



## **2025 JOINT CALL FOR PROPOSALS OF SCIENCE, TECHNOLOGY AND INNOVATION (10<sup>th</sup> CALL) IN THE THEMATIC AREAS OF:**

- 1. New Materials and Green Transition**
- 2. Climate Resilient, Smart Agriculture using AI & IoT**

### **Type of funded projects:**

- Southeast Asia - Europe Joint Call Project consortia must comprise of at least 3 partners from 3 different countries fulfilling the 2+1 rule: Either 2 partners must be from 2 different Southeast Asian countries and 1 partner from European or 2 partners must be from 2 different European countries and 1 partner from a Southeast Asian country.
- At least 1 partner from each region must be eligible for JFS funding.
- Further, the coordinator must be selected from among the partners eligible for funding.
- The required third partner can be funded by a funding organisation from a country participating in the JFS or bring his own funding.
- The proposals have to cover the thematic areas of “New Materials and Green Transition” or “Climate Resilient, Smart Agriculture using AI & IoT” and shall enhance bi-regional cooperation and develop new partnerships as well as strengthen existing ones.
- Please read carefully the National Regulations from the funding organisation that you are requesting funding from, since the National Regulations may include additional requirements, e.g. certain Technology Readiness Levels or additional submission procedures on national level.

## **THEMATIC AREAS**

### **1) New Materials and Green Transition**

New Materials & Green Transition are essential for tackling nowadays' big challenges towards global sustainability.

This topic under Call 10 supports joint research on the development and application of advanced materials for sustainable technologies. It focuses on functional materials that enable innovation in fields such as energy, cooling, electronics, and medicine.

The project aims to design and synthesize novel materials with tailored properties, including nanomaterials, thermoelectric materials, and magnetic cooling agents. The collaboration will also explore bio-inspired and hybrid materials for next-generation applications, promoting cross-disciplinary methods and scalable solutions.

The scope of the topic includes but is not limited to the following aspects:

- **Functional & Smart Materials:**
  - Thermoelectric materials for energy conversion and cooling
  - Magnetic materials for refrigeration and power systems
  - Advanced sorbents and separation materials
- **Nanomaterials & Surface Engineering**
  - Nanostructure design and characterization
  - Application in electronics, photonics, and biomedical devices
- **Bio-based & Hybrid Materials**
  - Materials derived from biological templates (e.g. diatoms, protists, viral particles)
  - Hybrid organic-inorganic structures for sustainable applications
- **Synthesis & Fabrication Techniques**
  - Scalable production methods for ultra-clean, two-dimensional materials
  - Surface modification and functionalization techniques
- **Materials Characterization & Modelling**
  - In situ analysis and predictive modelling of material properties
  - Structure-function relationships across application domains

### **2) Climate Resilient, Smart Agriculture, AI & IoT**

With increasing climate volatility, both ASEAN and EU regions are facing agricultural challenges. In the pursuit of a sustainable future, a spectrum of cutting-edge technologies converges to establish Climate Resilient, Smart Agriculture, especially with the integrating of Artificial Intelligence (AI), Internet of Things (IoT), drones, robotics, smart sensors, Big Data Analytics, precision farming, Farm Management Software and Apps. Collectively, these innovations

herald a paradigm shift toward SDGs, ensuring a cleaner, accessible, and pivotal in combating climate change and forging a brighter, resilient future. It can help optimize resource use, improve yields, and reduce environmental impact. ASEAN are dynamically developing innovative AI application systems on the one hand and come with a globally outstanding biodiversity, tropical agriculture, and field-testing environments. EU partners contribute advanced AI models, sensor technologies, and sustainable farming practices.

The scope of the topic includes but is not limited to the following aspects:

- **Agricultural Sciences**
  - Crop science and agronomy
  - Soil science and irrigation management
  - Agroecology and sustainable farming systems
- **Climate Science**
  - Climate modelling and impact assessment
  - Adaptation strategies for agriculture
  - Weather forecasting and early warning systems
- **Computer Science & Engineering**
  - Artificial Intelligence (AI) and Machine Learning (ML)
  - Internet of Things (IoT) and sensor networks
  - Data analytics and geospatial technologies
- **Environmental Science**
  - Land use and biodiversity conservation
  - Carbon footprint and emissions tracking
  - Water resource management
- **Social Sciences**
  - Rural development and farmer behaviour
  - Policy analysis and governance
  - Socioeconomic impact studies

**The JFS wants to support integrated research approaches and specifically encourages the submission of proposals by interdisciplinary consortia including expertise from humanities and social sciences.**

## **PARTICIPATING COUNTRIES AND FUNDING AGENCIES / MINISTRIES**

**(1= New Materials and Green Transition; 2= Climate Resilient, Smart Agriculture using AI & IoT)**

- **Belgium** – National Fund for Scientific Research ([F.R.S.–FNRS](#)) **1,2**
- **Brunei Darussalam** – University of Brunei Darussalam ([UBD](#)) **1,2**
- **Czech Republic** – Czech Academy of Sciences ([CAS](#)) **1,2**

- **Germany** – The Federal Ministry of Research, Technology and Space (*BMFTR*) **1 To be confirmed**
- **Indonesia** – National Research & Innovation Agency (*BRIN*) **1,2**
- **Malaysia** – Malaysia Science Endowment and Academy of Sciences Malaysia (*MSE & ASM*) **To be confirmed**
- **Switzerland** – Swiss National Science Foundation (*SNSF*) **1,2**
- **Thailand** – National Research Council of Thailand (*NRCT*) **2**
- **Thailand** – Program Management Unit for Human Resources & Institutional Development, Research and Innovation (*PMU-B*) **2**
- **The Philippines** – Philippine Council for Industry, Energy and Emerging Technology Research and Development (*PCIEERD*) **1**
- **The Philippines** – Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (*PCAARRD*) **2**
- **Türkiye** – The Scientific and Technological Research Council of Türkiye (*TÜBİTAK*) **1,2**
- **Viet Nam** – Ministry of Science and Technology (MoST) **To be confirmed**

#### PLEASE NOTE:

Some funders may only participate in one of the thematic areas. This is indicated with **1= New Materials and Green Transition; 2= Climate Resilient, Smart Agriculture using AI & IoT** after the name of each funding agency in the list above.

#### Scope of the projects:

Funding will be provided for the **duration of a maximum of three years (36 months)**. Projects can start at the earliest in **December 2026** depending on the funding contract procedures of each funder.

Within the framework of the Joint Call, funding can in general be applied for:

- Personnel costs
- Equipment and consumables (project-related miscellaneous expenses and project-related larger equipment)
- Mobility costs (exchange research visits between Europe and Southeast Asia. Travel costs, living expenses and visa costs are eligible for funding.
- Other costs (Costs which cannot be classified under the previous cost items but are required for the project implementation, such as costs related to

dissemination, intellectual property, demonstration, market search, management, organisational and subcontracting costs).

**The eligibility of cost items and their calculation are according to the respective National Funding Regulations** from the participating organisations and can be downloaded at the end of this site. The upper funding limit usually can also be found in the respective National Regulations.

### **Who can apply?**

Proposals may be submitted by public legal RTD (Research and Technology Development) entities, higher education institutions, non-university research establishments, and companies (all depending on National Funding Regulations). Eligibility criteria can be found in the respective National Funding Regulations.

Institutions not explicitly mentioned as recipients might be included in consortia if they provide their own funding. A Letter of Commitment has to be submitted in these cases by this partner confirming his contribution. Entities other than the above mentioned may apply if the respective National Funding Regulations allow it.

The JFS welcomes the submission of project proposals by interdisciplinary project consortia. The JFS also welcomes the submission of project proposals by project consortia that involve partners from the private sector.

**We strongly suggest that each partner of a consortium that intends to submit an application discusses his/her intentions and confirms eligibility with his/her respective National Focal Point (NFPs) before submission. The contact details of the NFPs can be found at the end of this call text.**

### **APPLICATION PROCESS**

Proposals for STI projects must be submitted electronically via the PT-Outline Web Tool, accessible at: <https://ptoutline.eu/app/JFS25STI>

The **proposal template (.word file)** can be downloaded directly from the PT-Outline Web Tool.

During the submission phase, the web tool will be open from the publishing date of the Call on **01 December 2025 until the 31 March 2026 (noon) CEST/ 05:00pm Bangkok/Jakarta time.**

**Any proposal that is submitted after this deadline cannot be accepted by the Secretariat and therefore will not be considered for evaluation.**

After the successful submission of the proposal, each principal coordinator will receive an automatic **confirmation e-mail**. This e-mail can be used **as proof that the proposal was submitted on time and correctly**. In case the coordinator is not sure whether the proposal was submitted correctly, he or she should contact the call secretariat immediately and/or resend the proposal via e-mail to the Joint Call Secretariat within the deadline.

Please note: Some funding organisations require that applicants from their respective countries **submit specific complementary documents at the national level**, in addition to the JFS application. These additional requirements will be made clear in the National Funding Regulations of the concerned countries/funding organisations.

Each project consortium has to choose a **Project Coordinator** from among all partners of the respective project that are eligible for JFS funding (partners participating on their own budget may not be coordinators). Only **one proposal per project should be submitted to PT-Outline**. The project proposal shall be submitted **by the Project Coordinator**. The Project Coordinator is responsible for submitting the proposal on behalf of his/her project consortium. The responsibilities of the Project Coordinator are to keep the other project partners updated on the submission process, to ensure the internal management and coordination of the project consortium, and to constitute the main contact to the Joint Call Secretariat. The project coordinator of a project receiving funding through the JFS is also the first contact point for the JFS coordinators whenever information related to the projects is required and for monitoring purposes. All proposals must be written in **English only**.

The PT-Outline electronic form consists of four pages (General information, Project Coordinator, Project partners, and Project description) that need to be filled in online. In addition, a Word template for the project description has to be downloaded from the project description page within PT-Outline, filled in with the requested information, converted to PDF format, and then uploaded to PT Outline again.

Please watch our **video tutorial** about how to apply in the **Media section** of the JFS website (<https://www.sea-europe-jfs.eu/media>) or on **YouTube**: <https://www.youtube.com/watch?v=JLCYFcKpARA>

The Project description document should contain the following information (max. number of 6,000 words, excluding all Annexes):

## **1. Basic project data**

*1.1 Project title*

*1.2 Project Acronym*

*1.3 Name and Institution of the Project Coordinator*

*1.4 Names and institutions of other project partners*

## **2. Project description**

*2.1 Describe why your proposal suits the respective call thematic area.*

*2.2 Describe as precisely as possible the technological objectives of the project.*

*2.3 Explain the novel character of the activities proposed. Show how the objectives of the project aim at significant advances in the state-of-the-art through extending the current technologies and/or filling the gaps identified.*

*2.4 Lay down the added value of transnational cooperation that is implemented in your consortium.*

*2.5 Describe what makes up the excellence of your consortium. Describe how the teams complement each other and the added value resulting from the multilateral cooperation. Mention where there is a potential for synergy effects between different tasks of the project and how this is going to be exploited.*

*2.6 Describe the multi-disciplinarity/ interdisciplinarity of your proposal.*

*2.7 Lay down if (and how) the research project matches the national priorities of the partners involved.*

*2.8 Self-assessment of targeted Technology Readiness Level (TRL) and explanation.*

## **3. Work plan**

- 3.1 *Describe the research project with respect to the methodology; justify the methodology chosen to reach the objectives. Highlight the particular advantages of the methodology chosen.*
- 3.2 *Describe the type of activities that are implemented in your project.*
- 3.3 *Describe the distribution of tasks. What is the involvement of each partner in relation to the proposed activities? How are the resources distributed among the partners? (time plan). Include defined, measurable deliverables that specify the tasks in a quantitative way and allows to follow up on the success of the implementation of the project.*
- 3.4 *Describe the management structure of your project.*

#### **4. Potential impact and exploitation of results**

- 4.1 *Describe the scientific and/or commercial expected impact.*
- 4.2 *Describe whether the project has any beneficial impact on society, in particular regarding societal challenges.*
- 4.3 *Describe the measures for the dissemination and./or exploitation of trans-national projects results, and management of intellectual property. What are the next steps?*
- 4.4 *Prospects for establishing efficient and sustainable partnership.*

#### **5. Financial Plan**

PLEASE NOTE:

- \* Make sure the cost overview is in line with the national regulations of all involved partners
- \* Please **enter the total costs related to your proposed project activities incl. the own contributions**, if there are any. The requested funds will be calculated based on the total costs multiplied by the funding rate (individually for each partner) as stated in the form on PT OUTLINE.

#### **6. Annexes**

- 6.1 *Statement about the application of generative AI instruments for the preparation of the proposal*

*Did you use generative AI instruments to prepare the project proposal?*

☐ Yes



☐ No

*If yes, please indicate, how:*

*Ideation & conceptualisation*

☐ *Development of ideas, research goals, objectives and research questions*

☐ *Identification and definition of relevant concepts*

*Literature research and analysis*

☐ *Search for relevant literature*

☐ *Review of potentially relevant literature*

☐ *Summaries of relevant literature*

*Methodology*

☐ *Search for a suitable methodology*

☐ *Development and adaptation of the methodology to the research question(s)*

*Other*

☐ *Other*

*If yes, please explain.*

6.2 *If applicable: the Letter of Commitment securing willingness to collaborate by partners from countries that are not on the list of funding for the 2025 JFS STI Call.*

6.3 *CVs and lists of principal publications of participating researchers (3 pages max. per researcher, one CV min. per partner).*

Download the **Word template** on [PT-Outline:](https://ptoutline.eu/app/JFS25STI)  
<https://ptoutline.eu/app/JFS25STI>.

Aims and methods of the proposed collaborative project should clearly demonstrate the excellence and innovativeness of the project, product or service, including the added value for Southeast Asian - European research and innovation cooperation and describe expected outcomes/marketability. In addition, a financial plan and a time and work plan, including deliverables/milestones have to be included. All budgets will be submitted in Euros. The applicants will have to identify the TRL which is targeted at the end of the project, and the TRL of the

work that the project proposal is based on. This self-assessment/estimation will have to be justified in brief paragraphs.

The applicant is responsible for determining whether the execution of the proposed research requires an ethical statement or license, and complies with national and international sanction rules and legislation. The applicant must ensure that the ethical statement or license is acquired in a timely manner from the relevant ethics review committee. In case that the applicant uses AI support for the writing of the proposal, the applicant needs to state on how AI was used during that process.

All information inserted into the PT-Outline web tool is saved after having clicked on the "SAVE" button at the bottom of each page.

During the proposal submission phase, it is allowed to replace already registered and eligible project partners or to add project partners to the consortium. Please note that after the binding submission of a proposal (by clicking on the 'SUBMIT NOW' button in PT-Outline) **no further changes can be made to your proposal.**

## EVALUATION PROCESS

The evaluation process includes the following steps.

### Eligibility check

The Joint Call Secretariat (JCS) will check all proposals to ensure that they meet the following **general eligibility criteria** for the Call:

- Date of submission
- Composition of consortium (**2+1 rule**)
- Duration of project
- Inclusion of all necessary information in English
- Appropriate length of the proposal
- Eligible of the thematic focus
- Eligibility for required funding
- Complete appendixes required

The JCS will forward the proposals to the National Focal Points (NFPs) who will perform a check for compliance with the respective country / national regulation including the eligibility of the institution requesting funding.

Please note: If the proposal does not meet the formal criteria / the national regulation/eligibility criteria and requirements or the Project Coordinator or a project partner is rejected in the eligibility check, **the entire proposal may be declined without further review.**

## **Peer review**

Independent scientific experts in the relevant thematic research fields will carry out the anonymous peer review of the eligible project proposals according to evaluation criteria as described below. Each proposal will be evaluated by at least two online evaluators if possible by at least one Southeast Asian and one European peer reviewer). The peer reviewers will be nominated by the Southeast Asian and European National Focal Points in cooperation with the funding parties.

The evaluation is done using the following evaluation criteria:

### **1. Scientific/technological excellence and innovativeness of the project idea (scoring from 0 to 10):**

- Sound concept, quality of objectives
- Innovativeness of the project idea: Capacity of the project to contribute to the development of a new technology, service, or product.
- Quality and effectiveness of the methodology and associated work plan
- Good balance between the technology/knowledge available at each participating team
- Complementarity of qualifications and relevant experience of the coordinator and the individual participants/participating teams.

### **2. Potential impact and expected outcomes of the project (scoring from 0 to 10):**

- Social and/or market-related impact
- Potential to meet market, economic, and societal needs and significant exploitation potential
- Prospects for establishing efficient and sustainable partnerships within the network, including transfer of know-how and experience in each direction
- Appropriateness of measures for the dissemination and/or exploitation of trans-national project results, and management of intellectual property

### **3. Management, Transnationality, and Cooperation (scoring from 0 to 10):**

- Quality and effectiveness of the management structure and distribution of tasks
- Added value of transnational cooperation
- Appropriate allocation and justification of the resources to be committed (budget, staff, equipment).

The total score of the proposal is the weighted average of the individual scores given to each criterion, rated from 0 to 10. The table below summarizes the scores and weight coefficients per criterion:

	Criteria	Score	Weight
1.	Scientific / Technological excellence and innovativeness of the project idea or product / service to be developed	0-10	40%
2.	Potential impact and expected outcomes of the project / marketability	0-10	40%
3.	Management, Transnationality and Cooperation	0-10	20%
	TOTAL	0-10	100%

After the peer reviewers submit their results, applicants will be contacted and informed about the online evaluation results. At this point, the applicants get the opportunity to **defend** their application on specific points and give a written statement. The rebuttal process is conducted through PT Outline. A maximum of 4.000 words can be uploaded.

Once the peer review process is finalized, the JCS will send the proposals and pooled reviews to the Scientific Council (SC) members. The SC is in charge of the final ranking based on the peer review results. The SC members consist of internationally recognized experts offering a high degree of technical, scientific, and innovation expertise in the respective research field, as well as broad experiences in international collaboration.

The final ranking list as well as the written remarks by the SC will be forwarded to the Programme Steering Committee (PSC) for the funding decision meeting. The PSC includes representatives from all participating funders.

## **Funding Decision**

Based on the ranking list established and the written minutes of the SC meeting, as well as the available funding, the PSC will make a final decision based on the ranking and under consideration of the available budget. The JCS will communicate to all project coordinators the final decision of their proposal together with the main comments from the SC about the proposal. In the case of a positive funding decision, the eligible project partners should get in touch with their individual funder to initiate the process of drafting the funding contract. The start of funded projects is expected to begin earliest December 2026.

## **MONITORING OF IMPLEMENTATION OF JFS CALL PROJECTS**

The monitoring of the projects is under the responsibility of the funders. Each project participant should submit financial and scientific reports to their national/regional funding organisation according to the respective National Regulations.

*In the case a partner decides to withdraw from a project before the completion date, due to the reasons such as: discrepancies within the consortia, funding problems, changes in the strategy of companies, or technical or sudden market problems; the partners need to inform their NFPs about the development and the NFPs have to check whether the excellence of the project is still maintained. If not, the involved funders may jointly decide to cease the funding for this specific project.*

## **PUBLICATION OF PROJECT INFORMATION**

In addition, the following regulations will apply to all research projects that are selected for funding through the JFS Call:

- Publications or another form of output resulting from the research for which funding was awarded should be made available to the JFS Call Secretariat (publication of the results in open-access journals is strongly encouraged).
- In any publication of results of the research for which JFS Call funding was awarded, mention must be made of the support received.
- Funded projects will be published on the JFS website: <https://www.sea-europe-jfs.eu/funded-projects> stating the project consortium, the project description, the project budget and the contact details of the Project Coordinator.

## **CONTACT INFORMATION**

### **Call Secretariat:**

Ms. Patchara Umprasert  
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### **National Focal Points:**

#### ***Belgium, FRS-FNRS***

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### **The Philippines, DOST-PCAARRD**

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***Viet Nam, MoST To be confirmed***