



ESFRI-FED PROGRAMME

IN SUPPORT OF THE VALORISATION OF FEDERAL
COMPONENTS IN ESFRI DISTRIBUTED AND
VIRTUAL INFRASTRUCTURES
PHASE 1 – [2021-2025]

CALL FOR PROPOSALS | 2021-2022 INFORMATION FILE

Submission deadlines:

EXPRESSIONS OF INTEREST: 09 August 2021 @ 14:00
FULL PROPOSALS: 06 September 2021 @ 14:00

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PART I:

GENERAL INFORMATION ON THE PROGRAMME

1. ESFRI-FED MULTI-YEAR FRAMEWORK PROGRAMME

- ESFRI-FED website:

EN: https://www.belspo.be/belspo/organisation/call/ESFRI-FED_2021_en.stm

FR: https://www.belspo.be/belspo/organisation/call/ESFRI-FED_2021_fr.stm

NL: https://www.belspo.be/belspo/organisation/call/ESFRI-FED_2021_nl.stm

- ESFRI-FED secretariat: esfri-fed@belspo.be

1.1. GENERAL

1.1.1. ESFRI INFRASTRUCTURES

On 16 July 2021, the Council of Ministers approved the implementation of the first phase of the ESFRI-FED programme in support of the valorisation of the federal components in ESFRI distributed and virtual infrastructures, to be carried out under the responsibility of the Federal Science Policy (BELSPO).

ESFRI, the European Strategy Forum on Research Infrastructures, is a strategic instrument to develop the scientific integration of Europe and to strengthen its international outreach. The mission of ESFRI is to support a coherent and strategy-led approach to policymaking on research infrastructures in Europe, and to facilitate multilateral initiatives leading to the better use and development of research infrastructures, at EU and international level¹.

Research infrastructures as defined by ESFRI are facilities, resources and services that are used by the research communities to conduct research and foster innovation in their fields. They include: major scientific equipment (or sets of instruments), knowledge-based resources such as collections, archives and scientific data, e-infrastructure, such as data and computing systems and communication networks and any other tools that are essential to achieve excellence in research and innovation². Beyond research, these infrastructures provide public services and education. They are classified as: single site, distributed or virtual infrastructures.

The ESFRI-FED programme focuses on distributed and virtual ESFRI infrastructures. A distributed research infrastructure consists of a Central Hub and interlinked National Nodes, holding a unique specific name and legal status, and governance structure. Distributed infrastructures define and follow a joint investment strategy aimed at strengthening the research infrastructure through the Nodes and common/shared facilities. User-wise, each infrastructure has a common access policy, providing a single point of access for all users.

¹ For more information on ESFRI: <https://www.esfri.eu/forum>

² <https://www.esfri.eu/glossary>

1.1.2. AIM OF THE PROGRAMME

ESFRI-FED is first and foremost designed to support the participation of Belgian Federal Scientific Institutions (FSI)³ and federal departments (listed in [Annex I](#)) in ESFRI distributed and virtual research infrastructures, through the funding of R&D projects based on scientific excellence and European anchorage. Accessorily, universities or research centres appertaining to a federated entity may also participate, under conditions given in [Part I - Point 1.3.2.b](#).

More concretely, the framework programme aims to:

- Support ESFRI research infrastructures which are in implementation or operational phase, and to which Belgium has formally adhered.
- Better position the presence of Belgium and especially its federal level within said ESFRI infrastructures.
- Further develop, test, reinforce and/or improve Belgian federal components and/or services within said ESFRI infrastructures.
- Valorise the Belgian federal component of the ESFRI infrastructure through the development of services or specific modules within the Federal Scientific Institutions.

1.2. ORGANISATION

For its operationalisation BELSPO is assisted by a **Programme Committee**. This committee is an **independent panel established for the duration of the programme**. The committee is composed of designated members from the FSIs and federal departments concerned with ESFRI research infrastructures (see [Annex II](#)). Its role is to monitor and insure consistency of the implementation procedures. Details of its composition and mandate are provided in the Terms of Reference.

1.3. CONSTRUCTION OF R&D PROJECTS

1.3.1. INFRASTRUCTURES ADDRESSED BY THE PROGRAMME

The ESFRI research infrastructures addressed by the different programme calls must meet all **the following conditions**:

- They have **Belgium among its members**; either as a legal entity or via a formal participation agreement (i.e. signature of a 'political support' document in the name of Belgium, a 'memorandum of understanding', a 'letter of intent', or its equivalent).
- They are in **implementation or operation phase**⁴.

³ The acronym FSI covers the institutions as defined in the Royal Decree of 30 October 1996 and their possible legal successors, such as Sciensano.

⁴ According to the description of the ESFRI lifecycle approach described in the Strategy Report on Research Infrastructures Roadmap 2018: <http://roadmap2018.esfri.eu/strategy-report/the-esfri-methodology/>

- They have a **“federal node”**⁵; this is, activities performed by federal actors (particularly FSI), or activities performed by non-federal actors in support of federal competencies.

For the list of addressed infrastructures by this call, [see PART II - point 2.2](#).

A rolling call agenda will be planned together with the Programme Committee allowing each ESFRI RI filling the above conditions to be addressed and enriched with a federal component by the end of the ESFRI-FED programme time span.

Synergies between components and between infrastructures within and between FSIs are encouraged.

1.3.2. ELIGIBLE PARTICIPANTS

(a) BELGIAN FEDERAL SCIENTIFIC INSTITUTIONS (FSI)

Participants will be mainly FSI (which may submit proposals alone, or as part of a consortium. The participation of a federated partner in a consortium must be essential to valorize the federal component within the ESFRI RI and will have to be justified in the proposal (see point b, here below).

(b) BELGIAN FEDERATED PARTNERS

Universities or Research Centres belonging to federated entities can participate in the call in the following cases:

- As **coordinator** of a proposal which focuses on federal priorities⁶ for which the expertise required does not exist within FSI⁷.
- As **partner** to FSI in a consortium, if justified by the proposal. In this case, FSI will act as coordinators of the consortium.
- As **subcontractor** in proposals submitted by FSI, for max. 25% of the total project budget.

(c) BELNET

BELNET may be associated **as a non-financed partner or as subcontractor** (for the subcontractor's budget see [PART I - point 1.3.5](#)) in proposals for the development of services or IT transversal solutions, or in connection with services developed by the Federal RI in the framework of the European Open Science Cloud (EOSC) and/or the European High Performance Computing Joint Undertaking (EuroHPC).

BELSPO wishes to avoid that beneficiaries implement technologies, which are not sustainable and scalable when the project funding ends. In this respect, it can be an added value for the project to enter a partnership with BELNET as a technology partner (See [PART I - point 2.3](#)).

⁵ A "federal node" is distinct from an "ESFRI National Focal Point" or "ESFRI node" for which the mission is to ensure the interface between the infrastructure's headquarters and the national contributions.

⁶ Federal priorities are those that mainly concern the competences of the federal departments and the FSI.

⁷ The added value of developing a federal component (e.g. a 'federal node' born of the coordination between federated entities) will have to be demonstrated together with the absence of subsidies for the project by the federated authorities.

1.3.3. ELIGIBLE PROPOSALS

- ✓ Proposals submitted in response to a call of the ESFRI-FED programme **must focus on** the development, test, strengthening or improving, AND anchoring of **federal components and/or services within an addressed ESFRI infrastructure**.
- ✗ Proposals submitted in response to a call of the ESFRI-FED programme **must NOT focus on**:
 - Completely new services that do not build on any previous development already organically linked to the targeted ESFRI infrastructure.
 - Research making use of data or services produced the by the ESFRI research infrastructure.

1.3.4. DURATION

Projects will have a duration of 2 to 4 years.

1.3.5. BUDGET

The objective is to develop a project with the most efficient use of public resources. For this reason, and given the envelope available for the call, projects will have a maximum budget of:

- **400 000€ for projects with a single partner.**
- **750 000€ if there are two or more partners in the consortium.**

The budget will cover exclusively the cost of the R&D activities related to the development of services and the anchoring of the federal component in the ESFRI infrastructure. The budget breakdowns as follows :

- Staff devoted to the implementation of the project [recruited personnel and/or existing personnel made (partially) available to the project and in charge of the budget].
- Operation costs: expenses derived from the implementation of the project and the services [monitoring, cost needed for the functioning and maintaining of the research infrastructure component ...].
- Equipment: only if strictly necessary for the integration of the federal component into the ESFRI infrastructure.
- Subcontracting: the amount may not exceed 25% of the claimed budget by the Belgian partner concerned.
- Overheads : the total may not exceed 5% of [Personnel + operation costs]

General conditions to BELSPO's R&D contracts apply.

For more information regarding the budget please consult the '**budget rules**' document on the [website](#).

1.4. CALENDAR & BUDGET OF THE CALLS FOR PROPOSALS

There will be a total of 3 calls, every two years.

The calendar and the indicative budgets for the calls for proposals are as follows (budgets in K€):

	Call 2021-2022	Call 2023-2024	Call 2025-2026	Total
Budget (k€)	3 800	3 000	3 000	9 800

2. CONTRACTUAL OBLIGATIONS FOR SELECTED PROJECTS

2.1. CONTRACTS

For the selected proposals, a contract is concluded between BELSPO and the funded institution(s).

For this purpose, the applicants of the selected proposal will be asked at the end of the evaluation and selection procedure to concisely formulate the specifications of their projects to be included in the contract. This Technical Annex to the contract will be drawn up in consultation with BELSPO and will consider the recommendations formulated by the evaluators and the Programme Committee.

Adaptations to the original proposal may relate, among other things, to the content of the research, the composition of the project partnership or Follow-up Committee, the budget, the proposals for valorising the research.

BELSPO grants the selected projects the funds required for their implementation. BELSPO shall reimburse at most, and up to the amount specified in the granted budget, the actual costs proven by the partners providing these costs are directly related to the implementation of the project.

The general terms of the contract are detailed in '**Annex II of the contract: General Conditions**', on the [website](#).

2.2. REPORTS AND PROGRESS MEETINGS

The contract foresees the following reports to be submitted to BELSPO:

- **Initial administrative report:** to be submitted within three months after the start of the project.
- **Mid-term progress report:** only for 3 and 4-year projects, to be submitted half-way the project.
- **Final scientific report:** to be submitted at the end of the project.

If deemed useful by BELSPO, an activity report may be requested for an external evaluation of the project. BELSPO may also ask for other reports/input at any time during the project to provide scientific support to valorisation and service actions related to the programme.

These reports are to be included in the project work plan and the cost of preparing them (including possible translations) must be covered by the project budget.

Meetings on the project's progress must be organised - minimum once a year - between the project partner(s), BELSPO and the Follow-up Committee. The organisation of these meetings must be included in the project work plan and the project budget.

2.3. DATA, RESULTS, INTELLECTUAL OWNERSHIP & OPEN ACCESS

In the framework of the open science policy, participants are reminded to comply with current and future open data legislation and guidelines, whereby all components of the infrastructure must be preserved as open digital objects for the long term and are made available for reuse by other researchers or research institutions. Digital objects include, among other things: open research data or FAIR data, open source software components, etc.

It is also required that the e-services financed by BELSPO in the context of the previous programmes and calls, are reused as much as possible in the framework of ESFRI-FED. The project proposals will describe which e-services will be reused, complemented or extended by the beneficiaries (example: the BELSPO long-term preservation platform, the Dataverse research dataset management platform, the use of BELNET services, including authentication and authorization (AAI) services, Secure Storage in secure redundant data centres and managed services).

The results (including information) produced by the project shall be the property of the institution carrying out the work generating this foreground. In accordance with the relevant BELSPO Open Research Data Mandate, each Institution undertakes to make the foreground and background relating to research data, available as soon as possible and free of charge in an approved data repository (Open Research Data Repository). This concerns data that supports the project results, with its metadata and other contextualised (curated) and/or raw data mentioned in the Data Management Plan (DMP) as part of the proposal submitted by the grant applicant. The data must comply with the FAIR principle (Findable, Accessible, Interoperable and Reusable) and must be accessible according to the principle "As open as possible, as closed as necessary".

If the project generates new data, researchers must transfer a copy of the analysis and measurement data and/or metadata to specific databases such as:

- **BMDC ([the Belgian Marine Data Centre](#))**: The Belgian Marine Data Centre, our federal NODC (National Oceanographic Data Centre, bmdc@naturalsciences.be), can be contacted for assistance in the development of a DMP for marine applications and/or in choosing the right repository.
- **AMD ([Antarctic Master Directory](#))**: The Belgian representative of SCADM (the SCAR Standing Committee for Antarctic Data Management, avandeputte@naturalsciences.be) can be contacted for assistance in the development of DMP for Antarctica related applications and/or in choosing the right repository.
- **SODHA ([Social Sciences Data Archive](#))**: For Social and Digital Humanities data, a copy of the data and/or metadata must be transferred to SODHA.
- The promoters of projects that include tasks in which biological materials are used, must ensure the preservation of this biological material by depositing it in a culture collection (Biological Resource Centre), and preferably one in Belgium. This does not apply to material that promoters can prove has already been deposited in a culture collection or for which existing agreements (Material Transfer Agreement) do not allow it to be deposited. Biological material includes

cultivable organisms such as microorganisms, viruses, plant, animal and human cells as well as the replicable parts of these organisms, such as non-modified and recombinant plasmids (including those with DNAC inserts).

2.4. RESEARCH ETHICS

The first code of ethics for scientific research in Belgium was drawn up in 2009:

http://www.belspo.be/belspo/organisation/publ/pub_ostc/Eth_code/ethcode_en.pdf.

The "Code of Ethics for Scientific Research in Belgium" is a joint initiative of the Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, the Académie Royale de Médecine de Belgique, the Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten and the Koninklijke Academie voor Geneeskunde van België, with the support of BELSPO.

All projects must take this code of ethics into account in their research. If necessary, the Ethical Board of the institutions concerned by a project must be consulted before submitting a proposal.

2.5. GENDER

BELSPO strongly encourages projects to consider the equality in terms of gender and to ensure gender mainstreaming in the implementation of the project. The project should include this both in the choice of the researchers and, where relevant, by integrating the gender dimension into their research. All statistics produced, collected, and commissioned are, where appropriate, disaggregated by sex and gender indicators are established where relevant.

PART II:

CALL INFORMATION

1. DOCUMENTATION RELATED TO THIS CALL

The following documents are available on the [ESFRI-FED website](#):

DOCUMENTS WITH INFORMATION REGARDING THE PROGRAMME AND THE CALL:

- Information file: General Information of the Programme and the Call.
- Submission-evaluation guidelines (the present document): Overview of the proposal content and corresponding evaluation criteria for applicants and evaluators.
- Budget rules: Budget rules that apply to the proposal and calculator for the project's budget.
- Evaluators eligibility: Eligibility rules for the evaluators employed in the programme.
- Terms of reference of the Programme Committee.

TEMPLATES:

- Template Expression of Interest (compulsory).
- Template 1 Full Proposal: Proposal description template (compulsory).
- Template 2 Full Proposal: Gantt chart (compulsory).
- Template 3 Full Proposal: Data Management Plan (compulsory).
- Template 4 Full Proposal: Contribution commitment letter (optional).
- Template 5 Full Proposal: Follow-up committee letter of intent (optional).

2. SCOPE OF THE CALL

2.1. MOTIVATION

The main purpose of this call is to further valorise federal participation (Belgian Federal Scientific Institutions (FSI)⁸ and federal departments (listed in [Annex I](#))) in ESFRI distributed and virtual research infrastructures, through the funding of R&D projects⁹.

⁸ The acronym FSI covers the institutions as defined in the Royal Decree of 30 October 1996 and their possible legal successors, such as Sciensano.

⁹ Accessorily, universities or research centres appertaining to a federated entity may also participate, under conditions given in [point 1.3.2.b](#).

Proposals submitted in response to a call of the ESFRI-FED programme **will focus on** the development, testing, strengthening or improving, AND anchoring of **federal components and/or services within an ESFRI infrastructure** addressed in ESFRI-FED call.

Services and specific modules developed by FSIs (or by federated partners on behalf of the federal level) will valorise the Federal contribution to the ESFRI RI in phase of implementation or operation.

2.2. LIST OF ESFRI RESEARCH INFRASTRUCTURES ADDRESSED IN THIS CALL

Domaine	Acronyme	Nom
Environment	ACTRIS*	Aerosols, Clouds and Trace gases Research Infrastructure
	EPOS*	European Plate Observing System
	ICOS*	Integrated Carbon Observation System
	LIFEWATCH*	e-infrastructure for Biodiversity and Ecosystem Research
Health & Food	BBMRI*	Biobanking and BioMolecular resources Research Infrastructure
	EMBRC*	European Marine Biological Resource Center
	MIRRI*	Microbial Resource Research Infrastructure
Social & Cultural Innovation	CESSDA*	Consortium of European Social Science Data Archives
	DARIAH*	Digital Research Infrastructure for the Arts and Humanities
	ESS	European Social Survey
	E-RIHS*	European Research Infrastructure for Heritage Science
	SHARE	Survey of Health, Ageing and Retirement in Europe

** Infrastructures for which a federal component developed by an FSI already exists*

3. SUBMISSION & EVALUATION PROCEDURE

3.1. INDICATIVE TIMING OF THE CALL

Opening date	Closing date	Phase
20/07/2021	09/08/2021	Expression of Interest
20/07/2021	06/09/2021	Full proposal
13/09/2021	04/10/2021	Individual evaluation
13/10/2021	15/10/2021	Panel interview and proposal selection
03/11/2021	05/11/2021	Full Proposal selection validation by Programme Committee
20/12/2021	23/12/2021	Communication of selected proposals

3.2. SUBMISSION & EVALUATION-SELECTION PROCEDURE

For more information regarding the submission & evaluation procedure and criteria, please consult the Submission & Evaluation guidelines on [the website](#).

3.2.1. SUBMISSION OF PROPOSALS

Applications will be submitted in two stages:

- **Expression of Interest (Eoi):** The Eoi will serve to identify the key elements of the project, enabling BELSPO to prepare the evaluation. The Eoi will not be evaluated. The submission of an Eoi will be a prerequisite for the submission of a Full proposal.
- **Full proposal:** The Full proposal will provide the scientific/technical details, budgetary and operational aspects that will be evaluated. BELSPO will carry out an eligibility check (compliance with the conditions of the call) of the Full proposals. Only eligible proposals will be submitted for evaluation.

3.2.2. EVALUATION OF PROPOSALS

(a) PROJECT EVALUATORS

All proposals will be evaluated by 4 experts with complementary and relevant expertise in ESFRI infrastructures:

- 1 Belgian non-thematic expert on the research landscape and ESFRI infrastructures in Belgium.
- 1 expert from a foreign funding agency with experience in calls related to ESFRI infrastructures.
- 1 expert on sustainability and long-term integration aspects of components in the ESFRI.
- 1 foreign expert [in Environment OR Food & Health OR Social & Cultural Innovation OR Physical sciences & engineering OR Digit OR Energy...] depending on the nature of the ESFRI concerned, who will study all the proposals submitted in their domain according to the ESFRI categories.

Whenever possible, the same experts will be solicited for each call of the ESFRI-FED programme.

(b) EVALUATION PROCEDURE

- **Individual evaluation:** Experts will review the proposals assigned to them and prepare a list of written questions for the applicants, in preparation of a face-to-face (or videoconference) panel interview. These questions, compiled by BELSPO, will aim to clarify specific aspects of the proposal or gather additional information regarding the relevance of the project, its scientific/technical excellence, quality of implementation, impact and added value for the federal government and ESFRI, as well as the long-term sustainability of the federal component.
- **Panel interview:** A face-to-face (or videoconference) panel interview based on the questions from the individual evaluation will take place following the individual evaluation. At the end of all the presentations, the expert panel will rank the proposals according to their quality against the criteria mentioned below. A Consensus Report will be drafted, per proposal, by one of the panel experts. This report will be provided as feedback to the applicants.

(c) EVALUATION CRITERIA

Eligible proposals submitted in response to the call will be evaluated according to the following criteria:

- Pertinence of the project & Relevance and scientific or technical excellence
- Quality of the implementation
- Impact and added value & Sustainability

3.2.3. SELECTION OF PROPOSALS

(a) SELECTION PROCEDURE

The proposals' ranking elaborated by the expert panel will be submitted to the Programme Committee. A selection will be made following this ranking within the available budget. In the exceptional case of *ex-aequo* proposals, a strategic choice will be made by the Programme Committee. This selection will be sent (via BELSPO) to the State Secretary in charge of Science Policy for approval.

(b) PROGRAMME COMMITTEE

A Programme Committee will be set up to ensure coherence and control of the implementation of the ESFRI-FED programme. This committee is established for the duration of the programme, and composed of designated members from FSIs and Federal Departments (for more information see [Annex II](#)). The full description of the committee and its role will be defined in its '**Terms of Reference**' made available on the [website](#).

4. COMPLAINTS

BELSPO places great importance on the quality of its service and on improving the way it operates. A special form to handle complaints has been created.

The complaint form is available at the following address:

http://www.belspo.be/belspo/organisation/complaints_en.stm.

Complaints submitted anonymously or which are offensive or not related to our organisation will not be processed.

A complaint is handled as follows:

1. Once your complaint has been filed, a notification of receipt will be sent.
2. The complaint will be forwarded to the relevant departments and individuals and will be processed within one month.
3. An answer will be sent by e-mail or letter.
4. The complaint will be treated with strict confidentiality.

If you are dissatisfied by the initial response to a complaint, you can always contact the Médiateur Fédéral / Federal Ombudsman, rue Ducale / Hertogstraat 43, 1000 Brussels (email: contact@mediateurfederal.be / contact@federaalombudsman.be).

ANNEX I: LIST OF FEDERAL SCIENTIFIC INSTITUTIONS AND FEDERAL DEPARTMENTS CONCERNED

- National Archives and State Archives in the Provinces (ARA-AGR)
- National Institute of Criminalistics and Criminology (NICC-INCC)
- Royal Belgian Institute for Space Aeronomy (BIRA-IASB)
- Royal Belgian Institute of Natural Sciences (KBIN-IRSNB)
- Royal Institute for Cultural Heritage (KIK-IRPA)
- Royal Library of Belgium (KBR)
- Royal Meteorological Institute of Belgium (KMI-IRM)
- Royal Museum for Central Africa (KMMA-MRAC)
- Royal Museums of Art and History (KMKG-MRAH)
- Royal Museums of Fine Arts of Belgium (KMSKB-MRBAB)
- Royal Observatory of Belgium (KSB-ORB)
- Sciensano
- War Heritage Institute (WHI)
- FPS Social security
- FPS Public Health, Safety of the Food Chain, and Environment
- FPS Employment

ANNEX II: PROGRAMME COMMITTEE COMPOSITION

- 1 FSI representative for the "art pole"¹⁰
- 1 FSI representative for the "documentation pole"
- 1 FSI representative for the "nature pole"
- 1 FSI representative for the "space pole"
- 1 representative for the FPS Social security
- 1 representative for FPS Public Health, Safety of the Food Chain, and Environment
- 1 representative for FPS Employment
- 2 members representing BELSPO and BELNET

¹⁰ Art, Documentation, Space and Nature poles, as described in www.belspo.be, also including: WHI, INCC et Sciensano.