Fortissimo Plus, EuroHPC Project 101163317, https://www.ffplus-project.eu/

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

Identifier: FFplus_Call-3-Type-1

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

Project name and grant agreement number: Fortissimo Plus, 101163317

Project Acronym: FFplus

Deadline: 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 at the latest.

The indicative total funding budget for all sub-projects funded under this call is € 4M.

Funding and eligibility: A number of funding constraints and eligibility conditions apply, detailed in the full announcement text below. Applicants are requested to ensure that their proposals comply with all constraints and eligibility conditions as failure to do so can lead to the proposal being rejected after an administrative check and without the technical aspects of the proposal being evaluated.

Submission language: English

Internet address for full open call information and proposal submission:
https://www.ffplus-project.eu/en/open-call/business-experiments/

Contact email for open questions: ffplus-call3-t1@scapos.eu

FFplus Introduction

FFplus is funded by the EuroHPC Joint Undertaking (EuroHPC JU) action DIGITAL-EUROHPC-JU-2023-SME-01 "Supporting the competitiveness and innovation potential of SMEs". The central objective of the action is to empower SMEs with advanced computational capabilities based on HPC, enabling them to drive innovation, enhance competitiveness, and overcome challenges in the digitisation of R&D and business processes.

Consequently, the work carried out under FFplus will lead to innovative business experiments (addressed in this call) and innovation studies (addressed in a subsequent call) that will showcase the benefits of adopting HPC for SMEs and Start-ups throughout Europe.

Business experiments will highlight the value of HPC adoption for SMEs across Europe. Whilst High-Performance Computing (HPC) and a range of associated fields of study and technologies, from numerical simulation to Artificial Intelligence (AI), are increasingly becoming versatile, widely deployed tools for both academia and large industrial organizations, there is still action needed to ensure the uptake of these novel technologies by Small and Medium-sized Enterprises (SMEs) that lack the required expertise. Innovation studies, in contrast, 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.

In particular, the FFplus project will use open-calls for proposals to select business experiments and innovation studies (also referred to as sub-projects) that will be funded through the mechanism of Financial Support for Third Parties (FSTP). Over the duration of the project, FFplus will provide over € 24 million to such sub-projects selected through a total of six open calls: three of which will target SMEs using HPC to improve their business (business experiments), and three of which will target SMEs/Start-ups in the field of generative artificial intelligence (innovation studies).

FFplus_Call-3_Type-1 Objectives

This announcement is the third call for proposals to address the uptake of HPC by SMEs in order to solve specific business challenges of SMEs that have had no prior use of, or experience with, HPC services. The resulting sub-projects will perform “business experiments” (also referred to below just as experiments) that should demonstrate to the broader European SME ecosystem that HPC uptake solves business challenges and leads to positive business impact (including but not limited to increased innovation potential and competitiveness) through the use and deployment of HPC-based computational methods (modelling and simulation, data analytics, AI, etc.). Thus, their key outputs are success stories that promote, communicate, and disseminate the business impact of HPC uptake to the SME ecosystem. The development of the technological innovation potential of the participating SMEs is also directly targeted and an important objective for the proposed business experiments.

The call targets highest quality experiments involving innovative, agile SMEs with work plans built around business innovation targets arising from the use of advanced HPC services. Proposals are sought that address business challenges from European SMEs from varied application domains, whereby SMEs whose adoption of advanced HPC services will create the highest business impact will be prioritized. SMEs with an academic focus, for example with business models around R&D services based on HPC

software, or activities with a potential impact only in the long term, such as fundamental research, are not within the scope of the call.

FFplus seeks to promote a widening of the HPC user base amongst European SMEs and thus targets a broad geographical distribution of participants. SMEs based in countries with a previously low level of HPC adoption are encouraged to submit a proposal and may expect to be assisted by their national HPC Competence Centre[1].

A "main participant" is an SME whose business challenge will be addressed by a business experiment proposed for this call. Since this call for business experiments targets only SMEs with no prior experience with HPC services as main participants, **a prior participation as main participant SME in a business experiment funded through either of the first two FFplus calls for proposals makes that SME ineligible for participation as main participant SME in a business experiment funded under this call**; a participation as supporting participant would be dependent on total funding constraints (for details refer to the section "Funding, Eligibility Criteria and Obligations"). Similarly, the HPC competencies required for innovation studies mean that **an SME that received (or is receiving) funding for an FFplus Innovation Study is ineligible for participation as main participant SME** in a business experiment funded under this call.

Requirements for the experiments and for proposals

The proposed experiments are required to:

1. Be fully aligned with all of the FFplus call objectives defined above.
2. Define the business challenge that needs to be addressed, justifying why this is a challenge and why HPC is needed to address it.
3. 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.
4. Define specific objectives that must be achieved in order to successfully address the business challenge and the accompanying action plan. Furthermore, if necessary, involve the necessary parties required for the effective and efficient execution of the experiment and the demonstration of the impact on SME business challenges through the use of HPC systems or advanced HPC services. Appropriate technical management within an experiment is a required component. Key indicators include revenue generated over recent years, and the existence of a customer base beyond the academic realm.
5. Define the resources needed to meet objectives and the associated costs. This potentially includes computing costs; please see the section "HPC Computing Resources" below.
6. Declare any data protection issues that might impact its proposed work plan, define data/information protection mechanisms addressing these in the framework of European law, and ensure that the operation of the experiment adheres to these.

[1] https://hpc-portal.eu/nccs

7. Declare any potential compliance issues with the EU AI Act [2]and the EU Data Act [3] that might arise during execution of the planned business experiment and/or in the post-project deployment and use of services or products developed within the business experiment[4].
8. 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.
9. Be complementary to past Fortissimo experiments[5], that is proposed experiments should avoid duplication of specific activities carried out in the prior Fortissimo, Fortissimo 2, and FF4EuroHPC projects or in the FFplus sub-projects funded as a result of either of the first two open calls.

In the context of the Fortissimo Plus calls, complementarity of experiments is understood to mean activities that address new applications, services, business cases, industrial sectors and market segments and the enhancement of the project's ability to demonstrate the impact of the Fortissimo approach for a broad set of industrial users. Proposals that just extend past experiments are thus not considered to be complementary.

HPC Computing Resources

The FFplus project is not in a position to provide HPC computing resources itself, nor does it have any special allocation or preferred-priority access to the HPC systems of the EuroHPC JU. As explained in the subsequent section of this document, 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.

In general, the EuroHPC JU access schemes are organised as a number of different calls for proposals with differing submission dates and available resource volumes and lengths of access and including specific opportunities for industrial users. Proposers are referred 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 HPC National Competence Centres may be

[2] https://artificialintelligenceact.eu/
[3] https://eur-lex.europa.eu/eli/reg/2023/2854/oj
[4] It should be noted that proposers selected for funding will be required to sign the funding agreement with the FFplus Coordinator which will stipulate compliance with all applicable laws and regulations, in particular the EU Data Act and the EU Artificial Intelligence Act.
[5] https://www.ff4eurohpc.eu/en/success-stories/
https://www.ffplus-project.eu/en/success-stories/

able to aid proposers with the selection of appropriate resources and access schemes and the related application process.

When suitably justified, the use of 3rd party commercial HPC resources is permissible, but the corresponding costs need to be taken into account within the proposal budget. Similarly, the use of resources provided by an organisation, such as an HPC centre, included within the sub-project consortium as supporting participant (explained in the following section) is permissible when suitably justified. It should be noted that the provision and cost of charged HPC resources by a supporting partner must be based on actual costs and not commercial rates. These costs have to be included in the experiment's budget as "other direct costs" of the partner providing the HPC resources to the experiment consortium.

Funding, Eligibility Criteria and Obligations

The total indicative funding budget for Call 3 sub-projects executing business experiments addressing the uptake of HPC by SMEs is € 4 million.

FFplus will make use of the FSTP (Financial Support of Third Parties) funding method for the experiment consortia selected through the open call. For all sub-projects funded under FSTP, an agreement will be concluded between the experiment consortium[6] and the FFplus Coordinator; provisions for avoidance of conflicts of interest between sub-projects will be anchored in that agreement. Before conclusion of the funding agreements, participating SMEs, and the main participant SME in particular, will be required to confirm their status as SME in line with European Commission definitions. All participating SMEs will be required to complete a financial capacity declaration - confirming their financial stability and capability to finalise the proposed experiment - before conclusion of the funding agreement.

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[7]. The FFplus project receives funding based on a Grant Agreement following the regulations of the Digital Europe Programme and the eligibility rules of that Grant Agreement will apply for the direct costs arising in the sub-projects.

Consortia selected for funding via the proposal evaluation process will be invited to conclude a funding agreement with the FFplus project coordinator, the University of Stuttgart. That funding agreement will define the payment schedule, whereby payment will be made in multiple tranches, partly linked to the delivery of reports and outputs defined in the experiment workplan and in the funding agreement itself. The principle followed will be that the experiment participants will receive an advance payment at the start of the experiment followed by subsequent instalments.

The following funding conditions and eligibility criteria for participation apply:

1. The experiments should address the business challenges of an SME new to the use of HPC (a "main participant") and that SME may participate in only one experiment as main participant. For avoidance of doubt: an SME that has participated as main participant in a previous business

[6] Note that single-organisation "consortia" are also eligible to apply.

[7] Please be aware that travel costs for dissemination and demonstration purposes **are not eligible** and cannot be claimed, even if they are included in the proposal.

experiment or as main participant in a prior or current FFplus innovation study is ineligible to be funded as main participant under this call.

2. A main participant is an SME, which might also be a start-up, and supporting participants are organisations supporting the main participant in the technical work needed to achieve the objectives defined for the experiment.
3. 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[6] needs to have a clearly defined role.
4. The total number of consortium partners (main participants and supporting participants) is limited to five (5).
5. 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 association agreement entered into force before the submission deadline of this call are eligible to receive funding. Natural persons (individuals) are not eligible to receive funding.
6. FFplus beneficiaries are ineligible to participate as either main or supporting participants.
7. The maximum duration of the experiments is 15 months.
8. 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€.
9. 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.
10. 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.

Proposals not adhering to the above will be rejected, **for items 1 to 8 without a technical evaluation of the proposal being performed.**

The budget modules available for experiments are listed in the table below, noting that costs for sub-contracting are not included (and thus ineligible for funding)

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.

For the avoidance of doubt, the following costs relating to dissemination actions [8]are ineligible for funding: costs for dissemination material; costs relating to the organisation of dissemination events; fees for participation at conferences, exhibitions or other events.

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.

The experiments will receive support from the project with a range of actions relating to interactions with the project and also relating to potential collaborations with other sub-projects. Furthermore, direct support for each individual experiment will be provided relating to the (external) application procedures for gaining access to EuroHPC JU-provided computing resources and technical consultation relating to the effective execution of the experiment work plan.

Submission Details

Submission Dates

Proposal submission will be possible commencing on January 14th, 2027 at 10:00 Brussels time. The call closure is dependent on the volume of proposals received: 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.

[8] For the avoidance of doubt, activities relating to the preparation of success stories to be provided to the FFplus project are **not** considered to fall under the category of dissemination actions.

Electronic Submission

Proposal submission is exclusively in electronic form using the proposal submission tool accessible via the Fortissimo web-site:

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

The central component of proposal submission is the uploading of a spread-sheet containing administrative information ("Part A") and a PDF-document ("Part B"), whose size must not exceed 5.0 MB, with the instructions on proposal structure given below.

Indicative Timetable

The target is for the new experiments to commence at the beginning of August 2027. We expect to be able to communicate the results of the evaluation of proposals by early June 2027.

Proposal format and structure

Proposals must be submitted in English. Each proposal must comprise 2 parts: Part A (containing administrative information), Part B (containing the body of the proposal, the structure of which is explained below).

Part A of the proposal must be submitted using the spread-sheet template, which contains a set of tables to provide administrative data, including a tabular list of proposal participants. The participant list must include for each participant the Participant Identification Code (PIC) issued by the European Commission[9], and the participant description must include a valid address, telephone number and email contact data.

Only requested information should be included in Part A, conform with the template spreadsheet provided. Additional extraneous information will be deleted before evaluation. Proposers are explicitly requested not to 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.

The main section of the proposal – Part B – must not exceed 10 pages in length (including any appendices, but excluding the Part B cover page). The Part B text must not be smaller than 11-point Arial font; which applies also to images inserted into the proposal that provide textual information. **Proposals submitted with a Part B whose length (excluding the cover page) exceeds the 10-page limit will be rejected without further evaluation.**

It is an explicit requirement for eligible proposals to provide consistent information, for example concerning funding budget requests, in Part A and Part B of their proposal.

ALL PROPOSERS MUST TAKE CAREFUL NOTE OF THE ABOVE RULES.

[9] To obtain a PIC, register at
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/participant-register

The structure of the proposal Part B (and **indicative** length per section) should be as follows (the maximum number of pages is the critical aspect as described above):

1. Summary (0.5 pages)
2. Industrial relevance, potential impact (including societal impact) and exploitation plans (3.5 pages)
3. Description of the work plan and concept, including the expected HPC computing needs (3 pages)
4. Quality of the consortium[6] as a whole and of the individual proposers (2 pages)
5. Justification of costs and resources (1 page)

A management structure will be established for the successful proposals. That is, the proposal will not need to contain a description of how the management of the experiment in the framework of the overall FFplus project will be achieved, but should include tasks for the technical management of the experiment activities.

Proposal templates for both Part A and Part B can be found at
https://www.ffplus-project.eu/en/open-call/business-experiments/

It is a requirement that these templates be followed and in particular that the breakdown of the proposal budget be provided using the embedded Excel spread-sheets in Part B. Furthermore, proposals providing inconsistent information in Part A and Part B will be rejected without further evaluation.

Evaluation Criteria

The criteria for evaluation will comprise:

1. Impact: industrial relevance (including potentially societal relevance), exploitation plans and alignment with the objectives of the call.
2. Excellence: Soundness of concept, business innovation, and quality of the work plan.
3. Quality of the consortium[6]: 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.

Submission and Evaluation Procedure

The procedure for proposal submission and evaluation consists of the following steps:

1. proposal submission;
2. admissibility/eligibility check of the proposal;
3. first-stage evaluation (initial ranking) of proposals (if applicable);
4. final selection (second-stage evaluation) of the proposals;
5. Funding Decision

Submission of proposals

For the submission of the proposal, proposal templates provided by the FFplus project are to be used which must be submitted using an online tool accessible via the open call section of the FFplus website corresponding to this open call. The funding and eligibility restrictions and format and structure described previously must be adhered to.
The call will be closed in advance of the final submission deadline once 200 proposals have been received (as described under "Submission Dates" above).

Admissibility/eligibility check

This step will assess whether a proposal will be taken into consideration. This will be determined on a number of administrative technical criteria concerning eligibility and proposal format and structure described previously. As explained earlier in this document, failure to adhere to the funding and eligibility restrictions and to the proposal format instructions will lead to immediate rejection of the proposal.

First-stage evaluation of proposals

In case the number of received admissible/eligible proposals exceeds 100 proposals, a two-stage selection procedure will be applied; the first-stage evaluation being as follows:
An **initial** ranking of proposals will be created based on the individual assessments and scores of the experts. From this ranking, the top set of proposals up to the cumulative funding that exceeds three times the number of proposals that can be funded within the available budget will be taken into the final (second-stage) evaluation. The remaining proposals will be rejected. Proposers whose proposal was rejected after the first evaluation stage will receive a short evaluation summary report comprising the combined or consolidated findings of the independent expert evaluators addressing only key issues.

Final selection of proposals

The final selection of proposals (which is potentially the second stage evaluation) will employ a consensus review process; which process will be supported by the FFplus beneficiaries coordinating the open call. Building on the individual assessment reports, consensus sessions will be organised in which a moderator works with the two individual evaluators to create a consensus assessment report, representing the consensus position of both experts. The consensus report is turned into an

evaluation summary report that will be shared with the proposing consortium comprising the consolidated findings of the expert evaluators.

Proposals ranked high enough to be considered for funding will be reviewed by the FFplus project with regard to potential EU AI Act compliance issues, typically relating to post-project deployment. This will take account of relevant comments made by the external expert evaluators. Where potential AI Act issues have been identified, proposers will be requested to submit a detailed assessment of their proposed experiment's AI Act compliance including mitigation measures before a final decision on selection for funding is made.

Funding Decision

In all cases, as previously stated, proposers will be provided with a decision from the project on the result of the selection procedure. That decision is final and the project will not enter into discussions concerning the evaluation results, and no appeals process will be provided.

The successful proposal consortia selected for funding will be included as sub-projects on conclusion of a Funding Agreement between the University of Stuttgart (the FFplus project Coordinator) and the Partner(s) involved in the proposal. This Funding Agreement reflects standardised terms developed to ensure compliance with the requirements of the FFplus Grant Agreement and to guarantee equal treatment of all funded 3rd parties, including SMEs. These uniform conditions are designed to maintain transparency and compliance with applicable FFplus Grant Agreement terms and conditions. Minor, non-material administrative modifications may be considered only where strictly necessary for implementation purposes and where they do not affect the core principles of equal treatment and regulatory compliance. With the submission of a proposal, the proposer(s) acknowledge this.[10]

Background to the evaluation procedure

Adherence to the proposal format and structure described previously – and notably to the prescribed page limit – will allow the independent external evaluators, see below, to evaluate the proposal against all of the above-mentioned evaluation criteria. As explained earlier in this document, failure to adhere to the funding and eligibility restrictions and to the proposal format instructions will lead to immediate rejection of the proposal.

Measures have been implemented to handle larger volumes of submitted proposals but nevertheless conclude the evaluation within the limits of the project's budget and time lines while maintaining a fair and impartial process. The first measure is the abovementioned call closure, in advance of a final submission deadline, once 200 proposals have been received. The second measure is to employ a two-stage evaluation process. For both evaluation stages, the evaluation of proposals will be done by independent, external experts; two experts, with demonstrated competency in the field of the business experiment proposals, being assigned to each proposal. Their assessments will be done independently of one another.

[10] Main Participant SMEs who have included a Supporting Partner with a legal department/division separate from the technical group involved in proposal preparation are advised to clarify that such legal department/division is aware of these conditions in advance of proposal submission.