

D1.16 Open Call Package

Author:	CARSA	
Work Package:	WP1 Beyond COORDINATION: AI DIH consortium from management to governance	
Delivery date:	11.10.2021	
Due date:	30.09.2021	
Classification:	Public	
Type:	Report	

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H2020 Innovation Action - This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 952003

Status of deliverable

Action/role	Name	Date (dd.mm.yyyy)
Submitted by	CARSA	11.10.2021
Responsible (WP leader)	POLIMI	11.10.2021
Approved by (internal reviewer)	BRAINPORT DEVELOPMENT	24.09.2021

Revision History

Date (dd.mm.yyyy)	Version	Author	Comments
20/09/2021	V0.1	CARSA	Document created
11/10/2021	V1.0	CARSA	Final version

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AI REGIO OPEN CALL 1 GUIDE FOR APPLICANTS

Deliverable Author:	CARSA
Work Package:	WP1 (T1.3)
Date:	MAY 2021 (V1.0)
Approved by:	-
Approved by:	-

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1 Introduction to Al 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:

Al REGIO will build on Digital Manufacturing Platforms from previous EU-funded projects such as BEinCPPS, MIDIH, L4MS and Al4EU 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 Al-enabled technological assets will further be extended.

3. BUSINESS IMPACT: Upgrade the offering of DIHs by Al-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

Al REGIO is an Innovation Action project co-funded by the Horizon 2020 Framework Programme of the European Union. Al 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 1st 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 first open call of AI REGIO project is to select up to 8 **SME-driven experiments** to complement AI REGIO in the extension of the current portfolio of "AI for Manufacturing" solutions; extending the domains of the AI REGIO Champions¹; and benefiting directly SMEs in underrepresented regions, with the perspective to join VANGUARD Initiative².

We expect two topics to be covered by experiments.

Technological topics:

1. Industry 5.0 and Collaborative Intelligence Al-driven solutions.

According to European Commission DG R&I Unit, *Industry 5.0 paradigm recognises the* power of industry to achieve societal goals beyond jobs and growth to become a resilient provider of prosperity, by making production respect the boundaries of our planet and placing the wellbeing of the industry worker at the centre of the production process, i.e. harmonising human centric, resilient and sustainable manufacturing. In the Industry 5.0 perspective of Aldriven Autonomous Systems, the Collaborative Intelligence paradigm is emerging as an innovative approach where Humans and AI join forces to materialise two interrelated interaction patterns "Humans Assist Machines" (train explain sustain) and "Machines Assist Humans" (amplify interact embody). Industry 5.0 and Collaborative Intelligence aim, on the one hand, at matching human and machine capabilities, by identifying which human features can't be embodied by machines, in order to enhance and concentrate on them, and to delegate those where workers can be effectively replaced; on the other hand, they propose to establish communication links to allow reciprocal understanding, such as an AI explaining how it weighed inputs for providing medical recommendations or humans enabling machines to assess their fatigue level to change their work shifts.

Inspired by both Industry 5.0 and Collaborative Intelligence concepts, **TOPIC-1** candidates shall experiment "test before invest" and "skills development" services in realistic DIH-driven testing and experimentation facilities, where Digital Twins and Digital Personas will be modelled using Open Standard approaches (e.g. adopting RAMI Asset Administration Shell) and their dynamic interaction implemented by AI technologies (e.g. Knowledge Graphs). The envisaged end-to-end solution shall encompass modelling, simulation, deployment, training, testing and experimentation phases and shall contribute to the AI REGIO Data4AI and AI4Manufacturing solutions, by enriching them with new tools and components, preferably open source, to be then inserted in the AI REGIO Marketplace. Experimental 'laboratory' environments are useful to consider AI ethical and regulatory issues under controlled conditions, as an example to enable machines to be aware of human behavior of volunteers in real regulatory conditions (but with possible exceptions from some rules). Development of

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

² Vanguard Initiative: https://www.s3vanguardinitiative.eu/

a TERESA (TEchnological REgulatory SAndbox) as an evolution of the experiment, will be considered as optional, preferential feature in the evaluation.

Available technical documentation for applicants:

- EC DG RTD Presentation INDUSTRY 5.0
- HLEG-AI (EC appointed High Level Expert Group on AI) Ethics Guidelines for Trustworthy AI
- HLEG-AI Assessment List for Trustworthy AI (ALTAI).

2. Manufacturing Data Spaces and Data4Al 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-2 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 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.

3.2 Key dates

The key dates of the open call are as follows:

Activity	Dates
Call opening	01/06/2021
Call closing	30/09/2021 - 13:00 CET
Assignation of evaluators	01/10/2021-15/10/2021
Evaluation of proposals	08/10/2021-19/11/2021
Communication of results	22/11/2021-24/11/2021
Sub-grant Agreements	25/11/2021-10/12/2021
Execution of experiments	13/12/2021-31/07/2022

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

3.3 Who can apply?

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

Mini-consortia have to be composed of:

- 1 manufacturing SME, as the leader of the consortium;
- 1 DIH, as reported in the DIH catalogue³;
- ICT solution provider or technological RTO (optional).

SMEs: digital and/or manufacturing SMEs, as defined in the European Commission recommendation 2003/361/EC⁴, 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.

<u>DIHs:</u> 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

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

^{3 Source:} https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool

transformation"⁵. Participating DIHs in this open call **must be registered in the DIH catalogue** and should mention "manufacture" in one of their smart specialization categories.

<u>ICT solution provider/RTO:</u> 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.

<u>Important remark:</u> 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 Al-REGIO monitoring team: the
 monitoring team will control de 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.

-

⁵ Source: <u>https://digital-strategy.ec.europa.eu/en/activities/edihs</u>

• **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	М3	M4	М5	М6	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 800.000,00 to fund 8 experiments.

The maximum amount of FSTP allowed per third party is **up to EUR 100.000,00**.

Budget considerations:

- **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.
- 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.

4.5 Structure of the budget

Al-REGIO first 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	%
A pre-financing payment	At the signature of the sub-grant agreement.	Sub-grant agreement	30%
An interim payment	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%
A third and final payment	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 Al-REGIO for the consortium?

The selected consortia will benefit from:

- Financial support of up to EUR 100.000 per experiment;
- Taking advantage of existing AI components and AI expertise for manufacturing already available in AI REGIO consortium;
- Extend and improve the Al REGIO catalogue of advanced Al 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:

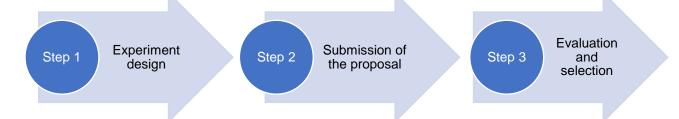


Figure 1. Open Call participation procedure

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	
1) Excellence (3 pages)	1.1 Objectives of the experiment	
	1.2 Experiment overview	
	1.3 Scientific and Technological Excellence	
2) Impact (3 pages)	2.1 Expected impact on the SME	
	2.2 Expected impact on the DIH	
	2.3 Dissemination and exploitation plan	

	2.4 Cross-border activities
3) Implementation (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 in a single-stage through the EMS platform.

Proposals prepared according to the instructions provided, shall be submitted electronically through the EMS platform.

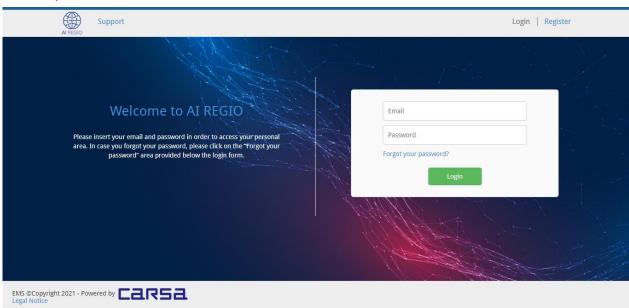


Figure 2. Home page of EMS platform for AI REGIO Open Calls

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. gRPC⁶) 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
1) Excellence	 Define clear objectives. Demonstrate alignment with AI-REGIO objectives. Address the sectors and technologies of AI-REGIO open call. 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.).
	 Provide a clear description of the challenge the experiment plans to overcome.
	 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 gRPC⁶).

⁶ Source: https://grpc.io/

	Demonstrate innovation capacity to improve the current processes, products or services.		
2) Impact	Contribute to increase the digitalisation level of the SME. Demonstrate clear technological, economic and commercial impacts. Set clear and realistic KPIs. Contribute to the goals of the DIH.		
	Develop an appropriate dissemination and exploitation plan.		
3) Implementation	 Develop a coherent and clear work plan. Have the required capacity to carry out the experiment (budget). Demonstrate capacity to carry out the experiment (personnel, infrastructure, etc.). Demonstrate the appropriateness of the consortium members. 		

Table 5. Evaluation criteria

Please consider that i) the usage of an AI REGIO tool and ii) being a cross-national consortium, will be positively assessed on the "Excellence" and "Impact" criteria, respectively.

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 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 8 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)
Excellence	3	2
Impact	4	1
Implementation	3	3

Table 6. Criteria thresholds and priority

The following table details the evaluation scores for each criterion:

Score	Score Description	
0. Fail	The Proposal fully fails to address the criterion under examination or cannot be judged due to missing or incomplete information.	

1. Poor	The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses that will impede success.
2. Fair	While the Proposal broadly addresses the criterion, there are significant weaknesses that would hinder the project implementation.
3. Good	The Proposal addresses the criterion well, although improvements would be necessary and various details are missing on implementation.
4 Very Good	The Proposal addresses the criterion very well, although certain improvements are still possible and some particular details are missing on implementation.
5. Excellent	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.

5.4.2.1 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.

5.4.3 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 one Call for Proposal content and conditions through the EMS platform.	n



PROPOSAL TEMPLATE FOR EXPERIMENT

TITLE OF THE EXPERIMENT

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INSTRUCTIONS

(Please remove this instruction page before submitting as well as the explanation in italic in the following pages.)

This template is to be used for all proposals to be submitted to the first AI REGIO open call.

The structure of this template must be followed when preparing your proposal. It has been designed to ensure that the important aspects of your planned work are presented in a way that will enable the evaluators to make an effective assessment against the evaluation criteria.

Please be aware that proposals will be evaluated as they were submitted, rather than on their potential if certain changes were to be made. This means that only proposals that successfully address all the required aspects will have a chance of being funded. There will be no possibility for significant changes to content, budget and consortium composition during grant preparation.

Page limit: There is a page limit of 10 pages starting from *section 1. Experiment Overview*. All tables, figures, references and any other element pertaining to these sections must be included as an integral part of these sections and are thus counted against this page limit.

If you submit a proposal longer than the specified limit (10 pages), excess pages (in over-long proposals) will be automatically disregarded, and will not be taken into consideration by the evaluators. The proposal is a self-contained document. Evaluators will be instructed to ignore hyperlinks to information that is specifically designed to expand the proposal, thus circumventing the page limit.

Formatting conditions

The following formatting conditions apply:

- The reference font for the body text of H2020 proposals is Arial (Windows and Apple platforms) or DejaVu Sans (Linux distributions).
- The use of a different font for the body text is not advised and is subject to the cumulative
 conditions that the font is legible and that its use does not significantly shorten the
 representation of the proposal in number of pages compared to using the reference font (for
 example with a view to bypass the page limit).
- The minimum font size allowed is 11 points. Standard character spacing and a minimum of single line spacing is to be used.

Text elements other than the body text, such as headers, foot/end notes, captions, formula's, may deviate, but must be legible.

The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

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1 Technical Excellence

Indicative number of pages: 3 pages

1.1 Objectives of the experiment

- Describe the objectives of the experiment in a SMART manner: **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**imely.
- Indicate how the experiment objectives are aligned with the AI REGIO open call objectives.

1.2 Experiment overview

• Describe the main concept, including sector, technology and geographical location.

1.3 Scientific and Technological Excellence

- Describe the innovative nature of the experiment.
- Identify the novel concepts and approaches as well as their added value to the state-of-theart.
- Explain the implementation and adequate usage of the technologies involved.
- Describe the challenges that the experiment intends to address and indicate how it will improve the current processes, products or services of the SME. Specify starting and ending TRL levels.
- 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 gRPC⁶).

2 Impact

Indicative number of pages: 3 pages

2.1 Expected impact on the SME

• Explain the contribution of the experiment to increase the digitalisation level of the SME. Technological, economic and commercial impacts foreseen. Include KPIs.

2.2 Expected impact on the DIH

• Explain the contribution of the experiment to the goals of the DIH.

2.3 Dissemination and exploitation plan

- Present the dissemination activity plan.
- Present an exploitation model for the application experiment including ownership of results (IPR), if applicable.

2.4 Cross-border activities

Describe the cross-border activities of the experiment, if any.

3 Implementation

Indicative number of pages: 4 pages, including tables

3.1 Work Plan

• Provide the work plan and tasks including a Gantt diagram and description of work package.

3.1.1 Work package

 Describe all the activities to be implemented in the experiment using the following table for each work package:

Work Package: Task name

Task(s) description: Describe the tasks to be carried out

Role: Role of each partner

Milestone(s): Milestone short description (Month XX)

Deliverable(s): Deliverable short description, related to the milestones (Month XX)

3.2 Budget of the experiment

Provide an explanation of the costs for the experiment.

3.3 Consortium presentation

- Describe the SME, DIH and ICT solution provider/RTO (if applicable), the teams, infrastructures and experience. Demonstrate that the partners possess the required competence to implement the project.
- Explain the adequateness of the consortium members.
- Detail the role of each partner in the experiment.
- Describe the DIH, particularly the service provided to implement the experiment.



AI REGIO OPEN CALL 1 FREQUENTLY ASKED QUESTIONS (FAQ)

Deliverable Author:	CARSA
Work Package:	WP1 (T1.3)
Date:	September 2021
Approved by:	-
Approved by:	-

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H2020 Innovation Action - This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 952003

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Revision History

Date (dd.mm.yyyy)	Version	Author	Comments
20.05.2021	1.0	CARSA	FAQ version 1.0 completed
14.06.2021	1.1	CARSA	Questions 3.2, 3.3 and 3.6 included
29.07.2021	1.2	CARSA	Reference number 3 updated
			Question 3.5 included
13.09.2021	1.3	CARSA	Question 3.7, 3.8 and 3.9 included

1 Introduction

The present document provides a list of Frequently Asked Questions (FAQs) and answers related to the Al REGIO Open Call 1. The list of questions is preliminary and the document will be continuously updated in the course of the process.

More information on the Call for Proposals can be found in the Guide for Applicants available on the AI REGIO webpage (https://www.airegio-project.eu/open-calls).

2 General questions

2.1 What is AI REGIO?

Al REGIO is a European project, precisely an Innovation Action, supported by the European Commission through the ICT Innovation for Manufacturing SMEs (I4MS) initiative. Al REGIO 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: policy impact, technological impact and business impact.

Through two open calls, the project will support a total of 16 experiments. The 1st open call for experiments will support up to 8 SME-driven experiments.

3 Questions related to the call

3.1 What is the call for proposals/experiments?

The objective for the first open call of AI REGIO project is to select up to 8 **SME-driven experiments** to complement AI REGIO in the extension of the current portfolio of "AI for Manufacturing" solutions; extending the domains of the AI REGIO Champions⁷; and benefiting directly SMEs in underrepresented regions, with the perspective to join VANGUARD Initiative⁸.

3.2 Can SMEs from regions that are members of the Vanguard Initiative apply to the Open Calls?

Yes, SMEs from the Vanguard Initiative regions can apply to the Open Calls, as well as SMEs outside of these regions.

3.3 Which regions in particular are considered "underrepresented" regions?

Proposals extending the current AI REGIO ecosystem (which includes 13 vanguard regions) will be positively considered, especially when including other Vanguard Initiative regions⁹, namely underrepresented regions.

3.4 Who can apply?

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

Mini-consortia have to be composed of:

⁷ Experiments conducted along the whole duration of the project and strongly linked to DIHs and the regional smart specialization strategies

⁸ Vanguard Initiative: https://www.s3vanguardinitiative.eu/

⁹ Vanguard initiative regions: https://www.s3vanguardinitiative.eu/members

- 1 manufacturing SME, as the leader of the consortium;
- 1 DIH, as reported in the DIH catalogue¹⁰;
- ICT solution provider or technological RTO (optional).

<u>SMEs:</u> digital and/or manufacturing SMEs, as defined in the European Commission recommendation 2003/361/EC¹¹, 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.

<u>DIHs</u>: 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"¹². Participating DIHs in this open call must be registered in the DIH catalogue and should mention "manufacture" in one of their smart specialization categories.

<u>ICT solution provider:</u> 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.

3.5 Can the RTO or SME acting as a solution provider be from any region?

Yes, the solution provider can be from any region.

3.6 Can AI REGIO partners apply to the call?

Al REGIO partners are not eligible as members of the mini-consortium. The application will be disqualified.

3.7 If we are part of a DIH and the work in supporting the SME will be entirely done by us, who should apply as a partner, us or the DIH?

You, as part of a DIH, can apply as a partner as you will represent the DIH. In this case, make sure to clearly explain in the proposal your role in the experiment and the DIH you are part of.

3.8 Which are the accepted costs for the budget?

All kind of costs are accepted as long as they are required for the execution of the pilot experiment and the development of the deliverables. The budget requested has to be presented and described in the proposal.

3.9 We are not sure that we can participate because of the 100K Euros per third parties limit rule. How should we proceed?

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

¹⁰ Source: https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool

¹¹ Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003H0361

¹² Source: https://digital-strategy.ec.europa.eu/en/activities/edihs

SMEs (I4MS) initiatives. Regardless, you may participate in the call, keeping in mind that if selected, the AI REGIO Project Officer will take this into consideration, and you will be eligible to receive the corresponding amount that ensures your organisation does not surpass this limit.

3.10 How to apply?

Consortia are invited to apply by submitting a complete Proposal following the proposal template on the submission platform: https://airegio.ems-carsa.com/. The template for proposal is available on the submission platform, as well as on the AI REGIO website.

3.11 When is the deadline?

The call's deadline is on 30/09/2021 at 13h00 (CET),

The key dates of the open call are as follows:

Activity	Dates
Call opening	01/06/2021
Call closing	30/09/2021
Assignation of evaluators	01/10/2021-15/10/2021
Evaluation of proposals	08/10/2021-19/11/2021
Communication of results	22/11/2021-24/11/2021
Sub-grant Agreements	25/11/2021-10/12/2021
Execution of experiments	13/12/2021-31/07/2022