



# AI REGIO

## AI REGIO OPEN CALL 2 GUIDE FOR APPLICANTS

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# 1 Introduction to AI REGIO

The AI REGIO “Regions and Digital Innovation Hubs alliance for AI-driven digital transformation of European Manufacturing SMEs”, aims to build a one-stop-shop platform that enables access to resources for AI-based solutions in efficient and sustainable manufacturing, with particular emphasis on resources that can lower the AI adoption barriers for SMEs.

The AI REGIO innovation action aims to consolidate the collaboration in the pan-European network of Digital Innovation Hubs (DIHs) by enhancing the offering of regional DIHs to manufacturing SMEs on three levels:

## 1. **POLICY IMPACT: Better coordination of regional smart specialisation strategies:**

AI REGIO will foster closer cooperation across European regions, EU and non-EU countries to make sure innovations can scale to European and global marketplaces, building up on the Four Motors for Europe movement and the I4MS Community and Innovation Collaboration platform.

## 2. **TECHNOLOGICAL IMPACT: Enhancing knowledge transfer across the network of DIHs:**

AI REGIO will build on Digital Manufacturing Platforms from previous EU-funded projects such as BEinCPPS, MIDIH, L4MS and AI4EU and help to integrate these into Digital Innovation Hubs offerings. These Digital Manufacturing Platforms will in turn benefit from present Digital Innovation Hubs services regarding their business and social impact challenges. Present AI-enabled technological assets will further be extended.

## 3. **BUSINESS IMPACT: Upgrade the offering of DIHs by AI-driven applications:**

DIHs and SMEs participating in AI REGIO will jointly conduct 30 AI-driven regional application experiments focused on the adoption of AI technologies by SMEs, considering skills development, as well as privacy and sovereignty preservation.

In this line, Open Calls in AI REGIO aim at further expanding and extending the impact to other European regions and focus on the adoption of AI applications to the business operations of SMEs. This way, a total number of **16 innovative AI experiments in manufacturing** (8+8) are going to become digital game changers for Europe and its regions.

The present Guide for Applicants provides detailed information on the AI REGIO open call and how to apply.

# 2 I4MS initiative

AI REGIO is an Innovation Action project co-funded by the Horizon 2020 Framework Programme of the European Union. AI REGIO project is part of the ICT Innovation for Manufacturing SMEs (I4MS) initiative. More information on the I4MS initiative is available on the website: <https://i4ms.eu/>.

I4MS is a European initiative supporting manufacturing SMEs and mid-caps in the widespread use of information and communication technologies (ICT) in their business operations.



## 3 AI REGIO 2<sup>nd</sup> Open Call for experiments

This section presents the objective of the call, who can apply and the eligibility criteria.

### 3.1 Objective

The objective for the second open call of AI REGIO project is to select up to 17 **SME-driven experiments**:

- **10 Type A experiments:** Single participant (SME) projects, applicable to TOPIC-1 and TOPIC-2
- **7 Type B experiments:** Mini-consortia (SME + DIH + optional third partner), applicable to TOPIC-1, TOPIC-2 and TOPIC-3 (all the TOPICS)

These experiments will complement AI REGIO in the extension of the current portfolio of “AI for Manufacturing” solutions; extending the domains of the AI REGIO Champions<sup>1</sup>; and benefiting directly SMEs in underrepresented regions, with the perspective to join VANGUARD Initiative<sup>2</sup>.

We expect three topics to be covered by experiments.

#### Technological topics:

##### TOPIC-1. Manufacturing Data Spaces and Data4AI pipelines

**Manufacturing Data Spaces** (MDS) are complex artefacts aiming at developing a soft data infrastructure for the full adoption of Data Economy by the Manufacturing Industry. MDSs embed high value FAIR Data Sets, open Industrial Data Platforms and adaptable Business and Governance Models. In an MDS, **Data Sets** have to be described by metadata so that they can be Findable, Accessible, Interoperable and Reusable; this includes the adoption of open standards and domain specific ontologies. Finally, Data Sets need to play a relevant economic Value for the enterprise and bring Volume, Velocity, Variety and Veracity characteristics. MDS **Industrial Data Platforms** materialise Data Capturing, Data Quality, Data Storing, Data Analytics, Data Visualisation, Data Sharing and are best implemented by open and adaptable end-to-end data service pipelines (such as for instance [Apache Streampipes](#) for Industrial IOT data). MDS **Business and Governance** rules aim to define and implement machine-readable models to drive new business models (e.g. Manufacturing as a Service) and technological enforcement of B2B trusted relationships, like those implemented by [IDSA Data Sovereignty](#). In the Digital Europe Programme perspective, the European Commission has recently organised several workshops with the aim to define the design principles of embryonic Data Spaces in Manufacturing. In the AI REGIO perspective, MDSs are Data4AI pipelines to feed advanced AI4Manufacturing applications, such as monitoring and events detection, planning & optimisation, forecasting and prediction, new knowledge discovery and recommendation systems.

The main goal of **TOPIC-1 proposals** is to build embryonic **Data Spaces for Manufacturing**, while showing the benefits of enhancing the value of the manufacturing data (e.g. Industrial IOT data integrated with other data sources), before they are used in advanced AI

<sup>1</sup> Experiments conducted along the whole duration of the project and strongly linked to DIHs and the regional smart specialization strategies.

<sup>2</sup> Vanguard Initiative: <https://www.s3vanguardinitiative.eu/>



applications. Data originating from different data sources (processes, assets) have different values for further analyses and are characterised by heterogeneous quality levels, so that a flexible and configurable Data Quality pipeline is needed. AI REGIO defines a high-level architecture for Data4AI applications and recommends the usage of end-to-end Data Pipelines. Proposals in this topic shall provide end-to-end business scenarios, reflecting real industry challenges and defining and measuring realistic data-driven business KPIs. In this perspective, it is expected that the application experiments provide their own datasets and the commitment of Manufacturing SMEs to define and measure the business benefits from Data4AI applications.

*Available technical documentation for applicants:*

- Implementing AI REGIO DATA4AI end-to-end PIPELINES with Apache Streampipes.

## **TOPIC-2. AI for Manufacturing Applications and AI-on-demand Platform contributions**

AI for Manufacturing Applications is a topic that embraces several areas such as Smart Manufacturing, Intelligent Product Service Systems, Agile and Dynamic Value Chains, Industry 5.0 and Human-AI interaction.

AI-based Manufacturing Edge Applications are extending Industry 4.0 Cyber Physical Production Systems functions (sensing monitoring control act) to more intelligent, flexible and interactive behaviours. They are either embedded in the hardware (e.g. robotic or automation systems) or operating in far edge real time architectures and infrastructures.

AI-based Manufacturing Cloud Applications enable the processing and interpretation of big volumes of data from the production floor and other distributed data sources to spot patterns, analyse and predict process/user behaviours, detect anomalies in production/business processes in real-time, or add intelligence to digital solutions, and more.

Automatically detecting, or even predicting future phenomena, when the expected conditions/behaviours change allows to maximize the production efficiency and enables several smart processes in our factories (e.g. predictive maintenance of assets, optimized planning and logistic schedules, smart interactions among workforce and supporting systems), alerting the production teams before faulty products and processes will happen. Using AI technology, data can be analysed even in real time and integrated in order to extract more knowledge, optimizing the quality of the production processes and maximizing several business KPIs in production.

Moreover, leveraging on the above-mentioned considerations, the AI REGIO wave 2 application experiments are expected to contribute to the Europe's [AI-on-demand Platform](#) as a pan-EU one-stop-shop for AI knowledge, technology, tools, services and experts. The platform acts as a facilitator of knowledge transfer from research to multiple business domains, manufacturing among them.

The main goal of **TOPIC-2 proposals** is to develop **advanced AI applications for Manufacturing** Products, Processes, Value Chains, which could enrich the AI on demand platform in one or both of the following aspects:

- AI Assets, Case Studies in the Manufacturing Vertical of the AI4Europe Portal: <https://www.ai4europe.eu/business-and-industry/manufacturing>
- AI Experiments and resources Marketplace of the AI4Europe ACUMOS-based experimental facility: <https://aiexp.ai4europe.eu/> .



*Available technical documentation for applicants:*

- AI for Manufacturing Toolkit\_v1.0 (not final version, working document)
- AI4Europe and Experimental facility available at <https://github.com/ai4eu/tutorials>

### **TOPIC-3. AI Didactic Factories for Manufacturing and TERESA Experimentations**

**The AI REGIO Network of Didactic Factories (DFs)** aims at building an ecosystem of experimental facilities which could combine the Skills Development aspects of Learning / Teaching Factories with the hands-on “test before invest” Technology Piloting aspects of European Digital Innovation Hubs and AI TEF for Manufacturing calls in the Digital Europe Programme. In synthesis, one AI REGIO DF is:

*An open testing and experimentation facility which extends the services of a Learning Factory towards the materialization of the EDIH “test before invest” pillar. By providing access to technical expertise and experimentation as well as the possibility to “test before invest”, A Didactic Factory, like an EDIH, helps companies innovating their business or production.*

In the first phase of AI REGIO a network of 11 DF champions have been identified. Abd available in the <https://airegio-portal.eu/>.

AI REGIO DFs are sharing the same methodology for describing their own service offering (DR BEST Data Remotisation Business Ecosystem Skills Technology services) especially for what concerns the R Remotisation dimension.

In fact, AI REGIO DFs are expected to provide remote access to advanced services for Manufacturing Industrial Assets Data Spaces (e.g. Real time Industrial Datasets, Assets Administration Shell Data Models, Open Data Repositories and Assets Data Marketplace); ICT as a Service applications (Infrastructure Platform and Software as a Service such as optimization and forecast algorithms), Digital Twins (FEM/CFD/FSI simulations, discrete event simulations, ambient virtualization) and Assets Teleoperations (with or without local operators and avatars).

Finally, in the AI REGIO DF network, TERESA (TEchnology REgulatory SAndboxes) could be operated with the aim to experiment ethical Human-AI interaction aspects related to e.g. safety, wellbeing, comfort and acceptance by human workers; improving working conditions in workplaces and social inclusion of particular disadvantaged workers' categories.

The main goal of **TOPIC-3 proposals** is to develop an SME-driven experiment exploiting the Remotisation services provided by a DF (DIH) (access to data spaces, simulation software, digital twins, physical production assets). TERESA experimentations addressing Human-AI interactions and regulatory issues could be optionally implemented as well.

*Available technical documentation for applicants:*

- Testing and Experimental Facility Network\_v1.0 (not final version, working document)
- AI REGIO DF Network:
  - Brainport Industries campus: <https://www.brainportindustriescampus.com/en/>
  - Flanders Make: <https://www.flandersmake.be/en>
  - Mittelstand 4.0 Competence Center Kaiserslautern: <https://kompetenzzentrum-kaiserslautern.digital/>



- Vicomtech: <https://www.vicomtech.org/en/>
- Radboud Industrial Sustainability: <https://www.ru.nl/english/>
- JOiiNT Labt: <https://www.kilometrosso.com/partner/joiint-lab-robotic-intelligence-league-bergamo/>
- Additive Technology Center: <http://www.atc-additive.com/>
- I4.0 Lab: <https://www.industry40lab.org/>
- Made Competence Center I4.0: <https://www.made-cc.eu/>
- Liam Lab: <https://www.liamlab.it/>
- Musp Lab: <https://www.musp.it/>
- Lean Experience Factory Scarl: <https://www.leanexperiencefactory.it/en/lean-experience-factory-4-0/>
- Festo Didactic: <https://www.festo-didactic.com/int-en/>
- Cognitive Robotics Laboratory: <https://eurecat.org/en/field-of-knowledge/robotics-automation/>
- Robolab Tampere: <https://www.tuni.fi/en/research/research-tampere-university>
- Illab: <https://www.inesctec.pt/en/laboratories/iilab-industry-and-innovation-lab#technologies>
- Innovalia Association Lab: <https://www.aicenter.eu/>

### 3.2 Key dates

The key dates of the open call are as follows:

Activity	Dates
Call opening	02/05/2022
Call closing	29/07/2022 – 12:00 CET
Assignment of evaluators	22/08/2022-12/09/2022
Evaluation of proposals	19/09/2022-21/10/2022
Communication of results	24/10/2022-26/10/2022
Sub-grant Agreements	27/10/2022-18/11/2022
Execution of experiments	21/11/2022-14/07/2023

Table 1. Key dates for the AI-REGIO second open call

### 3.3 Who can apply?

The AI-REGIO open call is addressed to **digital and/or manufacturing SMEs**, alone or associated in mini-consortia with Digital Innovation Hub (DIHs) and, eligible for Horizon 2020. Only one proposal will be accepted by each SME.

Therefore, two possibilities are considered:



<b>TYPE A INDIVIDUAL PROPOSAL</b>	Proposal presented by a <b>single organisation</b> ; namely an <b>SME</b> .
<b>TYPE B MINI CONSORTIUM PROPOSAL</b>	Proposal presented by <b>Mini-consortia</b> composed of: <ul style="list-style-type: none"> <li>1 manufacturing SME, as the leader of the consortium;</li> <li>1 DIH, as reported in the DIH catalogue;</li> <li>ICT solution provider or technological RTO (optional).</li> </ul>

Find below a formal definition of the eligible categories:

**SMEs:** digital and/or manufacturing SMEs, as defined in the European Commission recommendation 2003/361/EC<sup>3</sup>, as published in the Official Journal of the European Union L 124, p. 36 of 20 May 2003.

“The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.” Extract of Article 2 of the annex to Recommendation 2003/361/EC.

**DIHs:** following the description by the European Commission website: “DIHs are one-stop shops that help companies become more competitive with regard to their business/production processes, products or services using digital technologies. DIHs provide access to technical expertise and experimentation, so that companies can “test before invest”. They also provide innovation services, such as financing advice, training and skills development that are needed for a successful digital transformation”<sup>4</sup>. Participating DIHs in this open call **must be registered in the DIH catalogue** and should mention “manufacture” in one of their smart specialization categories.

**ICT solution provider/RTO:** An ICT solution provider, which can be either an SME or a large enterprise, or a technological RTO can be included in the mini-consortium.

### 3.4 Eligibility criteria

In order to be considered as eligible, applicants must comply with the following:

- All participants must be registered in a EU27 Member State or Horizon 2020 Associated Countries.
- Status of all organisations presenting the Proposal falls under the categories indicated in section **Who can apply?**

Furthermore, the proposal must:

- Be submitted in English. Proposals submitted in any other language will be excluded.
- Be submitted within the stipulated deadline.
- Be completed and follow the template provided.

<sup>3</sup> Source: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003H0361>

<sup>4</sup> Source: <https://digital-strategy.ec.europa.eu/en/activities/edihs>



**Important remark:** All third parties have a maximum limit of EUR 100.000,00 to be received as Financial Support to Third Parties (FSTP) in Smart Anything Everywhere (SAE) and ICT innovation for Manufacturing SMEs (I4MS) initiatives. This rule applies to this Open Call.

## 4 AI REGIO experiments

This section presents the mandatory tasks to be carried out by the experiments, the deliverables, the expected timeline, the budget and the payment schedule. The expected duration of AI REGIO experiments is of 8 months.

### 4.1 Experiment tasks

Selected experiments will have to participate in various mandatory activities:

- **Kick-off meeting of the AI-REGIO selected experiments:** the selected experiments will participate in a kick-off meeting organised by AI-REGIO with the aim of presenting their experiment in terms of general overview, objectives, participants and expected outcomes.
- **Participation in 1 individual follow-up meeting with AI-REGIO monitoring team:** the monitoring team will control the execution of the experiments through the organisation of a follow-up meeting at month 4. This meeting will allow the assessment of the advancement made by each experiment and will enable to solve any problems that may appear during the first months of execution.
- **Preparation and delivery of the established deliverables (see section 4.2):** the pilot experiments will have to develop a set of deliverables defined in section 4.2 that will serve to assess the execution of the experiments and the outcomes achieved.
- **KPIs:** The pilot experiments will define a set of KPIs in order to monitor, and finally assess, their experiment.
- **Dissemination of the experiments:** the selected experiments will carry out dissemination and exploitation activities during and after the execution of the experiments.

### 4.2 Experiment deliverables

- **D1. Technical Specifications, Architecture and/or Data Pipelines**  
This deliverable will detail the technical specifications of the pilot as well as the architecture and/or data pipelines. It will describe the system requirements, design decisions, components used in the experiments, as well as the architecture mapping and the phases of the experiment. This deliverable will also include the implementation of the proposed pipeline.
- **D2. Experiment implementation, Integration and Testing**  
This deliverable will explain in detail the phases of implementation, integration and testing of the experiment. It will contain a timeline of the experiment as well as a detailed description of the activities performed during the experiment. This deliverable also considers the definition of the barriers and difficulties faced during the implementation, integration and testing stages and the respective contingency plan.
- **D3. Experimentation and Measurement of technical-business KPIs**  
The pilot experiments will define a set of technical and business KPIs that the experiment is intended to address. These KPIs will reflect the outcomes of the pilot experiment solution and enable a deep analysis.
- **D4. Dissemination and exploitation + communication material**



This deliverable will define the dissemination and exploitation actions carried out by the pilot experiment participants during the execution of the experiment, as well as the expected activities for the coming months. The impact generated by these dissemination activities will be also considered within this deliverable. Furthermore, the communication material used for these activities (such as posters, infographics, brochures, videos, etc.) will be also presented.

### 4.3 Experiment timeline

The experiment timeline will be the following:

	M1	M2	M3	M4	M5	M6	M7	M8
Milestones	Kick-off			Individual Monitoring Meeting				
Deliverables				D1. Technical Specifications, Architecture and/or Data Pipelines D2. Experiment implementation, Integration and Testing				D3. Experimentation and Measurement of technical-business KPIs D4. Dissemination and exploitation + communication material

Table 2. Expected timeline of experiments

The **follow-up meetings**, scheduled for month 4 of the experiment, will be organised in order to enable the project coordinators to monitor the progress and solve any issues occurred during the implementation of the pilot experiment.

### 4.4 Budget and financial support

This Open Call has a budget of EUR 1.300.000,00 to fund 17 experiments.

- 10 Type A experiments: The maximum amount of FSTP allowed per experiment is **up to EUR 60.000,00.**
- 7 Type B experiments: The maximum amount of FSTP allowed per experiment is **up to EUR 100.000,00.**

#### **Budget considerations:**

- **Funding rate:** the funding rate follows Horizon 2020 rules, the funding rate applicability for the selected SMEs or for-profit entities is 70% of eligible costs, while for non-profit organisations it is 100% of eligible costs. The consortium will define the requirements of the experiments in a way that will be feasible to carry out the work within the specified budget for the call.
- **Horizon 2020 SAE & I4MS Projects financial support amount limit:** please note that there is a limit of EUR 100.000,00 funding per SME through the FSTP mechanism for all the Horizon 2020 SAE & I4MS Projects.
- **Applicable only to Type B experiments:**  
**Minimum financial support for the SMEs:** the minimum financial support for the SMEs must correspond to at least 50% of the total of the financial support requested per experiment. For instance, in the case of a requested amount of EUR 100.000,00, the minimum amount for the SME should be EUR 50.000,00.



## 4.5 Structure of the budget

AI-REGIO second Open Call will follow the Lump Sum cost reporting system. Lump sum funding provides considerable simplification potential, as it removes all obligations on cost reporting and the need for timesheets, simplifying a big part of the administrative burden on beneficiaries.

Proposers have to include the presentation of the budget requested in the proposal. The costs are exclusively destined to the execution of the pilot experiment and the development of the deliverables defined under section 4.2 Experiment deliverables.

## 4.6 Payments

The payment for the experiments will be linked to the accomplishment and approval by AI REGIO consortium of the defined KPIs and deliverables. The payment of the requested funding will be made in three instalments:

Payment	Description	Related deliverables	%
<b>A pre-financing payment</b>	At the signature of the sub-grant agreement.	Sub-grant agreement	30%
<b>An interim payment</b>	At the submission of the architecture and implementation of the experiment.	D1. Technical Specifications, Architecture and/or Data Pipelines D2. Experiment implementation, Integration and Testing	30%
<b>A third and final payment</b>	At the end of the experiment, when the defined KPIs and deliverables are accomplished and approved by AI-REGIO responsible partner.	D3. Experimentation and Measurement of technical-business KPIs D4. Dissemination and exploitation + communication material	40%

Table 3. Payment procedure

## 4.7 What is in AI-REGIO for the consortium?

The selected consortia will benefit from:

- Financial support of **up to:**
  - **EUR 60.000 per TYPE A experiment**
  - **EUR 100.000 per TYPE B experiment;**
- Taking advantage of existing AI components and AI expertise for manufacturing already available in AI REGIO consortium;
- Extend and improve the AI REGIO catalogue of advanced AI components and tools;
- Participate in innovative experiments in the domain of AI for Manufacturing.

# 5 Experiment design, submission and evaluation

## 5.1 Overall process

Experiments will undergo the following stages:

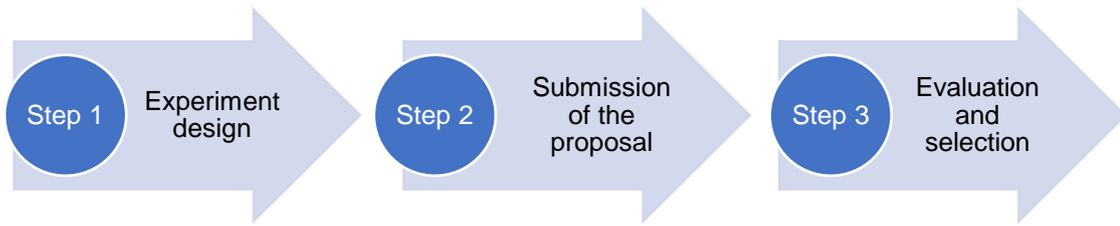


Figure 1. Open Call participation procedure

The steps are briefly described in the sub-sections below.

## 5.2 Step 1: Experiment design

Applicants have to prepare a description of the project proposal, as well as a technical description with further details concerning the implementation of the project and the exploitation of results.

The proposal is submitted in a single stage through the Evaluation Management System (EMS) online platform: <https://airegio.ems-carsa.com/>. The template can be downloaded from the EMS platform. Applicants are asked to carefully read and follow the instructions provided in the Proposal template.

The Proposal template details what is expected from the applicants in each section. Please note that each section of the proposal corresponds to an evaluation criterion.

The Proposal template includes the following sections:

Section	Sub-sections
<b>1) Excellence</b> (3 pages)	1.1 Objectives of the experiment 1.2 Experiment overview 1.3 Scientific and Technological Excellence
<b>2) Impact</b> (3 pages)	2.1 Expected impact on the SME 2.2 Expected impact on the DIH ( <i>if applicable</i> ) 2.3 Dissemination and exploitation plan 2.4 Cross-border activities
<b>3) Implementation</b> (4 pages)	3.1 Work Plan 3.2 Budget of the experiment 3.3 Consortium presentation

Table 4. Structure of the proposal

Further detail on what is expected in each sub-section is indicated in the proposal template.

In addition to the Proposal template, applicants are welcome to support their proposal by providing the following annexes on the platform:

- **Additional documentation to support the Proposal experiment** (not mandatory)

## 5.3 Step 2: Submission of the proposal

The proposals are submitted digitally, by the SME, in a single-stage through the Evaluation Management System (EMS). Proposals prepared according to the instructions provided, shall be submitted electronically through the EMS platform. Applicants should follow the steps starting from the AI REGIO EMS website (<https://airegio.ems-carsa.com/login>).

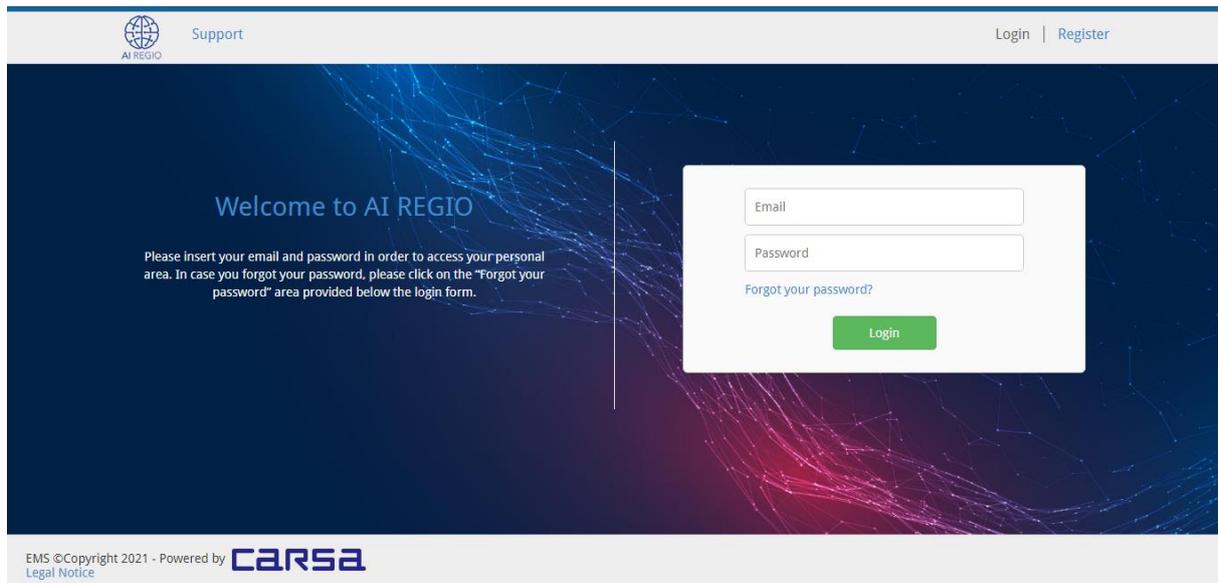


Figure 2. Home page of EMS platform for AI REGIO Open Calls

Once the Proposal is completed, click "Submit". Applicants will have the chance to submit new versions of their proposal as many times as they wish before the call closure. Only the last version submitted before the deadline will be considered in the evaluation.

An acknowledgement of receipt will be sent out via email to all successfully submitted Proposals, as soon as possible after the closure of the call. However, this receipt will not be proof that the Proposal is eligible for evaluation.

## 5.4 Step 3: Evaluation and selection

The proposals received will go through the following evaluation process detailed below.

### 5.4.1 Eligibility check

All Proposals received go through the automatic eligibility check. The eligibility check ensures that the criteria presented in section 3.4 are met. Criteria are the following:

- Based in an EU 27 Member State or Horizon 2020 associated countries.
- The Proposal must be submitted in English. Proposals submitted in any other language will be excluded.
- The Proposal must be submitted within the stipulated deadline.
- Complete the application following the template provided.
- Status of the organisation presenting the Proposal falls under the categories presented in section 3.3 Who can apply?

### 5.4.2 Evaluation

The best proposals of innovative experiments in the domain of AI for Manufacturing complying with the following criteria will be awarded for financial support:



- a) The relevance to AI REGIO's objectives and scope including complementarity to the project's technical areas of specialization and manufacturing domains of the AI REGIO Champions;
- b) Its impact to the AI sector needs, the development of AI in Europe, AI REGIO ecosystem, and AI REGIO's goals and objectives;
- c) The ability of the proposer to implement the experiments and/or integrate its new services, on the basis of the team and company profile, background infrastructures, experience, but also based on its proposed implementation plan.
- d) The ability of the proposed solutions to interface with the outside world (other data sources, external AI pipelines or Visualization tools) through open and standard APIs (e.g. gRPC<sup>5</sup>) to enable interoperability with the ever growing catalogue of AIREGIO AI solutions.

The following table presents the detailed description for each evaluation criteria.

Evaluation criteria	Description
<b>1) Excellence</b>	<ul style="list-style-type: none"> <li>• Define clear objectives.</li> <li>• Demonstrate alignment with AI-REGIO objectives.</li> <li>• Address the sectors and technologies of AI-REGIO open call.</li> <li>• Develop a sound and ambitious experiment consisting on an end-to-end solution, starting from connecting data sources, till "action handling" (visualization, robot arm, etc.).</li> <li>• Provide a clear description of the challenge the experiment plans to overcome.</li> <li>• Present a draft of the architecture based on the StreamPipes orchestration and further connections with the outside world (open-source API based on existing standards like gRPC<sup>5</sup>).</li> <li>• Demonstrate innovation capacity to improve the current processes, products or services.</li> </ul>
<b>2) Impact</b>	<ul style="list-style-type: none"> <li>• Contribute to increase the digitalisation level of the SME.</li> <li>• Demonstrate clear technological, economic and commercial impacts.</li> <li>• Set clear and realistic KPIs.</li> <li>• Contribute to the goals of the DIH (only for TYPE B experiments).</li> <li>• Develop an appropriate dissemination and exploitation plan.</li> </ul>
<b>3) Implementation</b>	<ul style="list-style-type: none"> <li>• Develop a coherent and clear work plan.</li> <li>• Have the required capacity to carry out the experiment (budget).</li> <li>• Demonstrate capacity to carry out the experiment (personnel, infrastructure, etc.).</li> <li>• Demonstrate the appropriateness of the participants.</li> </ul>

Table 5. Evaluation criteria

Each proposal will be evaluated by two evaluators against the criteria outlined above. Each evaluator will record his/her individual opinion on each proposal using the evaluation form. They will then communicate in order to reach consensus on the quality of each proposal. The result of that agreement (comments and scores) will be reflected on the Evaluation Summary Report (ESR). Only proposals with scores above thresholds for each criterion, as indicated below, will be ranked for

<sup>5</sup> Source: <https://grpc.io/>



funding. Once ESRs of all proposals are completed, AI-REGIO partners will have a meeting in order to rank all the proposals and create a shortlist of maximum 17 proposals, which will finally be proposed to receive funding. The rest of the approved proposals will be included in a reserve list.

The evaluation will be carried out by experts who are completely independent from the applicants. These experts will be individuals with experience and knowledge in the fields of digital technologies and the implementation of digital strategies.

When preparing the ranking, if two or more proposals are tied with the same overall score, priority will be given as illustrated in table below. The thresholds and priorities given to each criterion are the following:

Criterion	Threshold	Priority (in case of ex-aequo)
<b>Excellence</b>	3	2
<b>Impact</b>	4	1
<b>Implementation</b>	3	3

Table 6. Criteria thresholds and priority

The following table details the evaluation scores for each criterion:

Score	Description
<b>0. Fail</b>	The Proposal fully fails to address the criterion under examination or cannot be judged due to missing or incomplete information.
<b>1. Poor</b>	The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses that will impede success.
<b>2. Fair</b>	While the Proposal broadly addresses the criterion, there are significant weaknesses that would hinder the project implementation.
<b>3. Good</b>	The Proposal addresses the criterion well, although improvements would be necessary and various details are missing on implementation.
<b>4 Very Good</b>	The Proposal addresses the criterion very well, although certain improvements are still possible and some particular details are missing on implementation.
<b>5. Excellent</b>	The Proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

Table 7. Evaluation scores

All activities proposed should respect fundamental ethical principles, including those reflected in the Charter of Fundamental Rights of the European Union. If any issues with these fundamental ethical principles are identified while the Proposal is being evaluated the initiative will take any measures deemed appropriate in order to deal with the situation.

### 5.4.3 Evaluators

Each proposal will be **evaluated by two experts**, being **one expert external from the consortium partners**, against the evaluation criteria and each proposal will be given a score which will be used to select the experiments.

The names and CVs of the evaluators are communicated to the European Commission.

These evaluators will sign a declaration of confidentiality and a non-conflict declaration.



#### 5.4.4 Ranking of proposals and final selection

The result of this evaluation is a ranking of the proposals according to the obtained scores. The final selection will ensure diversity in terms of sectors and geographical coverage.

Once the evaluation process is completed for all Proposals, applicants, whether successful or unsuccessful, will receive a notice on the outcome of the evaluation and their Evaluation Summary Report.

## 6 Support available for applicants

In addition to the present Guide for Applicants, the following tools are available to support applicants:

- **Frequently Asked Questions**

A Frequently Asked Questions document is available on the website. The document will be periodically updated to reflect the questions received.

- **Instructions for the use of AI REGIO set of tools/data pipelines**

Instructions for the use of the set of tools and data pipelines developed under AI REGIO and at disposal for the Open Call experiments execution is available on the website.

- **Helpdesk**

Applicants may contact the AI REGIO helpdesk should they wish to receive further information on the Call for Proposal content and conditions through the EMS platform.