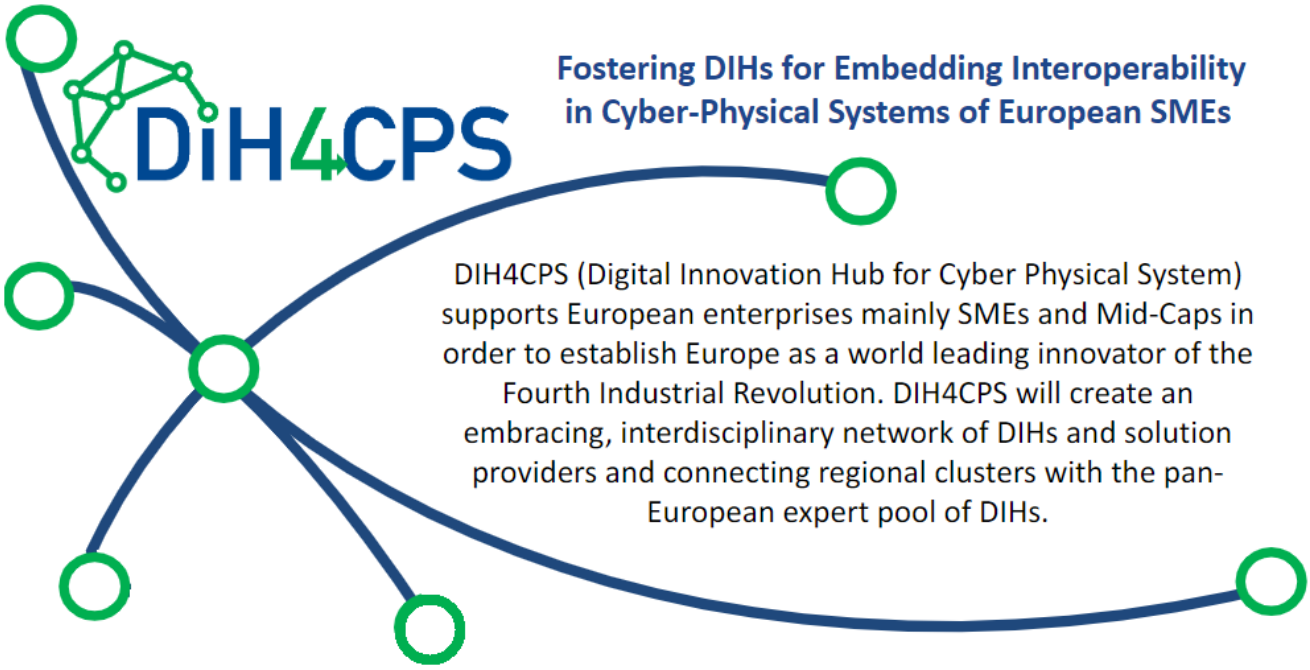
Welcome

Fostering DIHs for Embedding Interoperability in Cyber-Physical Systems of European SMEs



“The objective of this survey is to gather the set of services among DIH4CPS network. This will allow us to define our services Catalog and identify the different competences and skills that we have in our network. To do so, we will apply the Ecosystem-Technology-Business-Skills-Data (ETBSD) Model that defines macro-classes of services. In the next pages, we will propose you the set of classes of services identified by the ETBSD. Please check relevant ones you are offering and feel free to add other services if needed. We count on you!”

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Duration: 36 months
Maximum grant: 7.999.333,75 €
EC funding: 100 %
Grant Agreement: 872548

www.dih4cps.eu

Project Coordinator:
Ricardo Gonçalves - UNINOVA

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Contact Details

1 Contact details

Name *

Email Address *

Phone Number

2 Partner Information

Company *

Address

Address 2

City / Town

Country *

Website

3 Partner Short description

4 Partner mission

- [ ] Digital Innovation Hub
- [ ] Competence Center
- [ ] Academic Partner
- [ ] Technology Provider
- [ ] Small Medium Enterprise
- [ ] Research Technology Organization

Other (Please Specify)

5* Partner role in the project

- [ ] Digital Innovation Hub
- [ ] Competence Center
- [ ] Academic Partner
- [ ] Technology Provider
- [ ] Small Medium Enterprise
- [ ] Research Technology Organization
- [ ]

Other (Please Specify)

6 If you are involved in an IAE, please choose which one is it.

- [ ] IAE 1
- [ ] IAE 2
- [ ] IAE 3
- [ ] IAE 4
- [ ] IAE 5
- [ ] IAE 6
- [ ] IAE 7
- [ ] IAE 8
- [ ] IAE 9
- [ ] IAE 10
- [ ] IAE 11
- [ ] We are not involved in any IAE

Ecosystem Class

Ecosystem Services aim at creating, nurturing, expanding and connecting the local SME constituency, involving in the SME digital transformation process different stakeholders as technology providers, technology users, competence centers, education and training hubs, business and market development experts, regional development agencies and associations.

7 What are the services provided by your organization?

If you have service catalog please give the link here

If you do not have a service catalog and that you have identified a set of services please copy/paste them here

Other, please specify.

8 How do you help organizations in developing innovation?

- [ ] Providing up to date information on the trends in the market
- [ ] Assessing market potential
- [ ] Sharing best practices experiences
- [ ] Supporting customers in shaping their vision and strategies as well as remaining competitive in the marketplace
- [ ] Using trend intelligence platforms
- [ ] Providing trend reports
- [ ] Inviting experts in business and entrepreneurship to give talks and interact with (potential) customers and partners
- [ ] We do not help organizations in developing innovation

Other (Please Specify)

9 **How do you manage technology scouting?**

- [ ] Scouting of technologies and their proposal to companies
- [ ] Using of technology scouting platforms
- [ ] Identifying emerging technologies
- [ ] Communicating technology related information to organizations
- [ ] N/A

Other (Please Specify)

10 **How do you encourage collaborative innovation and problem solving?**

- [ ] Organizing challenges
- [ ] Providing awards
- [ ] Offering innovation spaces to encourage innovators and other ecosystem members to interact and share ideas
- [ ] N/A

Other (Please Specify)

11 **Which kind of events do you organize to connect the members of your ecosystem?**

- [ ] DIH annual event
- [ ] Industrial events
- [ ] Academic conferences and workshops
- [ ] Sectorial fairs
- [ ] Online events

If other, please specify the kind of event you organized

Please, put the list of events that you have organized in the past.

12 **Which kind of events do you attend to connect the members of your ecosystem?**

- [ ] DIH annual event
- [ ] Industrial events
- [ ] Academic conferences and workshops
- [ ] Sectorial fairs
- [ ] Online events

If other, please specify the kind of event you attended

Please, put the list of events that you have attended in the past.

13 **How do you assess the services provided to your ecosystem?**

- [ ] Developing KPI allowing to assess the performance of the provided services
- [ ] Using defined methods to evaluate the impact of the services delivered
- [ ] Defining guidelines and/or checklists for service assessment
- [ ] N/A

Other (Please specify)

14 **As part of an ecosystem, how are you managing your relationships?**

- [ ] Defining Intellectual Property (IP) rules
- [ ] Defining rules on how to manage internal collaborations
- [ ] Defining rules on how to engage external users

Other (Please Specify)

Technology Class

The services related to this class aim at following the whole lifecycle of digital technologies from conception and idea generation, through design and proof of concept, up to minimum viable product prototyping to commercialisation. They can be interpreted from the technology providers viewpoint and from the technology users viewpoint, through the steps of access-experiment-experience spiral model.

15 How do you support ideas management in the conceptual phase?

- [ ] Generating and assessing new ideas
- [ ] Using concept generation method
- [ ] Using concept evaluation method
- [ ] Conducting feasibility studies
- [ ] Conducting technology Readiness assessments on products/solutions developed by start-ups and SMEs
- [ ] Do not support ideas management at conceptual phase

Other (Please Specify)

16 How do you support research and technology at development phase ?

- [ ] Demonstrating the feasibility of an idea or project through its temporary or provisional realisation
- [ ] Developing proof of concepts
- [ ] Supporting the translation of innovative ideas into demonstrable concepts
- [ ] Applying technological innovation to develop new products/services or to improve existing ones
- [ ] Planning and defining new business services solutions
- [ ] Do not support research at development phase

Other (Please Specify)

17 How do you provide technical support on scale up?

- [ ] Developing minimum viable products that can be validated with real customers and/or in industrially relevant setting
- [ ] Designing prototypes to explore ideas and emerging technologies before going into production
- [ ] Supporting the exploration of ideas and emerging technologies
- [ ] Do not provide technical support on scale up

Other (Please Specify)

18 How do you provide access to infrastructure and technological platforms?

- [ ] Renting equipment
- [ ] Providing platform technology infrastructure
- [ ] Providing access to Lab facilities
- [ ] Providing infrastructure and support for low rate production
- [ ] Do not provide access to infrastructures and platforms.

Other (Please specify)

19 How do you support the verification of the products?

- [ ] Support in certifying that the product has passed functional tests
- [ ] Support in certifying that the product has passed performance tests
- [ ] Support in certifying that the product has passed quality assurance tests
- [ ] Do not support the verification of the products

Other (Please Specify)

20 How do you support product demonstration?

- [ ] Promoting showrooms and demo-cases in which a product is demonstrated in front of clients
- [ ] Organizing and promoting events where a product is demonstrated in front of clients
- [ ] Organizing and promoting online product demonstration
- [ ] Do not support product demonstration

Other (Please Specify)

Business Class

Business Services intervene in more advanced scenarios (with higher TRL solutions), identifying, modelling and sustaining viable business models, including also fund raising services (e.g. private matchmaking or access to public funding opportunities).

21 How do you support incubation acceleration?

- [ ] Providing access to physical infrastructure (offices, café, meeting rooms, laboratories, co-working areas, libraries, etc.)
- [ ] Providing access to telecommunication infrastructure and video conferencing
- [ ] Coaching and mentoring of entrepreneurs with dedicated programmes (innovation funnel, scenarios communication and business assessment..)
- [ ] Providing access to high powered computing
- [ ] Offering fiscal and/or legal advice
- [ ] Offering regulatory assistance
- [ ] Providing access to data ecosystem
- [ ] Providing back office services (adminitrative, secretary services, etc.)
- [ ] N/A

Other (Please Specify)

22 How do you support access to finance?

- [ ] Providing support in addressing financial issues
- [ ] Providing advice on innovative financial products
- [ ] Facilitating access to different funding sources (EU, national, regional, and private)
- [ ] Facilitating access to an effective mix of funds (conversation, lobbying, projects)
- [ ] N/A

Other (Please Specify)

23 **How do you support Business training and education?**

- [ ] Providing training and development in business skills and entrepreneurship (e.g. formal courses, workshops, seminars)
- [ ] Facilitating the exchange of personnel (e.g. researchers) and core competences among organisations, including IPR
- [ ] Orienting partners to the needed training organization
- [ ] We do not support business training and education

Other (Please Specify)

24 In which pilot areas can you provide support in the definition of KPIs to improve companies business?

25 **How do you support project development?**

- [ ] Supporting the identification of new market/business opportunities through strategic analysis of the ecosystem and trend watching
- [ ] Encouraging cooperation and collaboration among organisations for exploiting common opportunities (e.g. business, research, funding, match-making, open innovation)
- [ ] Providing technical assistance in the proposal development process in order to comply with specific proposal requirements (e.g. for project funding)
- [ ] N/A

Other (Please Specify)

Skills Class

Skill services have a twofold aim. The first is to assess the *status quo* of the companies that want to approach digitization, in terms of both process/organization and skills maturity, and to set an adequate roadmap to empower it. The second is to support the skill empowerment through not only educational programmes, up-skilling and re-skilling training but also sharing channels, structure contacts and collaborations for scouting and brokerage aimed at knowledge-transfer

26 How do you support Process and Organizational Maturity?

- [ ] Assessing the maturity companies, e.g: assessment of company readiness for Industry 4.0
- [ ] Defining a roadmap based on the maturity model assessment
- [ ] N/A

Other (Please Specify)

27 How do you support human capabilities maturity?

- [ ] Assessing human skills maturity (e.g. regarding skills in Industry 4.0)
- [ ] Analysing the gap between the AS-IS and the desired level of Industry 4.0 skills
- [ ] Defining action plan and support in implementing the desired level of Industry 4.0 skills
- [ ] N/A

Other (Please Specify)

28 How do you support skills improvement?

- [ ] Organizing dedicated human up-skilling, re-skilling trainings, courses and workshops
- [ ] Defining educational programs allowing to attract and form next generation talents (forming Industry 4.0 employees and workers)
- [ ] Supporting knowledge-transfer through internal channels, structure contacts and collaborations
- [ ] N/A

Other (Please Specify)

Data Class

Data services are pivotal for adequately exploit digital technologies potentialities. An organization can provide services dealing with different phases of the data lifecycle: from data acquisition and sensing, through data processing & analysis, up to decision-making and data sharing, not neglecting aspects as physical-human action & interaction

29 How do you support data acquisition and sensing

- [ ] Supporting data acquisition through data in Motion Models and Services for Industrial Internet of Things
- [ ] Supporting data anonymization, confidentiality, encryption and privacy preservation services
- [ ] N/A

Other (Please Specify)

30 How do you support data processing and analysis

- [ ] Providing data Spaces, Data Lake, Linked Data, Distributed Storage, Knowledge representation services
- [ ] Providing data analytics services: semantic analysis, Data discovery, Advanced Data Analytics (Edge Analytics, Cloud Analytics) services
- [ ] N/A

Other (Please Specify)

31 How do you support data driven decision-making?

- [ ] Configuring and deploying architectures for Big Data
- [ ] Providing and developing decision support services: cognition, prediction and prescription, simulation, machine learning, reinforcement, DNNs, formal logics
- [ ] N/A

Other (Please Specify)

32 How do you support physical-human action and interaction?

- [ ] Providing support/consultancy services for human-Machine Interface, Human-Robot Interaction, Human-Data Interaction, Multi-lingual AI
- [ ] Providing support/consultancy services for user experience and navigation
- [ ] Providing support/consultancy services for feedbacks loop (control/Actuation, Cognitive Mechatronics, Question Answering)
- [ ] N/A)

Other (Please Specify)

33 How do you support data sharing?

- [ ] Providing support/consultancy services in GDPR and Data Sovereignity compliance
- [ ] Providing support in modeling data and ontologies for Trusted and Secure Data Exchange
- [ ] Supporting and providing hardware and Software architectures and components, Connectors services
- [ ] N/A

Other (Please Specify)

Networking & Interoperability

DIH4CPS will create an embracing, interdisciplinary network of DIHs and solution providers and connecting regional clusters with the pan-European expert pool of DIHs. The following questions will help us in identifying service offers and needs and depicting potential collaborations within the network through matchmaking mechanisms.

34 **What are the services you would like to offer to the DIH4CPS network?**

35 **What are the services you would like to have from the DIH4CPS network?**

36 **What do you want to get from the DIH4CPS navigation interface?**
In detail, DIH4CPS will provide an intelligent navigation interface for its enrolled members and potential customers. SME's and DIH's can use this interface to search for different things that are available in the network. Companies that are looking for collaboration partners, need assistance on a specific task or want to make use of a complex technology can use it to find the partners with matching experiences, competencies, technologies and services. The underlying data model will enable to make very specific searches that, e.g. are focussed on certain domains, sectors or geographical limitations. The DIH4CPS Network Navigation Interface will therefore help to exploit and manage the resources available within the DIH4CPS network and make them accessible and visible for all partners and potential customers.

37 **If you have comments, please feel free to write them here.**

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