&D contracts will be awarded and signed.

The TDP26 R&D set of actions will be under preparation as per outcome of Technology Mapping/Roadmapping Workshops, identified needs and priorities.
The related Call for Tenders will be prepared.

Wokshops will be organized on other fusion technology domains.

Procurement activities:

Award and signature of TDP25 R&D contracts, as per selected set of actions and tendering outcome.

WORK PROGRAMME OBJECTIVES

Milestone ID	Scope Description	Forecast achievement date	Type of milestone	PA
EUTD.100730	Contract Signed OPE-TBD Task 01 for Collective 2026 R&D Selected Action	Q2 2026	WP26 objective	Technology Development Program
EUTD.100810	Contract Signed OPE-TBD-Task 02 for Collective 2026 R&D Selected Action	Q2 2026	WP26 objective	Technology Development Program

EXPECTED RESULTS

The main expected results for this action are:

1. Selection of TDP26 priority topics and preparation / Call for Tender for them.

2. Updates / Upgrades on existing Technology Maps / Roadmaps and organization of additional workshops on other fusion technology domains

3. Other technology development actions in support of critical technologies identified as part of the F4E strategic procurement initiative

TARGET

The target for 2026 is “Annual M-SPI ≥ 0.85”.

WP_TABLE 1 WORK PROGRAMME 2026 BUDGET SUMMARY

Budget Summary of the 2026 Work Programme

BUDGET CHAPTER		WORK PROGRAMME AVAILABLE BUDGET IN COMMITMENT (EUR)
3 1	ITER CONSTRUCTION INCLUDING ITER SITE PREPARATION	685,116,339
3 2	TECHNOLOGY FOR ITER AND DEMO	12,000,000
3 3	TECHNOLOGY FOR BROADER APPROACH	25,000,000
3 4	TECHNOLOGY FOR DONES	4,190,000
3 5	EXTERNAL SUPPORT ACTIVITIES	31,000,000
3 6	OTHER OPERATIONAL EXPENDITURE	9,000,000
TOTAL TITLE III OF THE BUDGET		**766,306,339**
4 1	ITER CONSTRUCTION - ITER HOST STATE CONTRIBUTION	169,670,000
4 2	ACTIVITIES LINKED TO ITER ORGANIZATION	p.m.
4 3	OTHER EARMARKED EXPENDITURE	p.m.
TOTAL TITLE IV OF THE BUDGET		**169,670,000**
TOTAL AMOUNT AVAILABLE FOR THE OPERATIONAL EXPENDITURE		**935,976,339**

WORK PROGRAMME		WORK PROGRAMME Commitment appropriations (EUR)		
		Grants	Procurement	Cash
3 1 + 4 1 + 4 2 + 4 3	Expenditure in support of ITER Construction	504,177	358,194,712	496,087,450
	Sub total ITER construction		**854,786,339**	
3 2	Technology for ITER and DEMO	200,000	11,800,000	
	Sub total technology for ITER and DEMO		**12,000,000**	
3 3	Technology for Broader Approach		18,665,000	6,335,000
	Sub total Technology for Broader Approach		**25,000,000**	
3 4	Technology for DONES		4,190,000	
	Sub total Technology for DONES		**4,190,000**	
3 5	External Support Activities		31,000,000	
	Sub total External Support Activities		**31,000,000**	
3 6	Other Operational Expenditure		9,000,000	
	Sub total Other Operational Expenditure		**9,000,000**	
Totals Operational Expenditure		***704,177***	***432,849,712***	***502,422,450***
		935,976,339		

WP_Table 1 . Work Programme Budget Summary

WP_Table 2 - Indicative Value of Financial Resources for the actions in WP2026

Action #	Action	WP2026 (in EUR)		
		Budgeted forecast WP2026	Provisional Budget allocation	Total Resources allocated (Original Budget)
1	Magnets			
2,3,4,10*	Main Vessel*	**68,406,862**	54,553,090	122,959,952
5	Remote Handling	**20,322,083**	13,634,673	33,956,756
6	Cryoplant & Fuel Cycle	**21,822,196**		21,822,196
7	Plasma Engineering & Operations			
8	Heating & current drive	**16,441,716**	8,607,545	25,049,261
9	Diagnostics	**18,597,545**		18,597,545
11	Buildings and Site Equipment	**131,097,822**	1,646,143	132,743,965
12	Cash Contributions	**478,621,391**	5,000,000	483,621,391
13	Technical Support Activities	**45,815,273**		45,815,273
14	Broader Approach	**25,028,925**	17,051,075	42,080,000
15	DEMO- IFMIF Dones	**790,000**	3,540,000	4,330,000
16	DEMO-Technology Development Programme	**5,000,000**		5,000,000
	Totals	**831,943,813**	**104,032,526**	**935,976,339**
	Stemming from cancelled appropriations to be entered in the estimate of revenue and expenditure of the following financial years as per Art.12.1 FR		104,032,526	
	Stemming from appropriations corresponding to external assigned revenue from ITER IO as per Art.12.4.b FR		p.m.	
	Stemming from appropriations corresponding to other assigned revenue as per Article 12.4.b FR		p.m.	

*The Sub-actions Actions of Vacuum Vessel, In-Vessel Blanket, In-Vessel Divertor and Test Blanket Module are presented merged in one single line due to commercial sensitive information.

WP_Table 2 . Financial Resources per action

WP_Table 3 - 2026 Main Procurement Activities (per Action)

Action		Type of contract	Signature
Magnets			
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Vacuum Vessel			
CA15018	Provision for Engineering activities 2026	SC-PServ	Q4
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
In Vessel- Blanket			
CA11045	TASK 3.X for FW Series Fabrication (Manufacturing of Series Panels) - Reopening #2	PSupply	Q4
CA16063	W Qualification (ITA) - Bonding of W/Cu tiles to mock-ups	PSupply	Q3
CA06536	Task Order Signed for Branch Pipes and Co-Axial Connectors (Task 6)	SC-PSupply	Q2
CA06535	Task Order Signed for Upper Ports (Task 5) - Contractor#01	SC-PSupply	Q2
CA15525	Task Order Signed for Upper Ports (Task 5) - Contractor #02	SC-PSupply	Q2
CA15618	HHFT for new ITA on W armour qualification	PSupply	Q3
CA16731	Procurement of W 2026 [W PCR] - Material for PSPs	SC-PSupply	Q1
CA15953	Procurement of extra SS/CuCrZr [W PCR]	SC-PSupply	Q2
CA11741	TO#04 for Procurement of CuCrZr	SC-PSupply	Q4
CA13121	TO 04 Material Characterization (Series) - HIP qualifications	SC-PSupply	Q4
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
In Vessel- Divertor			
CA08266	Commitment for Manufacturing 8 additional IVTs - OMF-1139-01-01 (Reserve Fund)	SC-PSupply	Q1
CA15698	TO-04 OPE-319-01 signed for HHF Testing of IVT components (15 PFUts)	SC-PServ	Q4
CA11549	TO-147.01 OMF-1639-01 signed for 2,5 Engineering Support - IVT	SC-PServ	Q3

CA13013	TO-XZ.01 OMF-1327-01 Signed for Metrology Support	SC-PServ	Q1
CA12492	TO-127.01 OMF-1639-01 Signed for Senior Mechanical Engineer Support for CB Series Stage 2	SC-PServ	Q2
CA15676	Task Order OMF-1321-01-APN Signed for Resident inspector for AP NDT	SC-PServ	Q2
CA15666	Task Order MDB OMF-1321-01 Signed for MDB/Documentation Support (50% IVT)	SC-PServ	Q2
CA15688	Task Order OMF-1321-01-APD Signed for Documentation/MDB Support for AP (50% CB)	SC-PServ	Q2
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Remote Handling			
CA13878	Task Order signed [OMF-1609] 2027 FD & Manufacturing for TLOM	SC-PSupply	Q4
CA16800	Task Order X (OMF-1609) for railway system raw material procurement and pre-machining	SC-PSupply	Q2
CA15012	TO (OMF-1609) for CMM 1st assembly System (Design & Manufacture)	SC-PSupply	Q4
CA14928	Task Order (OMF-1609) for CTM 1st assembly System (Design & Manufacture)	SC-PSupply	Q3
CA16077	Task Order for Prototyping of pre-SRO tools before 2027	SC-PSupply	Q3
CA14846	Task Order (FWC-1609) Signed for Final Design and Manufacturing of Simplified DRHS Cask	SC-PSupply	Q4
CA11595	TO for Engineering Insourcing Contract Control Sys 2026	SC-PServ	Q2
CA16744	Task Order for SAT/Assembly/Installation of EPP/UPP MA Casks	SC-PSupply	Q1
CA11584	TO (Alter tech OFC 1087-01) CTM and CMM 1st assembly Control System + Master Arm Development	SC-PSupply	Q2
CA10457	Task Order Signed (1087-01) for NBRHS MCS CS Software Readiness for FDR and MRR	SC-PSupply	Q4
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Cryoplant and Fuel Cycle			
CA15795	Contract signed for Design to Delivery for Water RAP	PSupply	Q3
CA15389	Contract/FwC Signed for Leak Detection Manufacturing and Assembly and remaining components	SC-PSupply	Q4
CA15246	Task Order #1 OFC-1592 Delivery and installation of A53-B11 DN25 Line (Cryogenic and Vacuum Services FwC)	PSupply	Q1
CA16561	TO#01 Signed for Preparation of PA	SC-PServ	Q3
CA16764	External support 2026 (new FwC) CPFC	SC-PServ	Q1

CA15433	TO Signed for OMF-1755 (insourced, F4E responsibility) Cubicles design; SEE electrical + cubicles assembly and acceptanc	PServ	Q4
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Plasma Engineering & Operations			
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Heating and Current Drive			
CA15849	Contract Signed for Supply of S235 and Pure Iron Plates for PMS	PSupply	Q4
CA16502	F4E-OMF-1886-01 TO1 Signed for PMS & ACCC Engineering and Prototyping (Comp.1)	SC-PServ	Q4
CA16504	F4E-OMF-1886-03 TO1 Signed for PMS & ACCC Engineering and Prototyping (Comp.3)	SC-PServ	Q4
CA16503	F4E-OMF-1886-02 TO1 Signed for PMS & ACCC Engineering and Prototyping (Comp.2)	SC-PServ	Q4
CA10206	OMF-1087: Task Order Signed for Procurement of the EC Gyrotrons Control System	SC-PSupply	Q2
CA05353	OFC-280: Task Order 6 Signed for Procurement of NBTF MITICA CODAS 2, Safety	SC-PSupply	Q2
CA09166	OFC-729: Task Order 05 signed for Brazing of Disks for Series production of EC Windows	SC-PSupply	Q2
CA13252	OMF-1120-01 Task Order Signed for Mechanical testing of Valve prototypes - Test qualification	SC-PServ	Q1
CA15364	OMF-1115-01 for FP Diagn., BIPS I&C, Add. Heating and Real Time Software Support Activities	SC-PServ	Q1
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Diagnostics			
CA15889	Task Order Signed for F4E for TO02a CTS Manufacture Main components	SC-PSupply	Q4
CA10542	Task Order Signed for MfG Ex-v & cameras EP12	SC-PServ	Q3
CA10454	Task Order signed for Manufacture of PP Cameras	SC-PServ	Q4
CA11177	Task Order signed for DPG Manufacture + Calibration of PG sensor Framework contract for SP Manufacturing	SC-PSupply	Q3
CA06771	Design and Supply for Plant Controller and CODAC of the CPTS	SC-PServ	Q3
CA13043	Task Order Signed for WAVS I&C EP12	SC-PSupply	Q1
CA16797	Task Order signed for Manufacture of Bolometers Sensors	PServ	Q4
CA10652	Task Order Signed for Development of Bolometer data-analysis Software	SC-PServ	Q3

CA09238	Task Order Signed for Mfg Specs for Eq. Vis/IR WAVS E09,17	SC-PSupply	Q2
CA10407	Contract Signed for Support for Manufacturing and Assembly for CTS	SC-PServ	Q4
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Test Blanket Module			
CA10941	TO#03 for WCLL TBM Set PD & FD	SC-PServ	Q2
CA14686	Task Force Port Cell 16 integration	PServ	Q2
CA01067	EUROFER 97 Procurement for TBMs	PSupply	Q4
CA06879	TO1 of HCCP TBM set (box + pipes as per WP sharing with ITER Korea)	SC-PServ	Q4
CA10945	OFC-1350 TO 03 - PDR minor adjustments	SC-PServ	Q1
CA10947	TO#02 for EUROFER Codification Database	SC-PServ	Q2
CA09805	TO 04 for Proof of the TBM-sets fabrication and assembly processes feasibility	SC-PServ	Q3
CA15338	F4E-OFC-0950-02-06 HCPB Ancillary System PD (chit resolution)	SC-PServ	Q1
CA09806	Procurement of SS for TBM Set Manufacturing	PSupply	Q4
CA11794	TO 11 signed for ANB Consultancy (TBM Set) - YPN	SC-PServ	Q1
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Buildings and Site Equipment			
CA15752	TB21 - Lot#1 TO#107 B11 C&I: Nuclear and Convencional all systems + Doors (TB04)	SC-PSupply	Q4
CA15760	TB21 - Lot#2 TO#203 B11 - Mech & HVAC (TB04)	SC-PSupply	Q2
CA15753	TB21 - Lot#1 TO#107 B11 C&I: Nuclear and Convencional all systems + Doors (TB04) (Increase of Raw Material)	SC-PSupply	Q4
CA15750	TB21 - Lot#1 TO#106 B11 C&I SIC - Specific systems H2M, SMS, LLDS (TB04)	SC-PSupply	Q1
CA15761	TB21 - Lot#2 TO#203 B11 - Mech & HVAC (TB04) (Increase of Raw Material)	SC-PSupply	Q2
CA16594	TB21 - Lot#2 TO#207A Commitment for rupture disks (TB04)	SC-PSupply	Q2
CA15751	TB21 - Lot#1 TO#106 B11 C&I SIC - Specific systems H2M, SMS, LLDS (TB04) (Increase of Raw Material)	SC-PSupply	Q1
CA12404	TB22 - Commitment for Primary structural works - Lot A TO#03	SC-PSupply	Q4

CA15857	TB09 - Commitment for Competitive dialogue 2026 (HCC)	PServ	Q3
CA15992	TB21 - Lot#2 TO#206b B11/B14 - PIC/SIC components (TB04)	SC-PSupply	Q1
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Supporting Activities			
CA07569	Commitment 2026 - Global transportation of HEL NON-EU ITER components	SC-PServ	Q4
CA09712	Commitment 2026 for Operational Missions	PServ	Q4
CA08981	2026 Commitments and Budget Reserves for Legal Services charged against Operational Budget	SC-PServ	Q4
CA10776	Third Party Liability (TPL) insurance 2026-2030	PServ	Q1
CA16613	Commitments 2026 for Software maintenance	SC-PServ	Q4
CA06038	TO for Embedded Control Data Access and Communication 2026	SC-PServ	Q4
CA10070	TO 01.1 OMF-TBD2-XX Systems Engineering Supports at F4E Barcelona (1-4) (cont. TO 01 OMF-1127-01) [2 years/4 ESPs]	SC-PServ	Q4
CA06086	TO for Engineering Analysis 2026	SC-PServ	Q4
CA15336	TO for Management fees 2027	SC-PServ	Q4
CA06076	TO for CAD Transversal Support 2026	SC-PServ	Q4
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
Broader Approach			
CA11577	Supply of JT-60SA actively cooled Divertor - integration of casette bodys, HHF and NHF elements	PSupply	Q2
CA16216	TO02 for Pellet Launching System (F4E-OFC-1725)	SC-PSupply	Q3
CA13583	TO for the Maintenance and Optimization of the LIPAc RFPS - 2026	SC-PSupply	Q1
CA14234	TOxx signed for LIPAc maintenance and obsolesence management - AF16	SC-PServ	Q2
CA14451	TO for Spare Parts for PS Additional Heating and maintenance 2026	SC-PSupply	Q3
CA10377	TO for Spare parts for Cryoplant and maintenance and repair 2026	SC-PSupply	Q1
CA13584	TO01 F4E-OFC-1695 for the Maintenance and Optimization of RFPS of LIPAc	SC-PSupply	Q1
CA13160	Assistance to on-site assembly and commissioning of EU machine enhancements	PServ	Q2

CA13161	Additional hardware enhancements - shielding	PSupply	Q2
CA14450	TO for Spare Parts and maintenance of Magnets PS 2026	SC-PSupply	Q2
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
DEMO_IFMIF-DONES			
CA16677	CON for Engineering Support for the DONES Programme	SC-PServ	Q3
CA15457	Placement of the contract for the procurement of Lithium raw material	PSupply	Q2
CA14363	Supply of EUROFER raw material	PSupply	Q2
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A
DEMO_Technology Development Programme			
CA16845	Contract Signed OPE-TBD Task 01 for Collective 2026 R&D Selected Action	PServ	Q1
CA16846	Contract Signed OPE-TBD Task 02 for Collective 2026 R&D Selected Action	PServ	Q1
CA15395	Commitment 2026 for Technology Development Programme & Collaboration	PServ	Q3
Provision for amendments, claims, reimbursement, indexation and late interest		N/A	N/A

WP_Table 3 . Main procurement activities per action

WP_TABLE 4 – PLAN FOR GRANTS

2026 GRANTS

Grant Agreements Reference	Expected date of Signature	Forecasted value to be committed	Duration	Counterpart (Leader Company)	Short Description
F4E-GRT-1781	Q1 2026	€504,177	*NA*	TEKNOLOGIAN TUTKIMUSKESKUS VTT OY	Amendment of Grant (GRT-1781) for Integration of Control System technologies at DTP2
F4E-GRT-TBD	Q2 2026	€200.000	10 Months	Next Step Fusion S.a.r.l.	Extension of 2D plasma codes to 3D passive structures.
Total		**€704,177**			

ON-GOING GRANTS[18]

Grant Agreements Reference	Date of Signature	Commitment Value (Euros)	Duration (In months)	Counterpart (Leader Company)	Short description
F4E-FPA-327 (PMS-DG)-07	20/02/2020	€2,240,971.00	68	AGENZIA NAZIONALE PER LE NUOVE TECN	Development of the Final Design and Prototyping
F4E-FPA-364-06	22/10/2018	€1,514,047.00	80	MAX-PLANCK-GESELLSCHAFT ZUR FORDERU	Development of the Design and Critical Prototyping
F4E-FPA-384 (DG)-05	30/07/2018	€2,802,996.14	82	MAX-PLANCK-GESELLSCHAFT ZUR FORDERU	Development of the Design and Prototyping
F4E-GRT-0901-01	09/03/2018	€2,024,913.50	82	TEKNOLOGIAN TUTKIMUSKESKUS VTT OY*T	Development and integration of 3D Machine Vision, HLCS modules and GENROBOT at DTP2
F4E-GRT-1146-01	25/07/2021	€2,277,644.40	48	COMMISSARIAT A L ENERGIE ATOMIQUE	Completion of the design of Equatorial Wide Angle Viewing System (EP-WAVS) in EP12 and post-design technical support
F4E-GRT-553	09/07/2014	€2,562,993.00	88	ECOLE POLYTECHNIQUE FEDERALE DE LAU	DESIGN, DEVELOPMENT AND VALIDATION OF THE EUROPEAN GYROTRON
F4E-GRT-1446-01	06/10/2023	€3,199,607.00	64	COMMISSARIAT A L ENERGIE ATOMIQUE	Completion of the design of Equatorial Wide Angle Viewing System (EP-WAVS) in EP#3, 9 and 17 and post-design technical support
F4E-GRT-1530-01	13/12/2023	€81,670.00	19	C.R.E.A.T.E. CONSORZIO DI RICERCA P	Design, manufacture and experiment of a benchmark problem set up for the validation of electromagnetic codes
Total		**€16,704,842.04**			

WP_Table 4. Plan for grants[19]

[18] Any 2025 Grant that was included in the original WP2025 but was not signed by the cut-off date of 30th April 2025 is not reflected in this table. Grants that were not known when the original WP2025 was drafted and that would be signed following a related WP2025 amendment are not listed neither.

[19] The Commission guidelines require to produce two additional tables covering Service Level agreement and Contribution Agreements. These are not displayed since F4E has no Service Level agreement nor Contribution Agreements under operational expenditure.

WP_TABLE 5 TIME OF CALL FOR THE PROCUREMENT PLAN

Indicative number, type of contract and timeframe for launching the procurement procedures.

Procurement Procedures	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026
P Serv - Contract	4	6	4	2	5	7
P Supply - Contract	9	2	3	10	5	4
Pserv - Specific Contracts	26	33	16	16	14	35
PSupply - Specific Contracts	12	9	13	17	5	13

WP_Table 5 . Indicative number and type of contracts per quarter

NB:

- During the implementation of the Work Programme activities, F4E may identify the need for new calls, group more activities in a single call or split one activity in more calls. This will in any case be performed preserving the scope and objective presented in WP2026.
- When a call for tender is not defined yet, the call is indicatively assigned to 6 months before the signature of the contract.
- For the specific contract, as they do not have call for tender, the table refers to its signature date.

ESSENTIAL SELECTION, AWARD CRITERIA AND UPPER FUNDING LIMITS FOR GRANTS

With regard to grant actions referred to in this Work Programme, the essential selection and award criteria are:

Essential Selection Criteria

- The applicants' technical and operational capacity: professional, scientific and/or technological competencies, qualifications and relevant experience required to complete the action.
- The applicants' financial capacity: stable and sufficient sources of funding in order to maintain the activity throughout the action.

Essential Award Criteria

- Relevance and quality of the proposal with regard to the objectives and priorities set out in this Work Programme and in the relevant call for proposals.
- Effectiveness of the implementation as well as of the management structure and procedures in relation to the proposed action.
- Cost-effectiveness and sound financial management, specifically with regard to F4E's needs and objectives and the expected results.

With regard to the specific action, more details will be provided in the call for proposals. Thresholds and weighting for the essential and additional award criteria will also be indicated in the call for proposals.

A proposal which does not fulfill the conditions set out in the Work Programme or in the call for proposals shall not be selected. Such a proposal may be excluded from the evaluation procedure at any time.

The timetable and indicative aggregated amounts for the actions are defined in this Work Programme.

Upper funding Criteria

With the entry into force of the recast F4E Financial Regulation and Implementing Rules on 1st January 2016, the following upper funding limits apply for grants:

1.	Research, technological development and demonstration activities	40%
2.	Purchase/manufacturing of durable equipment or assets and of ancillary services approved by the Joint Undertaking as necessary to carry out such activities	100%
3.	Coordination and support actions, including studies	100%
4.	Management activities, including certificates on the financial statements, and other activities not covered by paragraphs 1 and 2	100%

List of Tables