FORTISSIMO
PLUS

Third Call for Business Experiments addressing the uptake of HPC by SMEs



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10 November 2026

Overview

- The EuroHPC Supercomputing and AI Factories Access Schemes
  - Laura MARTINEZ CALVO, Programme Officer Peer-Review, EuroHPC JU
- Q&A
- FFplus Call-3 Business Experiments
- Q&A

Overview

- The EuroHPC Supercomputing and AI Factories Access Schemes
  - Laura MARTINEZ CALVO, Programme Officer Peer-Review, EuroHPC JU
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<u>FFplus Call-3 Business Experiments</u>

- Intro to the Fortissimo Approach & the FFplus project
  - HPC for Business Innovation, Fortissimo Success Stories
- FFplus Call-3 Type-1:
  Business experiments addressing the uptake of HPC by SMEs
    - Objectives; expectations; funding & eligibility
- Summary of info sources and submission procedure
- Q&A

A brief history of Fortissimo projects

EC “Factories of the Future” (FoF) public-private partnership

Technologies for FoF: FP7 & Horizon 2020

2008 Financial crisis

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2029

Fortissimo

SEVENTH FRAMEWORK PROGRAMME

HORIZON 2020

Fortissimo 2

Business relevant investigations and demonstrations of simulation services …creating future business benefits for manufacturing SMEs

Demonstrating the business potential … specifically for applications involving simulation of coupled physical processes or high-performance data analytics.



Political context

- All major economies world-wide are investing in large supercomputers on the road to Exascale
- EuroHPC is a major commitment by the European Union
- Business Case is for **Science and Industry**
- European citizens expect their taxes to be spent wisely for the good of everyone
- We must ensure our Universities **and** our Companies can access and benefit from investment in supercomputing



epcc

EuroHPC Created

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2029

Fortissimo

SEVENTH FRAMEWORK PROGRAMME

HORIZON 2020

Fortissimo 2

FF4EuroHPC



The Fortissimo Approach

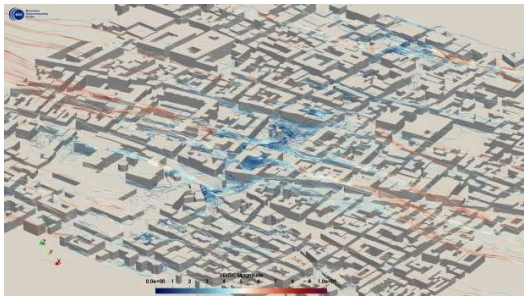
- Execution of “experiments” with SMEs, delivering real business impact through use of HPC
- The bulk of project funding was used for these experiments and the highest quality, innovative SME-oriented experiments were acquired through the execution of **open calls for proposals**

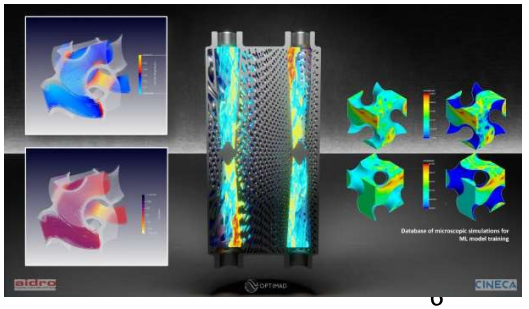
FF, FF-2, FF4EuroHPC:

121 success stories were produced in collaboration with **310 partners** from **more than 20 European countries**.

https://www.ff4eurohpc.eu/en/success-stories/







A brief history of Fortissimo projects

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Fortissimo

SEVENTH FRAMEWORK PROGRAMME

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Fortissimo 2



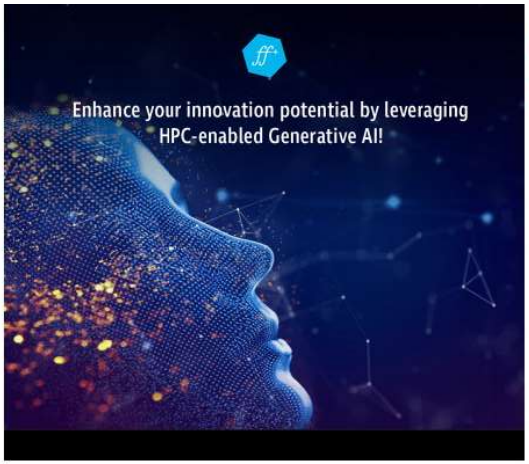
FF4EuroHPC

EuroHPC Joint Undertaking

Business experiments

will address the uptake of HPC by SMEs new to using HPC to solve specific business challenges

FFplus



Innovation studies

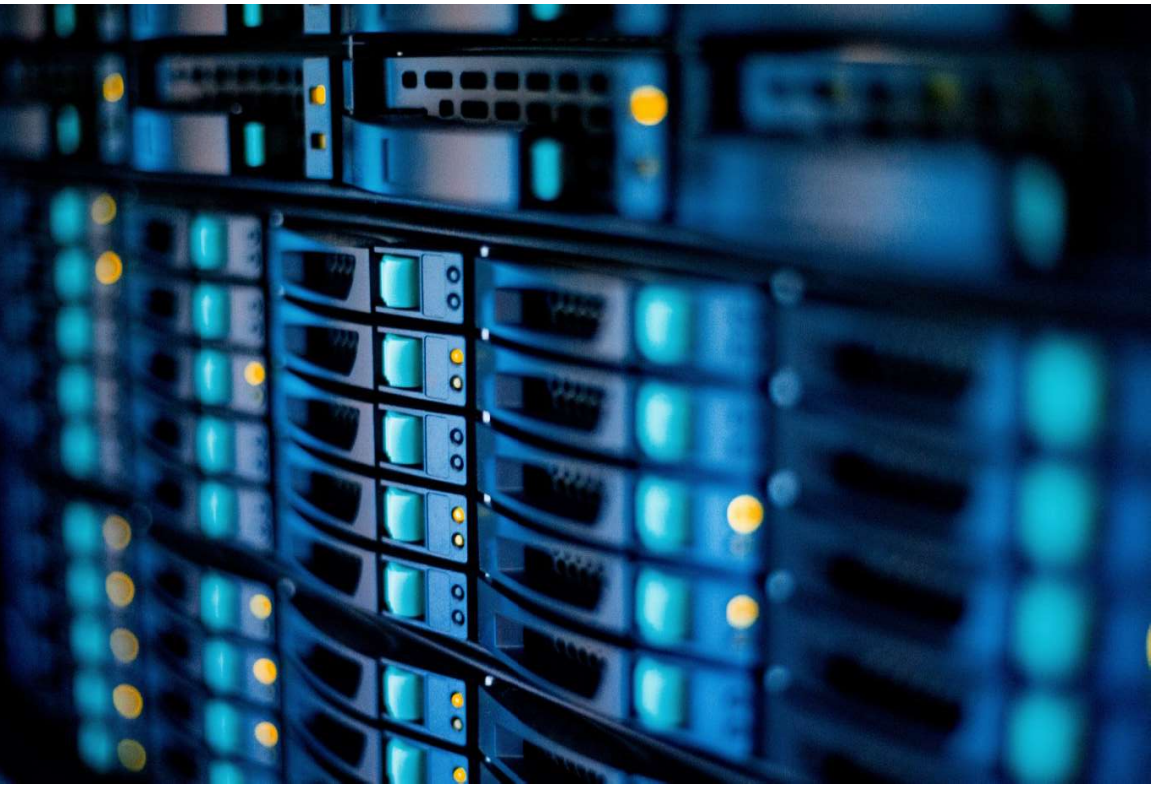
will support European SMEs and Start-ups already active in the field of generative AI technology, which lack the necessary computational resources to scale up.

FFplus Consortium & Project Data

- Funded by the EuroHPC JU action DIGITAL-EUROHPC-JU-2023-SME-01 "Supporting the competitiveness and innovation potential of SMEs".
- Commenced 1.5.2024; extended to 60 months duration to April 2029
- Coordinator HLRS High-Performance Computing Center | Stuttgart
- Other Partners:

ARCTUR CESGA Centro de Supercomputación de Galicia CINECA CYFRONET scapos Teratec

FFplus Objectives



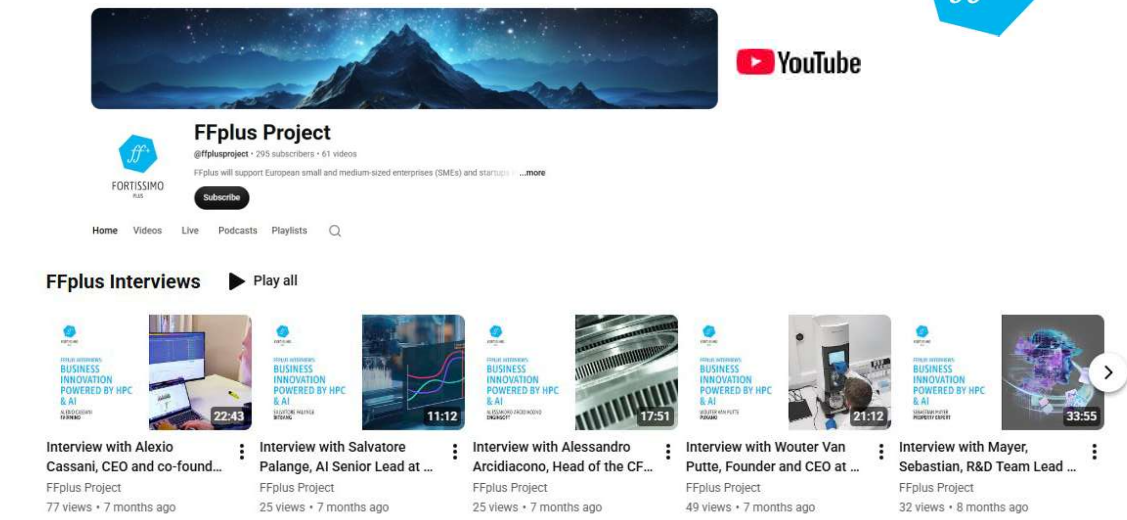
Empower SMEs and Start-Ups with advanced computational capabilities based on HPC, enabling them to **drive innovation**, enhance competitiveness, and overcome challenges in the digitalisation of R&D and business processes.

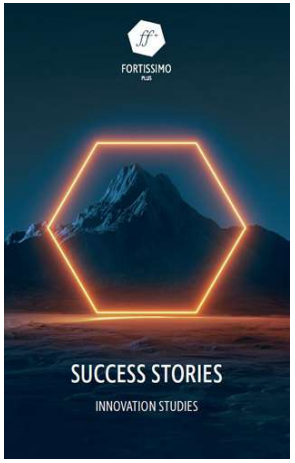
FFplus will **execute 6 open calls** (3 for business experiments, 3 for innovation studies) **with a funding budget of over 24 M€.**

FFplus Objectives – an alternative view

1. Promote the take-up of HPC by European SMEs by demonstrating the business impact through Success Stories
2. Support the participating SMEs to solve their business challenges and develop their business potential

Item 1 provides the alignment with the larger context of EuroHPC JU impact on the EU business ecosystem







FFplus Open Call 2 – Business Experiments

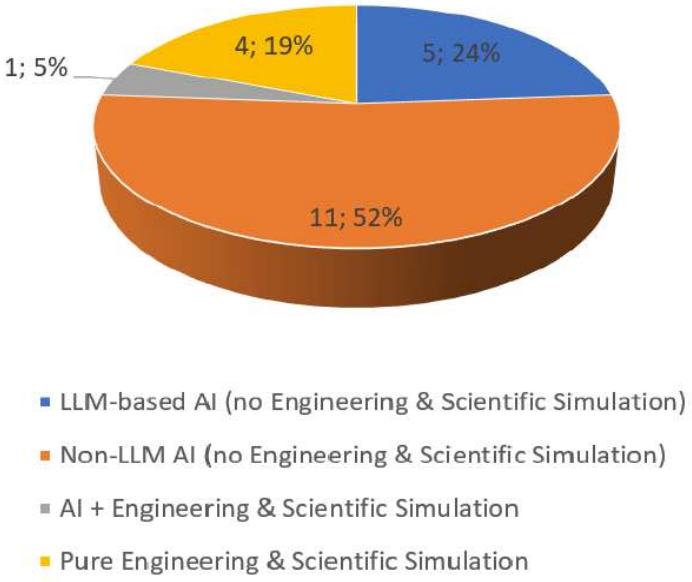


21 Business Experiments started May 2026

Application Domains

Healthcare & Life Sciences	4	Construction & Built Environment	1
Manufacturing & Industrial Process Optimization	3	Finance & Insurance	1
Cybersecurity & Data Privacy	2	Software Development & DevTools	1
Environment & Sustainability	1	Media, Gaming & Entertainment	1
Energy & Utilities	1	Marine & Maritime	1
Education & Training	1	Materials, Chemicals & Advanced Materials	1
Agriculture & AgriTech	1	Public Administration & Government	1
Smart Cities & Urban Infrastructure	1		

Technologies used

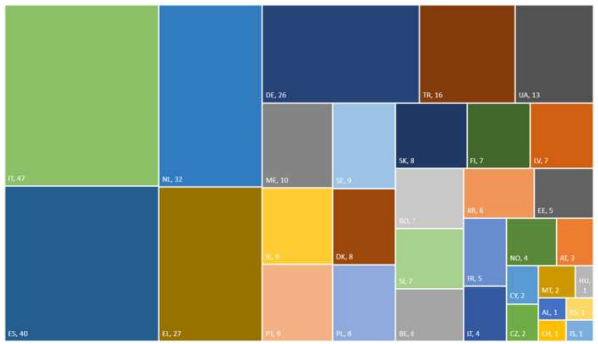


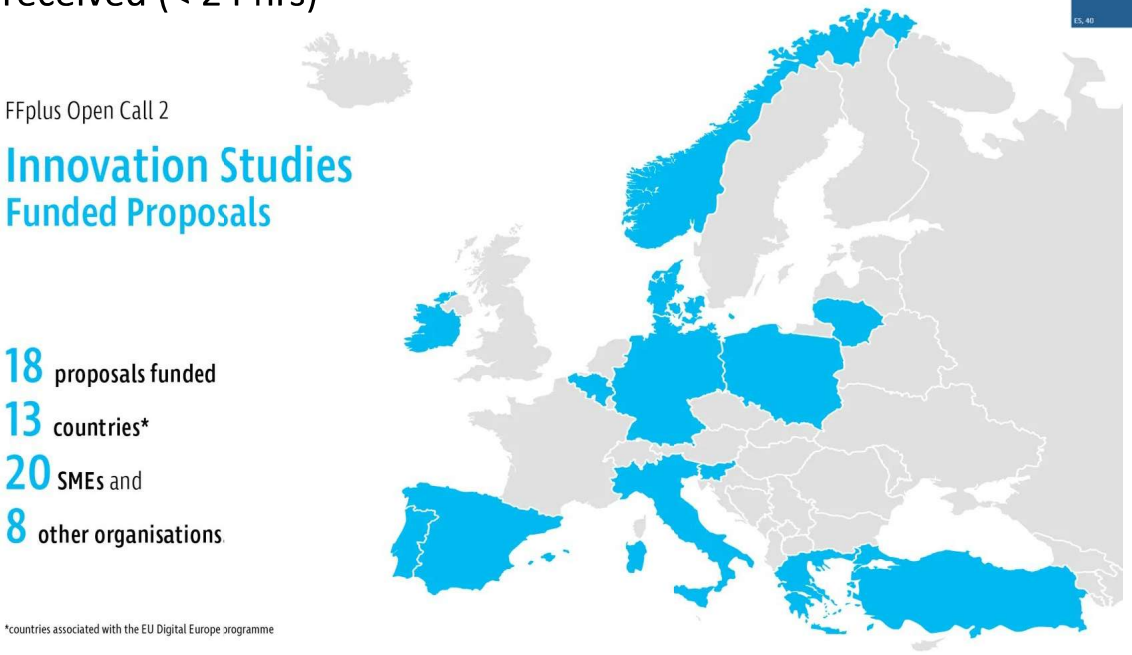
- Approx. 80% AI-related
- Similar break-down for submitted proposals

FFplus Open Call 2 – Innovation Studies

Staggered call announcement & proposal submission with the call closed after 250 proposals received (< 24 hrs)

250 proposals with participants from 33 countries





Tranche 2 Innovation Studies started Sept. 2026

Call 3 for Innovation Studies: open mid-2027

Aerodynamic and Structural Optimisation of Modular Bikes

Tranche 1 Business Experiment

The Challenge

Reduce design times for modular bikes with adaptation from road bike to triathlon bike with few components changed

The Solution

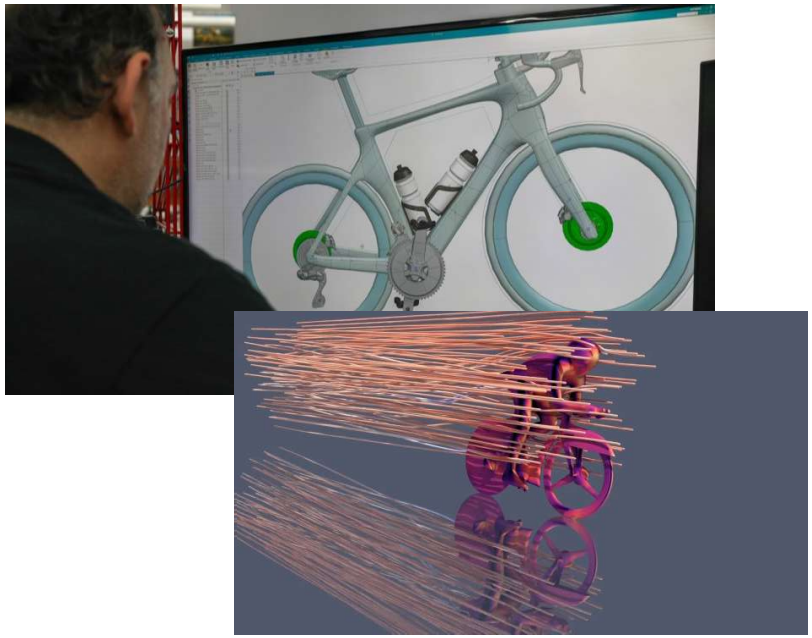
Automated CFD & structural optimisation workflows deployed on the LUMI supercomputer

Business Benefits

- 50% shorter design phase, 50% reduced design costs.
- 15-20% lower manufacturing costs through carbon-fibre material savings.
- 50 extra bicycles/year: up to €350,000 revenue and two new jobs.
- New cycling products could add €100,000/year and create one job.
- Sector expansion to luxury-boat applications could add €300,000/year and create two jobs.

Main Participant SME:
Advanced Engineering (Greece)

Supporting Partners:
NTUA (Greece), Politecnico Milano (Italy), FOSS (Greece)



Precision Engineering in Welding

Tranche 1 Business Experiment

The Challenge

Transform robotic welding qualification and process development with HPC-enabled AI geometry screening combined with thermal and structural prediction

The Solution

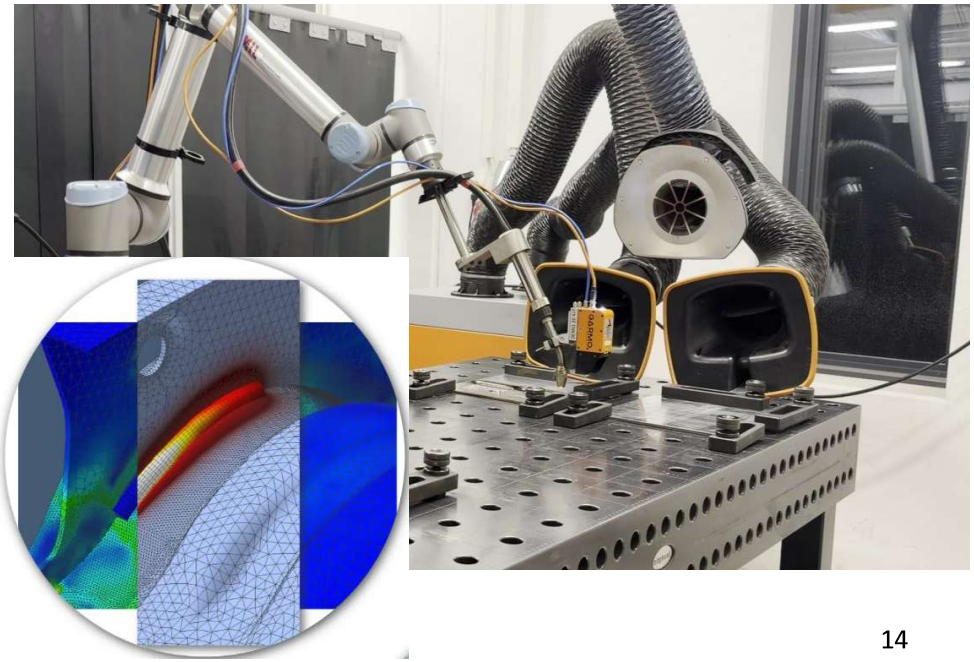
Thermomechanical simulations used for training the AI model that predicts weld quality, structural performance and cooling rates.

Main Participant SME:
3D-Components AS (Norway)

Supporting Partners:
SimEvolution A/S (Denmark),
Sigma2 AS (Norway)

Business Benefits

- HPC enables a typical 40-case study to run in about 1.5 hours (reduced from 2.5 days).
- Up to 200x faster welding qualification and process development.
- AI predictions of weld cooling rates show over 98% accuracy.
- Up to 90% less material waste and CO2 from fewer physical trials.
- Siemens collaboration opens an estimated market of around 2,000 users.



Damage Control for Rental Car Fleets

Tranche 1 Business Experiment

The Challenge

Replace manual processes for vehicle rental and fleet operations with fast, reliable, AI-based damage evaluation.

The Solution

A multimodal AI workflow platform that analyses vehicle images, text reports and voice descriptions – HPC-enabled AI training on thousands of annotated images

Business Benefits

- Expands TUBEIQ's footprint into rental, fleet and insurance markets.
- Projected revenues exceed €500,000 in 3 years with profitability from Year 2.
- 30-40% faster damage-report processing for rental/fleet operators.
- 20-25% lower inspection/reporting costs per vehicle.
- Up to 30% fewer disputes via consistent, transparent reporting.

Main Participant SME:
TUBEIQ (Serbia)

Supporting Partners:
DunavNET (Serbia), AAA-1 RENT(Serbia)





Business experiments

Apply to the Open Call!

FFplus Open Call-3 (Type-1)

Third call for business experiments addressing the uptake of HPC by SMEs

- Proposal submission will be possible commencing on January 14th, 2027 at 10:00 Brussels local time. The call will be closed when either 200 proposals have been received, or on January 20th, 2027 at 17:00 Brussels local time, whichever point in time is earlier.
- Expected duration of business experiments: 15 months, with targeted commencement August 1st, 2027
- The indicative total funding budget for all business experiments funded under this call is € 4M.

FFplus_Call-3-Type-1 - Objectives

- Proposals to address uptake of HPC by SMEs in order to solve specific business challenges of SMEs that have had no prior (business) use of, or experience with, HPC services.
- Demonstrate (to European SME ecosystem) that HPC uptake solves business challenges and leads to positive business impact through HPC-based computational methods (modelling and simulation, data analytics, AI, etc.) ➔ Key outputs are success stories
- Varied application domains – priority for highest business impact
- “Research-oriented” SMEs not in scope (defn in call text)
- Target for widening HPC user-base in Europe

FFplus_Call-3-Type-1 – „No Prior HPC“ clarifications

- Call-3-Type-1 targets SMEs with “no prior use of, or experience with, HPC services”. This essentially concerns the business activities of the organisation; thus, it concerns:
  - HPC use for the development of products or services or for the organisation’s business processes;
  - and also the use of HPC by the SME’s products and services, e.g. by the organisation’s customers.
- Main participant SMEs who have used HPC systems or services in those contexts would not be eligible for funding under this FFplus call.
- **Q: Would a successful application for access to one of the EuroHPC JU supercomputers or AI Factory systems make the main participant SME ineligible to receive FFplus funding?**
  - Did prior business use take place?
  - An initial evaluation of some appropriate software as preparation for the work planned for the proposed business experiment would not be a ground for ineligibility for funding.

FFplus_Call-3-Type-1 – Requirements 1/2

- Be fully aligned with the FFplus call objectives
- Explain & justify the business challenge and the need for HPC (systems and advanced services)
  → explain & justify the expected business impact & value creation
- Present a vision of success, i.e. how addressing the business challenge using HPC will lead to positive business impact; define the value propositions and the process of value creation.
- Define specific objectives to successfully address the business challenge and proposal work plan
- Involve the necessary parties required for the effective and efficient execution of the experiment and demonstration of the impact on SME business challenges

FFplus_Call-3-Type-1 – Requirements 2/2

- Define the resources needed to meet objectives and the associated costs. This potentially includes computing costs; please see the section “HPC Computing Resources” below.
- Declare any data protection issues that might impact the proposed work plan, define data/information protection mechanisms addressing these
- Declare any potential compliance issues with the EU AI Act and the EU Data Act (for both sub-project execution and subsequent post-project deployment / commercialization)
- Support the FFplus project in the generation of publishable success stories – including in multi-media form – which discuss how the SME’s real-world problems were addressed and clearly identify the business benefits realised or obtained.
- Be complementary to past Fortissimo experiments , i.e. avoid duplication of specific activities carried out in the prior Fortissimo, Fortissimo 2, and FF4EuroHPC projects or in the FFplus sub-projects from the 2 previous open calls.

HPC Computing Resources – 1 / 2

- There is an expectation that FFplus sub-projects make use of the HPC resources provided under the EuroHPC JU access schemes, which services are provided free of charge. The use of nationally provisioned HPC resources is considered equivalent.
- Please refer to the EuroHPC JU website for regularly updated information about the various access calls, which are organised in the two areas “supercomputers access” and “AI Factories access”:
  https://eurohpc-ju.europa.eu/supercomputers/supercomputers-access-policy-and-faq_en
  https://eurohpc-ju.europa.eu/ai-factories/ai-factories-access-calls_en
  Depending on the type of methodologies foreseen to be used in the proposed business experiment, both access areas are relevant for FFplus sub-projects.
- The NCCs may be able to aid with the selection of appropriate resources and the application process.

HPC Computing Resources – 2 / 2

- FFplus cannot provide computing resources itself, nor does it have any special allocation of time on the EuroHPC JU systems.
- The use of 3rd party commercial HPC resources is permissible - when suitably justified and the costs included in the proposed budget.
- Similarly, the use of resources provided by an organisation, such as an HPC centre, included within the sub-project consortium as supporting participant (*) is permissible when:
  - the costs of charged HPC resources are based on actual costs and not commercial rates;
  - the costs are included in the experiment's budget as "other direct cost" of the partner providing the HPC resources to the experiment consortium.

(*) Explained on the next slide

FFplus_Call-3-Type-1 – Eligibility Criteria -1/2

- The experiments should address the business challenges of an SME new to the use of HPC and that SME may participate in only one experiment as main participant.
- A **main participant** is an SME or a startup and **supporting participants** are organisations supporting the main participant in the technical work needed to achieve the objectives defined for the experiment.
- Applications are to be submitted by one or more main participants sharing a business case/challenge and optionally one or more supporting participants. Each consortium partner needs to have a clearly defined role.
- The total number of consortium partners (main participants and supporting participants) is limited to five.

FFplus_Call-3-Type-1 – Eligibility Criteria - 2/2

- Only organisations established in

  a) an EU Member State or

  b) (non-EU countries:) listed EEA countries and countries associated to the Digital Europe Programme where the agreement entered into force before 20/01/2027

are eligible to receive funding. Natural persons (individuals) are not eligible to receive funding.

- SMEs may only receive funding as a main participant in one type of sub-project (business experiment or innovation study)
- FFplus beneficiaries are ineligible to participate as either main or supporting participants.

FFplus_Call-3-Type-1 – Funding Conditions – 1/2

- Third Parties will receive 100% funding of incurred, eligible direct costs necessary for the completion of experiment activities; no indirect costs or overheads will be funded.
- The maximum duration of the experiments is 15 months.
- The maximum funding per organisation is 150 K€. For supporting participants, the maximum funding applies to all business experiments, for all FFplus calls, in which they participate.
- The maximum total funding for business experiment with multiple partners is 200 K€, for a business experiment not including supporting partners it is 150 K€.
- In principle, at least 50% of the funding applied for should be allocated to the main participants. Any deviations from this principle must be duly justified.
- For supporting participants, only engineering/technical activities are eligible for funding. Activities such as business consultancy, marketing initiatives, administrative tasks, and other non-engineering/non-technical activities are not eligible for funding.

FFplus_Call-1-Type-1 – Funding Conditions – 2/2

Budget module	Additional details
Personnel	Personnel costs need to be commensurate with the work to be performed
Equipment	Depreciation costs only. Only specialized equipment necessary for conducting the experiment is permitted. Costs for common-use equipment such as laptops, monitors, etc., are not eligible.
Travel	Travel must be justified in terms of the necessity for performance of the proposed experiment work plan. Travel costs for dissemination and demonstration purposes are ineligible.
HPC compute capacity	Compute Resources need to be justified. Ideally, EuroHPC systems will be used for the work. A decision not to apply for access to the EuroHPC systems should be duly justified.
Material	1. Costs for acquiring specialized SW licenses for conducting the experiment (licenses for general office software, for example, are not eligible). 2. Costs for acquiring or using data sets or collections needed to conduct the experiment.

Costs for the budget module "Material" need to be commensurate with the overall requested budget and with the scope of business innovation targeted by the proposed experiment.

Please note that costs for sub-contracting are not included (and thus ineligible for funding).

FFplus_Call-3-Type-1 – Evaluation Criteria

1. Impact: industrial relevance (including potentially societal relevance), exploitation plans and alignment with the objectives of the call.
2. Excellence: Soundness of concept, innovation, and quality of the work plan.
3. Quality of the consortium: as a whole and of the individual proposers including their ability to carry out the proposed work.
4. Resources: Effective and justified deployment of resources.

Criteria 1 to 4 will carry a score ranging from 0 to 5. Criterion 1 will have a weight of 2×, Criteria 2 to 4 a weight of 1× (leading to a maximum score of 25 points).

A threshold score of 3 will apply to the first three criteria.

In case of a tie in the overall score ranking, proposals are ranked based on the individual criteria scoring applying the following priority: Impact, Excellence, Quality of the Consortium, Resources, and finally total requested funding.

FFplus_Call-3-Type-1 – Proposal Submission

- Proposal submission will be possible commencing on January 14th, 2027 at 10:00 Brussels time. Electronic submission using the tool accessible via the FFplus website:

https://www.ffplus-project.eu/en/open-call/business-experiments/

- The call will be closed at the earliest of either (a) the point in time when 200 proposals have been received, or (b) 17:00 Brussels local time, January 20th, 2027.
- Submissions in English
- Upload of a spread-sheet containing administrative information and a PDF-document (whose size must not exceed 5.0 MB) compliant with the instructions on proposal structure

FFplus_Call-3-Type-1 – Proposal Submission

Upload of a spread-sheet containing administrative information and a PDF-document (whose size must not exceed 5.0 MB) compliant with the instructions on proposal structure. **Please Note:**

- Details in the call announcement (website & document)
- Only requested information should be included in Part A, conform with the template spreadsheet provided. Additional extraneous information will be deleted before evaluation.
  Please **do not make any changes to the template** (e.g. no deletion or renaming of work sheets, rows or columns); major deviations from the template may lead to the proposal being rejected without further evaluation.
- **Proposals submitted with a Part B whose length (excluding the cover page) exceeds the 10-page limit will be rejected without further evaluation.**

FFplus Call-3-Type-1: Documentation & Proposal Submission

- Open Call area of the FFplus Website:

https://www.ffplus-project.eu/en/open-call/business-experiments/

- Documents provided:
  - Call Announcement & Proposer‘s Guide
  - Proposal Templates
  - Proposal check-list
  - Frequently Asked Questions (FAQ)
  - Funding Agreement template
- **Access to the proposal submission tool**

Still have questions about the call for business experiments?
ffplus-call3-t1@scapos.eu

Information & inspiration

- Project website

www.ffplus-project.eu

- LinkedIn, YouTube

@ffplusproject

- Newsletter



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→ Q&A Session

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www.ffplus-project.eu