



AI On-Demand Platform for regional interoperable DIHs Network

Daniel Echebarria, R&D Project Manager, Innovalia Association



The DIH4AI Innovation Action

DURATION: 36 months (January 2021 – *ongoing*)

COORDINATOR: Politecnico di Milano

FUNDING: € 4,999,863 (2M Open Calls)

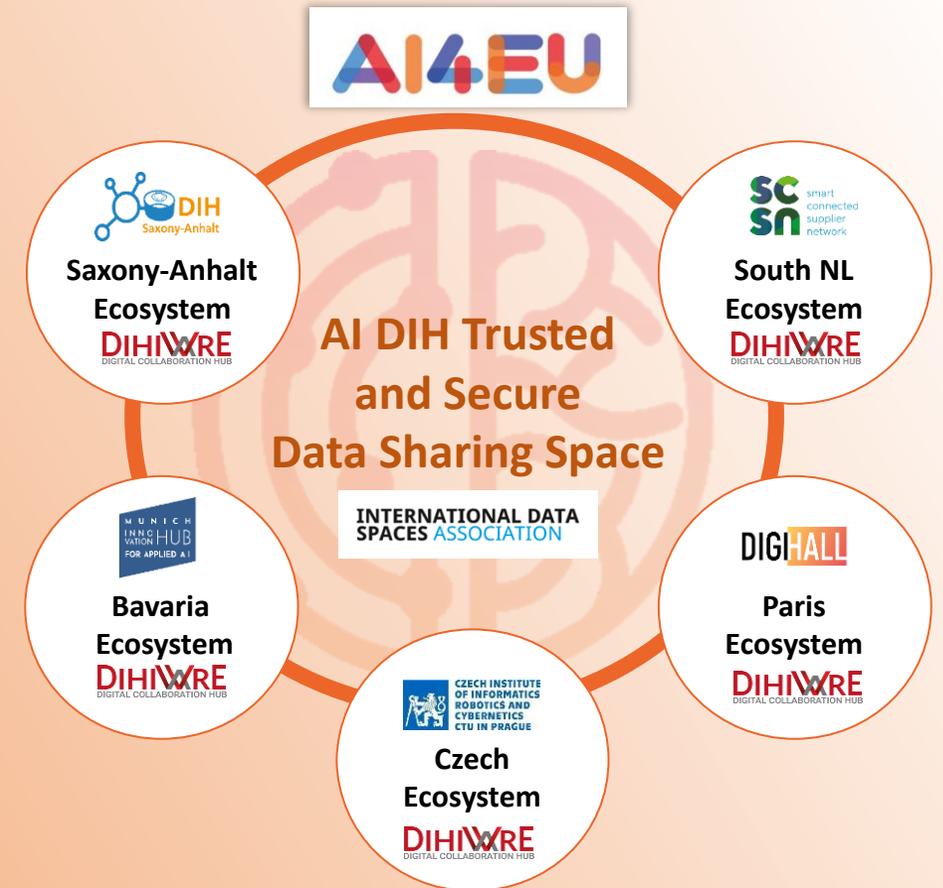
CONSORTIUM: 12 Partners from 6 countries

OPEN CALLS: 10+10 new DIH-driven SME-oriented

DIHs: 5 AI DIHs selected from AI DIH Network

EXPERIMENTS: 20+ AI Best Services implementations

<https://www.dih4ai.eu/>



Building upon the results of the AI DIH Network project

-  **Creation of a EU Network of DIHs focusing on AI**
30 DIHs were selected – out of 150 applications – for being involved in the AI DIH Network project
-  **The profile of an AI DIH**
Definition of the key characteristics of an AI DIH, in terms of service offering, competences & operating model
-  **Multi-lateral framework cooperation agreement**
Signature of a co-drafted multi-lateral framework cooperation agreement among 25 AI-focused DIHs
-  **Structured approach for cross-border collaboration**
Development, through co creation activities of 3 scenarios for cross-border collaboration and the blueprint

Results of the project



1. *The Blueprint for cross-border collaboration among DIHs*



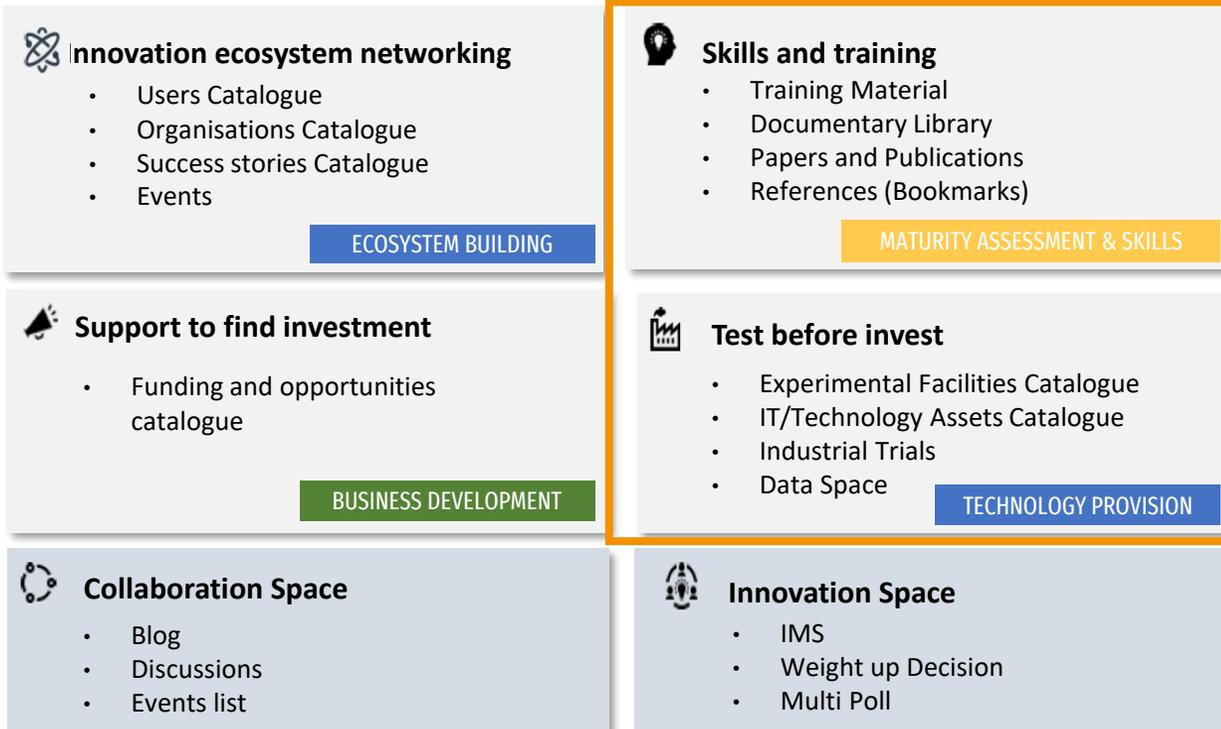
2. *The Final Study Report*

https://ai-dih-network.eu/media_and_training.html

Implementation of an **Maturity Assessment Collaboration Pilot**

1. Technological Open Platform for AI DIHs (Network)

GETTING CLOSER TO EUROPEAN DIGITAL INNOVATION HUBS SERVICES OFFER

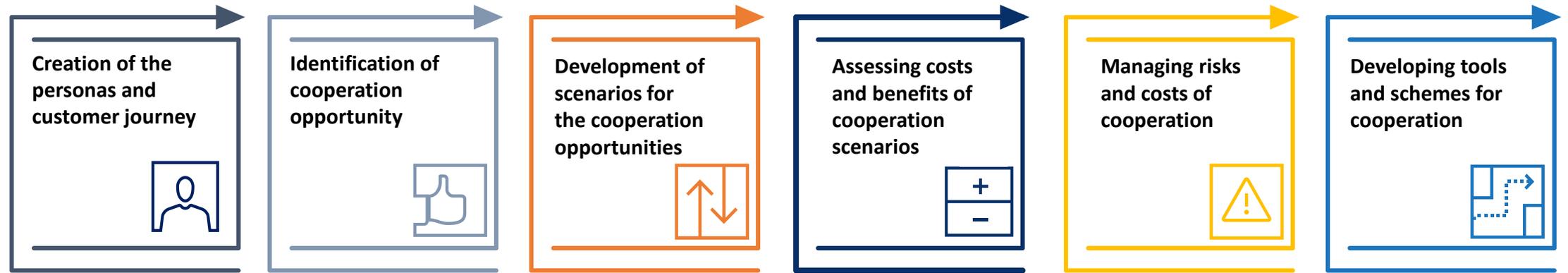


The Platform supports the intra-region SME ecosystem and cross-DIHs cooperation schemes. It materialises the 4 archetypal (E)DIH functions (i.e. Innovation Ecosystem and Networking, Support to Find Investments, Skills and Training, Test before Invest) in more generic and comprehensive service classes adapted to AI, respectively **Ecosystem Building, Business Development, Maturity Assessment & Skills and Technology Provision**, coupled with collaboration and innovation services to allow people and organisations to co-operate and co-innovate.



2. Methodological framework for DIH collaboration

This methodology was developed in the **AI DIH Network** initiative and promoted by the European Commission.



USER PERSPECTIVE

DIHs service offerings are analysed from a user perspective to identify situations in which cross-border collaboration could deliver tangible benefits to the DIHs and other stakeholders

CUSTOMER JOURNEY MAPPING

This methodology aims to represent the specific activities of the DIHs during the service delivery and the opportunities to improve through cooperation. This approach leads to the identification of different 'cooperation use-cases'.

COOPERATION SCENARIOS

Identified 'cooperation use-cases' and the described methodology will represent the basis for DIH4AI experimentations and will facilitate the wider use and uptake of AI-on-demand-platform.

3. Regional-European Interoperability Framework (2nd Open Call)



3 MAIN INTEROPERABILITY BRIDGES BETWEEN DIHWIRE AND AI4EU

DIGITAL COLLABORATION HUB

- 1 The Portal Interoperability**
To integrate **Users** of both the Regional and the European platforms.
- 2 The Data Interoperability**
To integrate **Content/Data Repositories** of both the Regional and the European platforms.
- 3 The Cloud Interoperability**
To integrate **Services and AI Infrastructures** of both the Regional and the European platforms.

Additional tools and services

In line with the upcoming European regulation on AI, different services and tools to support SMEs will be also developed and defined in this field, including:

01

Trustworth AI support

DIHs could help SMEs in the implementation of ethical AI guidelines/requirements through technical support and process guidance

02

Conformity assessment and compliance

DIHs could develop and deliver conformity and assessment mechanisms to verify the actual implementation of conformity requirements

03

AI skills development programme

The programme will support citizens, enterprises and public authorities in filling the competencies gaps required by AI

Wide dissemination: DIH related initiatives/EDIHs and the AI4EU ecosystem and International collaborations

THANKS

Follow the project updates



[@dih4ai](https://twitter.com/dih4ai)



[DIH4AI Project](https://www.linkedin.com/company/dih4ai)





DIH4AI

Open Calls: OC1

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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. 101017057

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GLOBAL FIGURES ABOUT THE DIH4AI OPEN CALLS



Total FTSP:

€ 2 Million

up to €100k funding for each 6-month long Experiment's Innovation activities



2 Calls:

1st OC opened on 30/09/2021 → proposals admitted until 31/01/2022

2nd OC to be opened on Q3, 2022

OBJECTIVES OF THE DIH4AI OPEN CALLS



Expand the Ecosystem of AI DIHs

beyond the European regions who constitute the DIH4AI Consortium

Complement the AI4EU Catalogue

of highly innovative applications in any AI domain

Validate the L-BEST Service Pipeline

The Service Portfolio and the Customer Journeys will be tested and validated in the Open Call Experiments

VERTICALS / SECTORIAL AREAS



AGRIFOOD



**EARTH
OBSERVATION**



**FINANCE AND
INSURANCE**



MANUFACTURING



**PUBLIC
ADMINISTRATION**

TECHNOLOGICAL TOPICS ON THE AI DOMAIN



**VISION
INTELLIGENCE, MACHINE
AND COMPUTER VISION**



MACHINE LEARNING



**NEURAL NETWORK
APPLICATIONS**



**ADVANCED PLANNING
AND FORECASTING**



**NATURAL LANGUAGE
PROCESSING (NLP)**



MACHINE TRANSLATION



**MULTI-MODAL HUMAN-AI
INTERACTION**



**KNOWLEDGE
REPRESENTATION**



**EXPERT AND
DECISION SUPPORT
SYSTEMS**

WHO CAN APPLY FOR OPEN CALL 1: Basics

- ✓ **H2020 General Regulations apply**, in terms of [countries of origin](#).
- ✓ **The participation of, at least, one DIH is mandatory** in each mini-consortium who is allowed to apply for OC1, **along with, maximum, 2 other participants**.
- ✓ **The Experiments must be lead by an AI SME or start-up**.
- ✓ **The participating DIH(s) must be enrolled in the [EC DIH Catalogue](#), or present a plan for successful enrolment by the end of the Experiment**.
- ✓ **Each proposal can request a maximum contribution of 100.000 €** in this Open Call.
- ✓ **SMEs may only apply once (as participants in ONE proposal)**. DIHs may apply as part of more than one proposal, but, eventually, the DIH4AI Consortium will ensure that the geographical coverage criterion is effectively taken into account at the time of evaluating the proposals.
- ✓ **Proposals must be submitted in English**.

WHO CAN APPLY FOR OPEN CALL 1: Mini-Consortia



Type A: Intra-Regional Skills-Technology Experiment

- mini-consortia formed by:
 - An AI Technology Provider SME or start-up (Experiment Leader)
 - Its Regional DIH, who will support the SME through the delivery of L-BEST services, with special regard to those related to Skills development and Technical support and mentoring.
 - *Optionally, an End-User SME or a Policy Maker can finalise the mini-consortium. This third tentative participant will be the one in charge of validating the developed solution.*

Type B: Cross-Regional Skills-Technology Experiment



- mini-consortia formed by:
 - An AI Technology Provider SME or start-up (Experiment Leader)
 - Its Regional DIH, who will support the SME through the delivery of L-BEST services, with special regard to those related to Skills development and Technical support and mentoring
 - Another DIH, likely a Testing and Experimental Facility owner, who may also provide training and technical mentoring, and at the same time, will help with the testing and validation.

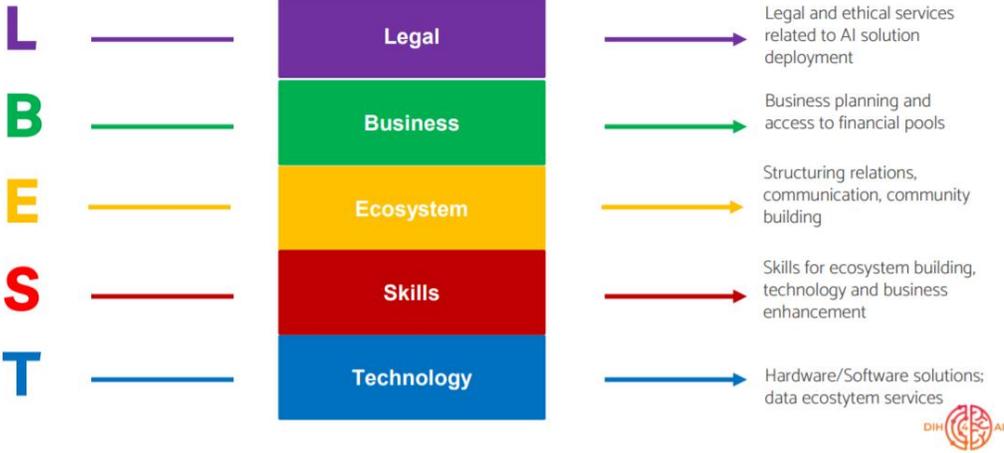
WHO CAN APPLY FOR OPEN CALL 1: “Regional DIH”

- ✓ The term “Regional DIH” is being extensively used along the Guide for Applicants and other relevant documentation for the OC1. However, as long as the collaboration among the AI SMEs and “Regional” AI DIHs responds to the challenges and terms of the Call (whether Type ‘A’ or ‘B’), their collaboration is not restricted to any particular geographical boundary.
- ✓ If a single entity, within a DIH already registered or planning-to-be in the JRC Catalogue, is entitled to represent the DIH, remarkably, by also possessing the infrastructure and knowledge in order to support the SME, it is eligible as part of the mini-consortium for the DIH4AI Open Call 1, in representation of that DIH.

WHO CAN APPLY FOR OPEN CALL 1: Role of DIH(s)

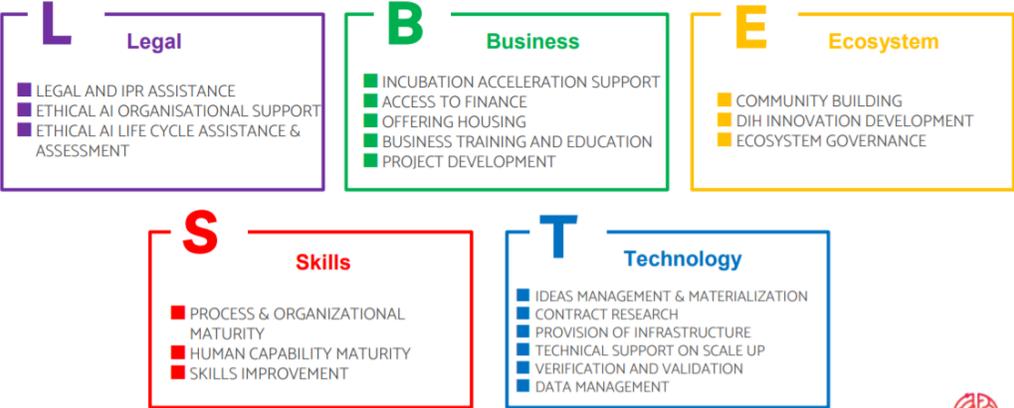
- ✓ **The DIHs must have proven capabilities (in terms of infrastructure, “know-how” and experience in AI) in order to answer to the needs of the AI SME in the Experiment.**
- ✓ **The DIHs in each mini-consortium will be the ones helping the SMEs overcome the barriers they may encounter in the development of their AI solution.**
- ✓ **This support may be translated into the delivery of L-BEST services (very soon, a Frequently Asked Questions guide will be published, with the categorisation description) to the SMEs.**
- ✓ **The collaboration among SMEs and DIHs should, in general, stress the provision of services regarding Skills Development and Technology Scouting and Mentoring.**

L-BEST Methodology for AI DIH Services categorisation



Level 1: Categories

Level 2: Sub-classes



PROPOSAL PREPARATION: suggested template

- ✓ **The following parts are considered very important** for the elaboration of a proposal:
 - ❖ **Summary (≈0,5 pages suggested)**
 - ❖ **Concept (≈2,5 pages)**
 - ❖ **AI sector relevance, potential impact and exploitation plans (≈3 pages)**
 - ❖ **Description of the workplan (≈2 pages)**
 - ❖ **Background and qualification (≈1 page)**
 - ❖ **Justification of costs and resources (≈1 page)**
- ✓ **Proposals with a length of more than 10 pages will be truncated at the end of the tenth page** → considering the six parts listed above; this is, this length excludes the front cover, the Administrative data requested on the second page, and Lists of Tables and Figures and References.

PROPOSAL PREPARATION: SME-DIH contractual framework

- ✓ The types of partnership and collaboration agreements signed between the SME, the DIH and other possible agents are considered, by the DIH4AI Consortium, as external and belonging to the mini-consortia. So, at the time of the proposal, you will not need to share the details about the type and the character of this collaboration, other than demonstrating the joint capabilities to achieve success in your Experiment.

PROPOSAL PREPARATION: Financials

- ✓ Each proposal can request a maximum contribution of 100.000 € in this Open Call.
- ✓ Each participant shall represent, at least, 15% of the overall budget of a proposal.
- ✓ The participants shall ask for the following eligible costs in the proposal:
 - Personnel Costs
 - Equipment Costs
 - Travel expenses
 - Software licenses
 - Subcontracting
 - Indirect costs (25% of Direct costs)
- ✓ However, at the time of submitting the Cost Statements during the Experiment, a “lump sum” method will be followed.

TECHNICAL DEVELOPMENT AND REPORTING

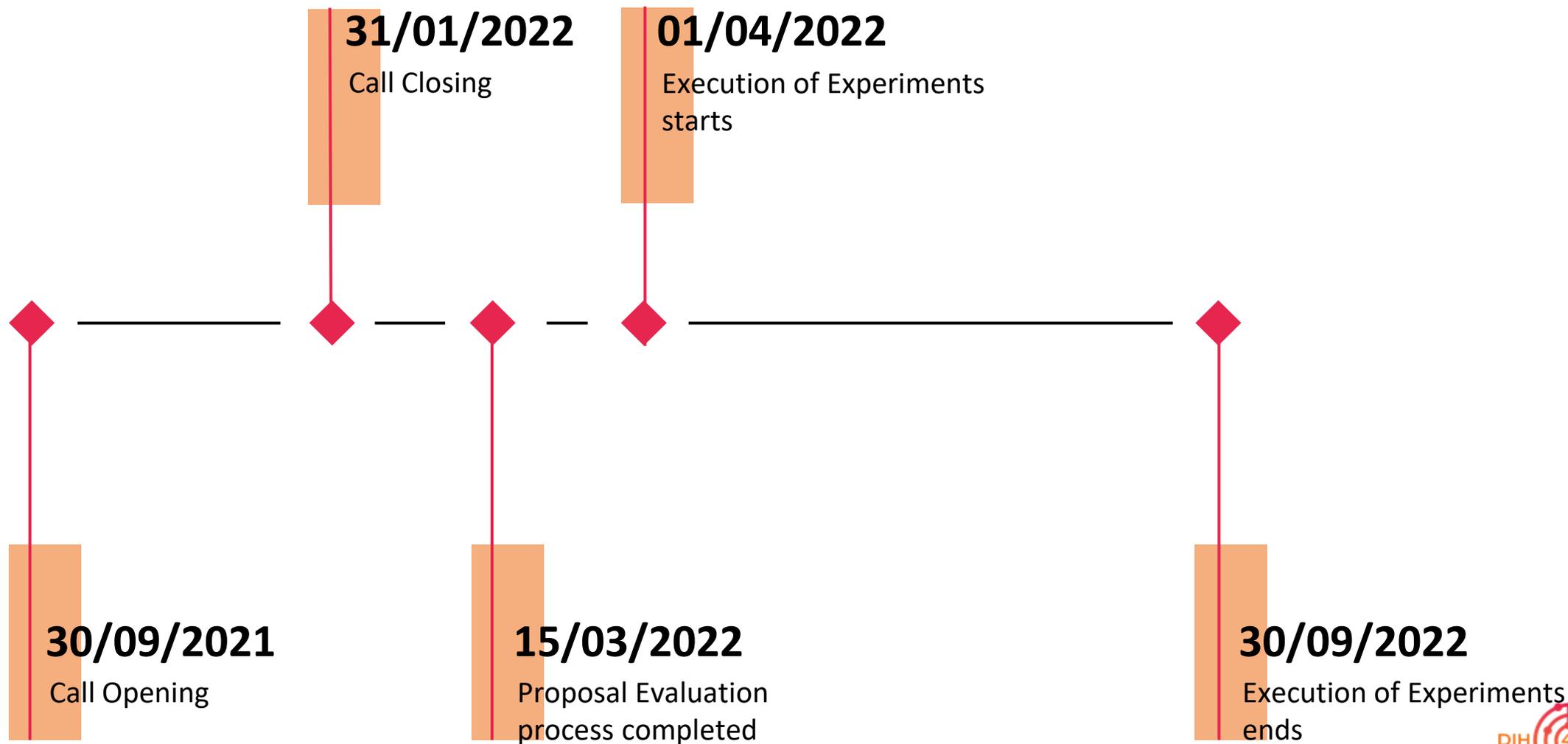
Status of Experiment development	Timing	Experiment deliverables
Experiment Milestone 1 <u>(Specification and Design of the Experiment)</u>	M2 of the Experiment execution	<ul style="list-style-type: none"> - Technical specifications - Architecture and Data Pipeline definition - Detailed Plan for the Implementation of the Experiment - Detailed Plan for the Integration and Testing
Experiment Milestone 2 <u>(end of the Technical Development of the Experiment)</u>	M6 of the Experiment execution	<ul style="list-style-type: none"> - Description of the Experimentation and measurement of the Technical and Business KPIs - Detail on Dissemination activities and the Exploitation Plan
Experiment Milestone 3 <u>(Internal Assessment and approval)</u>	M8: Deployment and Exploitation	(no new M8 deliverable to be submitted. The progress, results and the M2 and M6 documentation are approved by the DIH4AI Coordinators)

- ✓ The AI SMEs should seek the development of solutions until TRL 7-8 within the Experiments.

IPR AND EXPLOITATION OF THE SOLUTIONS

- ✓ **The owners of the solution will be the participants of each mini-consortium, this is, the participants of each Open Call Experiment.** The exploitation model shall be decided internally among them, as it is understood as something external to the DIH4AI beneficiaries.
- ✓ **Key information about the solutions** (functionalities, benefits, indicators, success story/stories) **will be published in the DIH4AI Platform.**
- ✓ Also, the willingness to publish the solution within the [AI4EU Catalogue](#) will be positively evaluated at the time of the evaluation. More information available [here](#).

TIMELINE FOR OPEN CALL 1



PROPOSAL EVALUATION PROCESS: Basics

- ✓ The evaluation will be mixed: both internal and external to the DIH4AI Consortium.
- ✓ The internal role taken by the DIH4AI beneficiaries will basically consist of ensuring that the geographical coverage criterion of the DIHs in the Experiments is considered in the evaluation process, since one of the objectives of the Open Calls is to enlarge the AI DIH network with newly-incorporated DIHs.
- ✓ The external evaluators may also apply for their participation in the evaluation process by submitting their CVs in [the EMS platform](#). They should not have conflict of interest with the involved applicants.

PROPOSAL EVALUATION PROCESS: Criteria

- ✓ **The criteria for financial support will include:**
 - **Excellence and Innovation**: The relevance to DIH4AI's objectives and scope, including complementarity to the project's technical areas of specialisation (i.e., in terms of its Scientific and Technological Excellence) and domains of the DIH4AI Network.
 - **Impact**, including Industrial relevance and Business strategy: Its impact on the AI sector needs, the development of AI in Europe, DIH4AI ecosystem and DIH4AI's goals and objectives. Alignment to the Conditions and Objectives of the 1st Call, in terms of assessing the relevance of the Technological Topic(s) and eventual economical Sector of Application will be considered as part of this Criterion.
 - **Implementation and Deployment of resources**: The ability of the third party 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.

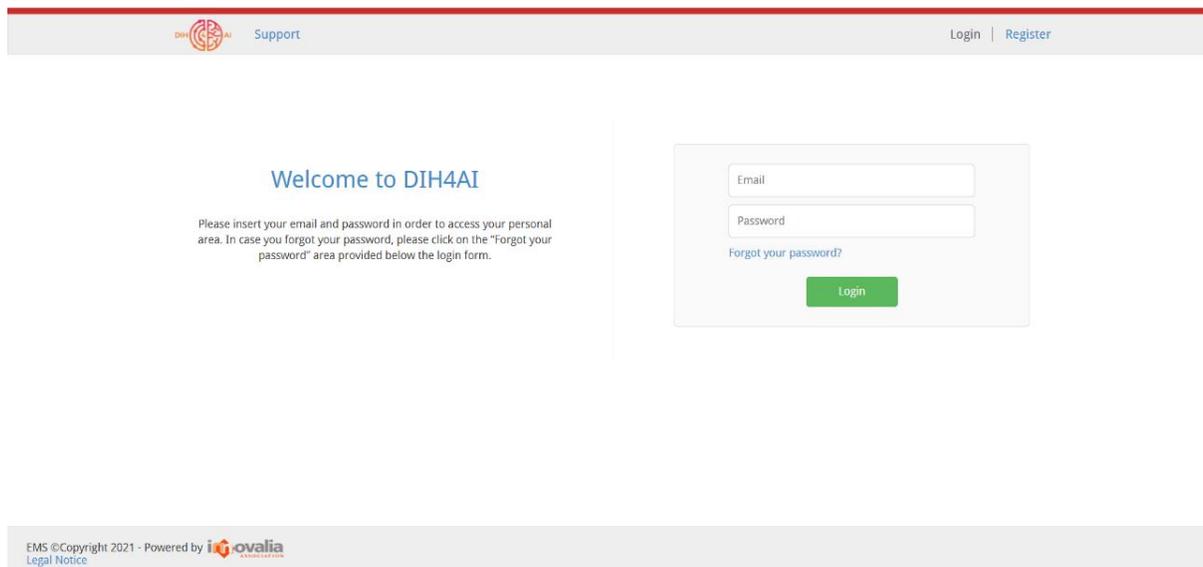
PROPOSAL EVALUATION PROCESS: Scoring

Points scored	Evaluation	Considerations
0	-	The proposal 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.
2	Fair	While the proposal broadly addresses the criterion, there are significant weaknesses.
3	Good	The proposal addresses the criterion well, although improvements would be necessary.
4	Very Good	The proposal addresses the criterion very well, although certain improvements are still possible.
5	Excellent	The proposal successfully addresses all relevant aspects of the criterion in question.

PROPOSAL EVALUATION PROCESS: Thresholds

Criterion	Priority, in case of a tie	Threshold for funding eligibility
Excellence and Innovation	2	3 out of 5
Impact, including Industrial relevance and Business strategy	1	4 out of 5
Implementation and Deployment of resources	3	3 out of 5

PROPOSAL SUBMISSION PROCESS



The screenshot shows the top navigation bar with the DIH4AI logo, a 'Support' link, and 'Login | Register' links. Below the navigation bar, there is a 'Welcome to DIH4AI' section with a message: 'Please insert your email and password in order to access your personal area. In case you forgot your password, please click on the "Forgot your password" area provided below the login form.' To the right of this message is a login form with fields for 'Email' and 'Password', a 'Forgot your password?' link, and a green 'Login' button. At the bottom left of the page, there is a footer: 'EMS ©Copyright 2021 - Powered by  Innovalia Legal Notice'.

I would like to submit proposals

Thank you for your interest in DIH4AI Open Calls. Please click on the box below in order to register as a proposer and be able to submit your proposal.

Register as a proposer

I would like to evaluate proposals

Thank you for your interest in evaluating proposals under DIH4AI Open Calls. Please click on the box below in order to register as an independent expert.

Register as an expert

The application will be done online, through the **EMS platform** by Innovalia:

<https://dih4ai.ems-innovalia.org/>

Find attached here all the information required for the application:

<https://www.dih4ai.eu/copy-of-open-calls>



PROPOSAL SUBMISSION PROCESS

General details
Technical proposal
Annexes
Submission

The application will be done online, through the **EMS platform** by Innovalia: <https://dih4ai.ems-innovalia.org/>

Find attached here all the information required for the application: <https://www.dih4ai.eu/copy-of-open-calls>

The screenshot shows the user interface of the DIH4AI EMS platform. At the top, there is a navigation bar with the DIH4AI logo, links for 'Support', 'Calls', and 'My area', and a user profile for 'Andrea Carcedo' with a 'Logout' button. Below the navigation bar, the breadcrumb trail reads 'My area > My proposals > New Proposal > General details'. A blue bar highlights the 'General details' section. A message states: 'Please make sure that you save all your changes before moving to a next section.' The main content area is divided into two sections: 'Proposal general details' and 'Details of the proposal relating to the selected call'. The 'Proposal general details' section contains two text input fields: 'Title' and 'Acronym'. The 'Details of the proposal relating to the selected call' section contains two dropdown menus: 'Call title' (set to 'DIH4AI OPEN CALL 1') and 'Thematic area' (set to 'Select a thematic area'). A blue 'Save' button is located at the bottom right of the form.



USEFUL RESOURCES AVAILABLE

[In our Project website](#), the following documentation is available in order to help applicants:

- Guide for Applicants
- Template for proposals
- Frequently Asked Questions document
- EMS User Guide
- Helpdesk module of the EMS Platform

Additionally,

- List of H2020 Associated Countries
- Ethics Guidelines for Trustworthy AI - European Commission (2019)

THANKS

For all the information on the Open Call 1, please visit [our Project website](#).

Alternatively, you may contact us via the [EMS Helpdesk](#).

Daniel Echebarria, R&D Project Manager, Innovalia Association

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ASSOCIATION

