

SMARTEEs2 APPLICATION GUIDELINES

SmartEEs2 is part of the Smart Anything Everywhere initiative under Horizon 2020. Please consult the Guidelines for Applicants provided which contains basic information needed to guide you in preparing your proposal for submission to the SmartEEs2 Open Call. It will provide a guideline on how to structure your response and provide the criteria on which it will be evaluated.

General guidelines apply to both topics, but there are specific guidelines with apply to one of the topics, and these will be clearly marked with an asterisk (*).

Please provide your submission in English. Proposals submitted in any other language will not be evaluated! Please register in the software, answer the questions, download the Application Form, fill all sections of the Application Form, save it as a pdf document, and submit it through the software apply.smartees2.eu.

Company Information

Registered Company Name

Company Registration Number

Date of Registration

Size (Number of employees)

Annual turnover (in millions of €)

Type of organization *SME or Mid-Cap*

What is your position in the value chain? Technology end-user (product designers, developers, integrators, etc.) and/or manufacturer

Are you an innovative (tech) or traditional company (non-tech)?

Registered Company Address:

Street

Post code

City

Country

Region (NUTS2 map¹):

Check if trading address is different than registered company address

Applicant Contact Details

Contact Name

First name:

Last name:

¹ <https://ec.europa.eu/eurostat/web/nuts/nuts-maps>



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Position in Company:

Email Address:

Telephone Number:

Password (If you leave the field blank, the password will not change):

Password confirm

Additional

How did you learn about SmartEEs2?

Ethics requirements: All application experiments must comply with the European policies regarding data protection and privacy and respects fundamental ethical issues particularly those outlined in the European Code of Conduct for Research Integrity. Please answer the following questions (Y/N options). If the answer is Yes to any of the questions below, you will be requested to provide more information about it.

Does your proposed work involve?

1. Human embryos and fetuses
2. Humans
3. Human cells/tissues
4. Personal data
5. Animals
6. Third countries (complying with EU rules?)
7. Environment & Health and Safety
8. Dual use (research having the potential for military applications?)
9. Misuse (research having the potential for malevolent/criminal/terrorist abuse?)
10. Other ethics issues

For more information on ethical issues, please consult the document provided by the European Commission:

https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf

Data privacy policy (All personal data and information included in the application submitted via the online submission system will be processed by AMIRES in line with their Privacy policy on behalf of the SmartEEs2 project with the purpose of your participation in the Call for Application Experiment competition and achievement of SmartEEs2 objectives. Your data and content of your applications will be kept confidential and will be shared only internally with SmartEEs2 partners, evaluators and European Commission. General data (such as type of company, country of origin, position in the value chain, etc.) will be used to create statistics and reports which will be exploited through the project in terms of communication activities and sustainability. In addition, the names of selected organizations and their countries of origin will be published on SmartEEs website as part of Public Evaluation Reports. Please click "I agree" to accept this use of your data.)

Which topic are you applying for?

Please select between:

- **Experimenting and testing end-product ideas with FWE technologies**
- **Support to manufacturing of FWE based end-products including upscaling**

Proposal Details

Proposal full name:

Proposal Acronym:



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Summary (Do not disclose any Intellectual Property Rights or any confidential information): *Please provide a concise summary of the content and objectives of your proposed Application Experiment, and the resulting Product Demonstrator / series of demonstrators including what is innovative about it. Please only include relevant information, including:*

- *what is the Product Demonstrator / series of demonstrators you would like to develop and which flexible and wearable electronics (FWE) / manufacturing technologies you plan to integrate in it / implement*
- *how the Application Experiment addresses the scope of the competition*
- *what is the business need, technological challenge and market opportunity to be addressed in this Application Experiment*
- *what are the potential benefits to your business and what is your approach to sustainability in the longer term*

! Although the summary is not scored, it is a requirement of the application form, and all applicants are requested to provide it, including all abovementioned information. The summary of the pre-selected AEs will be shared with potential third-party technical suppliers who form part of the SmartEes network and who might be selected to provide service to the winning application experiments.

Is this the first time that you submit your proposal? *Please select between 1st Submission and Re-submission*

****Valid for topic Experimentation and testing - Does your Application Experiment include Flexible and Wearable Electronics?*** (Visit the [Marketplace](#)) YES/NO

****Valid for topic Experimentation and testing – Is your demonstrator a wearable product?*** YES/NO

****Valid for topic Support to manufacturing – Do you already have a demonstrator based on Flexible and Wearable Electronics?*** YES

Have you already identified a Flexible and Wearable Electronics EU supplier for your Application Experiment? YES/NO, If the answer is Yes, specify which one

Have you read and understood the in-kind contribution conditions? YES/NO

Sector your application experiment proposal refers to: Automotive, Building & architecture, Consume electronics, Energy, Lighting, Logistics, Medical & pharmaceutical, Packaging, Printing & graphic arts, Textile & fashion, Others

Have you already received the Financial Support to Third Parties (FSTP) via open calls from H2020 I4MS and SAE projects? YES/NO, If yes, please state the amount of FSTP that you received (€)

Concept (Alignment, needs & challenges, market opportunity and innovation)

This section should cover how this Application Experiment aligns to the SmartEes2 call, the business needs, technological challenge identified, the potential market opportunity and your approach to innovation.

Alignment with call

****Valid for topic Experimentation and testing - Describe how this Application Experiment integrates flexible and wearable electronics offered by SmartEes into your product demonstrator?***

- *The Application Experiment must demonstrate that flexible and wearable electronics give a distinct advantage to the product value*



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- *Show that a clear majority of the Application Experiment's objectives and activities are focussing on integrating one or more of these flexible and wearable electronics*
 - *Make sure flexible and wearable electronics will be implemented only for its uniqueness, since it will be a major point of differentiation for your product*
 - *OLED lighting*
 - *Organic photovoltaics*
 - *Flexible displays*
 - *Electronics and components*
 - *Integrated smart systems*
 - *Smart textiles*
 - *Structural electronics*
 - *Explain how the Application Experiment will lead to an innovative Product Demonstrator*
- *Valid for topic Support to manufacturing – Describe how this Application Experiment integrates manufacturing technologies offered by SmartEEs into your small series of product demonstrators***
- *The Application Experiment must demonstrate that manufacturing technologies give a distinct advantage to the product value*
 - *Show that a clear majority of the Application Experiment's objectives and activities are focussing on transforming your existing demonstrator into a small series of production demonstrators*
 - *Explain why you need a large set of samples and how many of the samples you need*
 - *Make sure manufacturing technologies will be implemented only for its uniqueness enabling:*
 - *Smart features*
 - *Flexibility and stretchability*
 - *Simple circuit*
 - *State-of-the-art performance.*

Needs and challenges

- **Business Need**
 - *describe the business need for this Product and how the Application Experiment will satisfy it, this may include any commercial drivers or market failures*
 - *explain how your Application Experiment will improve on the current leading products available in the market, or does this Product open new markets*
- **Technological challenge**
 - *describe any work you have already carried out to address this need, for example is the Application Experiment focused on maturing an existing capability or developing a new one*
 - *have you any results from previous feasibility, prototyping or bread-boarding studies that have been carried out?*
 - *describe the nearest current state-of-the-art (including those near-market/in development) and its limitations*

Market Opportunity

Describe the market you are targeting, including its size and growth?



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- *specify the market(s) (European and/or international) you will be targeting in the Application Experiment and any other potential markets. Please indicate the size and growth of the markets you are targeting it will be important to further define your growth strategy and potential access to investors.*
- *explain how this Application Experiment fits with your current product/service lines/offerings*
- *explain how it will make your company more competitive in the selected market*

Tips and advice to describe the target market(s):

- *the size of the proposed market(s) for the Application Experiment outcome(s). This should be backed up by appropriate references where available*
- *the structure and dynamics of the market (such as customer segmentation), together with predicted growth rates within clear timeframes*
- *the main supply/value chains in operation and any barriers to entry, and the current EU position in addressing this market (if known)*

For highly innovative Application Experiments [1] where the market may be unexplored, explain:

- *what the route to market could or might be*
- *what the size of the potential market might be*

If required, describe your needs in services to accelerate your go to market strategy or market assessment that could be part of SmartEES2 support (E.g. strengthen your business case/your business model/your unique value proposition or brokerage services, technical feasibility).

Innovation and Approach

Describe the approach you will take and where the focus of the innovation will be. This should include:

- *how you propose to address the need, challenge or market opportunity identified*
- *explain how your Application Experiment will improve on the current state-of-the-art product available*
- *indicate where the focus of the innovation will be in the Application Experiment ²:*
 - *application of existing technologies in new areas*
 - *development of new technologies for existing areas*
 - *or a totally disruptive approach*
- **Sustainability**
 - *is the Application Experiment outcome likely to be subject to any policies and regulatory requirements? Do you expect the need for standardization or certification? Are there any potential ethical issues conceivable? Please describe how will you manage any of these*
 - *indicate the freedom you have to operate or the expected freedom to operate (Intellectual Property Rights)*
 - *describe how you will protect and exploit the outputs of the Application Experiment (for example, through know-how, patenting, design registration, improvements to current business model)*

² Innovative project: application of existing technologies in new areas or development of new technologies for existing areas

Highly innovative project: totally disruptive approach



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Implementation (Activities, resources and risks)

This section should include details of your company, resources, a draft outline work activities and any risks identified. Please note, a Service Delivery Manager (SDM) will be appointed by the SmartEEs2 consortium to manage the delivery of the Application Experiment.

- **Project implementation**
 - *outline your activities inside the Application Experiment highlighting your key inputs and Deliverables describe what “in-kind services” you will be bringing in order to deliver the Application Experiment*
 - *provide an outline budget on how the Voucher and your in-kind contribution will be spent (see SmartEEs2 Call for Application Experiments)*
- **Company description**
 - *describe the resources, equipment and processes the company has access to in relation to delivery of this Application Experiment*
 - *describe the existing supply chain and how this will be engaged*
- **Team**
 - *Include details of the Application Experiment delivery team (those who will be specifically required to work on the Application Experiment) their job titles and mini CVs?*
 - *describe the roles, skills and relevant experience of the team in relation to the approach to be taken, including any previous project management experience*
 - *outline the management reporting lines (for example an organogram)*
- **Risks and mitigations**
 - *identify the key risks and uncertainties of the Application Experiment, including any technical, commercial, managerial and environmental risks. Highlight the most significant ones (providing a risk register if appropriate)*
 - *provide details of how these risks will be mitigated*
 - *list any Application Experiment inputs required on the critical path to completion (for example; any resources, expertise, data sets, etc.)*

Highlight the specific services you would like to receive from SmartEEs to support your innovation development; E.g. technical expertise, IP management, innovation management to optimize your development plan and/or support in supply chain structuration.

Impact (Outcomes, wider impacts and sustainability)

This section describes the key outcomes of your Application Experiment and the impact that your innovative Product / series of products will have on the market. This should include:

- *Outcomes - How do you propose to grow your business and increase your productivity into the long term as a result of the Application Experiment?*
 - *Describe the nature of the outputs you expect from the Application Experiment (for example, what will the Product Demonstrator / series of products show, is there any*



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know-how, new process, product or service design) and how these will take you closer to addressing the need, challenge or opportunity identified

- *describe your current position in the market(s) and supply/value chains outlined (will you be extending or establishing your market position?)*
- *describe your target customers and/or end users, and the value proposition to them (why would they use/buy it?)*
- *explain how flexible and wearable electronics will impact your productivity, growth and competitiveness (in the short and long-term)*
- *Wider Impact - What impacts from the Application Experiment are expected beyond the immediate Application Experiment?*
 - *what impact might this Application Experiment have outside the project team?*
 - *identify, and where possible quantify, the economic benefits from the Application Experiment to external bodies (for example, customers, others in the supply chain, broader industry and the EU economy) such as productivity increases and import substitution*
 - *identify and where possible quantify, any expected environmental impacts, either positive or negative*
 - *identify any expected trans-national impacts of the Application Experiment (for example; is there any other country involved in the supply chain, is one of your subcontractors from another country)*
 - *show if possible how the delivered Product Demonstrator will be beneficial across multiple industry sectors or markets*
- *Strategy - Describe your strategy for developing this Product / series of products beyond SmartEes2 financing. This should include:*
 - *what is the total budget for your business case including: marketing; first trials; sales channel and technical product development and manufacturing scale-up investment?*
 - *what milestones have been set for the development and market entry?*
 - *the value chain(s) for the Product Demonstrator to be turned into a Commercial Product. (Any gaps in the value chain to be highlighted)*
 - *access to any potential Investors, have you already engaged in any discussions with Venture Capitalists*

Highlight the specific services you would like to receive from SmartEes2 to leverage the impact of your Application Experiment: E.g. coaching support on access to customers, access to further investment.

If you have been approached or supported by any of the RTOs within the SmartEes2 consortium (CEA, CPI, TNO, VTT, EUT, FHG, IMEC, CeNTI) explain in brief the outcome.



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