



AI on-demand platform for regional interoperable DIHs Network

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DIH4AI Coordinator <https://www.dih4ai.eu/>



**Open Call #2 Webinar
November 25th 2022**



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

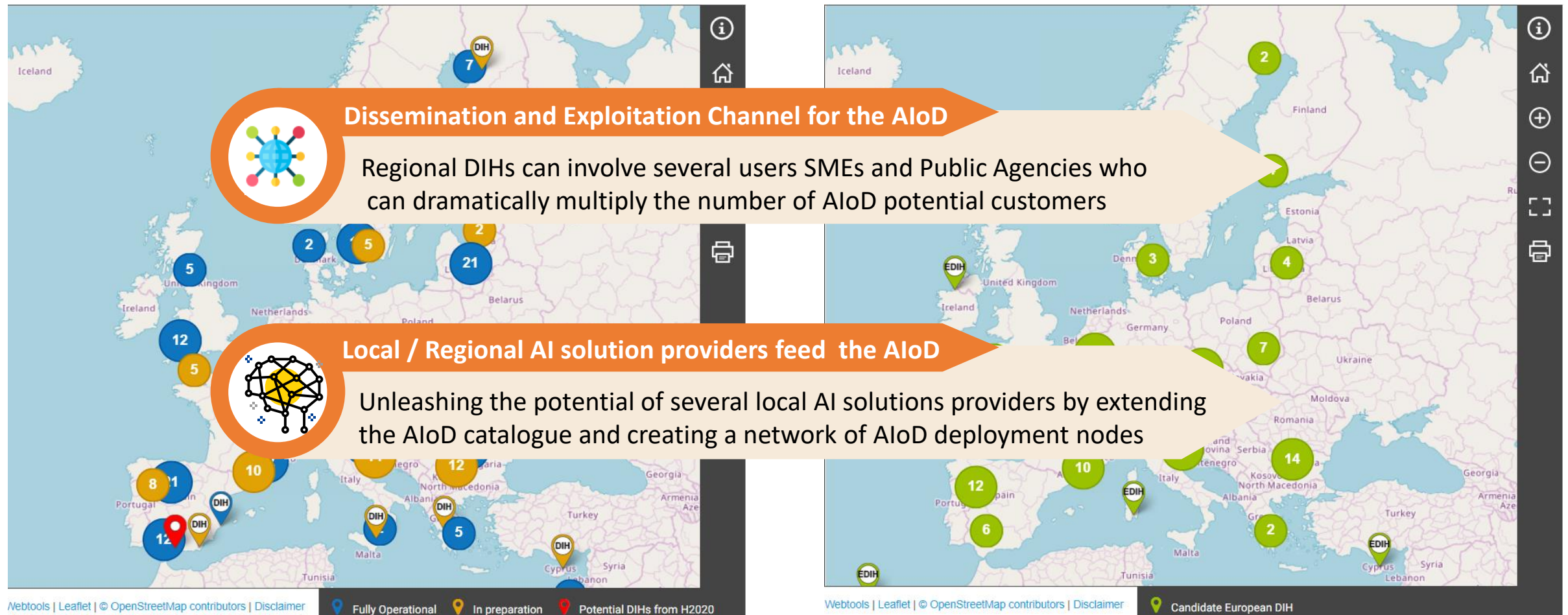
EXPERIMENTS: 20+ AI Best Services implementations

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



Regionalizing the AIoD: DIH Catalogue AI (E)DIH (434, 126)

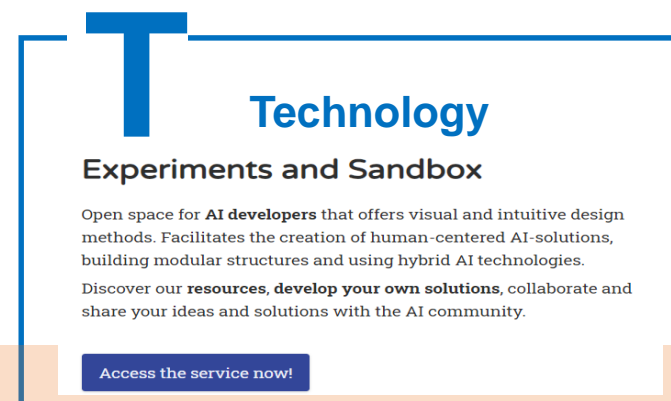
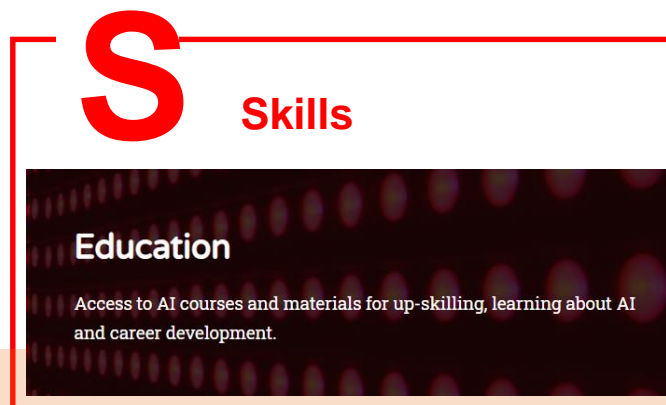
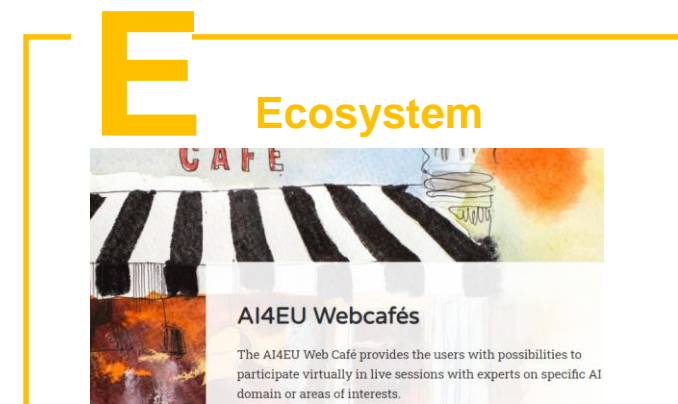
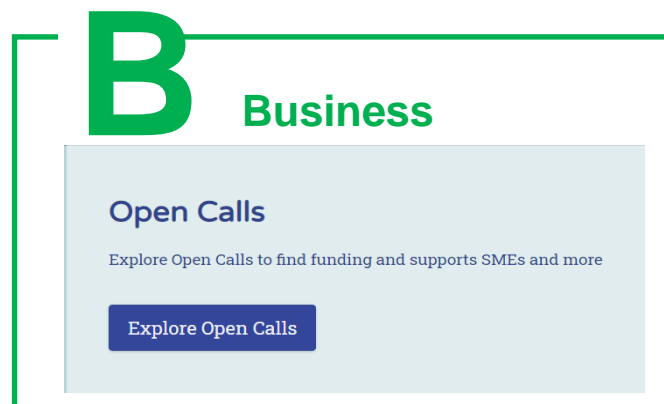
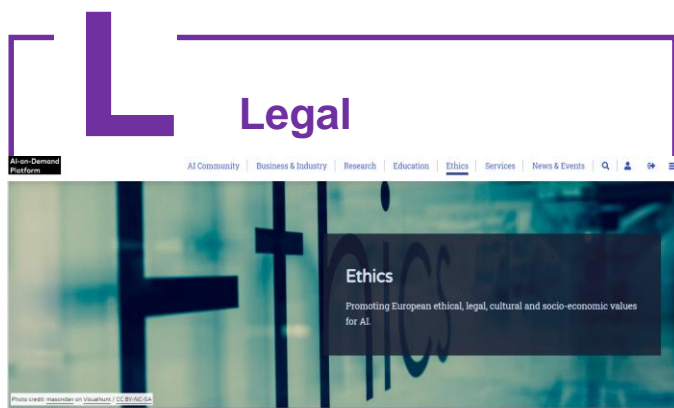
1. Be part of a **regional**, national or European policy initiative to digitise the industry;
2. Be a **non-profit** organisation;
3. Have a **physical presence** in the region and present an **updated website** clearly explaining the DIHs' services
4. Have at least **3 examples** of how the DIH has helped a company with their digital transformation



Servitise the AIoD Platform: L BEST



Developed an L-BEST 3-levels taxonomy of Services



CUSTOMER JOURNEY – TECHNOLOGY USER



OBSERVATION



Search Information

- Passive behaviour
- Access to proposed contents
- Come across the concept of I4.0 by chance

AWARENESS



Understand benefits and challenges

- Active behaviour
- Set targeted information
- Evaluate opportunities

EXPERIMENT



Proof of Concept

- Introduce new technologies
- Introduce new skills
- Access to technological and business opportunities

EXPERIENCE



Test the prototype inside company's facility

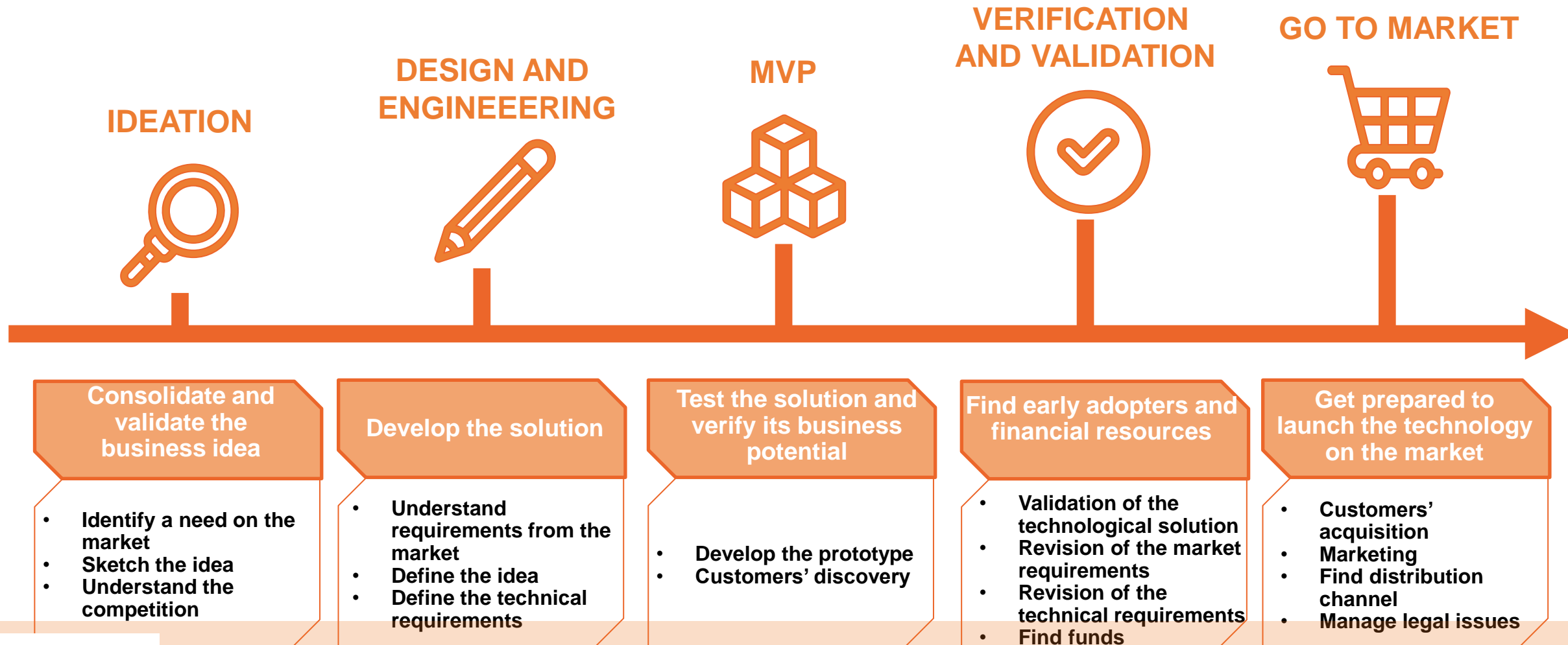
- Prototype testing in the company's environment
- KPIs analysis
- Organizational roadmapping



Decision of invest in the new technological facility

- Choice of technological adoption at company level
- New organizational models and schemas
- New business models

CUSTOMER JOURNEY – TECHNOLOGY PROVIDER



PIPELINE - TECHNOLOGY USER, DIGIHALL



OBSERVATION



AWARENESS



EXPERIMENT

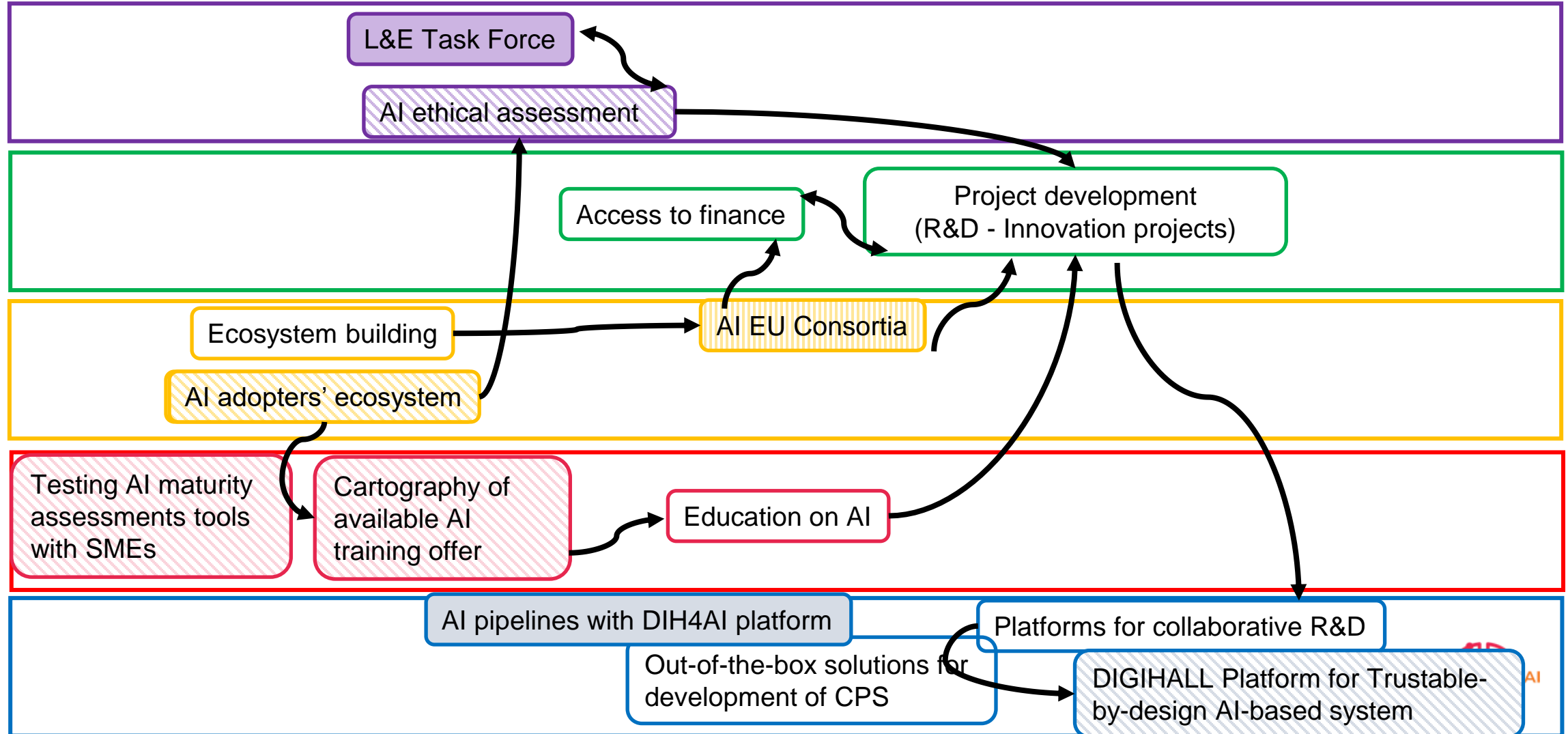


EXPERIENCE



ADOPTION

L
B
E
S
T



PIPELINE - TECHNOLOGY PROVIDER – South NL



IDEATION



DESIGN AND
ENGINEERING



MVP



VERIFICATION
AND VALIDATION



GO TO MARKET

L

B

E

S

T



Where we are
today

What we
want to
achieve



Data Coaches

Data Opportunities Scan

Pressure Cooker for collaborations

Supply chain collaboration (SCSN)

Future ecosystem services

Expert support for individual organizations

Blueprint for AI &
manufacturing

Data Sharing Testbed
(Gaia-X / IDS)

Federated
Learning Testbed

AI-on-demand playground
(AI4EU) via DIH4AI OC2

Application specific
testbeds (AAS/supply chain)



DIH4AI OC Outcomes Integration with the AloD Platform



The AloD Portal and the AI DIH pages

A concrete operational proposal was discussed in July 2021 TGB. Key point: integrating DIHIWARE into AloD platform (esp. AI Assets, Cases)

Regional Engagement - DIHs

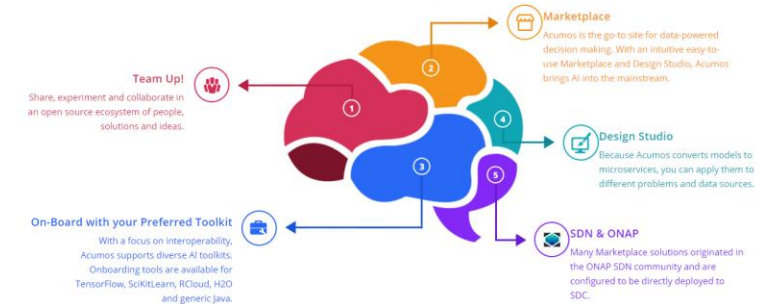
Digital Innovation Hubs support businesses and companies in their digital transformation and promote cooperation among them. To this end, a special focus is placed on AI to provide support for the preparation of upcoming policies and projects.



The AloD Experimental Facility and DIH AI Pipelines

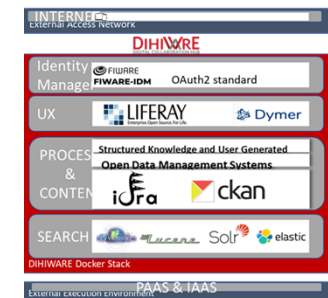
As part of their service pipelines, DIHs accompany their customers (AI users and/or providers) in the Design Studio and Assets Marketplace

Discover AI4EU Experiments



The AloD Platform and DIH-Europe Interoperability

Regional DIH platforms (DIHIWARE L1) as IDS Network nodes with AloD Catalog / Marketplace / Experiments Platform (portal data cloud, semi-automatic).



Funding Support to Third Parties – Call for Proposals

Total FSTP : 2 Million €

2 Open Calls – 1 Million € for each OC1 and OC2

Up to €100k lump sum funding for each Experiment (Innovation Action rules)

2st OC Opening: 17/10/2022

2st OC Closing: 16/12/2022

WEBINAR: NOV 25th 15:00 CET



Aims (20 additional experiments)

- AI Innovative applications experimentation in any domain of AI and Cognitive Science
- Support by local regional DIHs through the provision of (L) BEST Services (Pipeline)
- Active participation of technology users (SMEs or Public Organisations)
- Feasibility analysis of integration with AI4EU Platform and Catalogue

Objectives

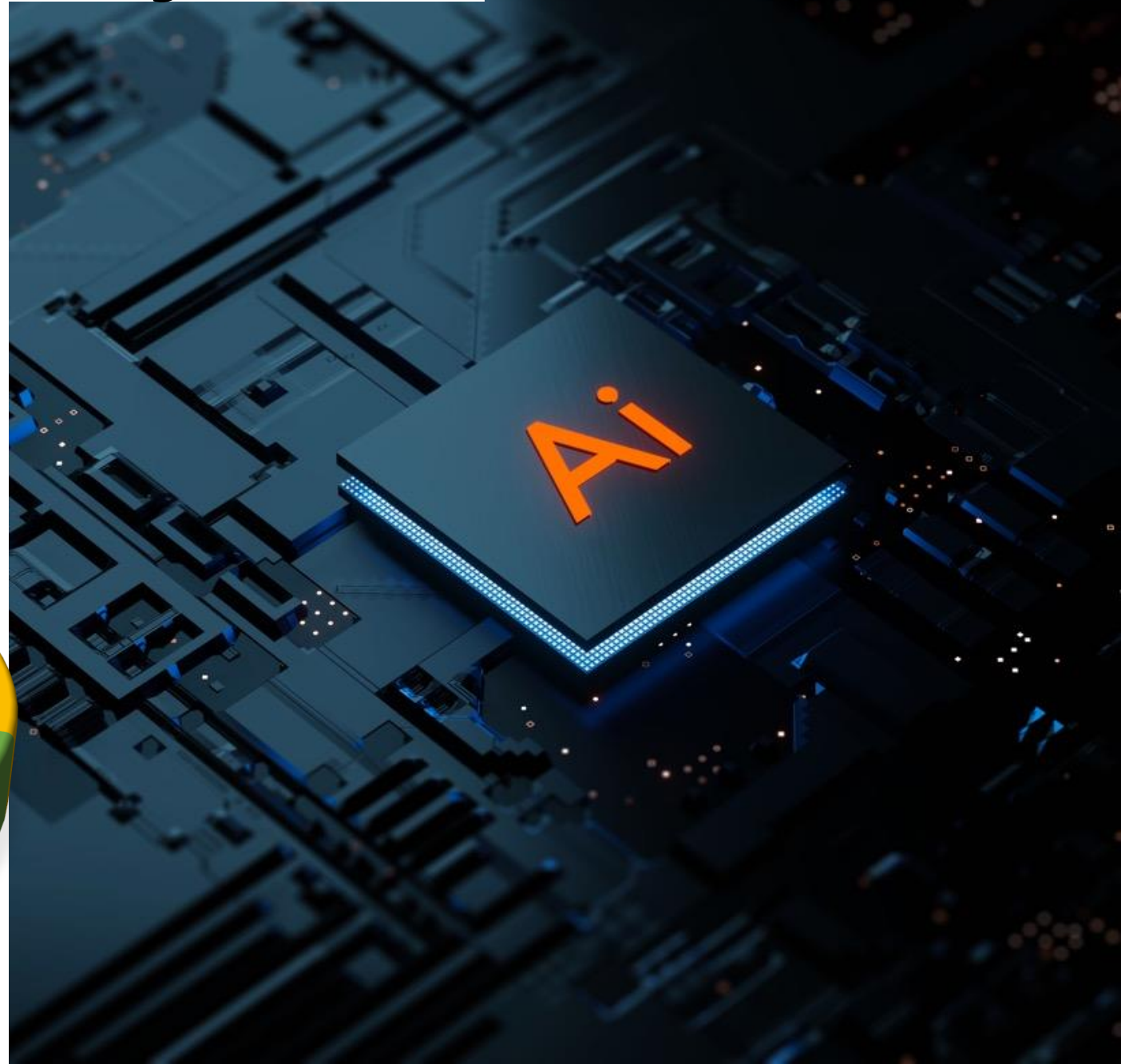
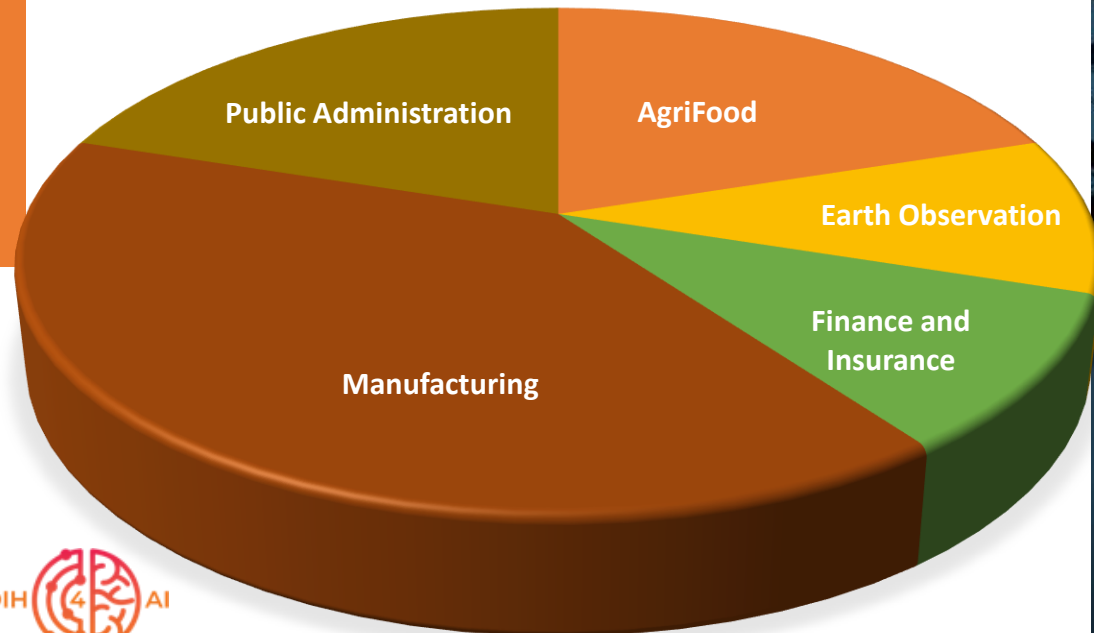
- Develop and Experiment highly innovative applications in any AI domain
- Test and Validate DIH (L) BEST Service Pipeline in the “AI Providers” [and “AI Users”] Customer Journeys
- Evaluate the feasibility of integration in the AI4EU Portal, Catalogue and Repositories



Open Call 1 funded Sub-Projects

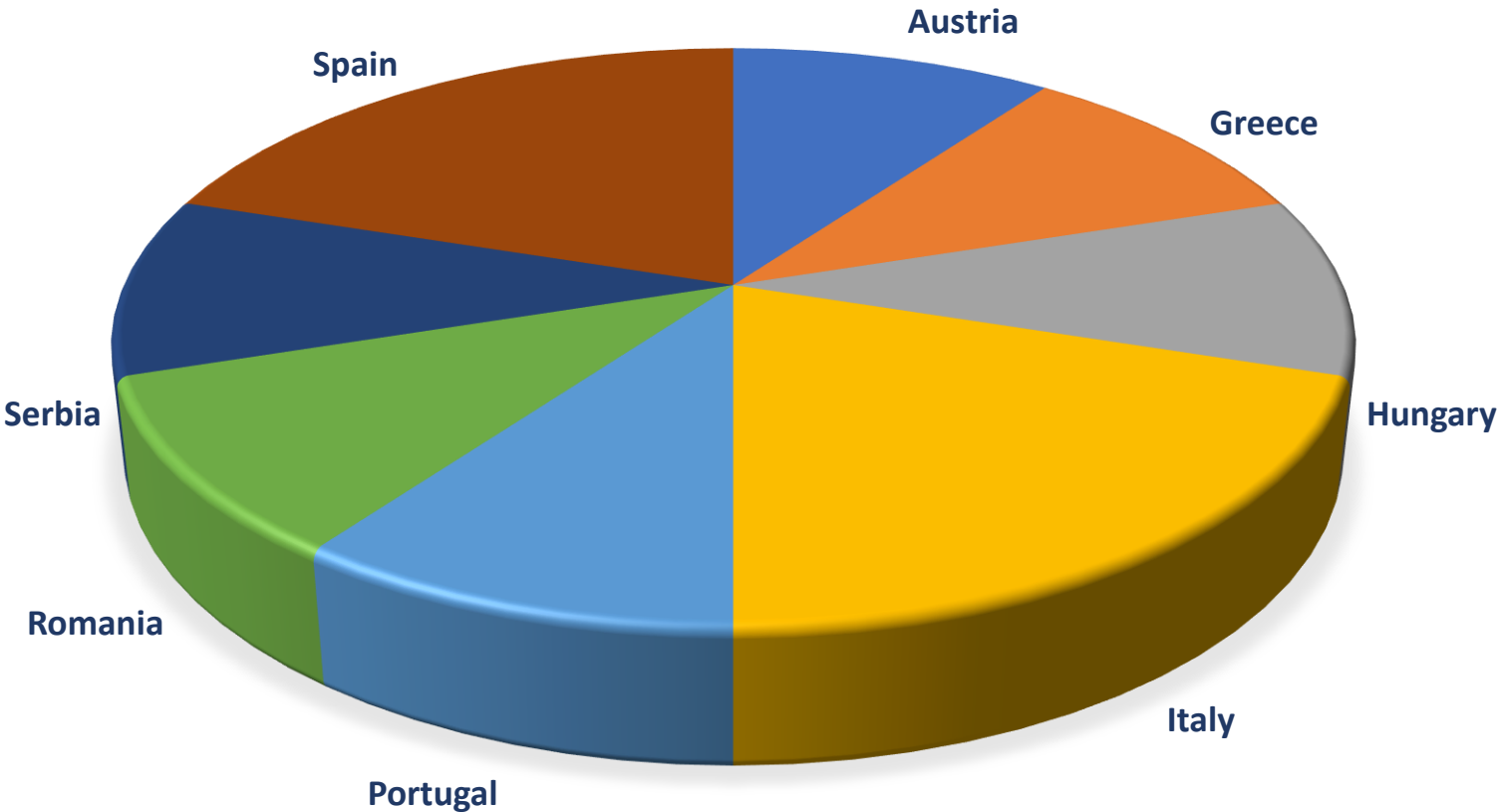
Distribution by vertical

Agri-Food	2
Earth Observation	1
Finance and Insurance	1
Manufacturing	4
Public Administration	2
Total	10



Open Call 1 Funded sub-Projects

Distribution by country	
Italy	2
Spain	2
Austria	1
Greece	1
Hungary	1
Portugal	1
Romania	1
Serbia	1
Total	10

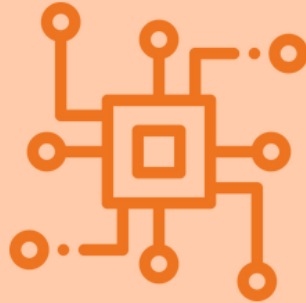


Funding Support to Third Parties – Call for Proposals

Technological topics

The technological topics in the scope are related to Artificial Intelligence use at large, examples are:

- *Vision Intelligence*
- *Machine and Computer Vision*
- *Machine Learning and Deep Learning*
- *Neural network applications*
- *Advanced Planning and Forecasting*
- *Natural Language Processing*
- *Machine Translation*
- *Multi-Modal Human-AI Interaction*
- *Knowledge Representation and Reasoning*
- *Expert and Decision-Support Systems*



Sectors

Application areas in scope are:

- *Agrifood*
- *Earth Observation*
- *Finance and Insurance*
- *Manufacturing*
- *Public Administration*
- *Energy*



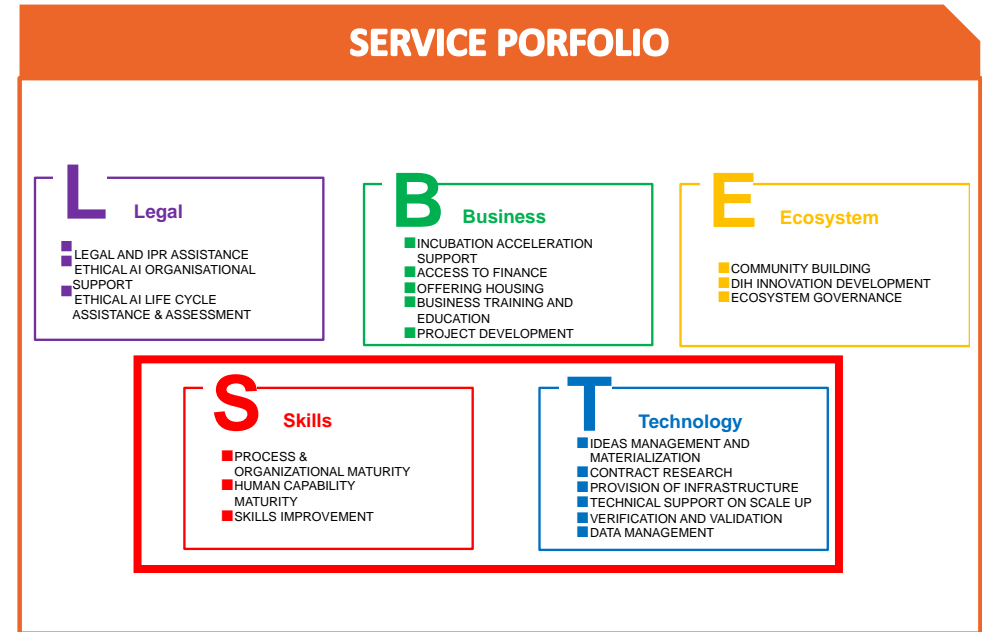
Funding Support to Third Parties – Call for Proposals

TWO KINDS OF EXPERIMENTS

Type A: Intra-Regional Skills-Technology Experiment

Mini-consortia formed by **2-3 partners**:

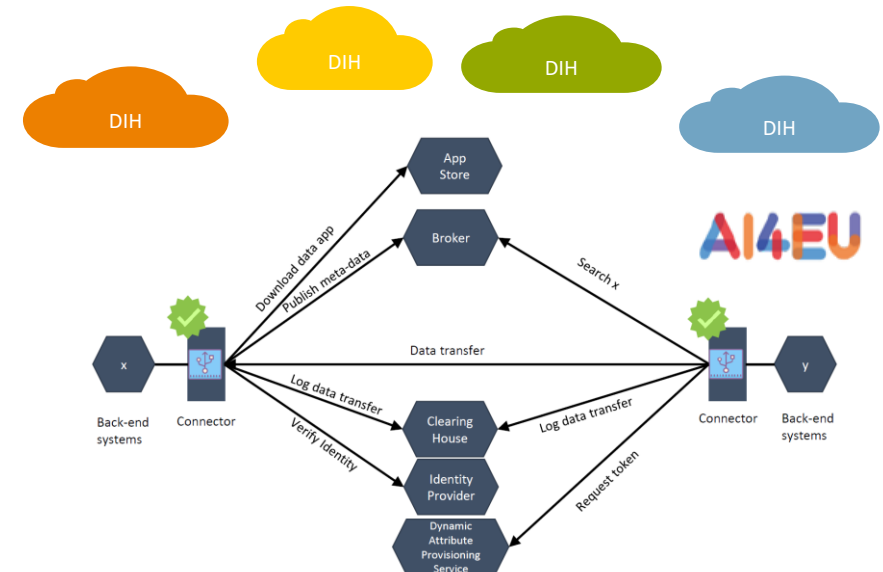
- an AI technology provider SME (who leads the Experiment)
- its regional DIH (operational in AI from the JRC Catalogue)
- optionally, an end user SME or a Policy Maker can complete the mini-consortium



Type B: cross-Regional Skills-Technology Experiment

Mini-consortia formed by **3 partners**:

- an AI technology provider SME (who leads the Experiment),
- its regional DIH (operational in AI from the JRC Catalogue)
- and a second DIH (operational in the JRC Catalogue) as testing and experimental facility



THANKS

Follow the project
updates



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



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

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DIH4AI Open Calls: OC2
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*Miriam García, R&D Project Manager,
Innovalia Association*



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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04

TIMELINE FOR OC2

05

USEFUL RESOURCES AVAILABLE

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 and closed on 31/01/2022

2nd OC opened on 16/11/2022 → proposals admitted until 16/12/2022

OBJECTIVES OF THE DIH4AI OPEN CALLS



Foster innovative experiments

In any AI domain

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

Funding Support to Third Parties



Type A: Intra-Regional Skills Technology Experiment

- Mini-consortia formed by 2-3 partners:
- An AI technology provider SME leads
 - A regional AI DIH (from the JRC Catalogue)
 - Optionally, a user SME or a Policy Maker

Type B Cross-Regional Skills Technology Experiment



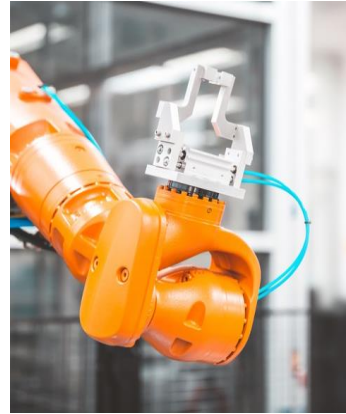
- Mini-consortia formed by 3 partners:
- An AI technology provider SME leads
 - A regional AI DIH (from the JRC Catalogue)
 - A second DIH (from the JRC Catalogue) as testing and experimental facility

MAIN TOPICS

Public Administration



Manufacturing



Finance and insurance



Earth observation



Agri-food



Energy



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-A
INTERACTION**



**KNOWLEDGE
REPRESENTATION**



**EXPERT AND
DECISION SUPPORT
SYSTEMS**



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USEFUL RESOURCES AVAILABLE

WHO CAN APPLY FOR OPEN CALL 2: Basics

- ✓ **Applicants must be legal entities** established in countries eligible for participation in **EC H2020 projects** (H2020 General Regulations apply, in terms of [countries of origin](#)).
- ✓ Applicants need to be registered and **have a Participant Identification Code (PIC)**.
- ✓ DIH4AI beneficiaries or their subsidiary or parent companies cannot apply to this call.
- ✓ **The Experiments must be led by a Tecnology Provider SME or start-up** with knowledge and background on the AI domain.
- ✓ **The participation of, at least, one DIH is mandatory** in each mini-consortium who is allowed to apply for OC2, along with, maximum, 2 other participants
- ✓ **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.**
- ✓ **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.
- ✓ DIHs should, from the writing of the proposal, envisage the development and provision of services within the experiment, with a strong focus on supporting the SME or start-up in the fields of: Training and Skills Development and Technical Scouting and Mentoring (“S” and “T” categories, respectively, of the DIH4O L-BEST Service Portfolio)



Am I
eligible?

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USEFUL RESOURCES AVAILABLE

WHO CAN APPLY FOR OPEN CALL 2: 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 2: “Regional DIH”

- ✓ The term “Regional DIH” is being extensively used along the Guide for Applicants and other relevant documentation for the OC2. 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 2, in representation of that DIH.



WHO CAN APPLY FOR OPEN CALL 2: Role of DIH(s)

- ✓ 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.
- ✓ 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.
- ✓ This support may be translated into the delivery of L-BEST services
- ✓ The collaboration among SMEs and DIHs should, in general, stress the provision of services regarding Skills Development and Technology Scouting and Mentoring.



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USEFUL RESOURCES AVAILABLE

TIMELINE

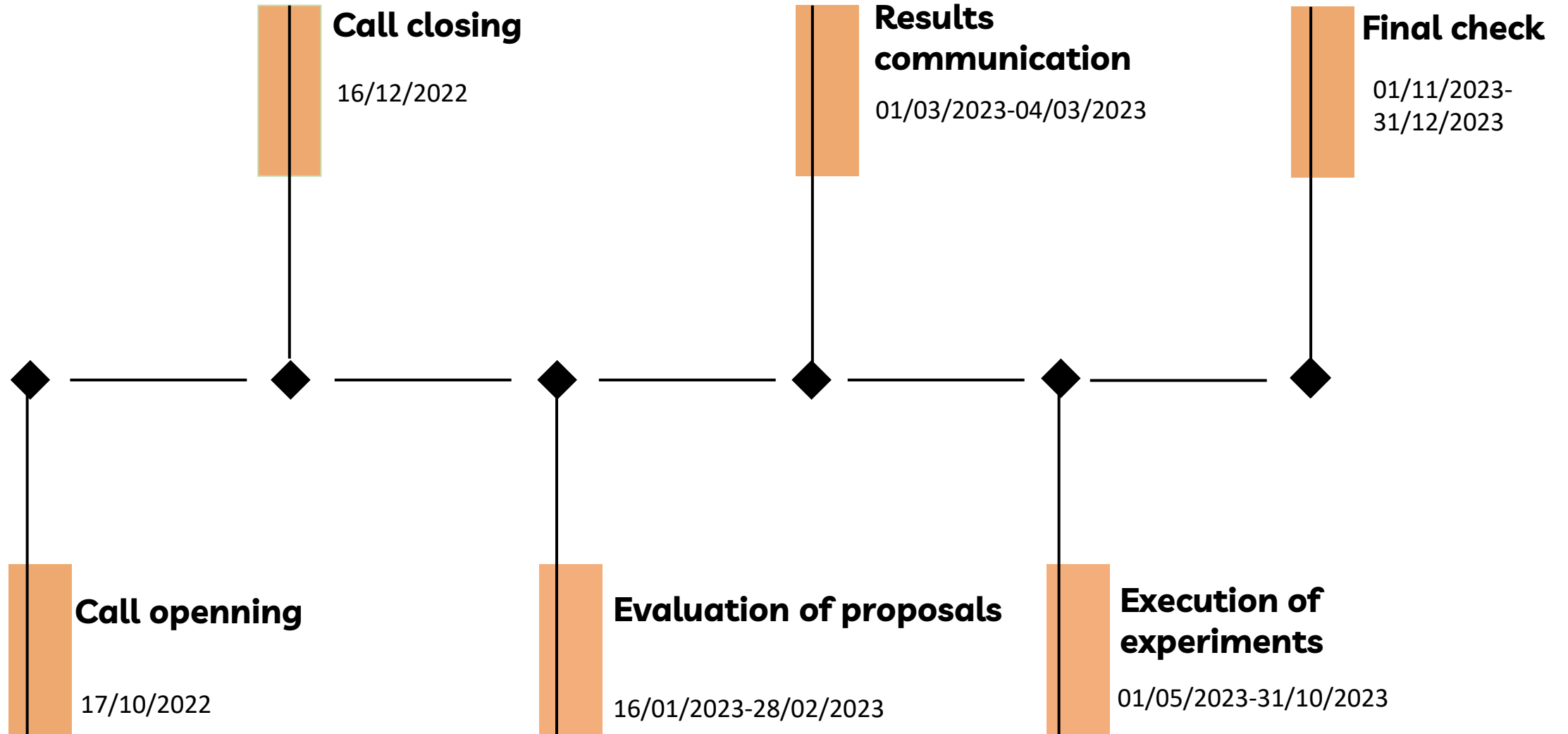


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**USEFUL RESOURCES AVAILABLE &
USEFUL INFORMATION (EMS)**

USEFUL RESOURCES AVAILABLE

In our Project website: (<https://www.dih4ai.eu/open-call-2>)

The following documentation is available in order to help applicants:

- ☐ **Guide for Applicants** (inside you find the **Template for proposals**)
- ☐ **Frequently Asked Questions document**
- ☐ **EMS User Guide**
- ☐ **Helpdesk module of the EMS Platform**
- ☐ **Resources (presentation + recorded webinar)**

Additionally,

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



PROPOSAL PREPARATION: [suggested template](#)

- ✓ The following parts are considered very important for the elaboration of a proposal:
 - ❖ Summary (≈0,5 pages suggested)
 - ❖ Concept (≈3 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 (≈0,5 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.
- ✓ **Proposals must be written in English**



PROPOSAL PREPARATION: SME-DIH contractual framework

- ✓ The type 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.



PROPOSAL SUBMISSION PROCESS

Objectives

The DIH4AI project will select **up to 10 SME-centered experiments** focused on developing **new AI solutions**, to extend the AI4EU platform.

The **selected consortia** will receive **up to EUR 100,000**.

DIHs will provide support to SMEs to test and experiment.

Submit your proposal for the second Open Call!

HERE

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>

EMS ©Copyright 2021 - Powered by Legal Notice

Welcome to DIH4AI

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.

Email

Password

[Forgot your password?](#)

Login

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

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 'General details' page of the DIH4AI EMS platform. The top navigation bar includes the DIH4AI logo, 'Support', 'Calls', 'My area', and a user profile for 'Andrea Carcedo' with a 'Logout' link. The breadcrumb trail is 'My area > My proposals > New Proposal > General details'. A blue header bar contains the text 'General details'. Below this, a message states: 'Please make sure that you save all your changes before moving to a next section.' The main form area is titled 'Proposal general details' and contains two sections. The first section has fields for 'Title' and 'Acronym'. The second section, titled 'Details of the proposal relating to the selected call', contains a 'Call title' dropdown menu (currently showing 'DIH4AI OPEN CALL 1') and a 'Thematic area' dropdown menu (currently showing 'Select a thematic area'). A blue 'Save' button is located at the bottom right of the form.

PROPOSAL EVALUATION PROCESS: Basics

- ✓ The evaluation will be mixed: both internal and external to the DIH4AI Consortium.
- ✓ 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.
- ✓ 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.



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 2nd 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



TECHNICAL DEVELOPMENT AND REPORTING

Status of experiment development	Timing	Experiment deliverables
Experiment Milestone 1	M2 of the experiment execution	D1 <ul style="list-style-type: none">- Technical specifications, Architecture and Data Pipeline definition- Detailed Plan for Experiment Implementation, Integration and Testing
Experiment Milestone 2	M6 of the experiment execution	D2 <ul style="list-style-type: none">- Experimentation description and measurement of the Technical and Business KPIs- Detailed Dissemination activities and Exploitation Plan
Experiment Milestone 3	M8: Deployment and Exploitation	D3 <ul style="list-style-type: none">- Final Dissemination, Communication and Exploitation material (The deliverables and progress are approved by the DIH4AI evaluation team)

- ✓ 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.
- ✓ **The solutions 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](#).



THANKS

For all the information on the Open Call 2,
please visit [our Project website](#).

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

&

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Miriam García, R&D Project Manager, Innovalia Association

