



SELSUSTAINED CROSS-BORDER CUSTOMIZED  
CYBERPHYSICAL SYSTEM EXPERIMENTS  
FOR CAPACITY BUILDING AMONG EUROPEAN  
STAKEHOLDERS

# SMART4ALL Open Calls, the right funding instrument to boost technology and business development in South, East and Central Europe

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[www.smart4all-project.eu](http://www.smart4all-project.eu)  
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# Outlines

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# What are SMART4ALL goals?

To build **cross-border experiments** that transfer knowledge and technology between academia and industry in **Customised Low-Energy Computing (CLEC)** for **Cyber-Physical Systems (CPS)** and the **Internet of Things (IoT)**

To **accelerate digital transformation** and **increase digital skills** in underrepresented geographical areas –especially **SEE**– in the 4 SMART4ALL verticals

# SMART4ALL Verticals

- **SMART4ALL** is focused on **Customised Low-Energy Computing (CLEC)** for **Cyber-Physical Systems (CPS)** and the **Internet of Things (IoT)** in the following domains:

| SMART4ALL VERTICALS         |  |  |   |   |
|-----------------------------|--|--|---|---|
| SMART4ALL COMPETENCE FIELDS |  |  |   |   |
|                             | DIGITIZED TRANSPORT  | DIGITIZED ENVIRONMENT  | DIGITIZED AGRICULTURE   | DIGITIZED ANYTHING  |
|                             | <ul style="list-style-type: none"> <li>• Green transport</li> <li>• Smart mobility</li> <li>• Shared mobility</li> <li>• Robotics</li> <li>• New platforms for efficient supply-demand matchmaking</li> <li>• Automotive electronics</li> <li>• Autonomous vehicles</li> <li>• Connected vehicles</li> <li>• Streamlining transport using big data</li> <li>• Aeronautics and space applications</li> <li>• Transport and Logistics</li> <li>• City Transport Mapping</li> </ul> | <ul style="list-style-type: none"> <li>• Smart building</li> <li>• Water pollution monitoring</li> <li>• Smart grids</li> <li>• Environment monitoring</li> <li>• Bio-diversity</li> <li>• Smart industry</li> <li>• Data processing &amp; data visualization</li> </ul> | <ul style="list-style-type: none"> <li>• Smart farming</li> <li>• AI inspired agriculture</li> <li>• Information based site specific applications</li> <li>• Demand driven, sustainable agriculture</li> <li>• Mobile plant, soil and environment sensors</li> <li>• Sensor networks – EU wide – cross-border</li> <li>• Field robotics and automation systems</li> <li>• UAV based agriculture and plant monitoring</li> <li>• Selective plant protection</li> <li>• Closed nutrient cycles</li> <li>• Agricultural decision support systems</li> <li>• Zero-energy food systems</li> <li>• Circular economy</li> <li>• Water, Energy and Food (WEF) efficiency</li> <li>• Revalorization of agricultural waste</li> </ul> | <ul style="list-style-type: none"> <li>• Human-machine Interaction</li> <li>• Digital Education</li> <li>• Industrial Automation</li> <li>• Machine Learning</li> <li>• Market Intelligence</li> <li>• Medical and Health Applications</li> <li>• Active &amp; Healthy Ageing</li> <li>• Support for disabled persons</li> <li>• Cybersecurity</li> <li>• Data Mining and Big Data</li> <li>• Personal security</li> <li>• Additive Manufacturing (3D printing)</li> <li>• Augmented and Virtual Reality</li> <li>• Audio/Video Processing</li> <li>• Location-based Technologies</li> <li>• Web and Mobile Applications</li> <li>• Wireless Sensor Networks</li> <li>• Disaster management</li> <li>• Digital heritage</li> <li>• Telemedicine</li> <li>• Rehabilitation, wellness, fitness</li> <li>• E-commerce</li> </ul> |

# Open Calls - Value Proposition

- **9 open calls:**
  - (i) supporting **67 cross-border pathfinder application experiments (PAE)**.
  - (ii) 3 batches: 1 KTE, 1 FTTE, 1 CTTE in the years 2020, 2021 and 2022.
- **EU Funding** up to **EUR 80,000** equity-free per PAE.
- **Support and coaching** from **experts** in technology, business development, public and private funding, and ethics.
- **Marketplace-as-a-Service**, AI based services and tools:
  - (i) practical **technical tools/services** to accelerate design, development, prototyping and manufacturing phases.
  - (ii) brokerage, coaching and guidance to **access funds** for market growth and development.

# Current Open Calls

## **CTTE – Cross-Domain Technology Transfer Experiments**

One Academic/Industrial **Technology Provider** transfers a novel technology to one Industrial **Technology Receiving** partner as an early-adopter and then one Industrial **productization** partner extends the value chain.

- **Duration: 9 months**

**OPENED on 15<sup>th</sup> October 2021**

**CLOSES on 17<sup>th</sup> January 2022 at 17:00 CET**

# Who can apply to CTTE?

## ACADEMIC



**Universities** and other **Academic Institutions**

## INDUSTRIAL



**SME and Slightly Bigger Companies** (< 500 employees & < EUR 100M turnover)



**System Integrators** and **Technology Providers** specialised in technology transfer or system integration to End-users (provided they can be categorised in one of the two previous types of beneficiaries)

Must be a **consortium of 3 entities** and led by an **INDUSTRIAL** partner

Must be **CROSS-BORDER** from **2 different ELIGIBLE countries**

# Who can apply?

## CTTE

| TECHNOLOGY PROVIDER   | TECHNOLOGY RECEIVER        | PRODUCTIZER                     |
|-----------------------|----------------------------|---------------------------------|
| ACADEMIC, Country 1   | INDUSTRIAL, Country 1 or 2 | INDUSTRIAL, Country 2 or 1 or 3 |
| INDUSTRIAL, Country 1 | INDUSTRIAL, Country 1 or 2 |                                 |

- **Eligible countries:**
  - EU member states
  - H2020 Associated countries
  - Other SEE countries
  - United Kingdom



## The technology Transfer must be:

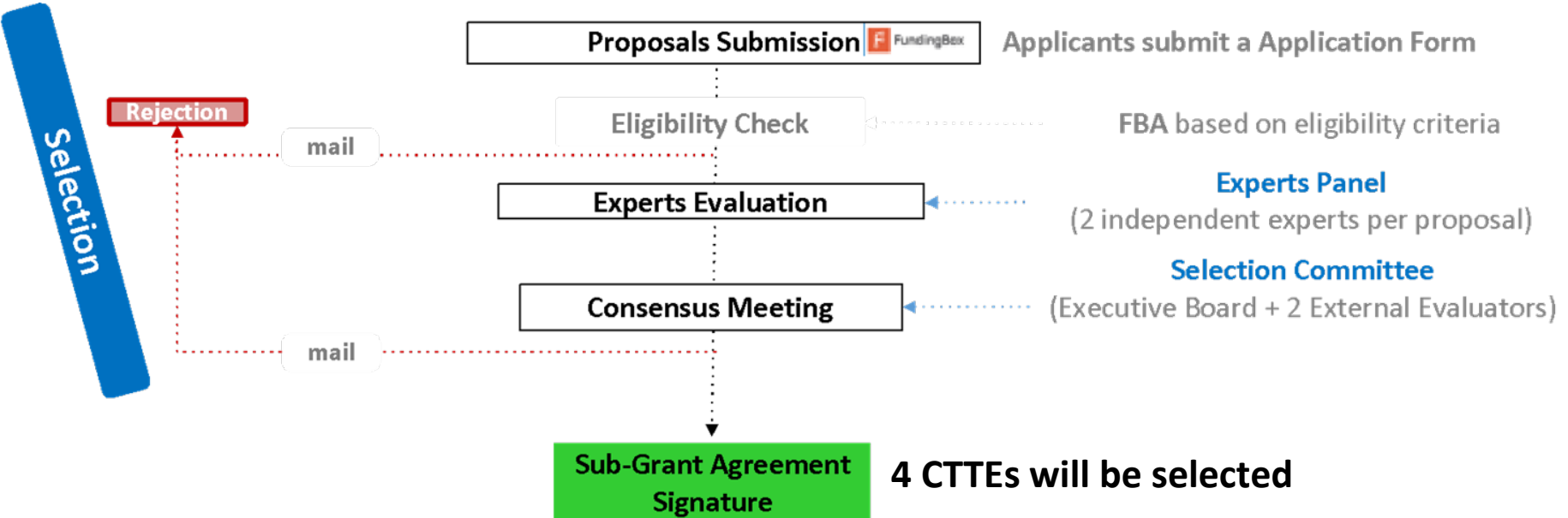
- A new product or extra features added to an existing product, always linked to IoT and Low-Energy Consumption (CLEC) systems, namely:
  - a reduction in power or energy consumption in % per device.
  - the power reduction can enable new features, new applications, or open new market verticals.
- Engineering/manufacturing processes improved.
- Cost savings in product engineering/manufacturing.

# Examples

- 1) A compression algorithm with adequate adaptation/enhancement is used in wireless communication for medical purposes.**
- 2) A hardware accelerator is integrated and used in surveillance or medical or ambient assisted living environments purposes.**

Previous winners can be found on the SMART4ALL Project Website  
<https://smart4all-project.eu/>

# Selection Process Overview



# Evaluation Criteria – CTTE

| Criteria   | Description  |
|------------|--|
| Excellence | <p><b>Ambition:</b> to what extent the proposed experiment is beyond the <b>State-of-the-Art</b> and what is the <b>innovative approach</b> behind it (e.g. ground-breaking objectives, novel concepts and approaches, new products, etc.)</p> |
|            | <p><b>Innovation:</b> level of innovation within their market and degree of <b>differentiation</b> that the experiment will bring.</p>   |
|            | <p><b>Soundness of the approach:</b> objectives of the proposed experiment to be clearly defined, relevant and aligned with the SMART4ALL project objectives, verticals and competence fields. <b>Elevation of TRL clearly justified.</b></p>  |
| Impact     | <p><b>Benefits of the collaboration,</b> in terms of technical and/or business/market expectations, and to what extent this particular collaboration will lead to a successful experiment and high economic impact.</p>                        |
|            | <p><b>Market opportunity:</b> demonstrate whether the new/improved product has market potential, e.g. because it solves a problem for a specific target customer.</p>  |
|            | <p><b>Competition analysis</b> for the experiment product/service and if the proposal is disruptive and breaks the market.</p>   |
|            | <p><b>Commercial Strategy and Scalability:</b> How the experiment is scalable and able to be commercialised to solve a structural problem in a specific sector/process/etc., using convincing business model and projections.</p>              |
|            | <p>How the proposal has an <b>impact in the lives of sensitive social groups</b> . I.e. Improving or supporting the lives of people who belong in sensitive social groups.</p>   |

# Evaluation Criteria continued

| Criteria              | Description  |
|-----------------------|--|
| <b>Implementation</b> | <b>Work plan:</b> clearly described and fully aligned with the objectives, including Work packages, tasks and responsible partners. The time plan should be realistic and achievable, coherent and effective.  |
|                       | <b>Contribution to SMART4ALL marketplace:</b> All SMART4ALL funded PAEs are required to contribute at least one artefact to the project Marketplace ( <a href="https://marketplace.smart4allproject.eu/">https://marketplace.smart4allproject.eu/</a> ). |
|                       | <b>Team:</b> Management and leadership qualities; balanced and cross-functional.   |
|                       | <b>Resources:</b> Quality and effectiveness of the resources assigned in order to get the objectives/deliverables proposed. Define the cost incurred (if any) in uploading an artefact as a contribution to the SMART4ALL marketplace.                   |

# Scoring and Prioritised Sub-Criteria

- Each criterion will be scored from 0 to 5. The threshold for individual criterion will be 3. The overall threshold, applied to the sum of the average of three individual scores of the 2 evaluators, will be 10.
- Applicants including at least 1 member of the **SEE region** in their consortium will be given **1 extra point** to the overall score (**except Greece**).

## List of SEE countries

Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, Moldova, Montenegro, North Macedonia, Romania, Slovakia, Slovenia and Serbia

# Financial Support

| Financial Support | CTTE             |
|-------------------|------------------|
| Per PAE           | up to EUR 80,000 |
| Per partner       | up to EUR 60,000 |

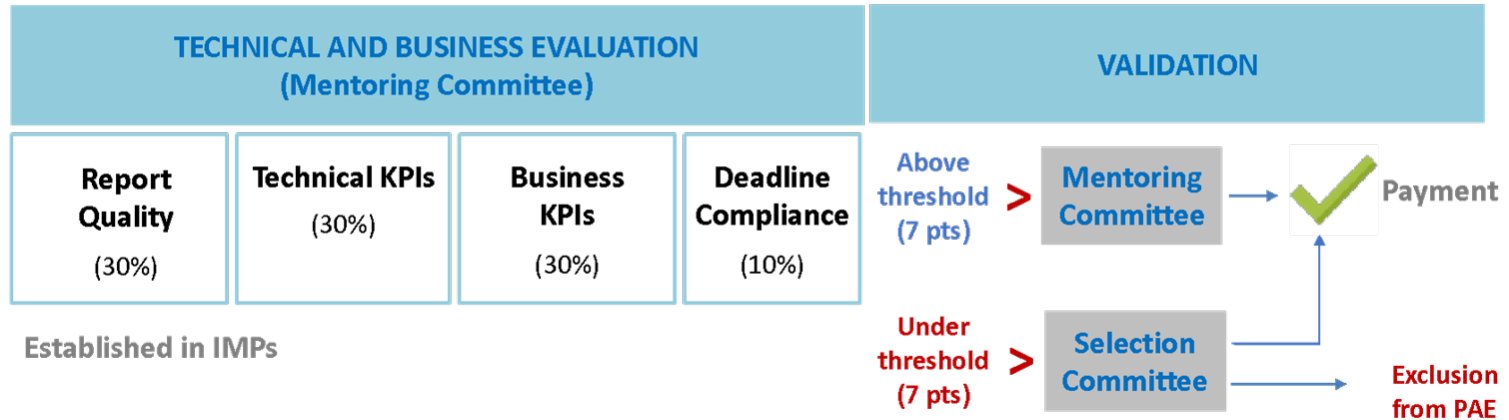
**Note:** Financial Support will be paid as a **lump sum** to the **lead partner** who will distribute the funds. The distribution of funds between partners should be reasonable

**Note:** Any partner can receive a maximum of EUR 60,000 if they haven't received money from any other SAE/L4MS. The combined amount cannot exceed EUR 100,000

# Payment Arrangements – CTTE

| Deliverable               | Submission date                    | Lump sum Instalments |
|---------------------------|------------------------------------|----------------------|
| Individual mentoring plan | 15 Days After the signature of SGA | 30%                  |
| Mid-term Report           | End of Month 5                     | 50%                  |
| Final Report              | End of Month 9                     | 20%                  |

## Interim & Final Review Milestones





# Open Calls Schedule

| Description                               | CTTE                         |
|---|------------------------------|
| <b>Open Call Launch</b>                   | 15 October 2021              |
| <b>Open Call Deadline</b>                 | 17 January 2022 at 17:00 CET |
| <b>Open Call Evaluation and Selection</b> | January/February 2022        |
| <b>Consensus Meeting</b>                  | February 2022                |
| <b>Communication of Results</b>           | February 2022                |
| <b>Start of the Experiment</b>            | Beginning of April 2022      |
| <b>End of Experiment</b>                  | End of December 2022         |

# Application Submission

How to apply?

- CTTE: <https://smart4all.fundingbox.com/>

Find our **Guides & Documents** here:

<https://smart4all.fundingbox.com/pages/Guides&Documents>

## Helpdesks

- SMART4ALL online community helpdesk: <https://spaces.fundingbox.com/spaces/smart4all-helpdesk>
- SMART4ALL project website helpdesk: <https://helpdesk.smart4all-project.eu>

**Questions from you..**