D1.5: Identification of existing CCs and DIHs for building the network – *Final version*

WP1 – Competence Centres and Technical Expertise Management

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Document Information

G.A. No.	825395	Acronym	agROBOfood
Full Title	Business-Oriented Support to the European Robotics and Agrifood Sector, towards a network of Digital Innovation Hubs in Robotics		
Horizon 2020 Call	DT-ICT-02-2018: Robotics - Digital Innovation Hubs (DIH)		
Type of Action	Innovation Action		
Start Date	1st June 2019	Duration	48 months
Project URL	https://agrobofood.eu/		
Document URL	-		
EU Project Officer	Jan Hückmann		
Project Coordinator	Kees Lokhorst		
Deliverable	D1.5: Identification of existing CCs and DIHs for building the network – Final version		
Work Package	WP1 – Competence Centres and Technical Expertise Management		
Date of Delivery	Contractual	M30	Actual	M33
Nature	Report	Dissemination Level	Public
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Keywords	DIH, Competence Centres, Agrifood technologies, robotic applications in agrofood sector, uptake of innovative robotics solutions in agriculture and food industries		

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Document History

Version	Issue Date	Stage	Changes	Contributor
1.0	05/02/2022	Draft	First draft	CEA
1.1	17/02/2022	Final	Minor Editing	CEA

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Executive summary

Project summary

This document is presenting deliverable D1.5 which is the last updated version of the series of D1.3 and D1.4. It is meant to provide the last version of the consortium's efforts for the identification of existing CCs and DIHs for building the network. In retrospect, this would rather fit more appropriately efforts for maintaining, stimulating, rejuvenating and extending the network's membership when appropriate and where needed. This last version D1.5 includes most of the content presented in D1.4 but updated and modified where necessary. All paragraphs given in a highlighted box such as this current paragraph are newly added in this last version. Other parts of the text are either unchanged or very slightly modified/updated.

All diagrams have been updated with the latest data taken from the network's existing membership as of January 2022.

European Commission's ambitious digital transformation strategies including its first pan-European Digital Europe Programme (DEP) for 2021-2027, the envisioned new network of the European Digital Innovation Hubs (EDIH), as well as the cohesion policy "interregional innovation investments" are complementary elements whose successes *heavily rely on effective cross sectorial and cross regional collaborations and synergies among the various key players in the public and the private* sectors in and across the member states.

AgROBOfood is dedicated to accelerating the digital transformation of the European agri-food sector through the adoption of robotic technologies. It has aimed at consolidating, extending and strengthening the current ecosystems by establishing a sustainable network of Digital Innovation Hubs (DIHs) and connecting myriad stakeholders (innovative companies, universities, research centres, etc).

The value proposition expected from the network is therefore oriented towards fostering the sharing of information, facilities, and best practices for an effective adoption of robotic technological concepts in the agri-food sector and for demonstrating their applicability under practical circumstances, in order to increase the sector's productivity and sustainability. AgROBOfood is characterized by a multi-stakeholder ecosystem. The consortium has 38 partners from 19 different countries, led by Wageningen University & Research. Both the SMEs receiving the anticipated services as well as the DIHs and CCs providing these will share value proposition which are inherent in the initial idea of creating the DIH networks in various domains. The DIHs and CCs taking part in the network will have a unique access to new problems, new challenges, cross-sectorial training and information sharing which will allow them to better develop and position themselves for taking effective roles in their eco-systems for facilitating the take up of robotics in agri-food sector.

Deliverable summary

In this deliverable 1.5, which updates *and finalises* D1.4 submitted in April 2021, the goal is to illustrate a complete picture of the existing asset in the network in terms of Digital Innovation Hubs (DIH), Competence Centres (CCs) and other enterprises (largely SMEs) at the time of writing of the deliverable (January 2022).

It is intended to use the networks' key characteristics pertinent to the ambitions of agROBOfood and to provide a complete and illustrative description of what exists at the time of preparing this document. In addition to updating D1.4, such an illustration can help structure and prioritize further actions of WP1 but also tasks within WP2, WP6. The current asset[1] is therefore illustrated using various parameters such as regional spread, application sectors, and robotics' main technology availability.

[1] based on the network's membership catalogue V73 dated January 2022

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This exercise can be repeated continually depending on the sustainability scenarios to be adopted for agROBOfood into the future. It should be considered for further elaborations and implementations in close connection with the needs assessment exercise (D6.1), white-spot analysis (D1.6 and D1.7) and in accordance with the strategy and criteria envisioned for the growth and sustainability of the network (e.g., D1.16). Please consult the new schematic diagram included in Section 1.2 of this final version.

In what follows, first a comparison of the growth of the network from the previous D1.4 including 168 members to the current situation (version 73 of the membership catalogue dated January 2022) with 213 members was made. Then a complete illustration of the existing assets in the network was provided using several structural parameters of the network, namely distribution across regional clusters, types of organisations, their membership status, portfolio of services they have declared as their offerings, and the main robotics technology expertise to be expected.

The last part of the report provides the results obtained from two concrete sources of information maintained by the European Commission. These were: Smart Specialisation Platform (S3P) which was used to identify possible candidates with given profiles to be further considered as new DIH or DIH-CCs for addition to the network. The second tool used for identification of new Competence Centres was the Advanced Technology Initiative (ATI) portal which catalogues various Technology Centres across Europe with different profiles. Three clusters were selected (Agriculture, Agro-food and Machinery) as well as eight Technology Centre Activities that were deemed to be more pertinent for agROBOfood. The results obtained from S3P and ATIP are illustrated and their full lists are given in Annex III and IV respectively.

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1 Introduction

1.1 About AgROBOfood

AgROBOfood aims to connect the different layers and agents active in the agri-food robotics sector in order to accelerate the sector's digital transformation. agROBOfood already starts with a strong ecosystem (see the illustration of the envisaged structure in Figure 1 below). It is built on an initial consortium of 39 partners across 19 countries (including research centres, universities and enterprises, amongst other entities). Since the beginning of agROBOfood the network has expanded considerably: relevant entities have already joined the network through industrial challenges, open calls and individual applications.

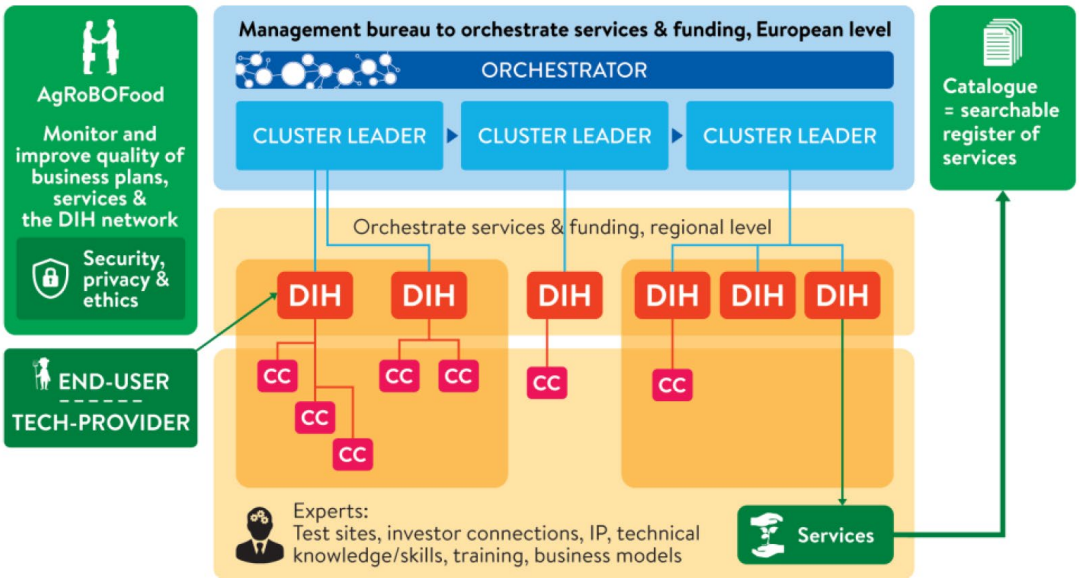

Figure 1 – Envisioned agROBOfood network structure.

1.2 About Deliverable 1.5

When preparing D1.4 as well as this final version D1.5, and motivated by cross-cutting exchanges and reflections, it has become more evident that the approach adopted for further building of the network should actually be considered as an approach for maintaining, rejuvenating and extending the membership based a coherent and explicit programme-wide vision and strategy. Ideally, the inputs from other tasks, activities and deliverables should come together to create a consorted vision and coherent implementation plan as schematically illustrated in Figure 2 below. Various delays has made a synchronising of the completion of the pertinent deliverables difficult to be incorporated more substantially at this stage. However, depending on the future scenarios to be adopted for the continuation of the network beyond the current agROBOfood project, a concurrent approach should be adopted based on concepts similar to what is shown in Figure 2.

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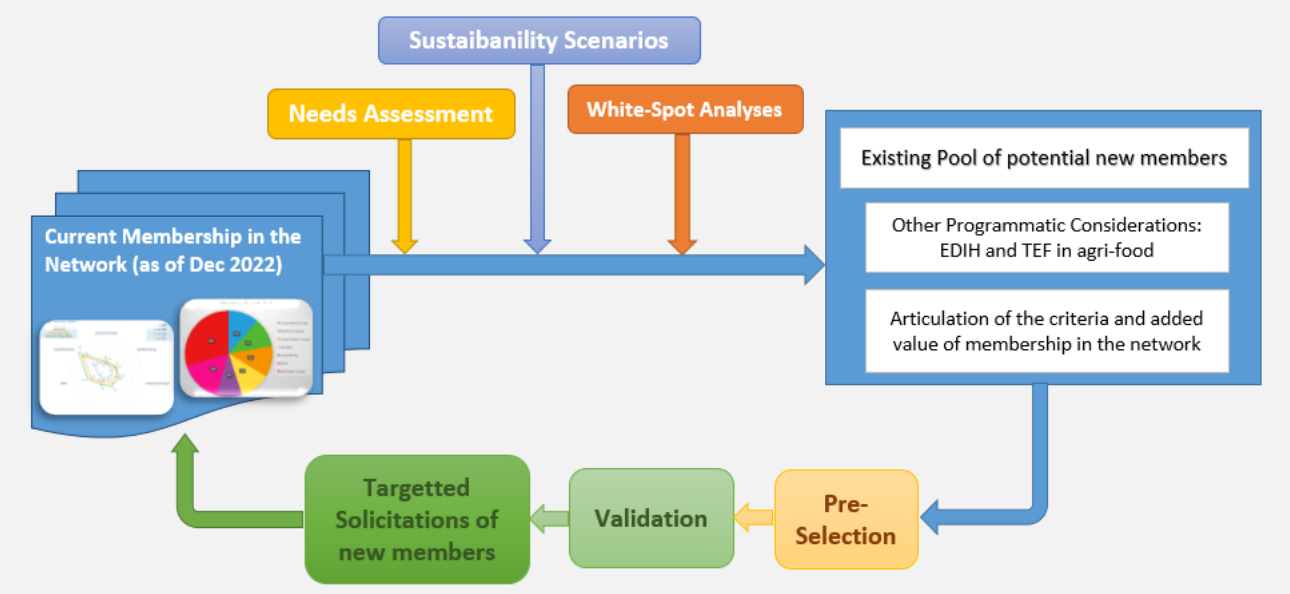

Figure 2 –: Proposed Concept for Purposeful Solicitation of new members and extention of the network

Figure 3 below illustrates the six Work Packages (WP) that constitute agROBOfood's work plan. Deliverable 1.5 is part of WP-1 and serves as an update to Deliverable 1.4: Identification of existing CCs and DIHs for building the network – updated version. D1.4 was submitted in April 2021, and together with this updated version (D1.5) form the outcomes envisaged under Task 1.2: "Build a sustainable network of CCs (including quality uptake in catalogue)".

The first version of this document has been received at the first review of the project with the needs for some adjustments and improvement which are hoped to be addressed in this update. The goal is to illustrate a complete picture of the existing asset in the network in terms of Digital Innovation Hubs (DIH), Competence Centres (CCs) and other enterprises, SMEs and Larger enterprises.

It is intended to use the networks' key characteristics and coverages pertinent to the ambitions of agROBOfood and to provide a complete and illustrative description of what exists at the time of preparing this document. In addition to updating D1.3, such an illustration can help structure and prioritize further actions of WP1 but also tasks within WP2, WP6.

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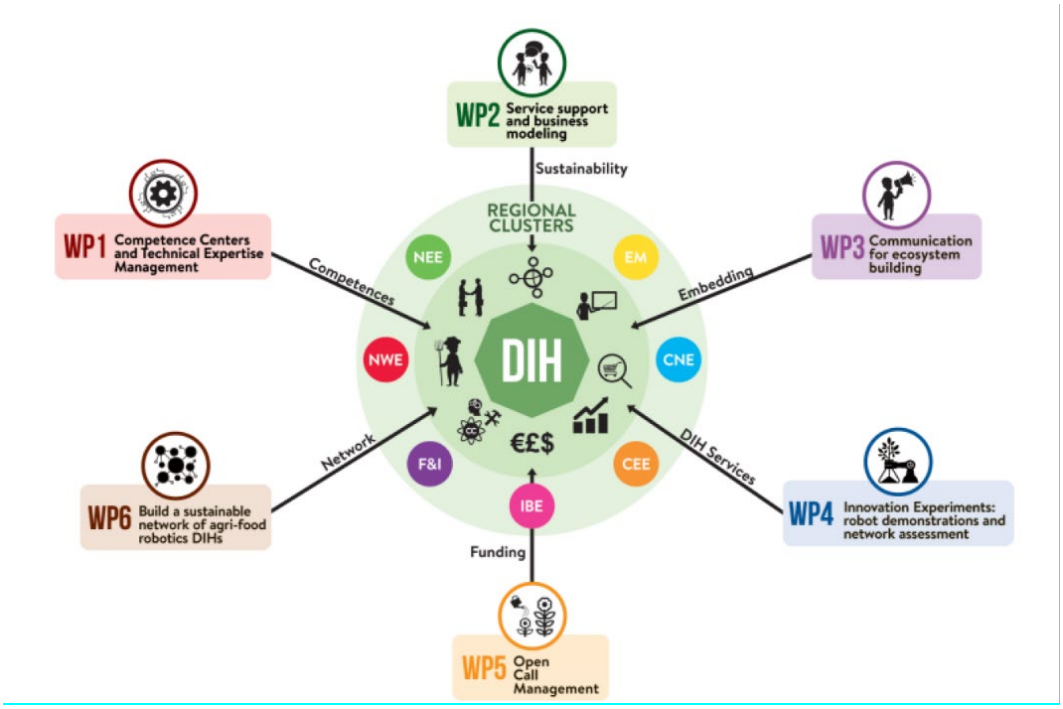

Figure 3 – agROBOfood Workplan.

It is hoped that the information and the candidate lists provided in this deliverable can help with the further implementation of a sustainable vision for further strengthening and extending the reach of the network where appropriate and based on a concerted reflections and findings enabled by agROBOfood up to this stage.

1.3 Definitions

To ensure common understanding of the concept of Digital Innovation Hubs, the definition used in the following JRC publication is used[2]: "Digital Innovation Hubs as policy instruments to boost digitalization of SMEs," by Kalpaka, A., Sörvik, J. and Tasigiorgou, A., 2020. Brief excerpts from this handbook is provided below:

Digital Innovation Hubs[1]

Digital Innovation Hubs are one-stop-shops that help companies become more competitive with regard to their business/production processes, products or services using digital technologies, by providing 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. Environmental issues will be considered, in particular regarding energy consumption and low carbon emissions. As proximity is considered crucial, they act as a first regional point of contact, a doorway, and strengthen the innovation ecosystem. A DIH is a regional multi-partner cooperation (including organisations such as research and technology organisations [RTOs], universities, industry associations, chambers of commerce, incubators/accelerators, regional development agencies and vocational training

[2] Kalpaka, A., Sörvik, J. and Tasigiorgou, A., "Digital Innovation Hubs as policy instruments to boost digitalization of SMEs," Kalpaka, A., Rissola, G. (Eds.), EUR 30337 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-21405-2,doi:10.2760/085193,JRC121604. https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digital-innovation-hubs-policy-instruments-boost-digitalisation-smes

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institutes (Figure 1-2) and can also share strong connections with service providers outside of their region supporting companies with access to their services.

Competence Centres[3]

A Competence Centre is a technology infrastructure centred on technologies that can be applied to any area, bringing together in one place extensive expertise in this field. A competence centre offers a set of services like training courses in the use of the technologies, advice on the choice of technologies and also work directly with DIH to apply the tools to the area problems in hand (Adapted from European Commission Competence Centres, 2019)[4].

Competence Centres cooperate within the Digital Innovation Hubs with other members of the innovation chain to support businesses in their digital transformation. This includes connection to investors, business developers and legal experts, as well as technical expertise.

The CCs often have regional scope and they aim at capturing the industrial ecosystem in each region where they are implemented (I4MS HORSE, 2018)[5].

1.4 Recommendations from the first review

As part of the first project review at the end of the first reporting period, D1.3 received some critical assessment along two main points:

1- The deliverable should go beyond listing potential entities to be invited to the network by articulating or highlighting the value proposition for CCs and DIHs to join the network;
2- Instead of describing various existing definitions of DIHs, utilise the latest definitions provided by the European Commission.

In addition to trying to address the foregoing two recommendations, this version of the deliverable, attempt is made in characterising the current makeup of the network and to identify areas for further enhancements.

1.5 Scope and objectives of this document

The main objective of this Deliverable is to describe the evolution and current characteristics of the AgROBOfood network from different dimensions outlined below:

- Size and regional spread and reach of the network; membership; and member status across the seven regional clusters.
- Availability and distribution of various types of services available in the network.
- Availability and distribution of the main robotic competencies available in the network.

Moreover, the information provided in this updated version can help advance other activities within Task 1.2: “Build a sustainable network of CCs (including quality uptake in catalogue)”. In particular it can:

- Establish an updated baseline for existing CCs and DIHs already connected.

[3] Source : agROBOfood common definitions on Basecamp

[4] https://ec.europa.eu/jrc/en/knowledge

[5] http://www.horse-project.eu/sites/default/files/publications/HORSE_D7.3-v1.00.pdf

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- To help set out an approach for further enhancing and extending the network's reach (gaps and partial coverages, white spots, needs, etc.). The network has grown from its launch and will continue to grow through various means. It is hoped that the global approach and process presented below can be used for the identification of new elements in order to fill gaps, to strengthen weaknesses, and to fulfil the needs as they become clearer through this update.

- To help characterise state-of-the-art robotics technology domains and subdomains pertinent to agro-food applications in the short term (up to end of 2023); medium term (up to end of Horizon Europe 2027) and long term (up to the end of next framework programme 2034).

  The EU-Robotics[6] topic group dedicated to Agriculture Robotics along with agROBOfood have produced a strategic vision on the opportunities and challenges for Robotics in Agri-Food. The resulting document (Sander et al. 2020) is published and can be used for inspiration exploring future possibilities in this domain.

  The mission statement at the core of the mentioned EU-Robotics document is stated as: "*Future Agri-Food networks will be flexible, responsive and transparent in order to provide enough, high-quality and healthy products and services for everyone at reasonable cost while preserving resources, biodiversity, cultural differences and our climate environment*". Based on this central vision, eleven "Use Case Themes" are identified (listed below) as well as a number of Key Challenges across the four types of services intended for DIHs, namely Technology, Ecosystem, Business and Training which are outlined in the next page. These four categories of services are used in agROBOfood catalogue, mapping / illustrating the available service competencies in the network as will be seen in the following sections of this document.

  Use Case Themes:

  1. Robotics, AI, and Data Science for Breeding
  2. Complex Handling and Manipulation in Primary Production
  3. Complex Handling and Manipulation in Post-Harvest
  4. Realizing Full Autonomy of already Mechanized Tasks
  5. AI and Robotics for Livestock Farming
  6. AI and Robotics for Precision Agriculture
  7. Cleaning in Agri-Food
  8. Connectivity, Distributed Intelligence and Pervasive Technology
  9. Logistics and Transport
  10. Innovative/Disruptively Novel Agri-Food Systems enabled by Robotics
  11. Ocean Farming and Agri-Food

[6] https://sparc-robotics-portal.eu/web/agriculture/home

Slawomir Sander, Eldert van Henten, Kees Lokhorst, Erik Pekkeriet, Thilo Steckel, European Robotics in agri-food Production: Opportunities and Challenges, https://zenodo.org/record/4742482

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Key Challenges:

I. Technology
- World Modelling, Simulation and Benchmarking
- Robot-to-X interaction
- 24/7 Level 5 Cooperative Systems and Fleet and Swarm Management
- Perception in Robotics
- Multi-Dimensional Manipulation
- Interactive Design of Trustful, Secure, and Ethical robotic system

II. Ecosystem
- Sustainable pan-European agROBOfood network

III. Business
- Push-to-Market for Agricultural Robots and Systems, Support, Education & Training
- Specialized Robots to be used by seasonal unskilled labour

IV. Training and Human Capital Development
- infrastructure for practical training with access to robotics
- lifelong learning: connecting people from Agri-Food with people from robotics and analytics

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2 Current status of the network

2.1 Network's membership as provided in D1.3

In this section, before providing the current update on the network's membership of the competence centres and digital innovation hubs, first a very short review of the status as reported in D1.3 is revisited. According to Deliverable 3.1 submitted in August 2019, there were a total of 106 organizations identified. Figure 5 below shows the distribution of these organizations over the seven regional clusters of agROBOfood, namely:

- *Central Eastern Europe*
- *Central North Europe*
- *East Med*
- *France & Italy*
- *Iberia*
- *North East Europe*
- *North West Europe*

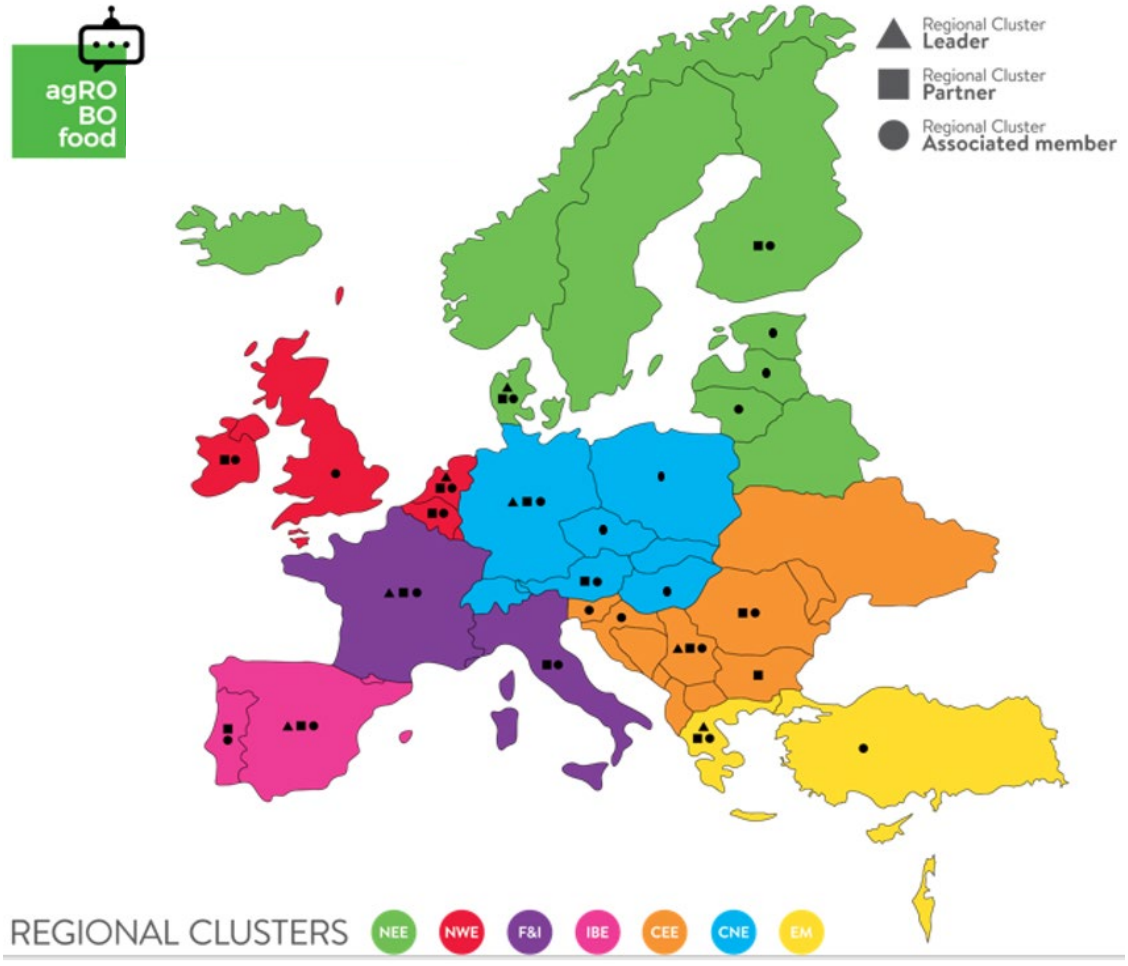

Figure 4 – Illustration of regional clusters with designated colours.

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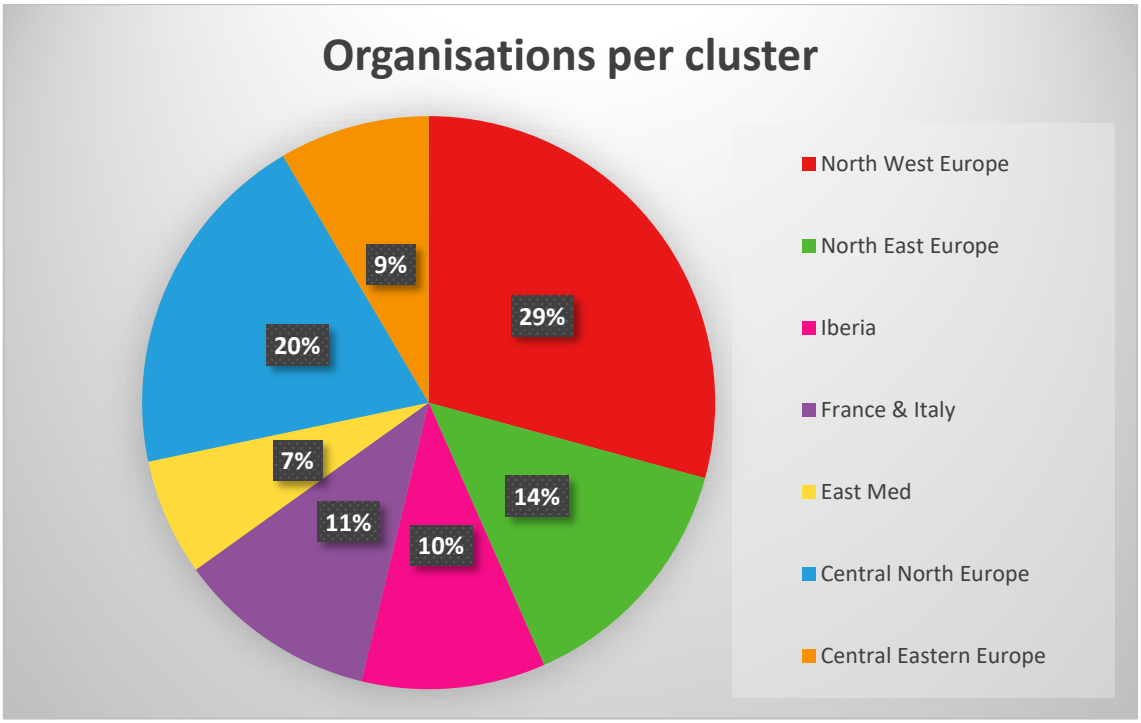

Figure 5 – Distribution of identified organizations per agROBOfood cluster (D1.3).

The complete list of competence centres and digital innovation hubs, which had been identified at the time of submission in December 2019 is given in a table in Annex 1, and their distribution across the seven regional clusters is illustrated in Figure 5 above.

2.2 Evolution of the network's reach and membership

European Commission's ambitious digital transformation strategies including its first pan-European Digital Europe Programme (DEP) for 2021-2027, the envisioned new network of the European Digital Innovation Hubs (EDIH), as well as the cohesion policy "interregional innovation investments" are complementary elements whose successes *heavily rely on effective cross sectorial and cross regional collaborations and synergies among the various key players in the public and the private* sectors in and across the member states.

The specific challenge under which agROBOfood DIH network has been selected for funding is: "… to provide a sustainable ecosystem of robotics stakeholders covering the entire value network to facilitate and accelerate a broad uptake and integration of robotic technologies, and supporting the digitisation of industry through robotics." The central goals of the programme are therefore cross-border and cross sectorial collaboration and networking of the member DIHs, CCs, SMEs and Midcaps that are concerned with or interested by the take up of robotic technologies in agri-food industries. In this context the value proposition is by design mutual and expected to be realised throughout a sustained and open agROBOfood network. The network provides the means for creating the needed synergies and complementarity across regions, industry sectors and competencies such that the adoption and take up of robotics technologies by the SMEs and Midcaps are considerably and effectively supported.

The underlying idea of one-stop shops for the SMEs and their access to the services and competencies they would need is an inherently pan-European value proposition shared between the constituencies of the network. On the receiving end, the value added is evident for the private enterprises with interests in exploitation and uptake of advanced technologies in the agri-food markets (in the form various types of services, such as training, access to broader knowledge, testing facilities, support for market penetration and

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business models, and others). On the side of the DIHs and CCs, engagement with the network provides unique opportunities and access to new problems, alternative solutions and good practices. Training, skills development, access to broader range of knowledge

In what follows various key characteristics and typology of the membership in the network are used to illustrate the current makeup, regional coverage, *service offers and main robotics competencies available in the network*. It is hoped that these multi-perspective illustrations will shed light on this evolving landscape and its assets through which concrete and measurable value added and synergies can be expected.

2.2.1 Spread of the network across regional clusters

The network has grown steadily but not uniformly across the regional clusters. It has been intended to use an enlargement strategy to reach out regionally and across the identified sectors of the industry and with a rich availability of the main robotics competencies needed for the take-up of robotics technologies in the agro-food applications. Figure 6 below shows the current distribution of the organisations (as of 20/12/2020) with a total of 168 DIHs and CCs.

Moreover, Figure 8 illustrates comparison of the situations from December 2019 to December 2020 while Figure 7 shows the current situation at the time of writing of this deliverable 1.5. It is seen from this chart that the enlargement in membership has not been achieved uniformly with some regional clusters having been significantly more active than others.

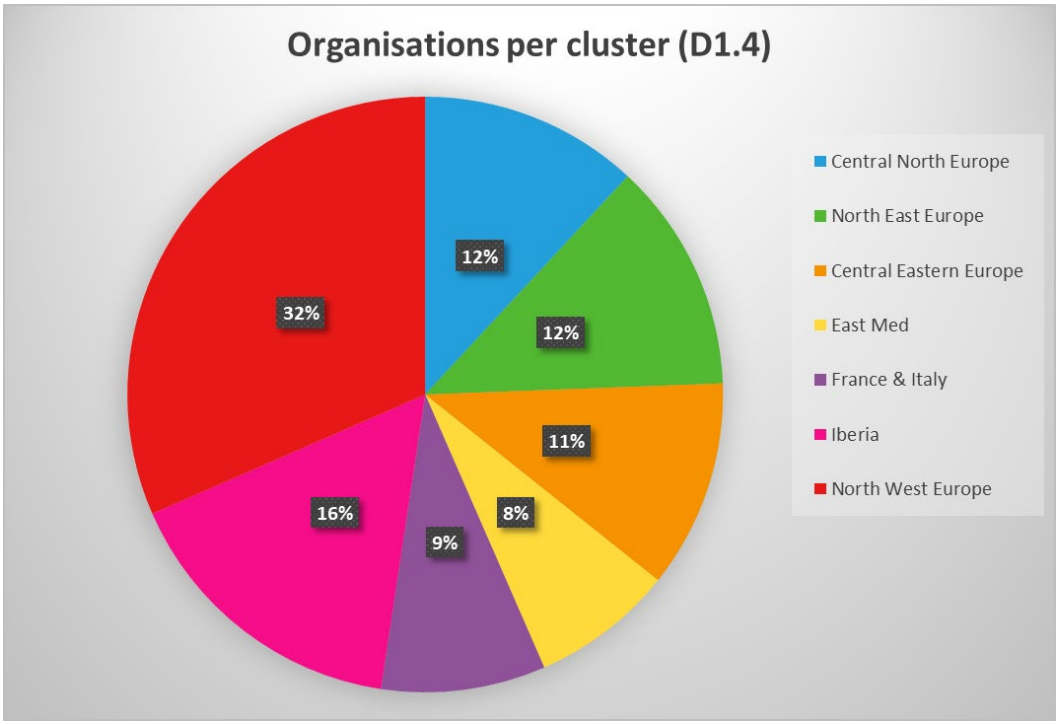

Figure 6 – Updated distribution of identified organizations per agROBOfood clusters (D1.4).

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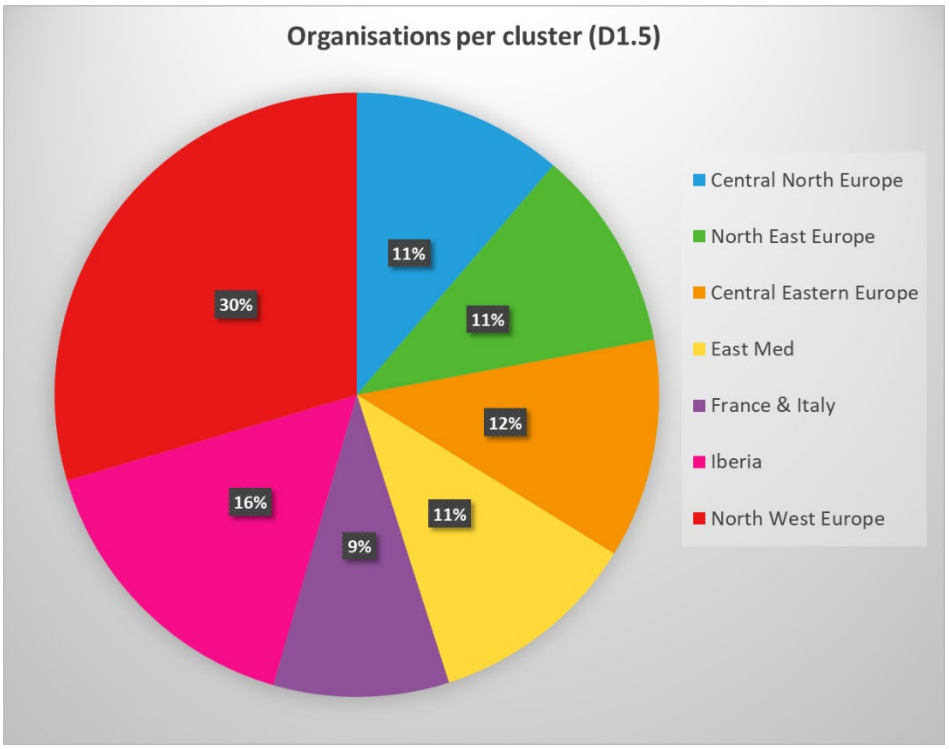

Figure 7– Updated distribution of identified organizations per agROBOfood clusters (D1.5).

The evolution of number of organisations in the network from D1.3 to D1.4 and D1.5 is illustrated below

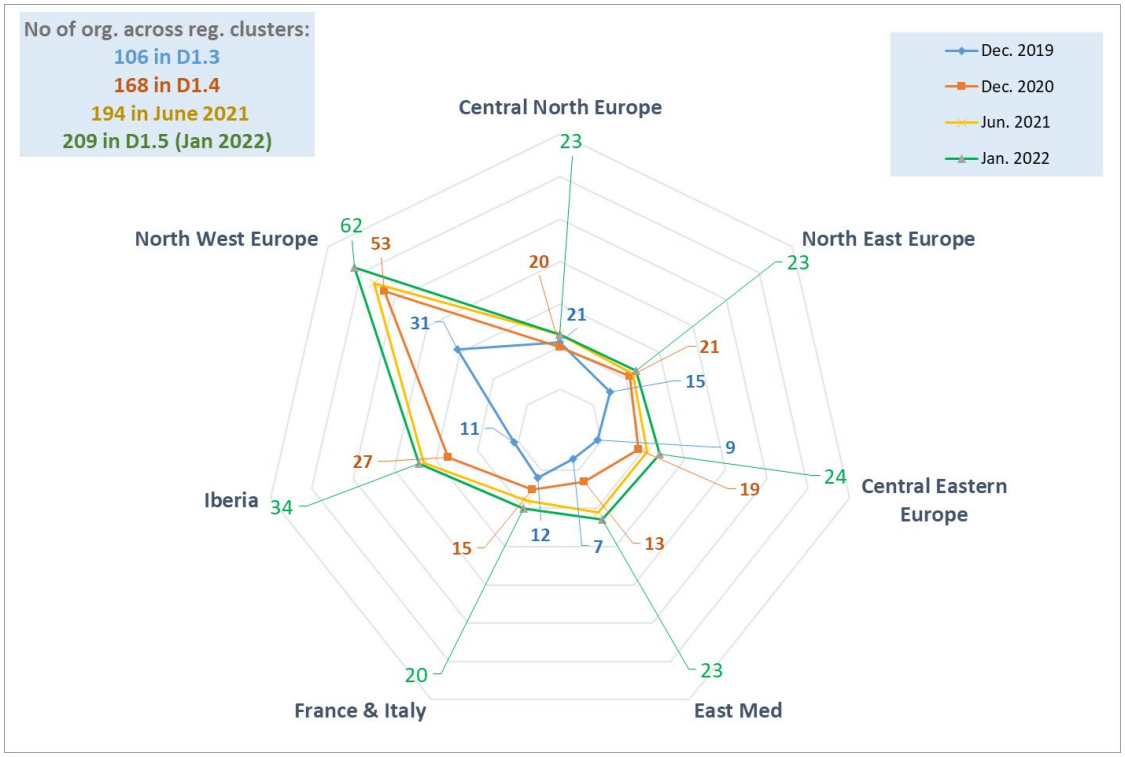

Figure 8 – Evolution of number of organisations in the network from D1.3 to D1.4 and D1.5.

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2.2.2 DIHs, CCs and SMEs in the network

In terms of organisational status and service provision capacities, the currently listed organisations and the ones reported as part of D1.4 back in January Dec 2020 are shown in Figure 9 below.

There are 38 members whose organisational role is not determined at the time of writing this document, and during this period two requests for membership have been refused due to incompatibility of the profile of the requesting entities.

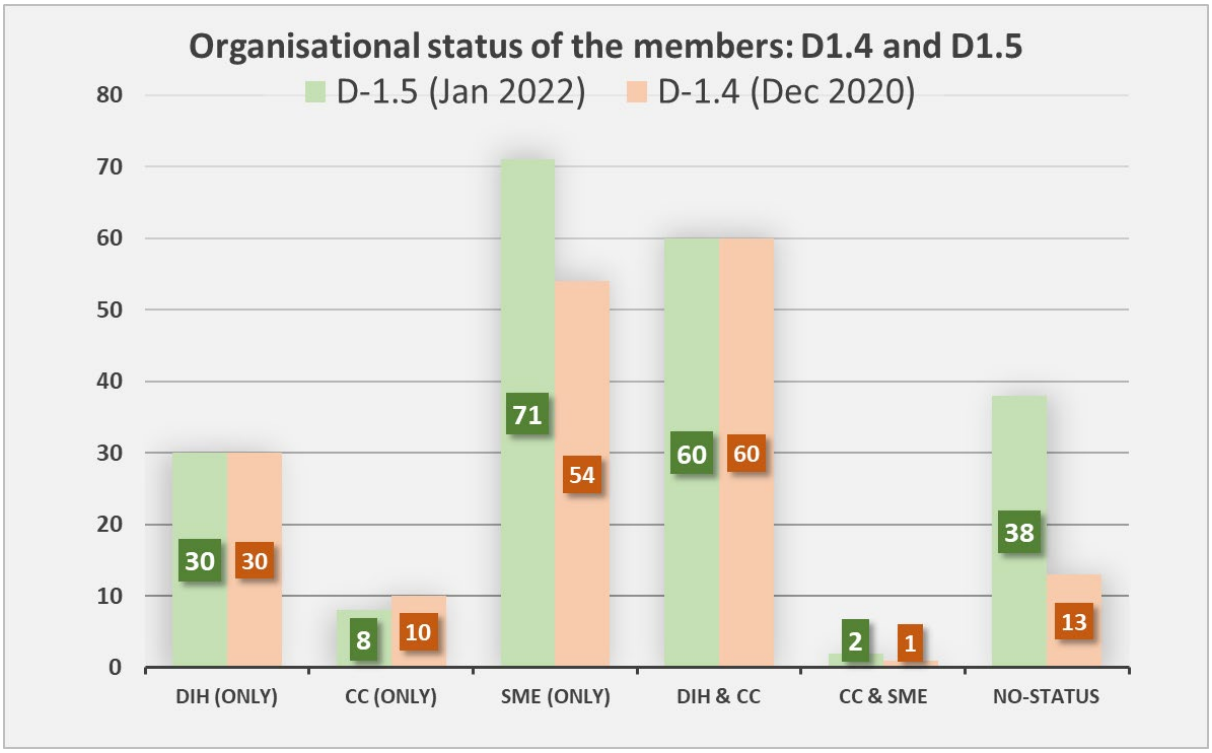

Figure 9 – Organisational status of the members in the network (168 in D1.4 versus 209 in D1.5)

2.2.3 Membership status of the organizations

N.B.: Since the submission of D-1.4., a new status has been added to the membership status list. This is the new category of "Business Members IE" to distinguish those business members that are also part of the Innovation Experiments supported under agROBOfood's FSTP opportunities.

Therefore, to have a complete picture in this document, the updated list is used while keeping the diagrams from D1.4. This will also illustrate the evolution of membership across various membership category.

The listed 168 organisations (as reported in D1.4) with their membership status are as shown in Figure 10 below. More detailed illustration of the organisational status per regional clusters is also provided in Figure 11 (again using the membership situation in D1.4).

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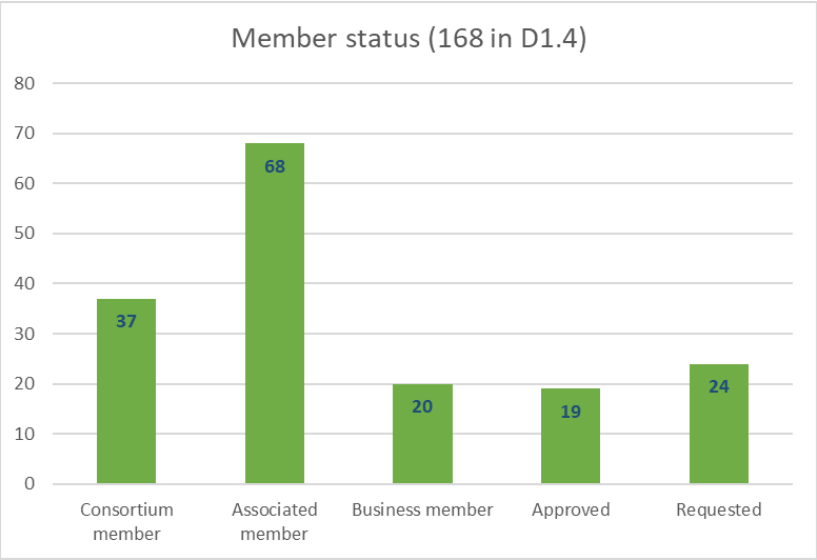

Figure 10 – Illustration of the status of the 168 Members' status in the network (in D1.4).

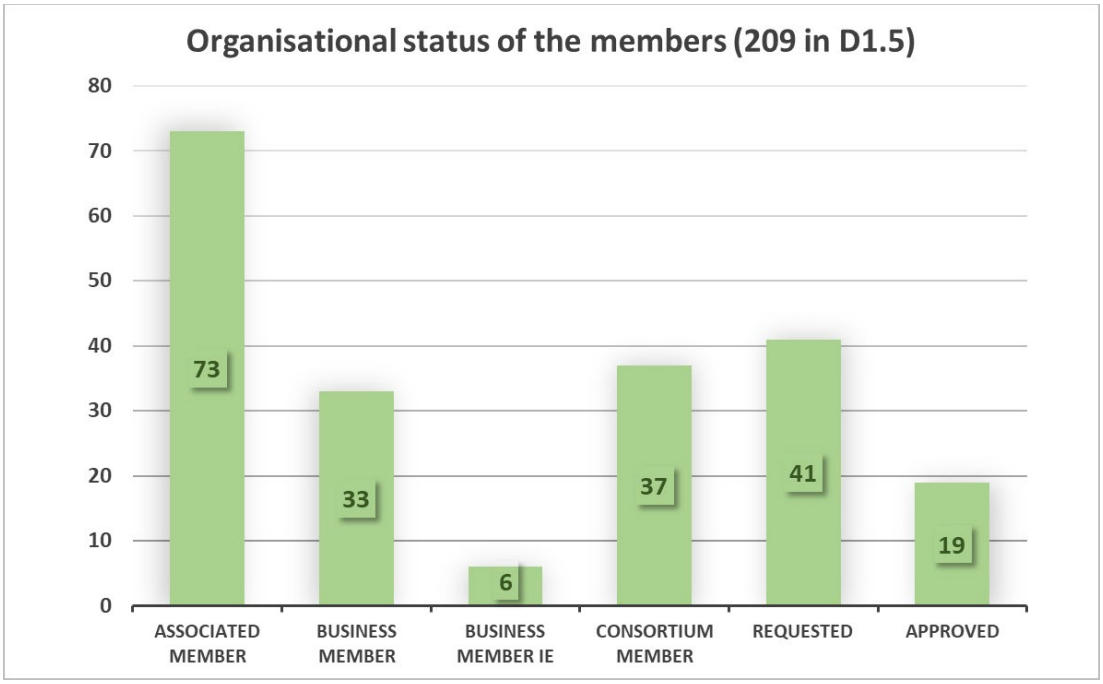

Figure 11 – Illustration of the status of the 209 Members' status in the network (in D1.5).

The definition given below for the grouping of the membership categories used in agROBOfood is taken from "D6.1: Assessment of the Needs of DIHs":

Consortium Members (or Partners):

Our DIHs, CCs, and SMEs within the project consortium are called agROBOfood partners (agROBOfood, 2019: Annex 1, section 4: Members of the consortium). The term "partners" is used throughout the agROBOfood project. Once the project ends this term will vanish and all entities belonging to the network will be called "members". We reserve the term "Core Partners" for those consortium entities being the work package leaders and the regional cluster leaders.

Associated Members (or Partners):

Non-consortium entities involved and registered as DIH/CCs in the agROBOfood network are defined as associated partners. Most of them were already listed in the project plan (agROBOfood, 2019: Annex 2 & 3).

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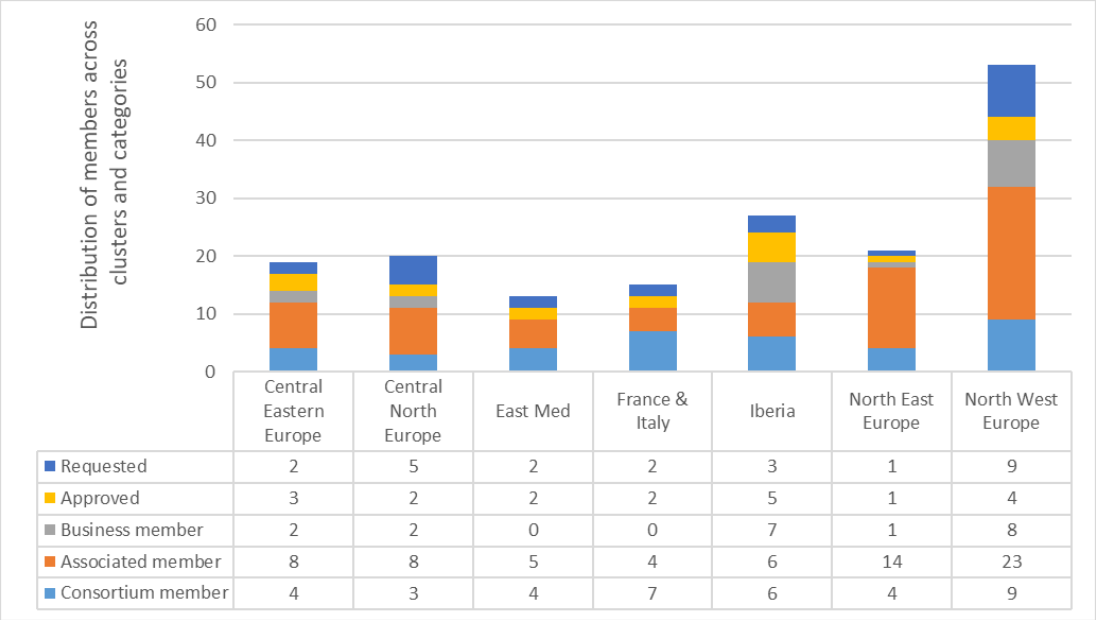
Business Members (or Partners): The ecosystem is also comprised of SMEs (equipment suppliers) and large-scale enterprises (LSE) selling robotic products or sub-products in the agri-food domain and being linked to some extent to a DIH/CC or DIH-node. Other entities, such as end-users or end-user associations and being an important stakeholder for the domain, can actively engage and support the agROBOfood network. These will also be registered having the role as a business member.

Business Members IE (new category added in D1.5 only): These are the SMEs that participate in the Innovation Experiments organised under FSTP calls of agROBOfood network (See Figure 11)

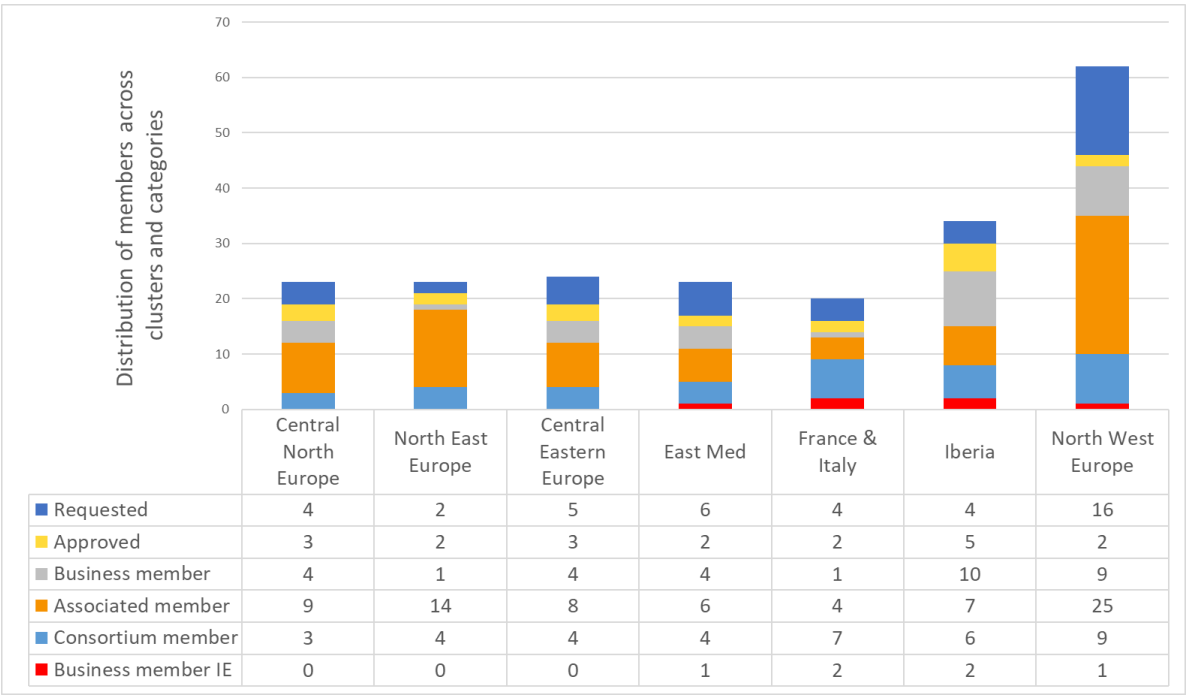
Approved: Organisations whose membership request or solicitation has been already confirmed pending further determination of their status in the network.

Requested: Organisations that have requested membership in the network and await a decision.



	Central Eastern Europe	Central North Europe	East Med	France & Italy	Iberia	North East Europe	North West Europe
Requested	2	5	2	2	3	1	9
Approved	3	2	2	2	5	1	4
Business member	2	2	0	0	7	1	8
Associated member	8	8	5	4	6	14	23
Consortium member	4	3	4	7	6	4	9

Figure 12 – Distribution of network's membership for RCs and per member status (as reported in D1.4).



	Central North Europe	North East Europe	Central Eastern Europe	East Med	France & Italy	Iberia	North West Europe
Requested	4	2	5	6	4	4	16
Approved	3	2	3	2	2	5	2
Business member	4	1	4	4	1	10	9
Associated member	9	14	8	6	4	7	25
Consortium member	3	4	4	4	7	6	9
Business member IE	0	0	0	1	2	2	1

Figure 13 – Distribution of network's current membership for RCs and per member status (for D1.5)

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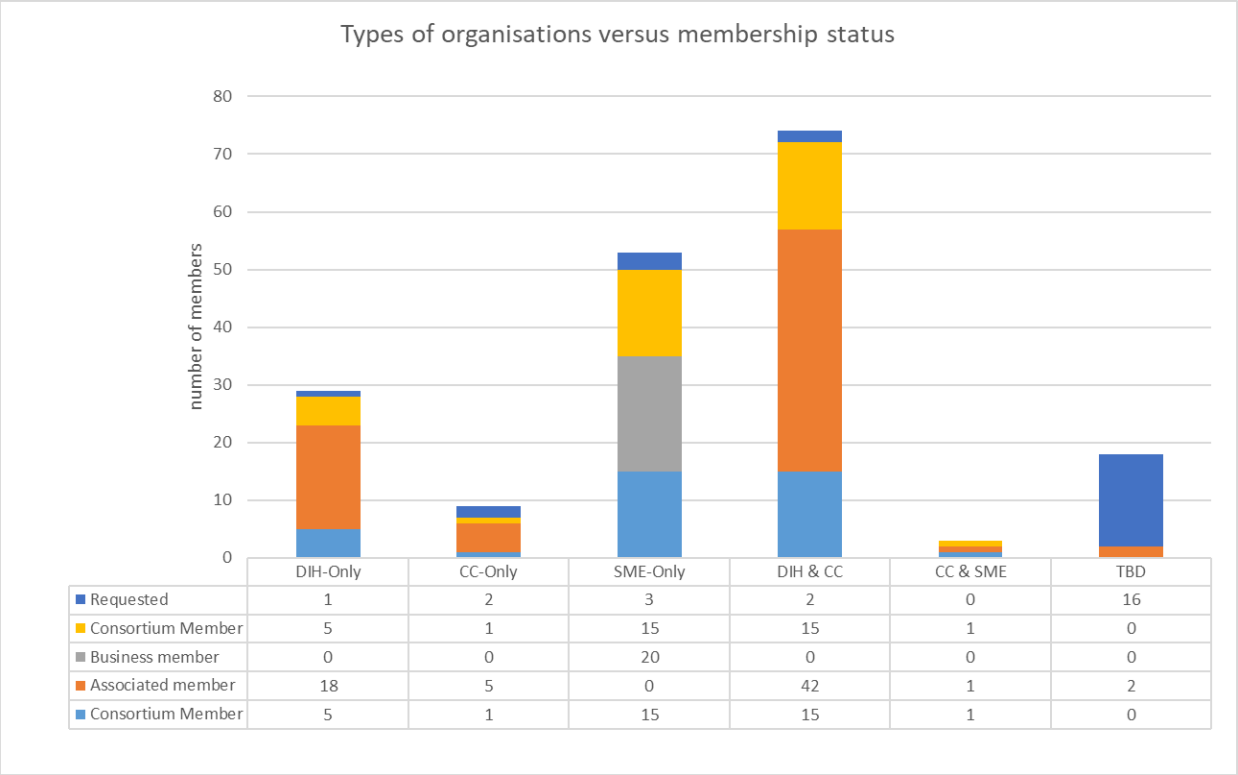
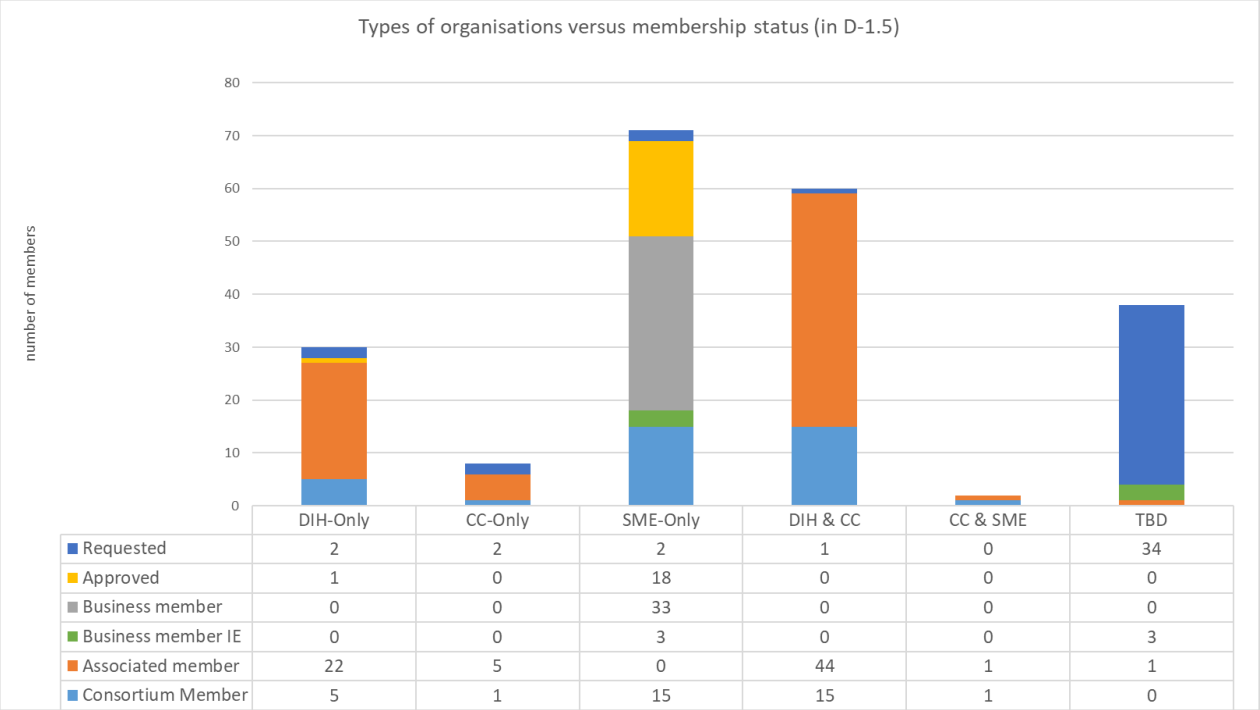
It should be noted that the network's membership is continuously evolving[7], and at the time of writing of this deliverable 18 organisation in the table had not been approved but their type (DIH, CC, etc.) were not concluded. This group is marked as TBD (To be Determined) as seen below.



	DIH-Only	CC-Only	SME-Only	DIH & CC	CC & SME	TBD
Requested	1	2	3	2	0	16
Consortium Member	5	1	15	15	1	0
Business member	0	0	20	0	0	0
Associated member	18	5	0	42	1	2
Consortium Member	5	1	15	15	1	0

Figure 14– Membership status / membership types of organisations in the network (as reported in D1.4).



	DIH-Only	CC-Only	SME-Only	DIH & CC	CC & SME	TBD
Requested	2	2	2	1	0	34
Approved	1	0	18	0	0	0
Business member	0	0	33	0	0	0
Business member IE	0	0	3	0	0	3
Associated member	22	5	0	44	1	1
Consortium Member	5	1	15	15	1	0

Figure 15 – Illustration of the current status / membership types of the 209 Members in the network (in D1.5).

[7] The data used for D1.4 represented Network's Membership as of January 2021, and the current D1.5 reflects the situation in January 2022

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2.3 Illustration of the services available in the network

A central motivation for the DIH networks such as agROBOfood being the availability of all the services the DIHs and the CCs of the regional clusters can offer in and across their respective ecosystems, it is important to characterise the types of services the SMEs and other end-users may need. RODIN[8] has promoted four broad categories of Services, namely:

- Technical Services
- Business Services
- Ecosystem Services
- Training Services

There are various services and activities defined under the four categories above through which the interests and competencies of a member can be defined. More details of these are shown in Table 1 below.

[8] Robotics Digital Innovation Network, (https://rodin-robotics.eu/about/) is a Horizon 2020 network of DIH networks dealing with robotics in various application areas. It helps robotics DIH networks to cooperate and strengthen the competitiveness of the European robotics market. RODIN is funded under the EU Horizon 2020 programme.

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Table 1 - List of services by DIHs and CCs (adapted from RODIN for agROBOfood as presented in D6.1)

Services		Activities
Ecosystem	Community Building	Awareness Creation, Dissemination, Innovation Scouting, Matchmaking & Brokerage, Ecosystem building
	Strategy Development	Market Assessments, Market intelligence, Roadmapping
	Ecosystem Learning	Seminars, Workshops, Best Practise Catalogue, Maturity Assessment (DIH/CC)
	Representation, promotion	Missions, Representation, Roadshows
Technology	Collaborative R&D	Access to specialist expertise, Joint, pre-competitive R&D, Maturity Assessment (SME), Project Management for R&I projects, Secondment from companies
	Contract Research	Specific R&D, Proof of concept, Technology concept development
	Technical Support on Scale-up	Concept validation, Prototyping, Small series production, Technology transfer (support & upscaling)
	Provision of tech infrastructure	Access to (low rate) production facilities, Access to Lab facilities, Access to Platforms, Access to technical infrastructure, Access to Test Sites, Commercial Infrastructure, Renting equipment
	Testing and validation	Benchmarking analysis, Functional safety assessment, Product certification, Product demonstration, Product qualification
	Data and Interface Standards	Development of standards, governance, compliance
Business	Incubator/accelerator support	Business coaching and mentoring, Business model development, Business plan development support, Consultancy, Corporate innovations, Envisioning & strategy development, Ethics support, GDPR related services, Innovation booster (incubator/accelerator), IPR issues
	Access to Finance	Connection to funding sources, Financial engineering, Investment plans
	Project Development	Creating consortia, Development of proposals, Identification of opportunities.
	Offering housing	Office space, Space for experimentation, Space for pilot manufacturing
Trainin	Skills training and Education	Business oriented training, Ecosystem oriented training, Technology oriented training

When joining the network, the candidates have been asked to outline the services they can provide based on these four types. In this Section, the currently available services based on these self-declarations will be analysed.

It should be noted that these four main categories initially articulated by RODIN are quite related to the envisaged types of services and collaborative efforts that had been expected from the DIHs inceptions in their ecosystems. As seen in Figure 13 below (source: Figure 1-3 of the JRC Handbook[9]). Furthermore, they are also aligned with the newly envisaged European Digital Innovation Hubs (or EDIH) which "will play a

[9] Kalpaka, A., Sörvik, J. and Tasigiorgou, A., "Digital Innovation Hubs as policy instruments to boost digitalization of SMEs," Kalpaka, A., Rissola, G. (Eds.), EUR 30337 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-21405-2,doi:10.2760/085193,JRC121604. https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digital-innovation-hubs-policy-instruments-boost-digitalisation-smes

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central role for the implementation of the Digital Europe Programme (2021-2027) to stimulate the broad uptake of Artificial Intelligence, High Performance Computing (HPC) and Cybersecurity as well as other digital technologies by industry (in particular SMEs and midcaps) and public sector organisations in Europe"[10]. The new EDIHs activities are anticipated to start towards the end of 2021.

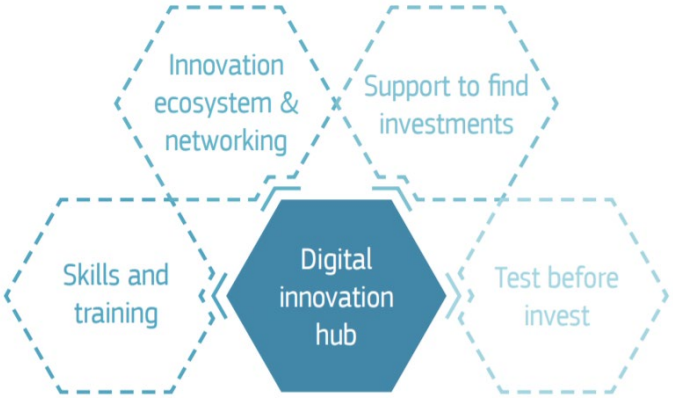

Figure 16 - DIHs services and network collaborations (Source: Figure 1-3 of the JRC handbook).

Figure 17 below illustrates the distribution of the available services as described by the network members per four broad RODIN categories (for completeness the services as reported in D1.4 are illustrated along with the current situation in D1.5).

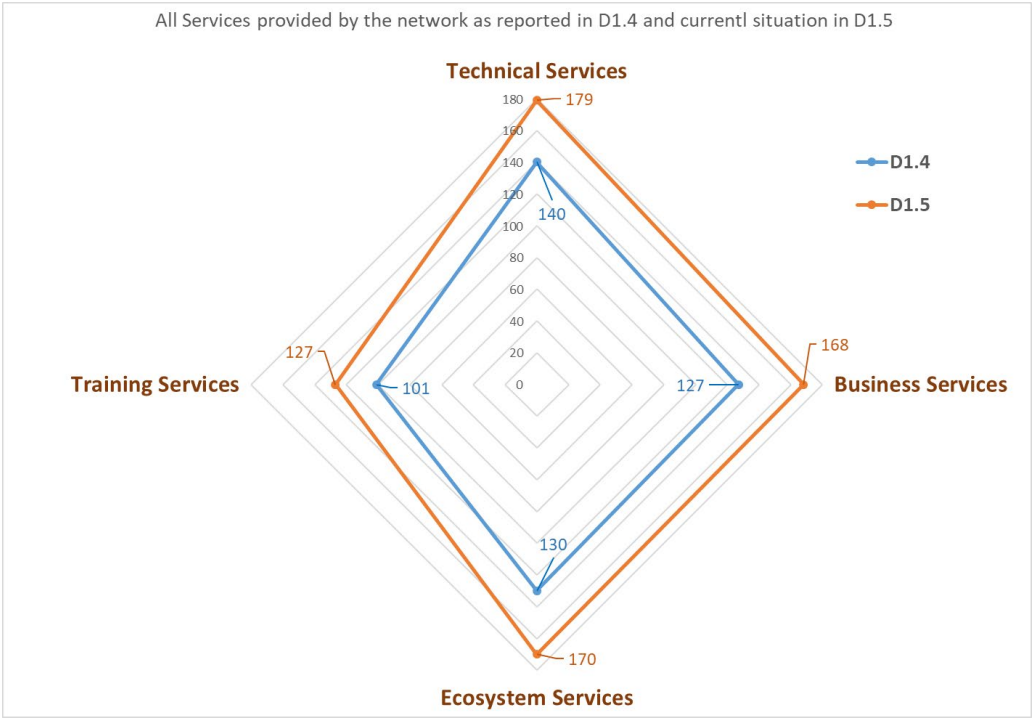

Figure 17 – Groups of all services by the entire network (evolution from D1.4 to current situation in D1.5)

[10] European Digital Innovation Hubs in Digital Europe Programme Draft working document; 25-01-2021; https://ec.europa.eu/digital-single-market/en/european-digital-innovation-hubs-digital-europe-programme-0

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In Figure 18, these services are illustrated across the regional clusters in which the corresponding DIH/CCs are located. Finally, in Figure 19, the ratio of the available services in each regional cluster per number of members in the clusters are shown.

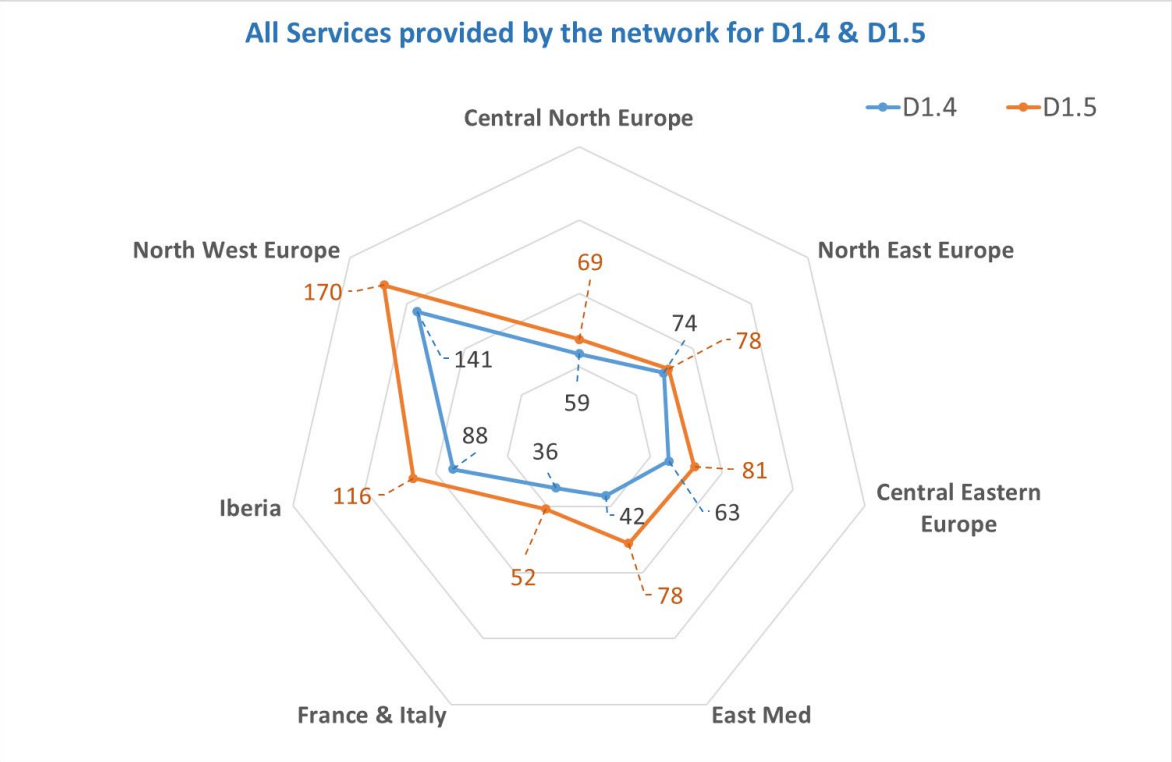

Figure 18 – Groups of all services by the regional clusters in the network.

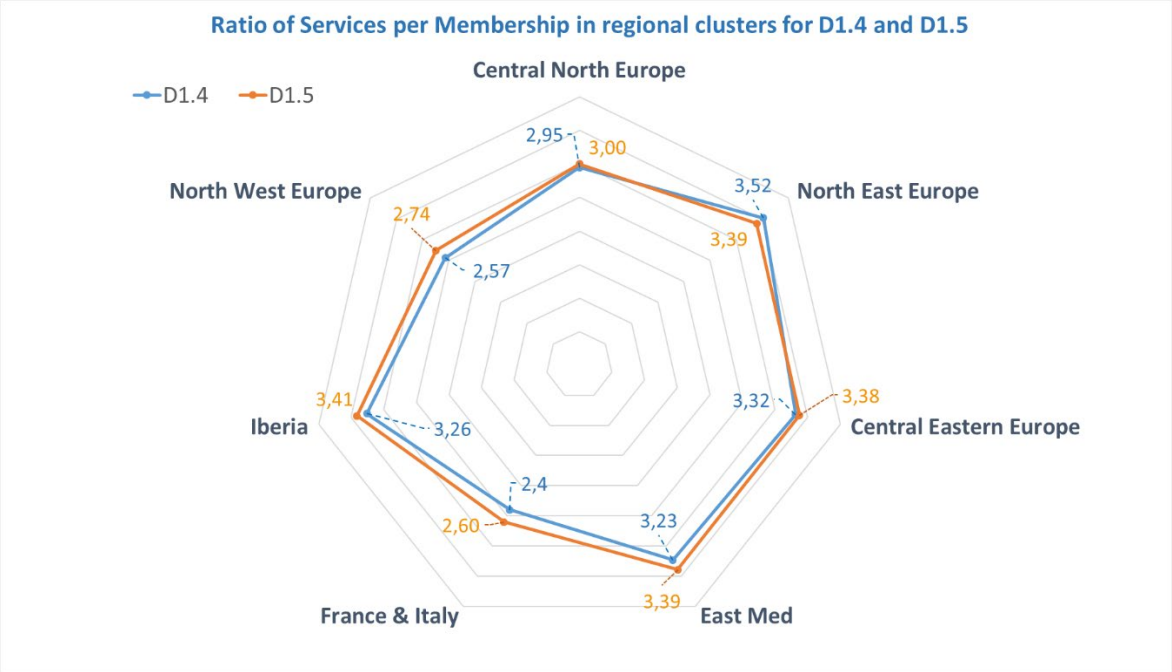

Figure 19 – Ratio of number of services per number of members in each regional cluster.

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In Figure 20 and 21, the details of the available services per categories and per regional clusters are illustrated respectively as it was in D1.4 and as it currently stands (for D1.5).

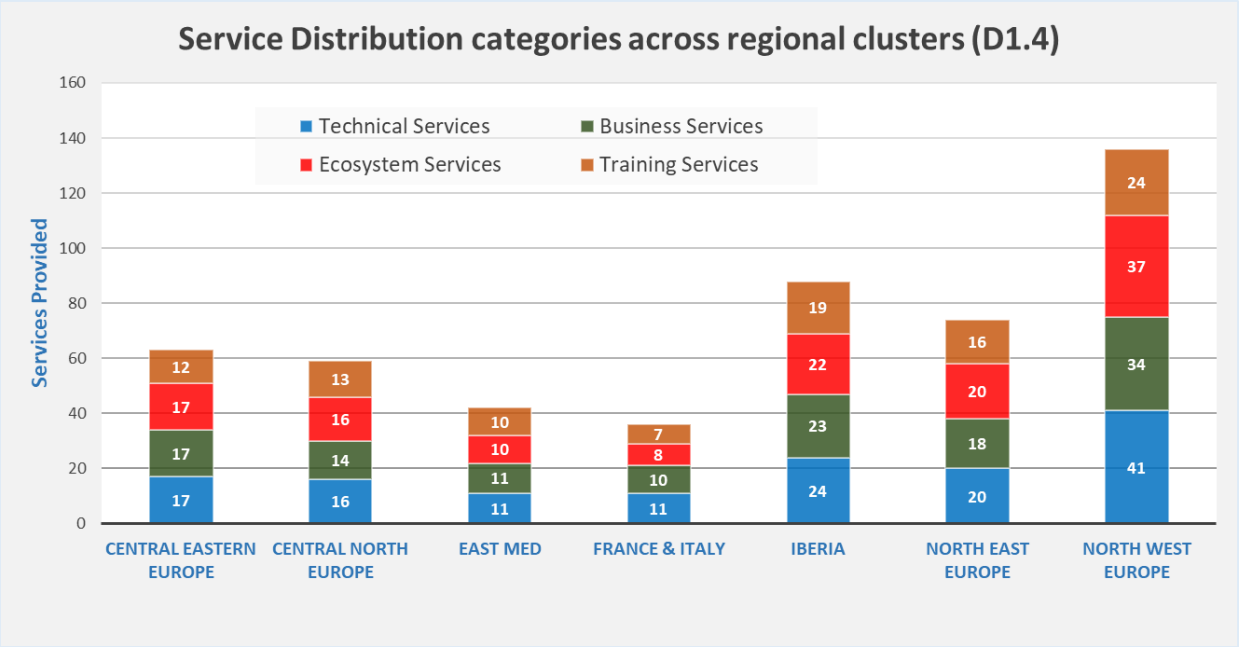

Figure 20 – Detailed distribution of number of services per group and per regional cluster (as reported in D1.4)

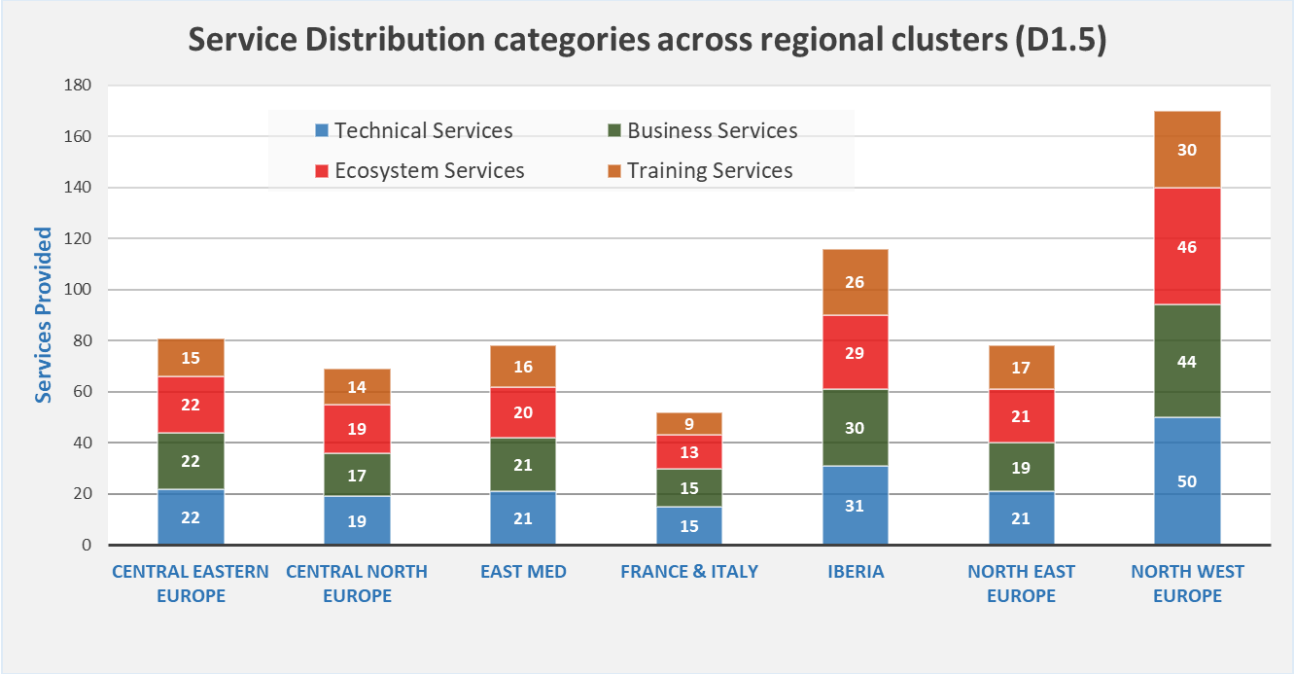

Figure 21 – Detailed distribution of the current number of services per group and per regional cluster (D1.5)

Figure 22 and 23 below show respectively for D1.4 and D1.5, the distribution of the main categories of available services in relation to the types of organisations that have indicated them as their offer (DIH, CC, SMEs and their combinations, since some organisations are both DIH and CC. Evidently the larger menu correspond to the collection of organisations which are both DIH and CC.

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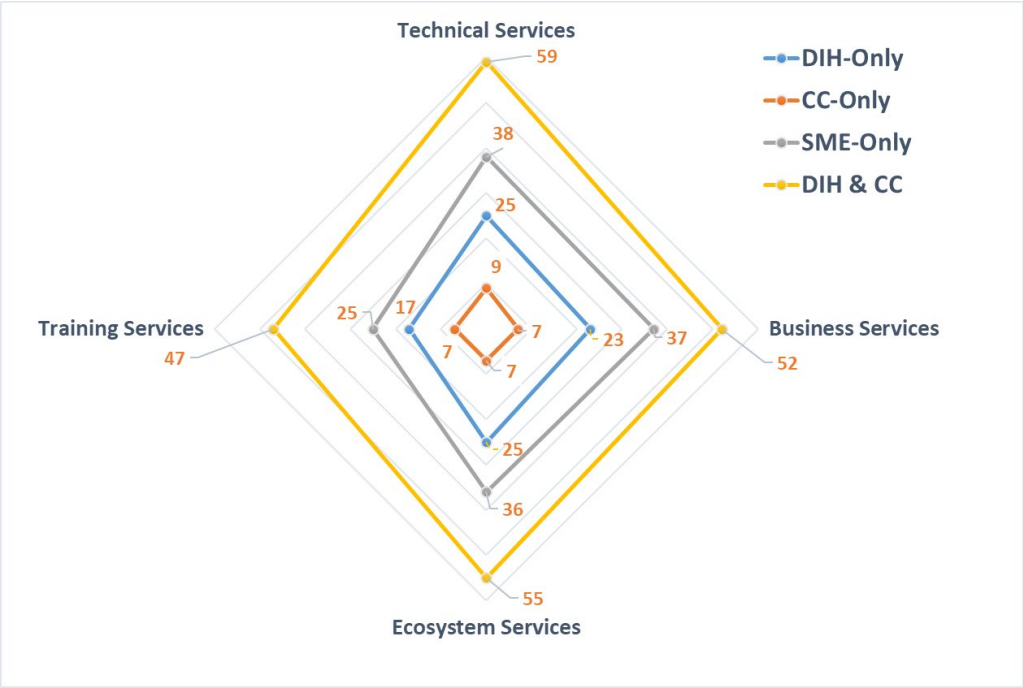

Figure 22 – Types of Services available in the network as a function of organisational types (in D1.4).

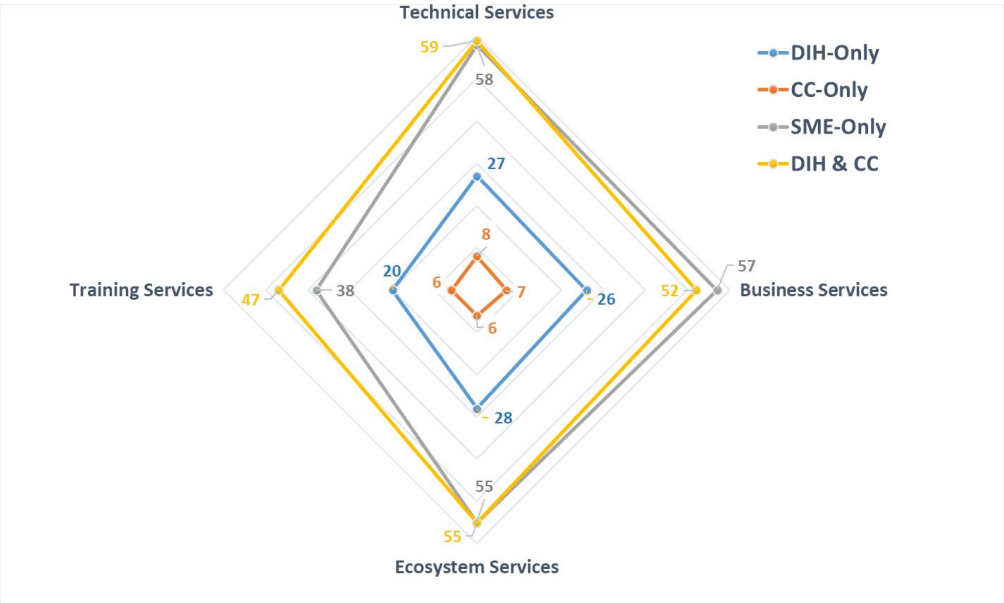

Figure 23 – Types of Services currently available in the network as a function of organisational types (in D1.5)

2.4 Agri-food Sectorial coverage available in the network

In this Section the number of organisations in the catalogue are mapped across the 16 sectors of agri-food economic activities. Figure 24 shows the variation of the membership across these 16 sectors from largest to smallest in number of organisations that have indicated these as their sector(s). For comparison, both values at the time of D1.4 and the current situation are included in this diagram.

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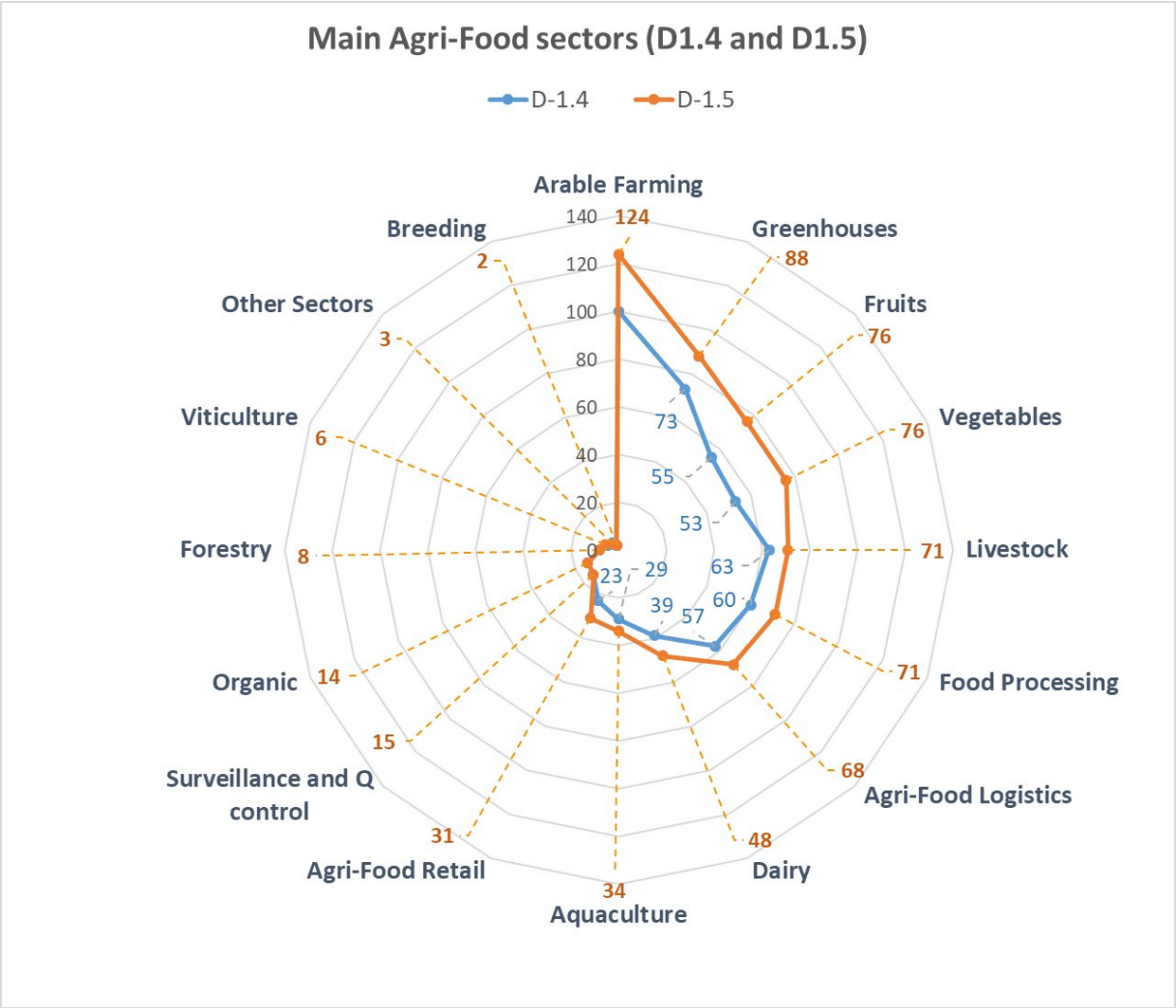

Figure 24 – Comparison of the size of agri-food sectors across the network's DIHs and CCs.

Figure 25 and 26 illustrate, respectively for D1.4 and D1.5, the same numbers of indicated sectors of activities but distributed also across the four types of member organisations, i.e., DIH, CC, SME, DIH & CC.

Moreover, Table 2 is a colour-map of the share of agri-food sectors available in each of the regional clusters (column-wise decreasing), while Table 3 gives the colour-map of the share of the regional clusters in each agri-food sector (row-wise).

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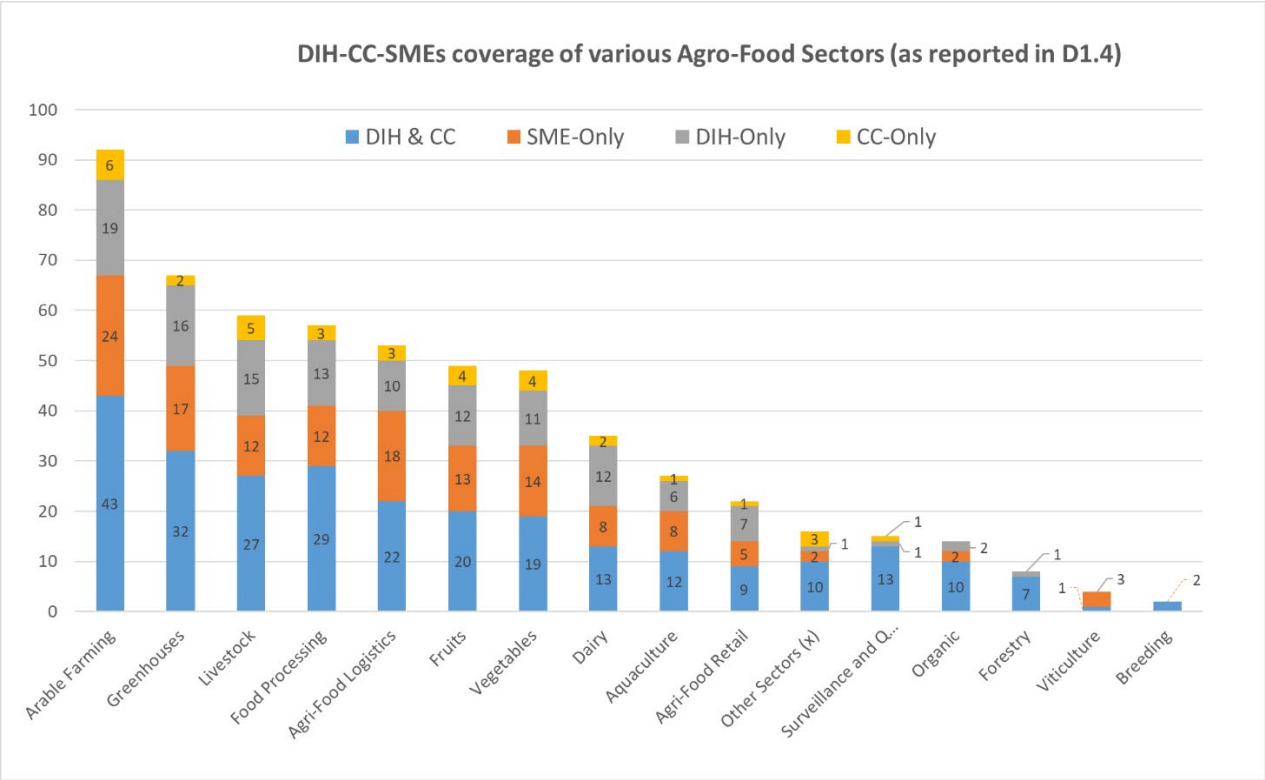

Figure 25 – Share of various organisational types across Agri-Food Sectors (as reported in D1.4).

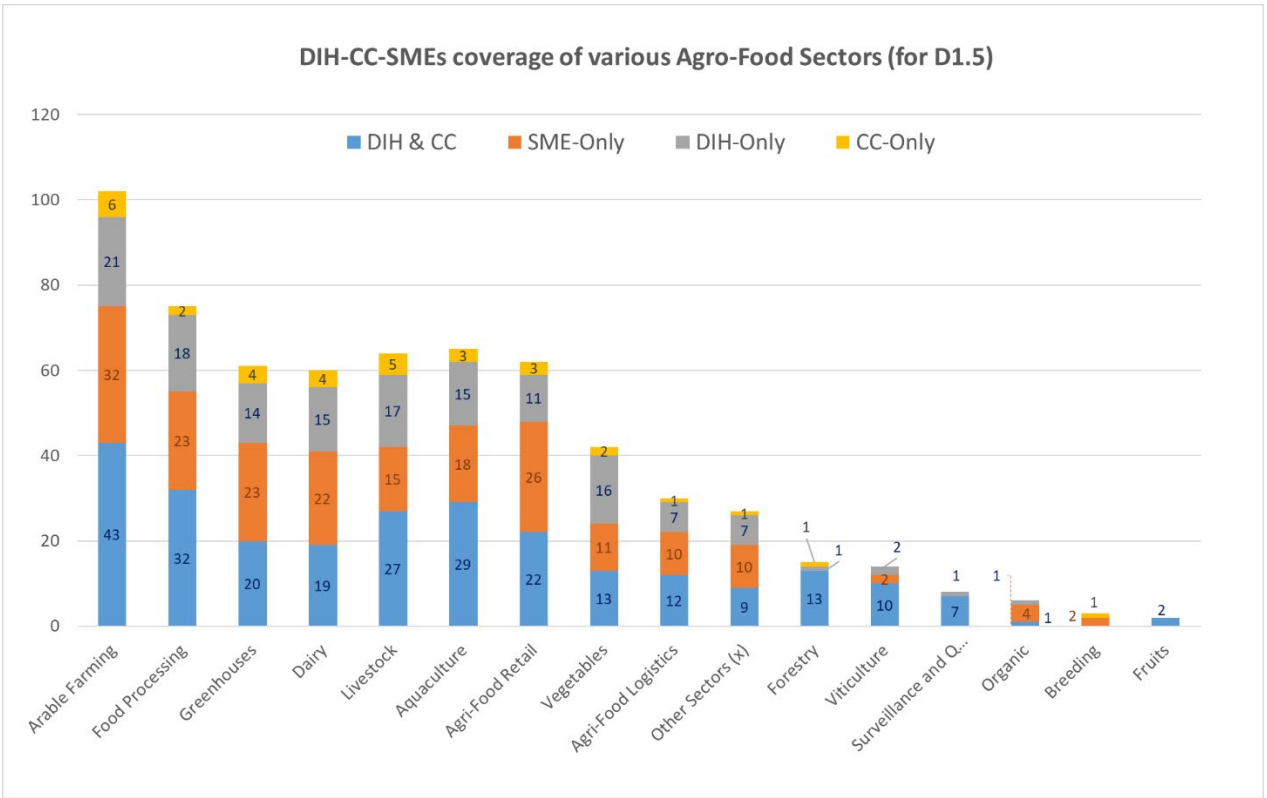

Figure 26 – Share of various organisational types across Agri-Food Sectors (current status in D1.5)

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Table 2 – Colour map of the current share of agri-food sectors in each regional cluster (for D1.5 only).

Percentage of sectors per clusters ↓	Central Eastern Europe (94)	Central North Europe (57)	East Med (92)	France & Italy (58)	Iberia (141)	North East Europe (80)	North West Europe (213)	All Clusters
Arable Farming	15%	19%	15%	21%	15%	16%	18%	124
Fruits	14%	9%	12%	10%	14%	5%	8%	76
Livestock	9%	9%	9%	7%	8%	8%	14%	71
Greenhouses	10%	5%	17%	14%	9%	14%	13%	88
Aquaculture	4%	5%	5%	0%	6%	5%	5%	34
Breeding	1%	0%	0%	2%	0%	0%	0%	2
Dairy	9%	11%	7%	3%	3%	10%	7%	48
Vegetables	11%	16%	14%	10%	10%	6%	9%	76
Food Processing	10%	7%	4%	10%	13%	13%	9%	71
Agri-Food Logistics	10%	12%	8%	9%	12%	10%	7%	68
Agri-Food Retail	6%	0%	5%	0%	5%	8%	3%	31
Forestry	1%	0%	0%	2%	1%	1%	1%	8
Viticulture	0%	0%	1%	5%	1%	0%	0%	6
Surveillance and Q control	2%	4%	1%	2%	1%	3%	2%	15
Organic	0%	0%	1%	5%	1%	3%	3%	14
Other Sectors	0%	4%	0%	0%	1%	0%	0%	3
All Sectors together	100%	100%	100%	100%	100%	100%	100%	735

Table 3 – Colour map of the current share of the regional clusters in each agri-food sector (for D1.5 only).

Percentage of clusters per sector →	Central Eastern Europe	Central North Europe	East Med	France & Italy	Iberia	North East Europe	North West Europe	All Clusters togather
Arable Farming (124)	11%	9%	11%	10%	17%	10%	31%	100%
Fruits (76)	17%	7%	14%	8%	26%	5%	22%	100%
Livestock (71)	11%	7%	11%	6%	15%	8%	41%	100%
Greenhouses (88)	10%	3%	18%	9%	15%	13%	32%	100%
Aquaculture (34)	12%	9%	15%	0%	24%	12%	29%	100%
Breeding (2)	50%	0%	0%	50%	0%	0%	0%	100%
Dairy (48)	17%	13%	13%	4%	8%	17%	29%	100%
Vegetables (76)	13%	12%	17%	8%	18%	7%	25%	100%
Food Processing (71)	13%	6%	6%	8%	25%	14%	28%	100%
Agri-Food Logistics (68)	13%	10%	10%	7%	25%	12%	22%	100%
Agri-Food Retail (31)	19%	0%	16%	0%	23%	19%	23%	100%
Forestry (8)	13%	0%	0%	13%	25%	13%	38%	100%
Viticulture (6)	0%	0%	17%	50%	33%	0%	0%	100%
Surveillance and Q control (15)	13%	13%	7%	7%	13%	13%	33%	100%
Organic (14)	0%	0%	7%	21%	7%	14%	50%	100%
Other Sectors (3)	0%	67%	0%	0%	33%	0%	0%	100%
All Sectors	94	57	92	58	141	80	213	735

2.5 Illustration of the Main Robotics Competencies available in the network

The purpose of the illustrations in this Section is to draw the landscape of the network in terms of the main robotic competencies the members have declared as their areas of interest/expertise. To this end, Figure 21 below compares the density of the available main robotic competencies (ten in total) as declared across the network's DIHs and CCs.

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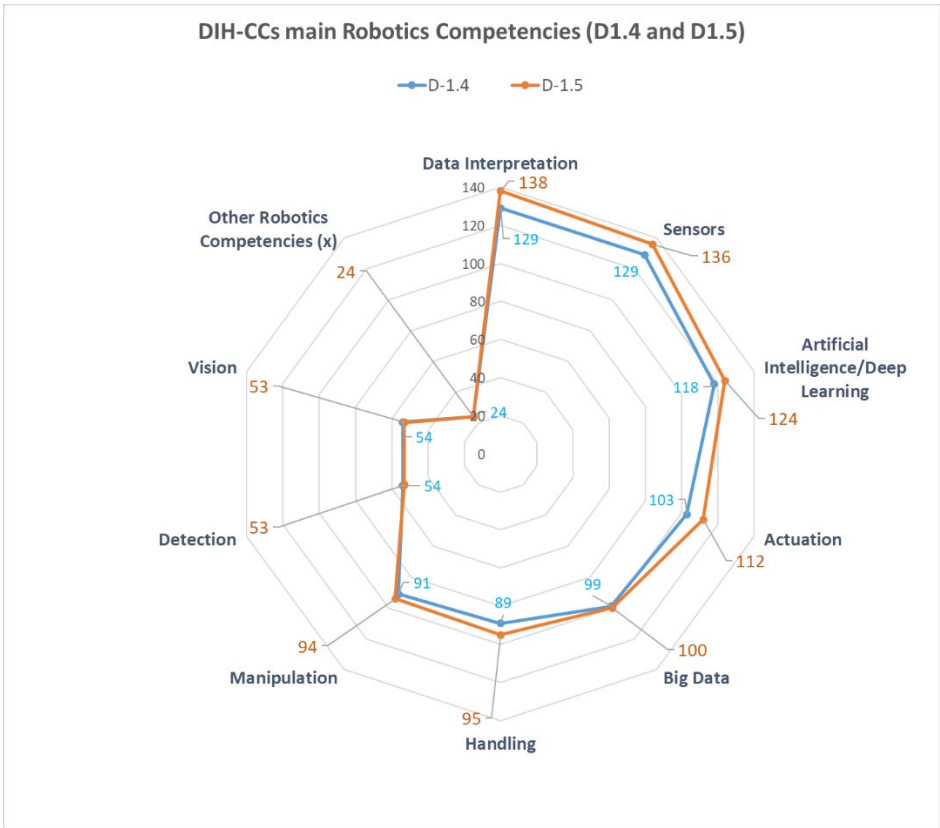

Figure 27 – Comparison of the main robotic competencies across the network's DIHs and CCs (from D1.4 and D1.5)

In order to obtain the complete picture of what can be expected in terms of main ten robotic competencies per regional clusters, Table 4 and Table 5 provide the two colour-maps similar to the ones in the previous Section. Table 4 is the map of the ten robotic competencies currently available per regional cluster (decreasing vertically), while Table 5 maps the share of regional clusters in each of the ten main robotic competency. Finally, in Figure 28 (as reported in D1.4), and Figure 29 (for current situation in D1.5) the share of various organisational types (DIH, CC, SME, DIH&CC, TBD) across the ten main robotic competencies available are illustrated.

Table 4 – Colour map of all Main Robotic Competencies currently available per regional cluster

% of the Main Robotic Competecies in each Cluster	Central Eastern Europe (99)	Central North Europe (62)	East Med (114)	France & Italy (101)	Iberia (164)	North East Europe (117)	North West Europe (272)	All Clusters
Sensors	16%	13%	16%	13%	15%	14%	15%	136
Detection	5%	5%	4%	7%	4%	8%	7%	53
Vision	5%	5%	4%	7%	4%	8%	7%	53
Big Data	11%	10%	11%	6%	14%	10%	11%	100
Data Interpretation	15%	16%	16%	14%	16%	13%	15%	138
AI /Deep Learning	13%	13%	15%	12%	15%	12%	13%	124
Actuation	11%	11%	13%	15%	12%	12%	11%	112
Manipulation	11%	10%	10%	13%	9%	10%	10%	94
Handling	11%	11%	9%	11%	9%	12%	10%	95
Other Rob. Competencies	1%	6%	2%	3%	2%	2%	3%	24
All Robotic Competencies	100%	100%	100%	100%	100%	100%	100%	929

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Table 5 – Colour map of the share of regional clusters in each Main Robotic Competencies

% of each Main Robotic Competencies across clusters →	Central Eastern Europe	Central North Europe	East Med	France & Italy	Iberia	North East Europe	North West Europe	All Clusters togather
Sensors (136)	12%	6%	13%	10%	18%	12%	29%	100%
Detection (53)	9%	6%	9%	13%	11%	17%	34%	100%
Vision (53)	9%	6%	9%	13%	11%	17%	34%	100%
Big Data (100)	11%	6%	13%	6%	23%	12%	29%	100%
Data Interpretation (138)	11%	7%	13%	10%	19%	11%	29%	100%
AI /Deep Learning (124)	10%	6%	14%	10%	19%	11%	29%	100%
Actuation (112)	10%	6%	13%	13%	18%	13%	27%	100%
Manipulation (94)	12%	6%	12%	14%	16%	13%	28%	100%
Handling (95)	12%	7%	11%	12%	16%	15%	28%	100%
Other Rob. Competencies (24)	4%	17%	8%	13%	17%	8%	33%	100%
All Robotics Competencies	99	62	114	101	164	117	272	929

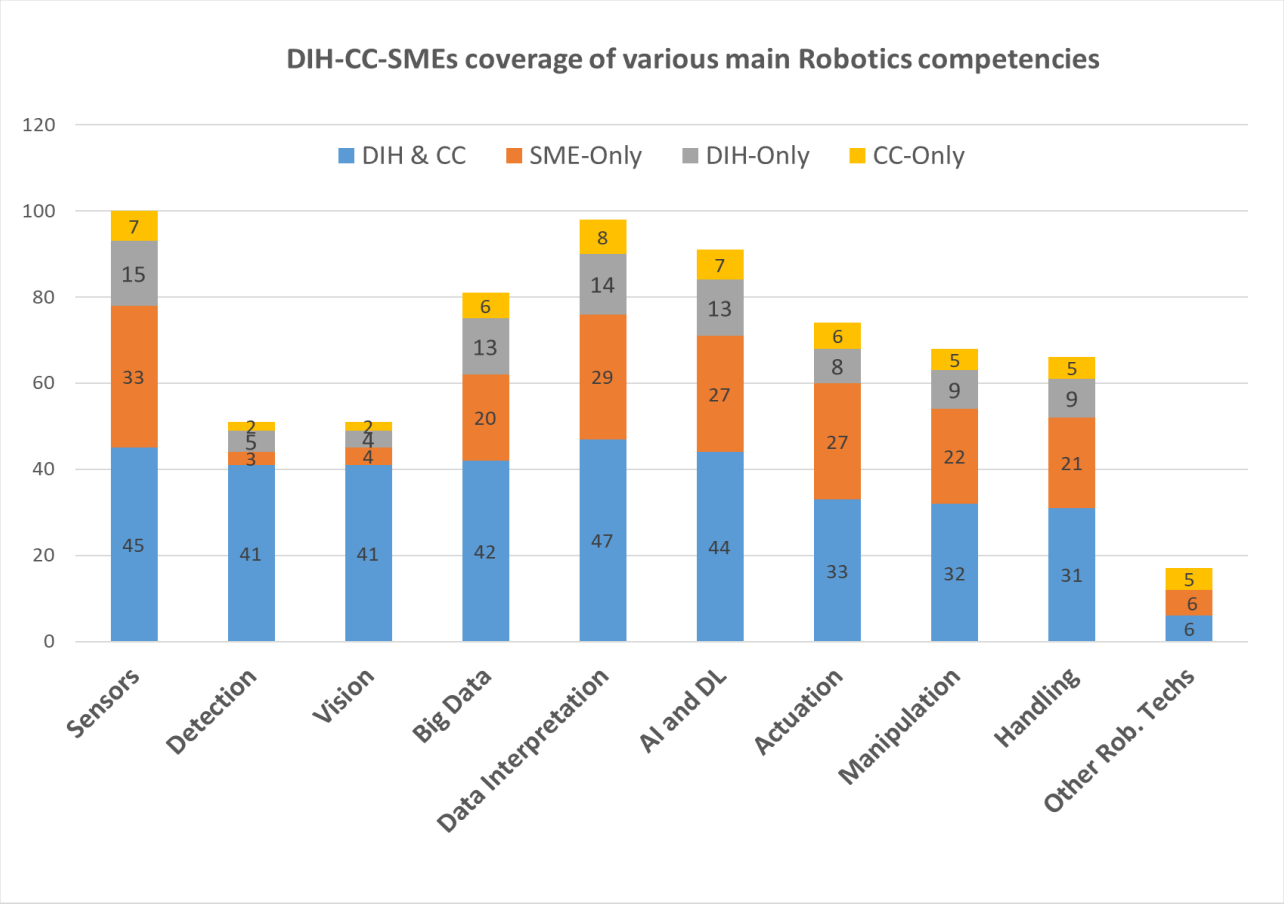

Figure 28 – Share of various organisational types across main Robotic Competencies (As reported in D1.4).

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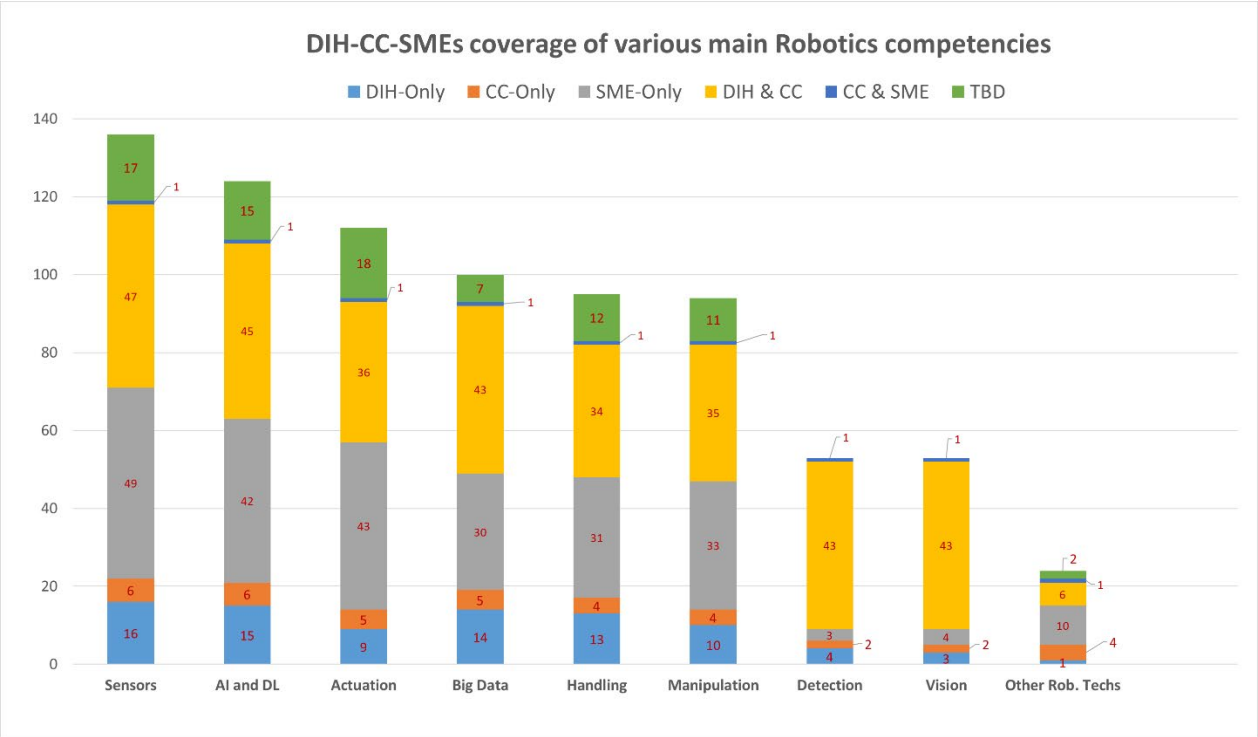

Figure 29 – Share of various organisational types across main Robotic Competencies (Current situation in D1.5).

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3 Identifying new candidate DIHs and CCs

3.1 Methodology for identification of new members

AgROBOfood has prepared a strategy for the growth of the network. There are several related work packages and tasks which can feed into and be guided by this strategy or approach. Identification of the fit-for-purpose organisations that can enrich the network with mutual benefits should occur based on a purposeful and coherent approach. In this Deliverable, it is tried to provide some of the more determining drivers for such an approach are outlined and a preliminary scan of the horizon is made with the goal of compiling lists of candidate organisations across the regional structure. The findings from other activities of the project such as the needs assessment, white spot analysis and the criteria for the final selection of new members will complement the intent of this task. Here we first:

- Take stock of the existing catalogue and mapping the current landscape using various dimensions such as:
  - Equilibrated spread across the 7 regional clusters (Section 2.2.1)
  - Coherence across types of organisations: DIH, CC, SME (Section 2.2.2)
  - Membership status of the organisations in the network (Section 2.2.3)
  - Balanced distribution of the available services (Section 2.3)
  - Adequate coverage of the ago food industry sectors (Section 2.4)
  - Availability of Main Robotics Competencies (Section 2.5)

Then, it is hoped to take the remaining time of the project and to:

- Identify focus areas (regional, services, industry sector, robotic competencies)
- Compile exhaustive list of candidate DIHs-CCs (Section 3.2).
- Analyse the needs and reduce the candidate lists to required short lists.
- Evaluate closely the short-listed categories.
- Solicit/invite/promote participation.

As mentioned before, there are other activities across work packages 1 and 6 with their respective deliverables which contribute to the evolution of the network's membership in a purposeful manner. In this document readily available directories of possible relevant DIHs and CCs are proposed for consultation and reference. Another valuable source of information for the identification of new members with direct and focused interests aligned with the goals of the network, is the list of enterprises (CCs, SMEs and LSEs) that apply to the Open Calls under FSTP instrument of agROBOfood. For example a needs assessment analysis is being carried out based on the results of the first open call through which 93 applications have been received and 6 projects are going to be funded. The result of this analysis which maps the applying organisations per regions and per RODIN categories will further contribute to the "needs-assessment" and "white-spot" analysis of the network and thereby towards facilitating more targeted solicitation of new members. The results of this exercise will become available in the near future and will therefore be incorporated in the next update of the deliverable in D1.5.

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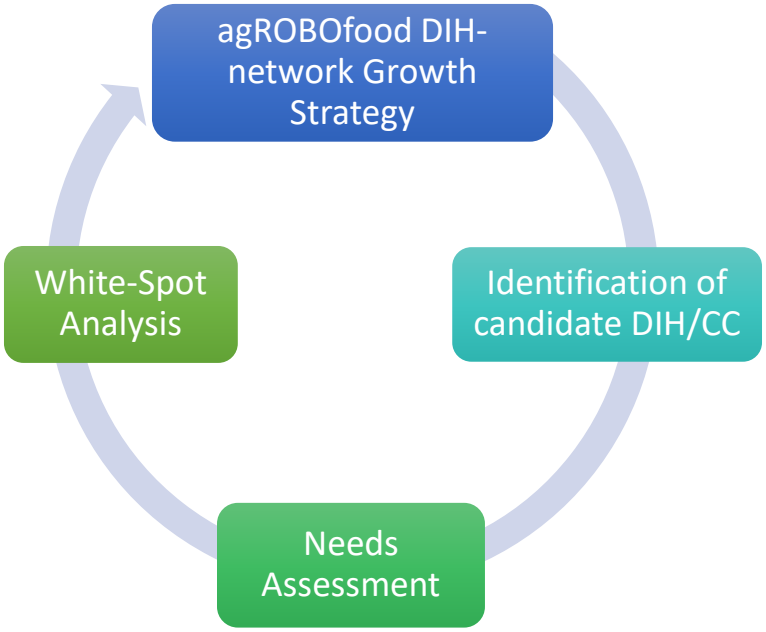

Figure 30 – The approach for the enlargement of the agROBOfood DIH Network

3.2 Means of identification of CCs and DIHs

As described in the previous Section, the enlargement of the network should be purposeful and coherent based on the needs and the gaps with the goal of extending the reach of the network and its unique added value to the SMEs and midcaps across Europe and onto the sectors of interest that it has targeted.

There are already many initiatives and activities mainly funded by the European Commission that can help the task of taking stock of what is available. Two of these resources are used in this Section in order to provide two types of lists for candidate organisations. The first one is based on the Smart Specialisation Platform (S3) which is a portal for the Digital Innovation Hubs across Europe some of which are also Competence Centres or have several Competence Centres (Section 3.2.1 below). Next the Advanced Technologies for Industry (ATI) portal will be used in Section 3.2.2., to provide a list of relevant European Technology Centres. Many of these TCs can serve as possible new Competence Centres to join agROBOfood network.

It is clear that each of the DIH member in the network will be best positioned to browse through the proposed list of candidates and to qualify/filter the identified new organisations and to make a choice of which ones are to be invited at which degree of priorities.

3.2.1 DIH candidates from EC's S3 Platform

- SMART SPECIALISATION PLATFORM (S3 Platform of the European Commission's Joint Research Centre)
  https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool

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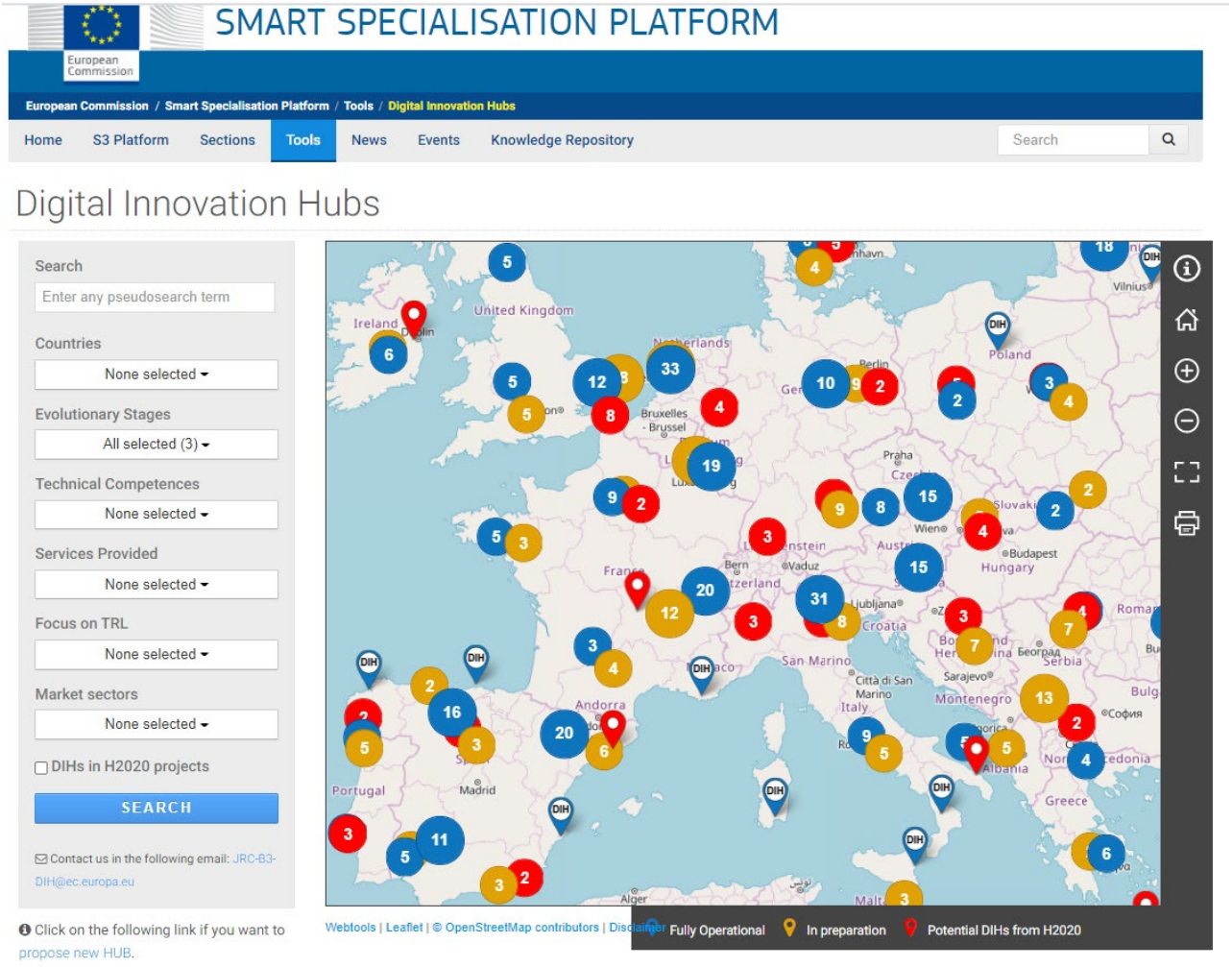

Figure 31 – S3 Platform to define search boundaries and identify candidate DIHs with

The parameters used to filter the results were:

- **Evolutionary Stage:** Selected from the two groups of "Fully Operational" and "Potential DIHs from H2020" and the third group "In preparation" was not selected.
- **Countries:** those described in the regional clusters
- **12 Technical Competences:**
  - Sensors, actuators, MEMS, NEMS, RF
  - Cyber physical systems (e.g. embedded systems)
  - Robotics and autonomous systems
  - Internet of Things (e.g. connected devices, sensors and actuators networks)
  - Artificial Intelligence and cognitive systems
  - Location based technologies (e.g. GPS, GIS, in-house localization)
  - Interaction technologies (e.g. human-machine Interaction, motion recognition and language technologies)
  - Cyber security (including biometrics)
  - Data mining, big data, database management
  - Augmented and virtual reality, visualization
  - Simulation and modelling
  - ICT management, logistics and business systems

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4 Market Sectors:

- Agriculture, hunting and forestry
- Financial intermediation
- Manufacture of food products, beverages and tobacco
- Manufacture of machinery and equipment

The resulting query brings back 288 DIHs (many of them being also CCs). The distribution of these across the regional clusters was determined and illustrated in Figure 40 while their distribution per countries is shown in Figure 41. The full list needs to be examined one by one, since the resulting table does not include information about the services these can provide. Furthermore, the DIHs in this query that are already in the network will have to be deleted. Following an automatic detection through text-matching between the "DIH Names" in the agROBOfood network Catalogue version 57 and the names of the organisations listed in the query from S3 Platform identified 8 matches, as outlined below. The reduced list of the candidate DIHs to be used for the next stage of analysis and eventual invitation are given for each regional cluster separately in Annex III.

- Central Eastern Europe: 1 of 28
- Central North Europe: 1 of 51
- East Mediterranean Europe: 0 of 11
- France Italy: 1 of 62
- Iberia (South West): 2 of 49
- North East Europe: 1 of 41
- North West Europe: 2 of 45

These lists need to be examined closely at the next stages for deciding which of these identified organisations could fit the purpose identified through the activities undertaken for Need Assessments (WP 6 - D6.1) and/or White-Spot Analyses (WP1, D1.6). These will be undertaken in support of the enlargement strategy envisioned for the network (WP6.4).

Figure 32 below shows the distribution of the resulting DIHs mapped across the seven regional clusters.

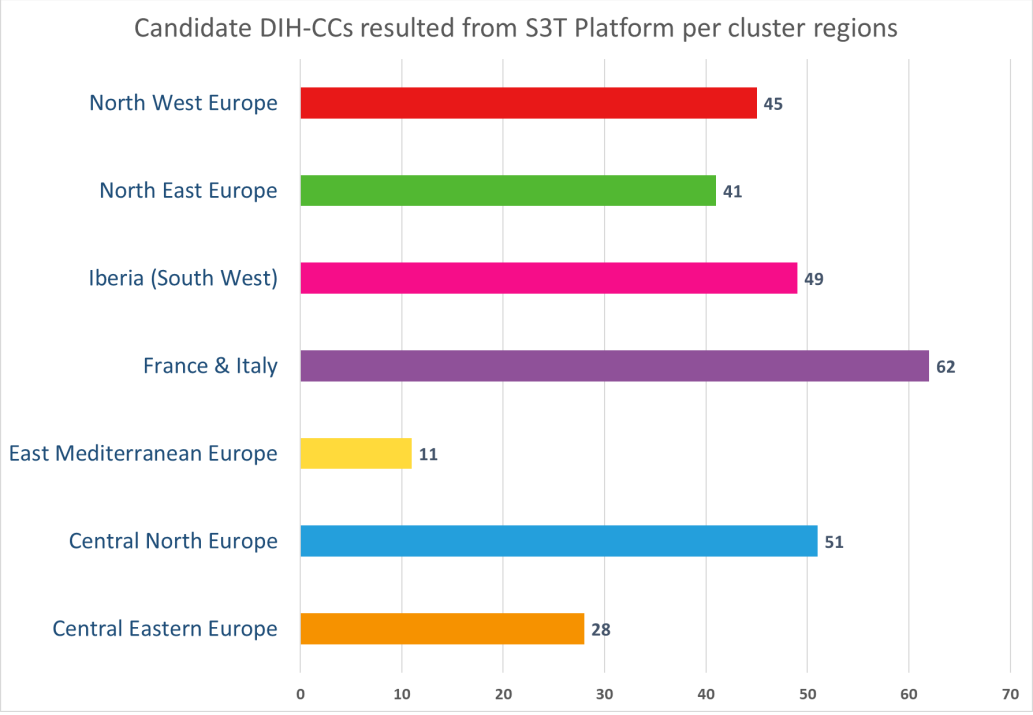

Figure 32 – Resulting DIHs mapped across regional clusters (possible overlaps with current catalogue)

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Moreover, Figure 33 below shows the distribution of these DIHs across the hosting countries.

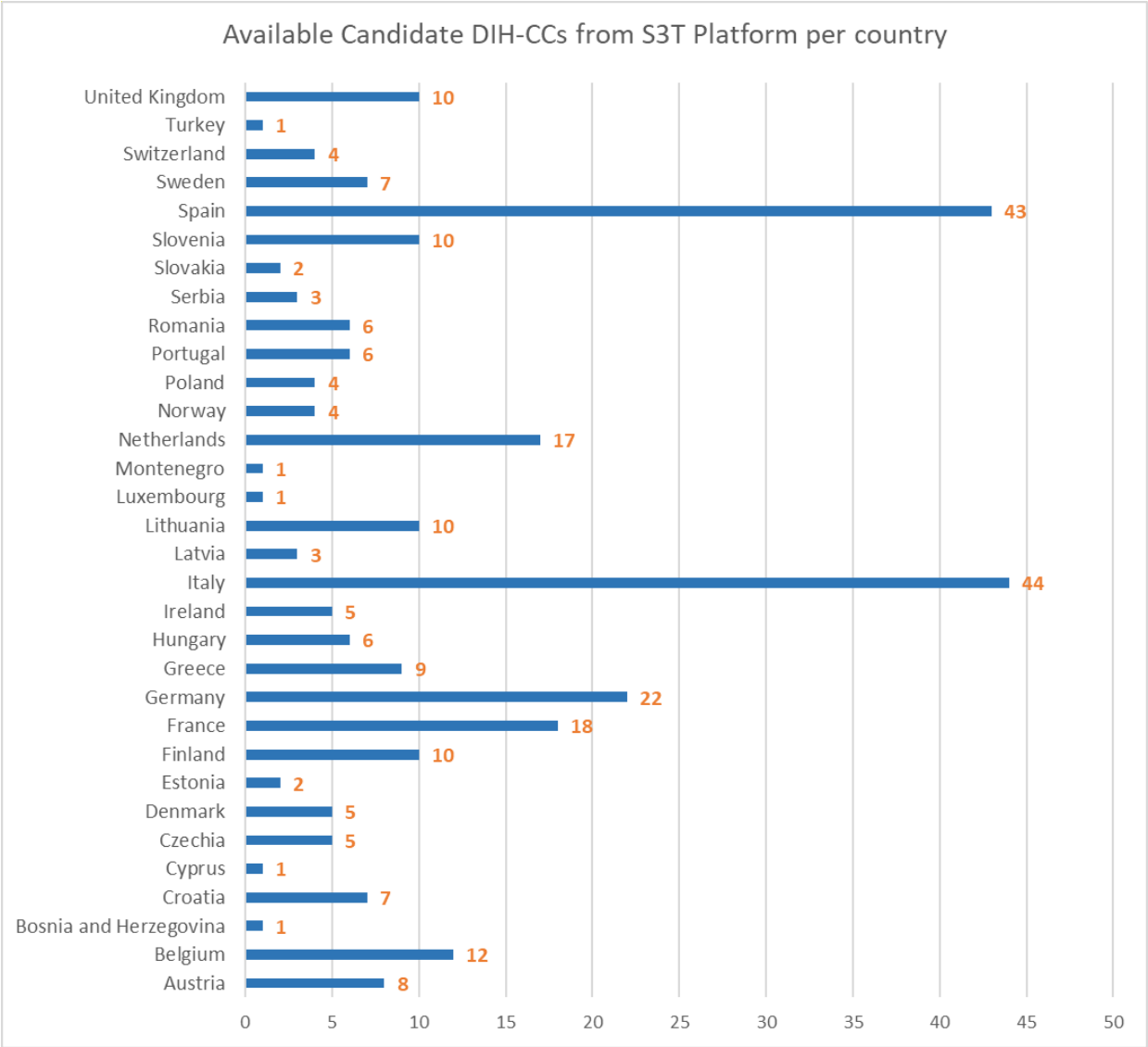

Figure 33 – Resulting candidate DIHs mapped across countries (possible overlaps with current catalogue).

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3.2.2 CC candidates from the EC's ATI Portal

https://ati.ec.europa.eu/technology-centre/mapping

"ATI Technology Centres help SMEs cross the 'Valley of Death' and go from lab to market to develop and produce new ATI-based products. They help companies reduce the time-to-market for new innovation ideas.

ATI Technology Centres are public or private organisations carrying out applied research and close-to-market innovation (Technology Readiness Levels TRL 3 to 8, not necessarily the whole range) in Advanced Technologies for Industry. Technology Centres typically provide the following services to SMEs:

Access to technology expertise and facilities for validation;

- Demonstration;
- Proof of concept / lab testing
- Prototype development and testing;
- Pilot production and demonstration/ pilot lines / pre-series
- Product validation / certification"

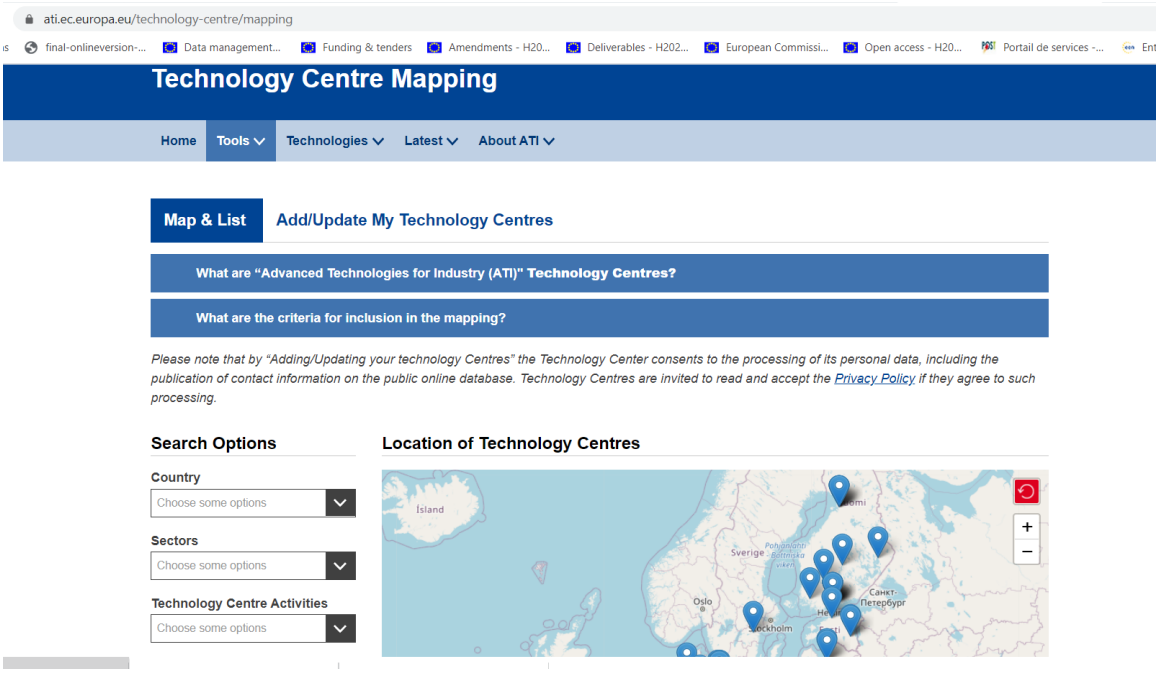

Figure 34 – Advanced Technologies for Industry Portal.

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As of 29/01/2021 there are 325 TC organisations in the portal. These 325 organisations are linked to multiple contact points therefore increasing the total number of entries to 399 (74 repeated CC).

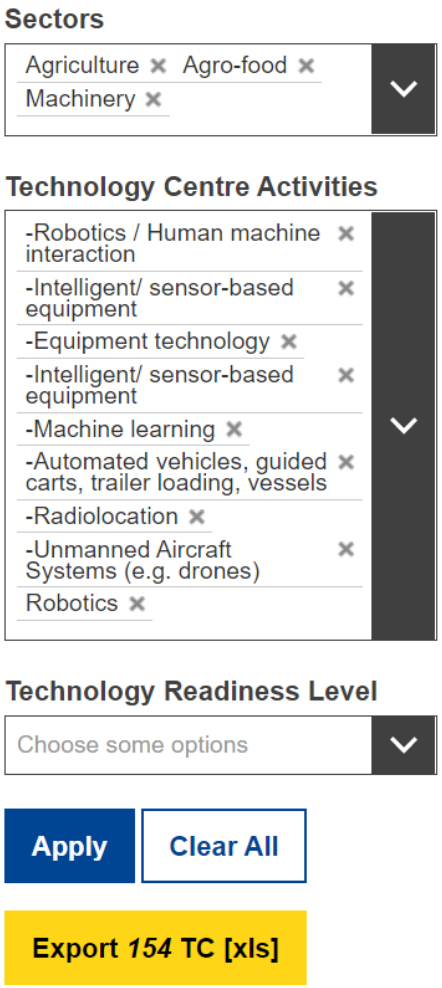
For the purposes of this Deliverable, only three Sectors were targeted, namely: Agriculture, Agro-food and Machinery.

Moreover, the list of Technology Centre Activities which were selected in the query are listed in the figure on the right-hand side. The TRLs were not filtered.

The resulting output was a list of 198 entries with 44 repeated organisations therefore leaving 153 unique CCs to be considered further. One entry was not kept in the final list (i.e., an SME from Malta which for the time being is not inscribed in any of the regional clusters).

These entries were mapped to the cluster regions of agROBOfood with the resulting distributions per cluster shown in Figure 36, while per types of organization illustrated in Figure 36.

Similarly to the previous Section for the identified DIH-CCs from the S3 platform, the Technology Centres proposed in this Section will need to be verified at a later stage in connection with the needs and the gaps identified in the network such that a purposeful and fit-for-purpose enlargement of the network can be achieved through targeted invitations.



The portal can potentially serve as very useful tool to quickly identify competence centres and their focus areas across Europe. This can be used to match the needs of and fill the gaps within the agROBOfood network Competence Centres, and should be therefore be consulted for the purposes of the network's enlargement.

However, it has to be noted that, when searching information in the portal, the two fields of "*web-links* to the *technology*" and "*other services*" of many organisations in the portal were not correct. To clarify this situation an email was sent to the support desk of the portal informing them of the issue. A reply from the portal's support desk has been received indicating that these problems have been solved and the data is now up to date and accurate.

Due to the timing of the aforementioned developments and the deadline for submission of this deliverable, the two mentioned fields were not available for inclusion in this version of the Deliverable 1.4, and thus the Tables given in Annex IV which provide the listing of the identified 153 Technology Centres per regional clusters do not include the web-links to the "technology" and to "other services" offered by each centre. The ATI portal is as an excellent and easy to use resource, therefore the corrected aforementioned URLs can be directly retrieved from the portal for any of the listed centres which shall be considered for joining the network in a later stage.

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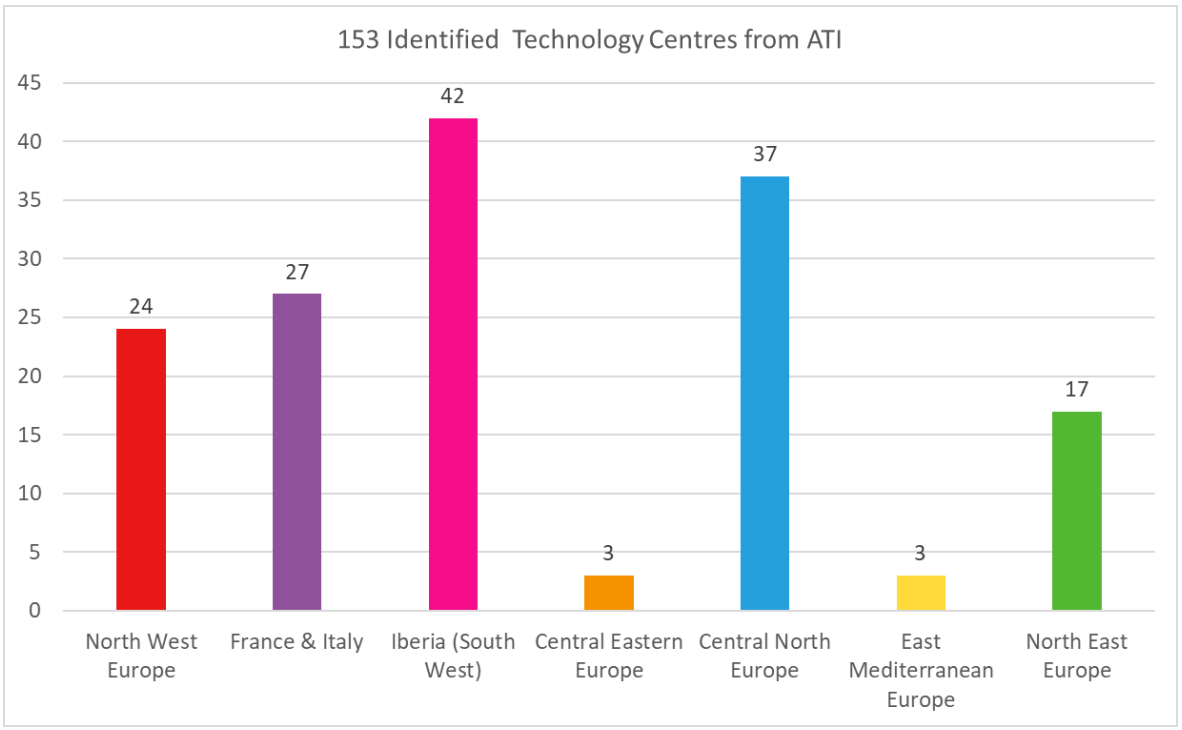
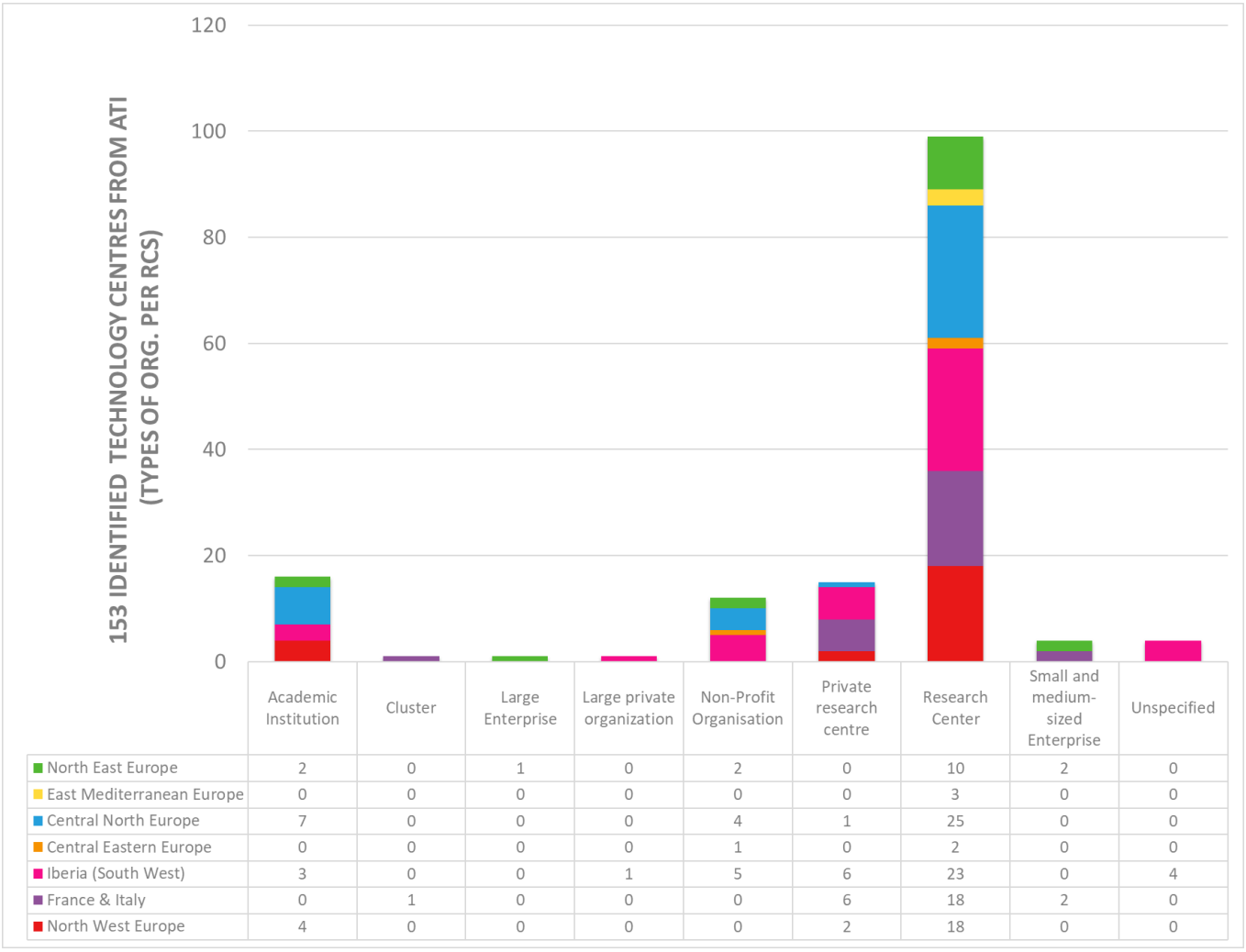


Figure 35 – Technology Centres identified from ATI portal across agROBOfood regional clusters



	Academic Institution	Cluster	Large Enterprise	Large private organization	Non-Profit Organisation	Private research centre	Research Center	Small and medium-sized Enterprise	Unspecified
North East Europe	2	0	1	0	2	0	10	2	0
East Mediterranean Europe	0	0	0	0	0	0	3	0	0
Central North Europe	7	0	0	0	4	1	25	0	0
Central Eastern Europe	0	0	0	0	1	0	2	0	0
Iberia (South West)	3	0	0	1	5	6	23	0	4
France & Italy	0	1	0	0	0	6	18	2	0
North West Europe	4	0	0	0	0	2	18	0	0

Figure 36 – Distribution of the seven categories of Technology Centres across regional clusters

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4 Next steps and concluding remarks

4.1 Next steps

The process of establishment, consolidation and growth of a DIH network such as agROBOfood is a continuous evolutionary process from a purposeful and coherent strategy through supporting actions, activities and adjustments such that the required conditions can be reached and thus the intended impacts can be expected. This deliverable was an update to a previous version submitted in December 2019 and it is foreseen that in November 2021, a second update to the list of identified DIHs and CCs as candidates shall be submitted. Several other activities and deliverables will cross-feed the overall process of using the lists identified in D1.4 and D1.5 for enlarging the size and the reach of the network as much as necessary while further establishing and consolidating its positioning and added value as a unique European network of digital innovation hubs and competence centres that can work together effectively in supporting the European agri-food sector in its take-up of robotic systems.

Currently the results of the open call for proposals launched under the programme are being analysed in order to help with the needs assessment exercise of the network in terms of its regional and sectorial coverages as well as the needed competencies. Furthermore, an updated version of the Competence profiling of CCs and DIHs and White-spot Analysis will be completed by November 2021. It is intended that the latter will be considered as a living reference document. Finally, towards the end of the 2022, Deliverable D1.17 will define the final version of the Criteria and procedures for new CCs and the connection of CCs to the DIHs.

Therefore the future update of this current Deliverable (D1.4 → D1.5) is hoped to be done through more extensive cross-fertilization and synergies with these other related actions mentioned above.

4.2 Concluding remarks

This deliverable reported on the identification of candidate existing Competence Centres and Digital Innovation Hubs whose joining to the network can be considered mutually beneficial. It was an update to a previously submitted D1.3 in December 2019. For completeness, the list of members reported in D1.3 are included in Annex 1.

In the first part of the document an introduction to the programme, and to the scope of this deliverable and related ones is provided. The second part of the report provides a complete illustration of the existing landscape in terms of current membership of the in the network according to version 57 of its catalogue dated January 2021 (the full list is provided in Annex II). This second part of the document was meant to bring to foreground the characteristics of the current membership using basic parameters inherent to the network. These were distribution across: Seven regional clusters, 16 sectors of activity, types of organisations, and their membership status. More overs the four broad categories of services indicated in the portfolio of activities of the members as well as the main robotics competencies that could be expected were illustrated.

The Second part of the document briefly outlines an approach and various means of continuous identification of new CC and DIH members. Moreover, two concrete sources of information at the European level were used to generate custom lists of possible candidates for new DIHs and CCs across all regional clusters.

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For identifying new DIHs and DIH-CCs we utilised European Commission's Smart Specialisation platform (S3P). When creating the query in this platform, 12 Technical Competencies and 4 Market Sectors were selected, namely: Agriculture hunting and forestry; Financial intermediation; Manufacture of food products, beverages and tobacco; and Manufacture of machinery and equipment. The result was briefly illustrated across the regional clusters and countries with the full list given in Annex III containing 288 DIHs (many of them being also CCs).

Another European Commission's central platform was used to identify possible new competence centres. This was the Advanced Technology Initiative portal (ATIP). For the purposes of this Deliverable, three Sectors were selected, namely: Agriculture, Agro-food and Machinery.

Moreover, a group of 8 Technology Centre Activities were selected for this query, namely:

- Robotics / Human-machine interaction
- Intelligent sensor-based equipment
- Equipment technology
- Machine learning
- Automated vehicles, guided carts, trailer loading vessels
- Radiolocation
- Unmanned Aircraft Systems (e.g., drones)
- Robotics

The resulting output was a list of 153 unique CCs to be considered further. These entries were mapped and illustrated to the cluster regions of agROBOfood with the full list being included as Annex IV.

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5 References

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- EuRobotics and agROBOfood Strategic Agenda Draft Document: "European Robotics in Agri-Food Opportunities and Challenges"

- agROBOfood Deliverable D1.3: Identification of existing CCs and DIHs for building the network, submitted in December 2019

- agROBOfood Deliverable D1.6: Competence profiling of CCs and DIHs and White-spot Analysis, submitted in June 2020

- agROBOfood Deliverable D6.1: Need assessment report, submitted in June 2020

- agROBOfood Deliverable D1.16: Define criteria and procedures for new CCs and the connection of CCs to the DIHs, submitted in December 2019

- agROBOfood Deliverable D6.4: DIH Observatory - 1st version, submitted in September 2020

- Slawomir Sander, Eldert van Henten, Kees Lokhorst, Erik Pekkeriet, Thilo Steckel, (2021) European Robotics in agri-food Production: Opportunities and Challenges, https://zenodo.org/record/4742482

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6 Annexes

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Annex I: Current member coverage analysed in this D1.5

Table 6 – List of 168 current members at the of D1.5 (excluding 41 Requesting members with undetermined status)

Region	Country	Short Name	Organization Name	Website	DIH	CC	SME	Status
Central Eastern Europe	Serbia	BIOS	BioSense Institute	-	x	x		Consortium member
Central Eastern Europe	Serbia	CAM ENGINE ERING	CAM Engineering	-			x	Consortium member
Central Eastern Europe	Bulgaria	DTB	Bulgarian Innovation & Technology Hub - Bulgarian DigiTecH 4.0		x	x		Consortium member
Central Eastern Europe	Serbia	Krivaja doo	Krivaja doo				x	Consortium member
Central Eastern Europe	Bulgaria	DSLL	Digital Spaces Living Lab	-	x	x		Associated member
Central Eastern Europe	Croatia	ICENT	CROBOHUB (Croatian Robotics Digital Innovation Hub) Innovation Centre Nikola Tesla	-	x	x		Associated member
Central Eastern Europe	Serbia	ICT Hub	ICT Hub d.o.o. Belgrade	-	x	x		Associated member
Central Eastern Europe	Slovenia	STP	Štajerski Tehnološki park d.o.o.	www.stp.si	x	x		Associated member
Central Eastern Europe	Romania	Transilv ania DIH	Transilvania Digital Innovation Hub		x	x		Associated member
Central Eastern Europe	Slovenia		DIH AGRIFOOD	www.dih-agrifood.com	x			Associated member
Central Eastern Europe	Romania		Digital Innovation Smart eHUB	www.smartehub.eu	x			Associated member
Central Eastern Europe	Romania	FIT	Futures of Innovation and Technology	https://www.iceberg.ro/digital-innovation-hub	x			Associated member
Central Eastern Europe	Serbia	RoboSh epherd	Coming computer engineering Belgrade, Faculty of mechanical engineering Nis (RoboShepherd)	www.robo-shepherd.com			x	Approved
Central Eastern Europe	Ukraine		UKRCAM LLC	www.ukrcam.net			x	Approved
Central Eastern Europe	Bulgaria		AgroRobotics Association Bulgaria	http://agrorobotika.eu/			x	Business member
Central Eastern Europe	Ukraine		Robotec	www.robotec.ua			x	Business member
Central Eastern Europe	Romania		Chamarel srl	www.vetfast.ro			x	Approved
Central Eastern Europe	Slovenia		PEK Automotive d.o.o.	www.slopehelper.com			x	Business member
Central Eastern Europe	Slovenia		ELMIBIT d.o.o.	www.evineyardapp.com			x	Business member
Central North Europe	Germany	AEF e.V.	Agricultural Industry Electronics Foundation		x			Consortium member
Central North Europe	Germany	Fraunho fer IPA	Fraunhofer -Gesellschaft zur Forderung der angewanten Forschung e.V.	-	x	x		Consortium member

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Central North Europe	Austria	JR-ROB	Institute for Robotics and Mechatronics (JOANNEUM RESEARCH)	https://www.joanneum.at/robotics		x		Consortium member
Central North Europe	Hungary	AGIT FIEK	Hungarian University of Agriculture and Life Sciences (MATE)	-	x	x		Associated member
Central North Europe	Czech Republic	AGRIS	Agrarian Advisory & Information group of Czech University of Life Science		x	x		Associated member
Central North Europe	Germany	DKE-Data	DKE - Data GmbH & Co. KG	-		x	x	Associated member
Central North Europe	Germany	Fraunhofer IVV Dresden	Fraunhofer Institute for Process Engineering & Packaging IVV, Institute Part Dresden	-	x	x		Associated member
Central North Europe	Poland	IoT North Poland	Regional Digital Innovation Hub related to Internet of Things		x	x		Associated member
Central North Europe	Czech Republic	Plan4All	Innovation Hub for Open Data & Landscape Management	-	x	x		Associated member
Central North Europe	Czech Republic		IT4Innovations@National Supercomputing Center VSB - Technical University of Ostrava	https://www.it4i.cz	x			Associated member
Central North Europe	Germany		Deepmentation UG	www.deepmentation.ai			x	Business member
Central North Europe	Switzerland	BFH	Bern University of Applied Sciences (BFH) - School of Agricultural, Forest and Food Sciences (HAFL)	www.bhf.ch/hafl/en/research/research-areas		x		Associated member
Central North Europe	Slovakia		MAVIS, s.r.o.	www.mavis.sk			x	Approved
Central North Europe	Switzerland		Fixposition AG	www.fixposition.com			x	Business member
Central North Europe	Germany		Farming Revolution GmbH	https://farming-revulution.com			x	Business member
Central North Europe	Germany		EurA AG	www.eura-ag.de	x			Associated member
Central North Europe	Switzerland		ArboPilot	www.arbopilot.com			x	Approved
Central North Europe	Germany		Dahlia Robotics GmbH	www.dahliarobotics.com			x	Approved
Central North Europe	Germany		E-TERRY	www.e-terry.de			x	Business member
East Med	Greece	AGENSO	Agricultural & Environmental Solutions	-			x	Consortium member
East Med	Greece	AUA	Agricultural University of Athens	-	x	x		Consortium member
East Med	Greece	DRAXIS	DRAXIS	-			x	Consortium member
East Med	Greece	ETAM	ETAM SA	www.etam.gr			x	Consortium member
East Med	Greece	AIC Central Macedonia	Alexandreio Innovation Center AIC - Central Macedonia DIH	-	x	x		Associated member
East Med	Greece	ATHENA RC	ATHENA Research & Innovation Center	-	x	x		Associated member
East Med	Greece	Gaiasense	Gaiasense DIH on Smart Farming	-	x	x		Associated member

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East Med	Turkey	IAIC	Izmir Agrifood Innoavtion Center	-	x	x		Associated member
East Med	Greece	CERTH-ITI	Information Technologies Institute - CERTH-ITI	www.iti.gr	x	x		Associated member
East Med	Cyprus	Novatex	Novatex Solutions LTD	www.novatexsolutions.eu			x	Business member
East Med	Greece		University of Patras - Soil Science Laboratory (SSLab)	www.edafologiko.gr		x		Associated member
East Med	Cyprus		ECECT - European Centre for Emerging Competencies and Technologies	www.ecect.eu			x	Business member
East Med	Greece		CityCrop Automated Indoor Farming	www.citycrop.io			x	Business member
East Med	Turkey		Tabit Akıllı Tarım Teknolojileri A.Ş	www.tabit.com.tr			x	Approved
East Med	Greece		IntelAgro IKE	www.intelagro.eu			x	Approved
East Med	Greece		Terra Robotics				x	Business member
East Med	Israel		Automato Agricultural Robotics (Automato)	www.automatorobotics.com				Business member IE
France & Italy	France	AgreenCulture	AgreenCulture				x	Consortium member
France & Italy	France	CEA	CEA	-	x	x		Consortium member
France & Italy	Italy	CNR-IMAMOTER	Consiglio Nazionale delle Ricerche - Instituto per le Macchine Agricole e Movimento Terra	-	x	x		Consortium member
France & Italy	France	INRAE	National Research Institute for Agriculture, Food and Environment	https://www.inrae.fr/en	x	x		Consortium member
France & Italy	France	SITIA	Sitia	-			x	Consortium member
France & Italy	France	VitiBot	VitiBot	https://vitibot.fr/			x	Consortium member
France & Italy	France	Vitirover	Vitirover SAS				x	Consortium member
France & Italy	France	BDI-AGRETIC	Bretagne Development Innovation AGRETIC		x	x		Associated member
France & Italy	Italy	CNR	Nationa research Council		x	x		Associated member
France & Italy	Italy	MEDISDIH	Distretto Meccatronico Regionale e Digital Innovation Hub della Puglia S.c.a r.l.	-	x	x		Associated member
France & Italy	France	RobAgri	RobAgri	www.robagri.fr	x	x		Associated member
France & Italy	France		MIP robotics	www.mip-robotics.com			x	Approved
France & Italy	Italy		ROBODYNE	www.robo-dyne.com			x	Business member
France & Italy	France		Roborative	www.roborative.com			x	Approved
France & Italy	Italy		Aigritec	http://aigritec.com/			x	Business member IE
France & Italy	France		OSIRIS AGRICULTURE SAS	osiris-agriculture.fr			x	Business member IE
Iberia	Spain	E-STRATOS	E-STRATOS				x	Consortium member
Iberia	Spain	EURECAT	Eurecat	-	x	x		Consortium member

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Iberia	Portugal	INESCTEC	INESCTEC	www.inesctec.pt	x	x		Consortium member
Iberia	Spain	INNOVI	INNOVI	-			x	Consortium member
Iberia	Spain	ROBOTNIK	Robotnik	-			x	Consortium member
Iberia	Spain	Tecnova	Andalusian Technological Centre of Agricultural Industry	www.fundaciontecnova.com	x			Consortium member
Iberia	Spain/Catalonia	AgriTech BigData DIH	AgriTech BigData, Big Data Innovation Hub	-	x	x		Associated member
Iberia	Spain/Catalonia	IAAC	Institute for Advanced Architecture Catalunya		x	x		Associated member
Iberia	Portugal	Iman Norte Hub	iMan Norte Hub	https://www.imannortehub.com/	x			Associated member
Iberia	Spain/Madrid	ROBOCITY2030	ROBOCITY2030		x	x		Associated member
Iberia	Spain	Clusaga	Clusaga - Cluster Alimentario de Galicia		x			Associated member
Iberia	Spain	LEITAT	LEITAT	https://projects.leitat.org	x			Approved
Iberia	Spain	ASTIBOT	ASTIBOT	www.astibot.es			x	Approved
Iberia	Spain		IOT Environment Technologies SL	www.geoentec.com			x	Business member
Iberia	Spain		Innovarum	www.innovarum.es			x	Business member
Iberia	Spain		Innovatione AgroFood Design	www.innovatione.eu			x	Business member
Iberia	Spain		Electroingeniería industrial XCLC S.L.	www.electroingenium.es			x	Business member
Iberia	Portugal		XpectralTEK	www.xpectraltek.com			x	Approved
Iberia	Spain		GREENARTECH	www.greenar.tech			x	Approved
Iberia	Spain	DIHBU	Digital Innovation Hub Industry 4.0	www.dihbu40.es	x			Associated member
Iberia	Spain		SubSea Mechatronics	htpps://www.subseamechatronics.com			x	Business member
Iberia	Spain		Deimos Imaging	www.deimos-imaging.com			x	Business member
Iberia	Spain		TEKNIKER	www.tekniker.es	x	x		Associated member
Iberia	Spain		AZCATEC Tecnología e Ingeniería	http://azcatec.com			x	Business member
Iberia	Spain		Sonicat Systems	www.sonicat-systems.com			x	Business member
Iberia	Spain		Pulverizadores Fede SL	www.fedepulverizadores.com			x	Business member
Iberia	Spain		GeneticAI				x	Approved
Iberia	Spain		AMBIMETRICS	www.ambimetrics.com			x	Business member
Iberia	Spain		Pal-robotics - Anaël le Bihan	http://pal-robotics.com/			x	Business member IE
Iberia	Spain		GreenKillerWeeds	greenkillerweeds.com				Business member IE
North East Europe	Denmark	DTI	Danish Technological Institute	www.dti.dk	x	x		Consortium member
North East Europe	Lithuania	SD	VSI Startup Division		x			Consortium member
North East Europe	Denmark	TECHNICON	Technicon ApS	-			x	Consortium member

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North East Europe	Finland	VTT	VTT Technical Research Centre of Finland Ltd		x	x		Consortium member
North East Europe	Denmark	Agrotech	Agrotech		x	x		Associated member
North East Europe	Sweden	Agroväst	AGROVÄSTLIVSMEDEL LTD	-	x			Associated member
North East Europe	Denmark	DMRI	Danish Meat Research Institute	-	x	x		Associated member
North East Europe	Lithuania	LRA	Lithuanian Robotics Association Digital Innovation Hub		x			Associated member
North East Europe	Finland	Luke DIS	Luke DigiInno Services		x	x		Associated member
North East Europe	Denmark	OR	Odense Robotics		x			Associated member
North East Europe	Denmark	RT	Robot Technology		x	x		Associated member
North East Europe	Denmark	SEGES	Danish Food and Agricultural Council, SEGES	-	x			Associated member
North East Europe	Estonia	SmartIC Robotics	DIH Smart Industry Centre of Robotics in Estonia		x	x		Associated member
North East Europe	Latvia	ZSA	Farmers Parliament, Union		x			Associated member
North East Europe	Finland	ROBOCAST	Robocoast		x	x		Associated member
North East Europe	Lithuania		AgriFood Lithuania	www.agrifood.lt	x			Associated member
North East Europe	Denmark		Organe Institute ApS	www.organe.dk	x	x		Associated member
North East Europe	Norway		Norwegian University of Life Sciences	www.nmbu.no		x		Associated member
North East Europe	Finland		Berggren Oy	www.berggren.fi			x	Approved
North East Europe	Denmark		Seasony	www.seasony.io			x	Business member
North East Europe	Denmark		Cestek Automation A/S	www.cestek.dk			x	Approved
North West Europe	Belgium	CEMA	CEMA European Agricultural Machinery Industry Association	www.cema-agri.org	x			Consortium member
North West Europe	Netherlands	HIGH TECH NL	High Tech NL	-	x			Consortium member
North West Europe	Belgium	ILVO	Institute for Agricultural, Fisheries and Food	-	x	x		Consortium member
North West Europe	Netherlands	Letsgrow	LetsGrow.com	www.letsgrow.com		x	x	Consortium member
North West Europe	United Kingdom	Q-Technologies	Q Technologies Ltd	www.q-technologies.co.uk/			x	Consortium member
North West Europe	Netherlands	SAIA Agrobotics	Saia Agrobotics				x	Consortium member
North West Europe	Netherlands	TUDelft	Delft University of Technology	www.robotics.tudelft.nl	x	x		Consortium member
North West Europe	Ireland	WIT	Waterford Institute of Technology		x	x		Consortium member
North West Europe	Netherlands	WR	Stichting Wageningen Research		x	x		Consortium member
North West Europe	Netherlands	Akkerweb	Stichting Akkerweb					Associated member
North West Europe	Netherlands	AVAG	Algemene Vereniging van Aannemers en Installateurs in de Glastuinbouw, AVAG		x	x		Associated member

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North West Europe	Luxembourg	EXXUS	EXXUS SA	-	x	x		Associated member
North West Europe	Netherlands	Fedecom	Fedecom		x			Associated member
North West Europe	Belgium	FF	Flanders` food		x	x		Associated member
North West Europe	Belgium	Flanders MAKE	Flanders MAKE	-	x	x		Associated member
North West Europe	Netherlands	FME Agri & Food	FME Cluster Agri & Food	-	x			Associated member
North West Europe	Netherlands	GTL	GreenTechLab	-	x	x		Associated member
North West Europe	United Kingdom	IFA	Innovation for agriculture	-	x			Associated member
North West Europe	Belgium	IMEC	Interuniversitair Micro-Electronica Centrum vzw	-	x	x		Associated member
North West Europe	Ireland	ITT	Institute of Technology Tralee	-	x	x		Associated member
North West Europe	Belgium	KU Leuven	Katholieke Universiteit Leuven	-	x	x		Associated member
North West Europe	Netherlands	KvK	Kamer van Koophandel	-	x			Associated member
North West Europe	Netherlands	NLR	Nederlands Aerospace Centre			x		Associated member
North West Europe	Belgium	SDF	Smart Digital Farming		x	x		Associated member
North West Europe	United Kingdom	UoL	The University of Lincoln		x	x		Associated member
North West Europe	Netherlands	UT	University of Twente		x	x		Associated member
North West Europe	Netherlands	WDCC	Wageningen Data Competence Center		x	x		Associated member
North West Europe	Netherlands	WUR-FTE	Farm Technology Group	-		x		Associated member
North West Europe	Netherlands	WUR-GRS	Laboratory of Geo-information science & remote sensing		x	x		Associated member
North West Europe	Netherlands	ZLTO	Zuidelijke Land en Tuinbouw Organisatie		x			Associated member
North West Europe	Netherlands	DIH GPWH	Greenport West Holland Smart Agri DIH		x			Associated member
North West Europe	Netherlands	Agro Care	Agro Care	www.agrocare.nl			x	Business member
North West Europe	United Kingdom		Peacock Technology Ltd	www.peacocktech.co.uk			x	Business member
North West Europe	United Kingdom		Agri-EPI Centre	www.agri-epicentre.com	x			Associated member
North West Europe	Netherlands		Oost NL		x			Associated member
North West Europe	Ireland		Iamus Technologies Limited				x	Business member
North West Europe	Netherlands		Difco International BV	www.difco.nl			x	Approved
North West Europe	United Kingdom		FLOX	www.flox.ai			x	Business member
North West Europe	Netherlands		Distribute	www.distribute.company			x	Business member
North West Europe	Netherlands		Innovatec	www.innovatec.com			x	Approved
North West Europe	Netherlands		ABB	https://global.abb/group/en			x	Business member

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North West Europe	Netherlands		Kubota Innovation Center Europe	www.kubota-eu.com			x	Business member
North West Europe	Belgium		Ten Agency	htpps://www.ten-agency.be			x	Business member
North West Europe	United Kingdom		University of Essex	www.essex.ac.uk	x	x		Associated member
North West Europe	Netherlands		Vectioneer	www.vectioneer.com			x	Business member
North West Europe	United Kingdom		Crover Ltd					Business member IE

Table 7 – Forty one requesting members whose status are not fully determined at the time of writing of D1.5

Region	Country	Short Name	Organization Name	Website	DIH	CC	SME	Status
Central Eastern Europe	Croatia		SEGESTAN SUPERIOR j.d.o.o					Requested
Central Eastern Europe	Romania		Levente Tamas	robotics-ai.org				Requested
Central Eastern Europe	Ukraine		Sens Agro LLC					Requested
Central Eastern Europe	Croatia		IPS Konzalting d.o.o. (IPS)	www.ips-konzalting.hr				Requested
Central Eastern Europe	Bulgaria		Bulgarian National Agricultural Advisory Service	www.naas.government.bg				Requested
Central North Europe	Germany	AKONR	AKON Robotics	www.akon-robotics.de				Requested
Central North Europe	Switzerland	NTB	NTB	https://www.ntb.ch/				Requested
Central North Europe	Switzerland		ecoRobotix	www.ecorobotix.com				Requested
Central North Europe	Germany		RootCamp GmbH					Requested
East Med	Greece		University of the Peloponnese; Electrical & Computer Engineering Department	https://sites.google.com/view/ecsalab/				Requested
East Med	Cyprus		ARI (Agricultural Research Institute)					Requested
East Med	Cyprus		Michael Olympios					Requested
East Med	Greece		IKnowHow	https://www.iknowhow.com/				Requested
East Med	Cyprus		Future Needs Management consulting Ltd.	www.futureneeds.eu				Requested
East Med	Greece		Hellenic Drones					Requested
France & Italy	France	PTS	PowerTech Systems					Requested
France & Italy	France		Hortobot s.r.l.	www.hortobot.com			x	Requested
France & Italy	Italy		Robotic Perception	www.roboticperception.com				Requested
France & Italy	Italy		Josef Kienzle / Josef	http:/www.fao.org/sustainable-agricultural-mechanization/en/				Requested
Iberia	Spain	INSOMNIA	Insomnia Digital Innovation Hub		x			Requested

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Iberia	Spain	CAMPAG	Clúster de la Maquinaria Agrícola de Aragón	www.campag.es		x		Requested
Iberia	Spain	SPHERAG	SPHERAG	www.risiberia.es		x		Requested
Iberia	Spain		Alpha Unmanned Systems SL	www.alphaunmannedsystems.com				Requested
North East Europe	Estonia		BerryBot					Requested
North East Europe	Denmark		FarmDroid	www.farmdroid.dk				Requested
North West Europe	Netherlands	NEITRACO	Neitraco					Requested
North West Europe	Netherlands	ONTWNHN	Ontwikkelingsbedrijf Noord-Holland Noord					Requested
North West Europe	Netherlands	ODDBOT	Odd.bot				x	Requested
North West Europe	Netherlands	FMTENG	Farmertronics Engineering BV					Requested
North West Europe	Netherlands	NPKDESIGN	npk design					Requested
North West Europe	Netherlands	OLMIAROB	Olmia Robotics					Requested
North West Europe	Netherlands	ATOS	Atos					Requested
North West Europe	Belgium	INAGRO	Inagro vzw		x	x		Requested
North West Europe	Netherlands		PATS Indoor Drone Solutions	www.pats-drones.com				Requested
North West Europe	Ireland		Anuland	www.anuland.com				Requested
North West Europe	Netherlands		Pixelfarm Robotics	https://pixelfarming robotics.com/#robot-one				Requested
North West Europe	Ireland		AgriTech Ireland Cluster	www.agritechireland.ie	x			Requested
North West Europe	Ireland		Konree Innovation Limited	http://konreeinnovation.com				Requested
North West Europe	Netherlands		DIH Limburg	info@dih-limburg.nl				Requested
North West Europe	Belgium	UGent	Universiteit Gent	https://www.ugent.be/bw/environment/en/research/presco				Requested
North West Europe	United Kingdom		Muddy Machines	www.muddymachines.com				Requested

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Annex II: Reduced list of candidate DIHs from S3 Platform

A.II.1. DIHs in Central Eastern Europe: 28 identified from S3P

NB: Entities which are already in the catalogue are crossed out (but kept in the table)

Table 8 – List of identified DIHs from S3P in CEE as reported in D1.4

DIH Name (in CEE)	City	Country	Website	Contact
AgriFood Croatia	Sibenik	Croatia	https://agrifoodcroatia.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16394/view
Algebra LAB	Zagreb	Croatia	https://www.algebra.hr/lab/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2566/view
BioSense Institute - Institute for research and development of information technology in biosystems	Novi Sad	Serbia	http://biosense.rs/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1416/view
Bridgeway Europe Startup Accelerator, Bridgeway Accelerator	Novi Beograd	Serbia	https://www.bridgeway.company/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1038/view
Business incubator PISMO	Novska	Croatia	http://inkubator-pismo.eu/en/digital-inovation-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13266/view
CROBOHUB Croatian Robotics Digital Innovation Hub	Zagreb	Croatia	http://www.icent.hr/en/crobohub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1474/view
DIGIPARC - Digital Partnership Centre	Rijeka	Croatia	https://dih.par.hr/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13567/view
Digital Innovation Hub for Smart Manufacturing	Murska Sobota	Slovenia	http://www.p-tech.si	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1431/view
Digital Innovation Hub for Society (DIH4S)	Cluj-Napoca	Romania	https://www.dih4society.ro	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17474/view
Digital Innovation Hub of Eastern Slovenia (DIGITECH SI -East)	Celje	Slovenia	http://digitech-si-east.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1487/view
Digital Innovation Hub Slovenia	Ljubljana	Slovenia	http://dihslovenia.si/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5693/view
~~Digital Innovation SMART eHUB~~	~~Bucharest~~	~~Romania~~	~~https://smartehub.ro/~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/15802/view~~
DIH AGRIFOOD - Digital Innovation Hub for Agriculture and Food production	Murska Sobota	Slovenia	http://itc-cluster.com/dih-agrifood/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2467/view
DIH for digital twins of logistics systems and manufacturing processes and systems (DIH_DiTMaPS)	Ljubljana	Slovenia	http://dih-ditmaps.si	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19703/view
DIH North	Koprivnica	Croatia	https://www.dih-north.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3103/view
DIH UM	Maribor	Slovenia	https://www.um.si/en/research/DIH%20UM/Pages/DIH%20UM.aspx	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12068/view
Foundation for innovation and technology development, INTERA Technology Park	Mostar	Bosnia and Herzegovina	http://www.intera.ba	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1179/view
HPC5 - High Performance and Cloud Computing Cross-border Competence Consortium	Nova Gorica	Slovenia	https://hpc5.eu/eng/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3278/view

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hub.in Bjelovar	Bjelovar	Croatia	https://www.hubinbjelovar.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12265/view
ICT HUB	Belgrade	Serbia	http://icthub.rs/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1088/view
Jožef Stefan Institute	Ljubljana	Slovenia	http://tehnologije.ijs.si	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1435/view
M:tel digitalna fabrika	Podgorica	Montenegro	http://www.digitalnafabrika.mtel.me	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1382/view
North- East Romania DIH - ″Digital Innovation Zone″	Piatra Neamt	Romania	https://digital-innovation.zone	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17069/view
Sibiu Smart Systems	Sibiu	Romania	http://centers.ulbsibiu.ro/incon/dih	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13267/view
Styrian Technology Park, STP	Pesnica pri Mariboru	Slovenia	https://stp.si	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1432/view
Transilvania Digital Innovation Hub - Transilvania DIH	Cluj-Napoca	Romania	https://transilvaniait.ro/en/transylvania-dih/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1233/view
Wallachia eHub	Ploiesti	Romania	https://wallachiaehub.ro/en/about-us/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19411/view
4PDIH - Public Private People Partnership Digital Innovation Hub	Ljubljana	Slovenia	http://4pdih.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17265/view

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A.II.2. DIHs in Central North Europe: 51 identified from S3P

NB: Entities which are already in the catalogue are crossed out (but kept in the table)

Table 9 – List of identified DIHs from S3P in CNE as reported in D1.4

DIH Name (in CNE)	City	Country	Website	Contact
AddedValue	Budapest	Hungary	https://www.addedvalueinstitution.com/?page_id=178	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13293/view
am-LAB	Szombathely	Hungary	http://www.amlab.hu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3091/view
BioNanoNet ForschungsGmbH, BNN	Graz	Austria	http://www.bionanonet.at	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1220/view
BME-EET	Budapest	Hungary	https://dih.eet.bme.hu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13299/view
CAMPUS 02 R&D Section	Graz	Austria	https://en.campus02.at/rd/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5580/view
Center Digitisation District Böblingen (ZD.BB)	Böblingen	Germany	https://www.zd-bb.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12606/view
Center Digitisation.Bavaria, ZD.B	Garching	Germany	https://zentrum-digitalisierung.bayern	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1491/view
Centre for Advanced Manufacturing Technologies, Wroclaw University of Science and Technology	Wroclaw	Poland	http://www.camt.pl/index.php/en/home-en/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1046/view
Czech Institute of Informatics, Robotics, and Cybernetics	Praha 6	Czechia	https://www.ciirc.cvut.cz/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1437/view
Demola-Budapest	Budapest	Hungary	https://budapest.demola.net/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1515/view
DFKI Human Centric AI Innovation Hub	Kaiserslautern	Germany	https://www.dfki.de/en/web/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12379/view
DIGIMAT: South Moravian Digital Manufacturing Hub	Kuřim	Czechia	http://www.dih-digimat.cz	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1355/view
Digital Hub Logistics	Dortmund	Germany	http://www.digitalhublogistics.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5476/view
Digital Innovation Hub 'Smart Production Systems Saxony' – InnoSax	Chemnitz	Germany	http://innosax-smartproductionsystems.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1505/view
DIH Technicom at the Technical University of Košice	KOSICE	Slovakia	https://dihtechnicom.tuke.sk	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/18413/view
DIHOST - Digital Innovation Hub OST	St. Pölten	Austria	https://dih-ost.at/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/20300/view
Experimental and Digital Factory (EDF)	Chemnitz	Germany	https://www.tu-chemnitz.de/mb/FabrPlan/edf.php.en	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1128/view
Frankfurt School Blockchain Center (FSBC) at the Frankfurt School of Finance & Management gGmbH (FS)	Frankfurt am Main	Germany	https://www.frankfurt-school.de/en/home/research/centres/blockchain	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/18068/view
Fraunhofer Future Work Lab (FWL)	Stuttgart	Germany	http://www.futureworklab.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1177/view
Fraunhofer IPA - Robot and Assistive Systems	Stuttgart	Germany	http://www.ipa.fraunhofer.de/robotsystems	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1481/view
~~FZI Research Center for Information Technology~~	~~Karlsruhe~~	~~Germany~~	~~http://www.fzi.de/en/home/~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1517/view~~
HPC4Poland	Poznan	Poland	http://www.hpc4poland.pl	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1240/view
innomine Digital Innovation Hub	Budapest	Hungary	http://innomine.com/digital-innovation-hub	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13270/view
innomine DIH - South Transdanubian branch	Pécs	Hungary	http://innomine.com/digital-innovation-hub	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16565/view
Institute of Production Management, Technology and Machine Tools (PTW)	Darmstadt	Germany	http://www.ptw.tu-darmstadt.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1069/view
IT4Innovations National Supercomputing Center	Ostrava-Poruba	Czechia	https://www.it4i.cz	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1436/view
Know-Center GmbH	Graz	Austria	http://www.know-center.tugraz.at/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1101/view
lifehub.swiss	Muttenz	Switzerland	http://lifehub.swiss/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19508/view

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 825395

Linz Center of Mechatronics GmbH	Linz	Austria	https://www.lcm.at/en/virtual-development/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12421/view
L3S Digital Innovation Hub	Hannover	Germany	https://www.l3s.de/en/innovation/hub	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12496/view
MicroHub.Swiss - The Swiss Microtechnology & Micromanufacturing DIH	Neuchatel	Switzerland	http://www.microhub.swiss	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12554/view
Mittelstand 4.0-Kompetenzzentrum Darmstadt	Darmstadt	Germany	https://www.mit40.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1270/view
Munich Innovation Hub for Applied AI	Garching	Germany	https://www.appliedai.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12409/view
NASK National Research Institute	Warsaw	Poland	https://eng.nask.pl/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12504/view
PIAP HUB	Warsaw	Poland	http://www.hub.piap.pl/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1408/view
PROFACTOR Cognitive Robotics and Factory HUB	Steyr	Austria	https://www.profactor.at/open-labs/cognitive-robotics-and-factory-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12521/view
Raisehub.swiss- The Swiss Robotics & AI DIH	Alpnach	Switzerland	http://raisehub.swiss/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/18505/view
RECENDT - Research Center for Non-Destructive Testing GmbH	Linz	Austria	https://www.recendt.at	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12680/view
Research Center for Informatics	Prague	Czechia	http://rci.cvut.cz/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12071/view
Robotics Hub Technical University of Kosice	Kosice	Slovakia	http://roboticshub.sk/en/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19617/view
simul+InnovationHub	Dresden	Germany	https://www.smul.sachsen.de/simul-innovationhub-25679.html	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/15803/view
Smart Data Solution Center Baden-Württemberg	Stuttgart	Germany	https://sdsc-bw.de/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12681/view
Smart Infrastructure Hub Leipzig	Leipzig	Germany	http://www.smartinfrastructurehub.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2367/view
Smart Systems Hub - Enabling IoT	Dresden	Germany	http://www.smart-systems-hub.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2175/view
South Bohemian Digi Hub	České Budějovice	Czechia	http://www.jvtp.cz/en/about-us/our-projects/south-bohemian-digi-hub.html	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13287/view
SpectroNet - International Collaboration Cluster	Jena	Germany	https://www.spectronet.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1052/view
Swiss Smart Factory (SSF)	Biel	Switzerland	https://www.sipbb.ch/ssf	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12515/view
Technologie-Initiative SmartFactory KL e.V.	Kaiserslautern	Germany	https://smartfactory.de	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5508/view
Technology Transfer via Multinational Application Experiments (TETRAMAX)	Aachen	Germany	https://www.tetramax.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1073/view
VDTC of the Fraunhofer IFF	Magdeburg	Germany	https://www.produktion.fraunhofer.de/de/forschung-im-verbund/forschungskooperationen/digitalinnovationhubs.html	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1363/view
Virtual Vehicle Research Center	Graz	Austria	https://www.v2c2.at/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1346/view

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A.II.3. DIHs in East Mediterranean EU: 11 identified from S3P

NB: Entities which are already in the catalogue are crossed out (but kept in the table)

Table 10 – List of identified DIHs from S3P in EME as reported in D1.4

DIH Name (in EME)	City	Country	Website	Contact
ATHENA Research and Innovation Center	Maroussi, Athens	Greece	http://www.athena-innovation.gr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2094/view
Attica Hub for the Economy of Data and Devices- ahedd	Athens	Greece	http://ahedd.demokritos.gr/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2092/view
CENTRE FOR RESEARCH AND TECHNOLOGY HELLAS	Thermi - Thessaloniki	Greece	https://www.certh.gr/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3085/view
Cyprus Digital Innovation Hub	Nicosia	Cyprus	https://www.cyric.eu/cydi_hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1459/view
Embedded System Design & Application Laboratory	Patra	Greece	http://esda-lab.cied.teiwest.gr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12382/view
Foundation for Research and Technology – Hellas (FORTH) / PRAXI Network	Athens	Greece	https://www.praxinetwork.gr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5967/view
Internet of Things, Intelligent Systems, Data Engineering and Media DIH [National Technical University of Athens - Institute of Communication and Computer Systems]	Athens	Greece	https://www.dih-ntua.gr/services/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1980/view
Nanotechnology Lab LTFN (Lab for Thin Films - Nanobiomaterials - Nanosystems - Nanometrology)	Thessaloniki	Greece	http://www.ltfn.gr/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1784/view
National Documentation Centre / National Hellenic Research Foundation	Athens	Greece	http://www.ekt.gr/en	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5806/view
nZEB Smart House	Thessaloniki	Greece	https://smarthome.iti.gr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1521/view
Teknopark Istanbul - Innovation Hub of Turkey	Istanbul	Turkey	https://teknoparkistanbul.com.tr/en	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3077/view

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A.II.4. DIHs in France-Italy: 62 identified from S3P

NB: Entities which are already in the catalogue are crossed out (but kept in the table)

Table 11 – List of identified DIHs from S3P in F&I as reported in D1.4

DIH Name (in FI)	City	Country	Website	Contact
AFIL - Lombardy Intelligent Factory Association	Milano	Italy	http://www.afil.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1427/view
Agri Sud Ouest Innovation	Auzeville-Tolosane	France	https://www.agrisoi.fr/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1263/view
ASTER-DIH	Bologna	Italy	https://www.aster.it/en/aster-dih	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13284/view
Atlanpole	Nantes	France	http://www.atlanpole.fr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2966/view
BI-REX - BIG DATA INNOVATION & RESEARCH EXCELLENCE	BOLOGNA	Italy	https://bi-rex.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19205/view
Campania Digital Innovation Hub	Napoli	Italy	http://www.campaniadih.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1118/view
Centre Val de Loire Digital Innovation Hub	ORLEANS	France	https://www.devup-centrevaldeloire.fr/dih	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13673/view
Cineca Consorzio Interuniversitario	CASALECCHIO DI RENO BO	Italy	https://www.cineca.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1322/view
CITC-EuraRFID	Lille	France	http://www.iotcluster.fr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12983/view
Confapi Digital Innovation Hub	Rome	Italy	https://www.confapi.org/it/digital-innovation-hub-confapi.html	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19211/view
DIEX - Digital Experience	San Vito al Tagliamento	Italy	http://www.diex.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2365/view
~~DIGIHALL~~	~~Palaiseau~~	~~France~~	~~http://www.digihall.fr~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1876/view~~
Digital Innovation Hub Basilicata	Potenza	Italy	http://www.confindustria.basilicata.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1053/view
DIGITAL INNOVATION HUB BELLUNO DOLOMITI	FELTRE	Italy	https://digitalhub.belluno.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5665/view
Digital Innovation Hub Emilia-Romagna	Bologna	Italy	https://cerr.eu/en/projects/dih-er	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19212/view
Digital Innovation Hub Liguria	Genova	Italy	http://www.dihliguria.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1486/view
Digital Innovation Hub Lombardia	Milano	Italy	http://www.dihlombardia.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1494/view
Digital Innovation Hub Piemonte	Torino	Italy	http://www.dih.piemonte.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1483/view
Digital Innovation Hub South Tyrol	bolzano	Italy	http://www.noi.bz.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13280/view
Digital Innovation Hub Toscana	Firenze	Italy	https://www.confindustria.toscana.it/digital-innovation-hub-toscana/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2265/view
Digital Innovation Hub Vicenza	Vicenza	Italy	https://www.digitalinnovationhubvicenza.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2667/view
DIH - Calabria	Cosenza	Italy	https://www.dihcalabria.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5690/view
DIH- Confartigianato Ancona - Pesaro e Urbino	ANCONA	Italy	http://www.confartigianatoimprese.net/content/servizi-corsi-digital-innovation-hub-confartigianato-ancona	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13331/view
DIH Marche - 4M.0	Ancona	Italy	http://www.4m0.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1199/view
DIH Udine	Udine	Italy	http://www.dih.ud.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5638/view

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DIHNAMIC - Digital Innovation Hub for Nouvelle-Aquitaine Manufacturing Industry Community	Bordeaux	France	https://www.dihnamic.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2471/view
Ecipa Nordest Hub	Venezia	Italy	http://www.ecipahub.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16781/view
EDI.it - Digital Innovation Ecosystem	Rome	Italy	https://www.ediconfcommercio.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16669/view
E-Secure Transactions Cluster - TES	Colombelles	France	https://www.pole-tes.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12715/view
FAB4 Digital Innovation Hub Confartigianato Salerno	Salerno	Italy	http://www.fab4dih.it/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19500/view
Faubourg Numérique	Saint-Quentin	France	http://faubourgnumerique.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12696/view
FIWARE Innova iHub	Perugia	Italy	https://fiwareinnova.org/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19412/view
Galileo Digital Innovation Hub	Padova	Italy	https://www.galileovisionarydistrict.it/galileo-digital-innovation-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17366/view
ICT4Manuf	BRON	France	https://ict4manuf.univ-lyon2.fr/Digital-Innovation-Hub/?page_id=1695	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13675/view
Images et Réseaux	Lannion	France	http://www.images-et-reseaux.com/fr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1002/view
innovation experience HUB (InnexHUB)	Brescia	Italy	https://www.innexhub.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2487/view
JESSICA FRANCE - CAP'TRONIC program	GRENOBLE	France	https://www.captronic.fr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/7558/view
lvh.apa Digital Innovation Hub Südtirol - Alto Adige	Bolzano	Italy	http://www.digitalinnovationhub.bz.it/en/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17473/view
MADE - Competence Center	Milano	Italy	https://www.made-cc.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19215/view
MARCHE INNOVATION HUB	Chiaravalle	Italy	http://www.innovationbox.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16570/view
MEDISDIH - Apulian Mechatronics Technological Cluster and Digital Innovation Hub	Valenzano	Italy	http://www.medisdih.it/wp/en/services-2/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2269/view
Minalogic	Grenoble	France	https://www.minalogic.com/fr	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1297/view
Move2Digital	Valbonne Sophia Antipolis	France	https://www.move2digital.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/14773/view
PARSEC HUB ANCONA	Chiaravalle (AN)	Italy	http://www.parsec-hub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13687/view
PARSEC HUB BARI	Bari	Italy	http://www.parsec-hub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13689/view
PARSEC HUB CATANIA	Tremestieri Etneo (CT)	Italy	http://www.parsec-hub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13690/view
PARSEC HUB GENOVA	Genova	Italy	http://www.parsec-hub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12590/view
PARSEC HUB MILAN	Milano	Italy	http://www.parsec-hub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13867/view
PARSEC HUB NAPOLI	Napoli	Italy	http://www.parsec-hub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13688/view
PARSEC HUB PERUGIA	Perugia	Italy	http://www.parsec-hub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13686/view
PID BERGAMO SVILUPPO	Bergamo	Italy	https://www.bergamosviluppo.it/sito/sviluppo-e-innovazione/pid-punto-impresa-digitale.html	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/15791/view
Plastipolis	Bellignat	France	http://www.plastipolis.fr/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12648/view

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Pôle EMC2 Competitiveness cluster for innovation in production technologies	Nantes	France	http://www.pole-emc2.fr/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1057/view
Regional Platform Industry 4.0 of Tuscany Region (Tuscan Platform Industry 4.0)	Firenze	Italy	http://www.cantieri40.it/i40/index.php	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1668/view
RIF BioRobotics Institute	Pontedera	Italy	http://www.peccioliri f.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1326/view
Secured Communicating Solutions cluster	Rousset	France	https://www.pole-scs.org	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1275/view
SMILE-DIH (Smart Manufacturing Innovation for Lean Excellence center - Digital Innovation Hub)	Parma	Italy	http://smile.italian-dih.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1430/view
SPEEDHUB	Verona	Italy	https://www.fondazionespeedhub.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2168/view
t2i - DIH Triveneto	Treviso	Italy	https://www.t2i.it/dih	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1433/view
Umbria Digital Innovation Hub	Perugia	Italy	http://dih.confindustria.umbria.it	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1231/view
ViaMéca	Clermont-Ferrand	France	http://www.viameca.fr/accueil-viameca.html	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1172/view
7TB - 7 Technopoles de Bretagne	QUIMPER	France	http://7technopoles-bretagne.bzh/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1458/view

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 825395

A.II.5. DIHs in Iberia (South West): 49 identified from S3P

NB: Entities which are already in the catalogue are crossed out (but kept in the table)

Table 12 – List of identified DIHs from S3P in ISW as reported in D1.4

DIH Name (in ISW)	City	Country	Website	Contact
AIR4S - Artificial Intelligence & Robotics for Sustainable Development Goals	Madrid	Spain	http://www.upm.es/dih-air4s	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12535/view
AI4GALICIA: Artificial Intelligence for Galicia	A Coruna	Spain	http://ai4galicia.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/14772/view
Algarve Smart Destination, Digital Innovation Hub	Faro	Portugal	http://www.algarvesmartdestination.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16876/view
Barcelona Activa SA SPM	Barcelona	Spain	http://www.barcelonactiva.cat	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3078/view
Basque Digital Innovation Hub (BDIH)	Bilbao	Spain	http://www.spri.eus/en/basque-industry/basque-digital-innovation-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1513/view
Catalonia AI DIH	Barcelona	Spain	https://www.bigdatabcn.com/en/catalonia-ai-dih/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12588/view
Centre d'Innovació i Tecnologia de la UPC (CIT UPC)	Barcelona	Spain	https://cit.upc.edu/en	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1039/view
Centro Nacional de Tecnología de Riegos (CENTER)	San Fernando de Henares (Madrid)	Spain	http://www.mapama.gob.es/es/desarrollo-rural/temas/centro-nacional-tecnologia-regadios/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2668/view
Cybersecurity Innovation HUB	León	Spain	https://www.cyberdih.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1392/view
Data Science and Artificial Intelligence (DASAI)	Granada	Spain	https://dasciihub.dasci.es/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12691/view
DATAlife	Santiago de Compostela	Spain	http://dihdatalife.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17469/view
Digital Impulse Hub	Terrassa	Spain	https://digitalimpulsehub.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/18605/view
Digital Innovation Hub Andalucía Agrotech	Sevilla	Spain	https://juntadeandalucia.es/organismos/agriculturapescaydesarrollorural/areas/desarrollo-rural/dih-andalucia-agrotech.html	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1020/view
Digital Water Innovation Hub (Digital Water)	Lleida	Spain	https://eurecat.org/en/centres-of-excellence/centre-for-water-management-excellence/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1208/view
DIH-BAITUR: Digital Innovation Hub of the Balearic Islands for Artificial Intelligence and Tourism	Palma	Spain	http://www.dihbai-tur.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16670/view
DIHBU Industry 4.0	Burgos	Spain	https://dihbu-industry.fundingbox.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/6069/view
Dinapsis DIH	Benidorm	Spain	https://www.dinapsis.es/dih-dinapsis/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1544/view
ETICOM, Digital economy cluster in Andalusia	Seville	Spain	http://www.eticom.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5881/view
FIWARE Space	Badajoz	Spain	https://www.fiware.space/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17269/view
FIWARE Zone	Malaga	Spain	https://fiware.zone/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16069/view
GALician manufACTuring Innovation ConsortiA (GALACTICA)	O Porriño	Spain	http://www.galacticaDIH.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12667/view
Granada Plaza Tecnológica y Biotecnológica	Granada	Spain	https://www.ongranada.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1074/view

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 825395

HPC-Cloud and Cognitive Systems for Smart Manufacturing processes, Robotics and Logistics.	Zaragoza	Spain	https://www.aragondih.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1070/view
HUB for Agriculture (HUB4AGRI)	Lisbon	Portugal	http://hub4agri.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2072/view
Hub 4.0 of Manufacturing Sectors in Valencian Region	Valencia	Spain	http://hub4manuval.ai2.upv.es	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1114/view
iMan Norte Hub - Digital Innovation Hub for Customer-Driven Manufacturing @ Norte	Porto	Portugal	https://www.imannortehub.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1535/view
Industrial Ring	Barcelona	Spain	http://anellaindustrial.cat	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1244/view
Industrial Technology Knowledge Linares DIH	Linares	Spain	http://dih-itkl.es/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1314/view
Innovalia ZDM Digital Innovation Hub	Amorebieta-Etxano	Spain	http://digiware.org	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1421/view
Innovation for Manufacturing in the South (I4MSOUTH)	Murcia	Spain	https://i4msouth.fundingbox.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1397/view
inNOVA4TECH hub – inNOVAtion Hub for TECHnology Transfer	Caparica	Portugal	http://www.innova4tech.uninova.pt/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17374/view
~~Insomnia Digital Innovation Hub~~	~~Valencia~~	~~Spain~~	~~http://www.innsomnia.es/~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5877/view~~
International Advanced Manufacturing 3D Hub (IAM 3D HUB)	Barcelona	Spain	http://www.iam3dhub.org	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1032/view
IoT Catalan Alliance	Barcelona	Spain	https://www.cataloniaiot.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5505/view
IoT DIH	Carbajosa de la Sagrada	Spain	http://innovationhub.es	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1383/view
IRIS: European Digital Innovation Hub Navarra	Pamplona	Spain	https://www.irisnavarra.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1327/view
ITI Data Hub (The Data Cycle Hub)	Valencia	Spain	https://thedatacyclehub.com/en/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12365/view
i4CAM HUB (Innovation for competitiveness and advanced manufacturing)	Tomelloso	Spain	http://www.i4camhub.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1238/view
Madeira Digital Innovation HUB	Funchal	Portugal	https://www.madeiradih.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17173/view
MaDIH: Manufacturing Digital Innovation Hub	Madrid	Spain	https://madih.fundingbox.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19199/view
PRODUTECH Digital Innovation Hub National Platform	Porto	Portugal	http://www.produtech.org	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1345/view
RIOHUB	Logroño	Spain	http://riohub.fundingbox.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1370/view
~~RoboCity2030~~	~~Madrid~~	~~Spain~~	~~http://www.robocity2030.org/~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1555/view~~
Robotics Digital Innovation Hub	Seville	Spain	https://robotics-dih.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3100/view
SmartCityTech	San Sebastián	Spain	http://www.smartcitytech.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1123/view
Technologies for Efficiency Digital Innovation Hub Extremadura (T4E DIH)	Badajoz	Spain	http://www.dih4e.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2166/view
TECNOCAMPUS TECHNOLOGY PARK	Mataró	Spain	https://www.tecnocampus.cat/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2665/view
University of Valencia Science Park DIH	Paterna (Valencia)	Spain	https://www.pcuv.es/en/dih	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/20602/view
5TONIC Open 5G Lab 5TONIC	Leganes, Madrid	Spain	https://www.5tonic.org	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1186/view

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 825395

A.II.6. DIHs in North East Europe: 41 identified from S3P

NB: Entities which are already in the catalogue are crossed out (but kept in the table)

Table 13 – List of identified DIHs from S3P in NEE as reported in D1.4

DIH Name (in NEE)	City	Country	Website	Contact
Aarhus University Centre for Digitalisation, Big Data and Data Analytics (DIGIT)	Aarhus	Denmark	http://www.digit.au.dk	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13281/view
Advanced Manufacturing Digital Innovation Hub	Vilnius	Lithuania	http://intechcentras.lt/services/advanced-manufacturing-digital-innovation-hub/?lang=en	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1349/view
AgriFood Lithuania DIH	Vilnius	Lithuania	https://www.agrifood.lt/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/15066/view
Agro Space DIH	Vilnius	Lithuania	http://www.vpva.lt/agrospacedih/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13767/view
Arctic Drone Labs	OULU	Finland	https://www.arcticdronelabs.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2767/view
Danish Technological Institute, Robot Technology	Odense	Denmark	https://www.dti.dk/robot	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1330/view
DigiCenterNS	Kuopio	Finland	https://www.digicenterns.fi/en/home/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16667/view
Digital Innovation Hub Ocean Technology	Kristiansand	Norway	https://www.dih-ot.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1970/view
DigitalNorway	Oslo	Norway	https://www.digitalnorway.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2473/view
DIH Tartu	Tartu	Estonia	https://www.cs.ut.ee/en/DIHTartu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12410/view
EDI DIH	Riga	Latvia	https://www.edi.lv	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13295/view
Energy Valley	Lysaker	Norway	https://energyvalley.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12616/view
Finnish Center for Artificial Intelligence (FCAI)	Espoo	Finland	https://fcai.fi/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12406/view
Future Position X	Gävle	Sweden	https://fpx.se/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16775/view
Future Technologies Digital Innovation Hub (FTDIH)	Vilnius	Lithuania	https://www.futuredih.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/19007/view
INFOBALT DIH	Vilnius	Lithuania	https://infobalt.lt/dih/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16300/view
Infrastructure and Cloud data centre test Environment (SICS ICE)	Luleå	Sweden	http://ice.sics.se	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1228/view
Intelligent Industry ecosystem	Helsinki	Finland	https://intelligentindustry.dimecc.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12979/view
IoT Compass Hub (DIH)	Seinäjoki	Finland	https://www.seamk.fi/en/iot-compass-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1467/view
Latvian IT Cluster	Riga	Latvia	http://www.itbaltic.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3095/view
Linköping Science Park	Linköping	Sweden	https://linkopingsciencepark.se/digital-innovation-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/18265/view
Lithuanian robotic DIH (LTroboticsDIH)	Vilnius	Lithuania	http://www.ltrobotics.eu/en/digital-innovation-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1189/view
LTU AI Innovation Hub	Luleå	Sweden	https://www.ltu.se/ai	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/17480/view
MADE - Manufacturing Academy of Denmark	Copenhagen	Denmark	http://MADE.dk/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1059/view
Mälardalen Industrial Technology Center	Eskilstuna	Sweden	http://www.mitc.se/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16571/view
PrintoCent	Oulu	Finland	http://www.printocent.net	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1500/view
~~ROBOCOAST~~	~~Pori~~	~~Finland~~	~~http://www.robocoast.eu~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1043/view~~
Santaka Artificial Intelligence DIH	Kaunas	Lithuania	http://santakosslenis.lt/en/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12488/view
Santaka Digital Innovation HUB	Vilnius	Lithuania	https://dih.santaka.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/18701/view

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SINTEF	Trondheim	Norway	https://www.sintef.no/en/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3067/view
Smart Industry Centre (SmartIC)	Tallinn	Estonia	http://www.smartic.ee	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1083/view
Smart Manufacturing	Tampere	Finland	http://smacc.fi/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1131/view
Stena Industry Innovation Hub at Chalmers - SII-Hub	Goteborg	Sweden	http://www.chalmers.se/en/areas-of-advance/production/laboratories/csilab/Pages/default.aspx	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1198/view
Sunrise Valley Digital Innovation Hub (SV DIH)	Vilnius	Lithuania	https://sunrisevalleydih.lt/en/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3069/view
Super IoT	Oulu	Finland	http://www.superiot.fi	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1006/view
The Alexandra Institute - ICT-based innovation	Aarhus	Denmark	https://www.alexandra.dk	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1358/view
The KTH Innovation Hub of Digital Industrialization	Stockholm	Sweden	http://www.kth.se/iiothub	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/5792/view
Ventspils High Technology Park (VHTP)	Ventspils	Latvia	http://www.vhtp.lv/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1293/view
ViDIH Visoriai Digital Innovation Hub	Vilnius	Lithuania	https://vitp.lt/vidih/?lang=en	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/15071/view
Vitus Bering Innovation Park	Horsens	Denmark	https://vitusbering.dk/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3575/view
5G Test Network Finland (5GTNF)	Oulu	Finland	http://5gtnf.fi/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1201/view

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 825395

A.II.7. DIHs in North West Europe: 45 identified from S3P

NB: Entities which are already in the catalogue are crossed out (but kept in the table)

Table 14 – List of identified DIHs from S3P in NWE as reported in D1.4

DIH Name (in NWE)	City	Country	Website	Contact
AMSYSTEMS Center	Eindhoven	Netherlands	http://amsystemscenter.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1413/view
BOOST Smart Industry Hub, East-Netherlands	Apeldoorn	Netherlands	https://smartindustryoost.nl	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12392/view
Bristol Robotics Laboratory's RIF	Bristol	United Kingdom	http://echord.eu/the-bristol-rif/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1776/view
Centre de recherche en aéronautique ASBL, Cenaero	Gosselies	Belgium	http://www.cenaero.be/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1425/view
Centre for Applied Data Analytics and Machine Intelligence, CeADAR	Dublin	Ireland	https://www.ceadar.ie/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1109/view
Confirm | Research Centre for Smart Manufacturing	Limerick	Ireland	https://confirm.ie/dih/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/15865/view
CP Lab Newcastle	Newcastle Upon Tyne	United Kingdom	https://research.ncl.ac.uk/cplab/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13265/view
CPI	Sedgefield	United Kingdom	https://www.uk-cpi.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1010/view
Cranfield University Digital Innovation Hub	Bedford	United Kingdom	https://www.cranfield.ac.uk/digitalinnovationhub	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12601/view
Digital Catapult	London	United Kingdom	https://www.digitalcatapultcentre.org.uk	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1317/view
Digital Manufacturing Innovation Hub Wales (DMIW)	Bridgend	United Kingdom	http://www.dmiw.co.uk	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/13294/view
DIH High Tech Software Cluster	Eindhoven	Netherlands	https://hightechsoftwarecluster.nl/digital-innovation-hub/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/16680/view
EOSC-DIH	Amsterdam	Netherlands	https://www.eosc-dih.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/6109/view
European Digital Innovation Hub The Northern Netherlands / Region of Smart Factories	Groningen	Netherlands	https://rosf.nl/dih/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1047/view
Flanders' FOOD, FF	Brussels	Belgium	http://www.flandersfood.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1376/view
~~Flanders Make~~	~~Lommel~~	~~Belgium~~	~~https://www.flandersmake.be~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1158/view~~
IMEC	Leuven	Belgium	https://www.imec-int.com/en/home	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1085/view
Industrial Reality Hub	Apeldoorn	Netherlands	http://www.industrialrealityhub.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1180/view
Innovation Cluster Drachten (ICD)	drachten	Netherlands	http://www.icdrachten.nl	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12630/view
Insight Centre for Data Analytics	Galway	Ireland	https://www.insight-centre.org/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1036/view
Irish Manufacturing Research	Rathcoole	Ireland	http://www.imr.ie/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1368/view
Jheronimus Academy of Data Science	's-Hertogenbosch	Netherlands	https://www.jads.nl/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12676/view
Luxembourg Institute of Science and Technology (LIST)	Esch-sur-Alzette	Luxembourg	https://www.list.lu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1061/view
Made Different | Digital Wallonia	Jambes	Belgium	https://www.digitalwallonia.be/fr/publications/made-different-digital-wallonia	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1161/view
Manufacturing Technology Centre	Coventry	United Kingdom	http://www.the-mtc.org/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1456/view
Novel-T	Enschede	Netherlands	http://www.novelt.com	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3488/view

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PhotonDelta	Eindhoven	Netherlands	https://www.photondelta.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1546/view
RoboValley Delft	Delft	Netherlands	http://www.robovalley.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1194/view
Sirris Hub Mechatronics and Digitising Manufacturing	Leuven	Belgium	https://www.sirris.be/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1280/view
Sirris Hub Smart Assembly	Kortrijk	Belgium	https://www.sirris.be/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1022/view
Sirris Hub/smart product	Seraing	Belgium	https://www.sirris.be/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1045/view
Smart Connected Supplier Network	Eindhoven	Netherlands	https://smartconnected.t4smm.nl/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1064/view
~~Smart Digital Farming~~	~~Merelbeke~~	~~Belgium~~	~~https://www.smartdigitalfarming.be~~	~~https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1985/view~~
Smart Industry Hub South	Eindhoven	Netherlands	https://www.smartindustry.nl/smart-industry-zuid/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/12489/view
Smart Welding Factory (SWF)	Hengelo	Netherlands	http://www.smartweldingfactory.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1080/view
Space53	Enschede	Netherlands	http://www.space53.eu/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3280/view
Sunderland Software City	Sunderland	United Kingdom	http://www.sunderlandsoftwarecity.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1484/view
SynHERA	Naninne	Belgium	http://www.synhera.be	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1127/view
Technologies Added	Emmen	Netherlands	https://www.technologiesadded.com/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1155/view
The AMRC's Factory 2050	Sheffield	United Kingdom	http://www.amrc.co.uk/facilities/factory-2050	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3275/view
The High Value Manufacturing Catapult	Solihull	United Kingdom	https://hvm.catapult.org.uk/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1454/view
Tyndall National Institute, Tyndall	Cork	Ireland	https://www.tyndall.ie/	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1099/view
VP Delta	Delft	Netherlands	http://www.vpdelta.nl/nl	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/1219/view
3IF - Industrial Internet In Flanders	Leuven	Belgium	http://www.3if.eu	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/3081/view
3IF.be & 3IF.be Fieldlab	Heverlee	Belgium	http://www.3if.be	https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool/-/dih/2468/view

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Annex III: Reduced list of candidate CCs from the ATI Portal

A.III.1. Identified CTs in Central Eastern Europe from ATIP

Table 15 – List of identified CTs from ATIP in CEE as reported in D1.4

Organisation	Upper organisation	Type of organisation	Web-link for equipment	Web-link for services	Country	Membership Status
Josef Stefan Institute		Research Center	http://www.ijs.si/ijsw/JSI?action=AttachFile&do=get&target=Basic_info.pdf	http://www.ijs.si/ijsw/Institute%20and%20industry	Slovenia	Listed in the DIH candidates See Table in A.III.1
Zavod za gradbeništvo Slovenije		Research Center	http://www.zag.si/en/equipment	http://www.zag.si/en/certifikati-soglasja	Slovenia	-
Innovation Centre Nikola Tesla		Non-Profit Organisation	https://lamor.fer.hr/lamor/research/equipment	https://www.icent.hr/en	Croatia	-

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A.III.2. Identified CTs in Central North Europe from ATIP

Table 16 – List of identified CTs from ATIP in CNE as reported in D1.4

Organisation	Upper organisation	Type of organisation	Web-link for equipment	Web-link for services	Country	Membership Status
JOANNEUM RESEARCH Forschungsgesellschaft mbH		Non-Profit Organisation	https://www.joanneum.at/en/materials/infrastructure.html	http://www.joanneum.at/materials.html	Austria	-
Fraunhofer Institute for Applied Optics and Precision Engineering IOF	Fraunhofer Gesellschaft	Research Center	http://www.iof.fraunhofer.de/en/we-about-us/laboratory-equipment.html	http://www.iof.fraunhofer.de/en/competences.html	Germany	-
Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP	Fraunhofer Gesellschaft	Research Center	https://www.fep.fraunhofer.de/en/Leistungsangebot/Anlagentechnik.html	https://www.fep.fraunhofer.de/en/Leistungsangebot/technologien.html	Germany	-
Fraunhofer Institute for Production Technology IPT	Fraunhofer Gesellschaft	Research Center	http://www.ipt.fraunhofer.de/en/Competencies.html	http://www.ipt.fraunhofer.de/en/Profile/cooperation.html	Germany	-
Fraunhofer Institute for Surface Engineering and Thin Films IST	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	Research Center	https://www.ist.fraunhofer.de/en/the_institute/special_equipment.html	https://www.ist.fraunhofer.de/en/our-services.html	Germany	-
Hahn-Schickard Institute for Micro Assembly Technology	Hahn-Schickard-Gesellschaft für angewandte Forschung e.V.	Research Center	http://www.hahn-schickard.de/en/production/transferfab/	http://hahn-schickard.de/en/services/	Germany	-
Textile Research Institute Thuringia-Vogtland - TITV		Research Center	http://www.titv-greiz.de/index.php?id=technika&L=1	http://www.titv-greiz.de/index.php?id=technika&L=1	Germany	-
Antal Bejczy Center for Intelligent Robotics	Obudai University	Academic Institution	http://irob.uni-obuda.hu/	http://irob.uni-obuda.hu/	Hungary	-
SmartFactoryOWL	OWL University of Applied Sciences and Fraunhofer IOSB-INA	Research Center	http://www.smartfactory-owl.de/index.php/en/smartfactory-eng	http://www.smartfactory-owl.de	Germany	-
Fraunhofer Institute for Microengineering and Microsystems IMM	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	Research Center	https://www.imm.fraunhofer.de/en/expertises_technologies.html	https://www.imm.fraunhofer.de/en.html	Germany	-
Institut für Mikroelektronik Stuttgart		Research Center	https://www.ims-chips.de/home.php?id=a0b0c0en	https://www.ims-chips.de/home.php?id=a3b1c1en&adm=	Germany	-
Fraunhofer Institute for Machine Tools and Forming Technology (Fraunhofer IWU)	Fraunhofer	Research Center	https://www.iwu.fraunhofer.de/en/research/range-of-services.html	https://www.iwu.fraunhofer.de/en/research/range-of-services.html	Germany	-
Fraunhofer Institute for Laser Technology	Fraunhofer Gesellschaft für Angewandte Forschung e.V.	Non-Profit Organisation	http://www.ilt.fraunhofer.de	http://www.ilt.fraunhofer.de	Germany	-
Fraunhofer Institute for High Frequency Physics and Radar Techniques (FHR)	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	Non-Profit Organisation	http://www.fhr.fraunhofer.de/en/the-institute/technical-equipment.html	http://www.fhr.fraunhofer.de/en/businessunits.html	Germany	-
RECENDT - Research Center for Non-Destructive Testing GmbH	Upper Austrian Research (UAR)	Research Center	https://www.recendt.at/en/research-areas.html	https://www.recendt.at/en/industrial-applications.html	Austria	-
BIBA - Bremer Institut für Produktion und Logistik GmbH		Research Center	http://www.biba.uni-bremen.de/en/industry.html	http://www.biba.uni-bremen.de/en/industry/industry-40.html	Germany	-
CTR Carinthian Tech Research		Research Center	http://www.ctr.at/en/r-d-areas/r-d-infrastructure	http://www.ctr.at/en/services/by-r-d-service	Austria	-

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Research Institute of Textile Chemistry and Textile Physics	University of Innsbruck	Academic Institution	https://www.uibk.ac.at/textilchemie/	https://www.uibk.ac.at/textilchemie/	Austria	-
Hahn-Schickard Institute for Micro and Information Technology	Hahn-Schickard-Gesellschaft für angewandte Forschung e.V.	Research Center	http://www.hahn-schickard.de/en/production/mems-foundry/	http://www.hahn-schickard.de/en/services/	Germany	-
Fraunhofer Institute for Manufacturing Engineering and Automation IPA	Fraunhofer-Gesellschaft für Angewandte Forschung e.V.	Non-Profit Organisation	http://www.ipa.fraunhofer.de/en.html	http://www.ipa.fraunhofer.de/en.html	Germany	-
Institute of Photonic Technologies	Friedrich-Alexander University Erlangen-Nürnberg	Academic Institution	http://www.lpt.uni-erlangen.de	http://www.lpt.techfak.uni-erlangen.de/en/research-at-the-lpt.html	Germany	-
Fraunhofer Institute for Integrated Circuits IIS, Division Engineering of Adaptive Systems EAS	Fraunhofer-Gesellschaft	Research Center	https://www.eas.iis.fraunhofer.de/en/business_areas.html	https://www.eas.iis.fraunhofer.de/en/services/consulting_to_manufacturing.html	Germany	-
CAMT - Centre for Advanced Manufacturing Technologies	Wroclaw University of Science and Technology	Academic Institution	http://www.camt.pl/en/laboratoria.html	http://www.camt.pl/en/zainteresowania.html	Poland	-
Fraunhofer Institute for Chemical Technology ICT	Fraunhofer Gesellschaft	Research Center	http://www.ict.fraunhofer.de/en/comp.html	http://www.ict.fraunhofer.de/en/comp/cbp.html	Germany	-
Linz Center of Mechatronics GmbH	Linz Center of Mechatronics GmbH	Private research centre	http://www.lcm.at	http://www.lcm.at/en/solutions/	Austria	-
Cybernetics Lab IMA & IfU	RWTH Aachen University	Academic Institution	https://www.ima-zlw-ifu.rwth-aachen.de/en/services/virtual_theatre.html?MP=1507...	https://www.ima-zlw-ifu.rwth-aachen.de/en/services.html	Germany	-
CENTRUM INDUSTRIAL IT (CIIT)		Research Center	http://www.ciit-owl.de	http://www.ciit-owl.de	Germany	-
New Technologies-Research Centre	University of West Bohemia	Research Center	http://www.ntc.zcu.cz/en	http://ntc.zcu.cz/en/nabidka.html	Czechia	-
Institute of Micromechanics and Photonics	Warsaw University of Technology	Academic Institution	http://zif.mchtr.pw.edu.pl/en/	http://ztrw.mchtr.pw.edu.pl/en/	Poland	-
K1-MET GmbH	K1-MET GmbH	Research Center	http://www.k1-met.com/research_program/en/	http://www.k1-met.com/research_program/en/	Austria	-
Software Competence Center Hagenberg GmbH		Research Center	http://www.scch.at/en/about-scch	http://www.scch.at/en/offer	Austria	-
Bay Zoltán Nonprofit Ltd. for Applied Research		Research Center	http://www.bayzoltan.hu/en/welcome/	http://www.bayzoltan.hu/en/welcome/	Hungary	-
DITF Denkendorf (German Institutes for Textile and Fiber Research)		Research Center	https://www.ditf.de/en/index/technologies.html	https://www.ditf.de/en/index/service-dienstleistungen-en/ditf-prueflabore.html	Germany	-
Fraunhofer IVV Dresden	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	Research Center	https://www.ivv.fraunhofer.de/en/processing-machinery/pilot-plant-dresden.html	https://www.ivv.fraunhofer.de/en/processing-machinery.html	Germany	-
Neue Materialien Fürth GmbH		Research Center	https://www.nmfgmbh.de/unternehmen/maschinenpark/?lang=en	https://www.nmfgmbh.de/services/?lang=en	Germany	-
IT4Innovations National Supercomputing Center	VSB - Technical University of Ostrava	Academic Institution	https://www.it4i.cz/en	https://www.it4i.cz/en/industry-cooperation/portfolio-of-services	Czechia	Listed in the DIH candidates See Table in A.III.2
Intemac Solutions, s.r.o.	JIC, interest association of legal entities	Research Center	https://www.intemac.cz/en/services/infrastructure/	https://www.intemac.cz/en/services/expert-services/	Czechia	-

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 825395

A.III.3. Identified CTs in East Mediterranean EU from ATIP

Table 17 – List of identified CTs from ATIP in EME as reported in D1.4

Organisation	Upper organisation	Type of organisation	Web-link for equipment	Web-link for services	Country	Status
Photonics Communications Research Laboratory - Institute of Communication and Computer Systems	National Technical University of Athens	Research Center	http://photonics.ntua.gr	http://photonics.ntua.gr/projects/	Greece	-
FOUNDATION for Research and Technology-Hellas (FORTH)		Research Center	http://www.forth.gr	http://www.stepc.gr	Greece	Listed in the DIH candidates See Table in A.III.3
KIOS Research and Innovation Center of Excellence	University of Cyprus	Research Center	http://www.kios.ucy.ac.cy/index.php/research/facilities.html	http://www.kios.ucy.ac.cy/index.php/innovation/kios-innovation-hub.html	Cyprus	-

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A.III.4. Identified CTs in France-Italy from ATIP

Table 18 – List of identified CTs from ATIP in F&I as reported in D1.4

Organisation	Upper organisation	Type of organisation	Web-link for equipment	Web-link for services	Country	Status
Laboratory for Innovation in New Energy Technologies and Nanomaterials (LITEN)	CEA Tech	Research Center	https://www-cea-fr.admsite.extra.cea.fr/cea-tech/liten/en/Pages/Contact-Form.as...	https://www-cea-fr.admsite.extra.cea.fr/cea-tech/liten/en/Pages/Liten%20text%20...	France	CEA is a Partner
Laboratory of Electronics and Information Technologies (LETI)	CEA Tech	Research Center	http://www.leti-cea.com/cea-tech/leti/english/Pages/Applied-Research/Facilities...	http://www.leti-cea.com/cea-tech/leti/english/Pages/Industrial-Innovation/Innov...	France	CEA is a Partner
Polynat institute	CNRS	Research Center	http://www.polynat.eu/en/technical-platforms/teklicell	http://www.polynat.eu/en	France	CEA is a Partner
CEA Advanced Manufacturing	CEA Tech	Research Center	http://www-list.cea.fr/en/recherche-technologique/programmes-de-recherche/advan...	http://www-list.cea.fr/en/innover-pour-l-industrie/collaborer-avec-le-cea-list/...	France	CEA is a Partner
CEA Battery Infrastructure	CEA	Research Center	http://liten.cea.fr/cea-tech/liten/en/Pages/Liten%20text%20(general%20corporate...	http://liten.cea.fr/cea-tech/liten/en/Pages/Contact-Form.aspx	France	CEA is a Partner
CEA Biomass Infrastructure	CEA	Research Center	http://liten.cea.fr/cea-tech/liten/en/Pages/Liten%20text%20(general%20corporate...	http://liten.cea.fr/cea-tech/liten/en/Pages/Contact-Form.aspx	France	CEA is a Partner
CEA Clinatec Infrastructure	CEA	Research Center	http://www.leti-cea.com/cea-tech/leti/english/Pages/Applied-Research/Facilities...	http://www.leti-cea.com/cea-tech/leti/english/Pages/Applied-Research/Facilities...	France	CEA is a Partner
CEA Electric mobility Infrastructure	CEA Tech	Research Center	http://liten.cea.fr/cea-tech/liten/en/Pages/Liten%20text%20(general%20corporate...	http://liten.cea.fr/cea-tech/liten/en/Pages/Contact-Form.aspx	France	CEA is a Partner
CEA Integrated circuit and embedded systems design Infrastructure	CEA Tech	Research Center	http://www.leti-cea.com/cea-tech/leti/english/Pages/Applied-Research/Facilities...	http://www-list.cea.fr/en/innovating-for-industry/our-assets-for-industry/r-d-p...	France	CEA is a Partner
CEA Micro Energy Sources	CEA Tech	Research Center	http://www.leti-cea.com/cea-tech/leti/english/Pages/Applied-Research/Facilities...	http://www.leti-cea.com/cea-tech/leti/english/Pages/Contact-us.aspx	France	CEA is a Partner
CEA Nanoelectronics and micro-and nanosystems Infrastructure	CEA Tech	Research Center	http://www.leti-cea.com/cea-tech/leti/english/Pages/Applied-Research/Facilities...	http://www.leti-cea.com/cea-tech/leti/english/Pages/Industrial-Innovation/Innov...	France	CEA is a Partner
CEA Photovoltaic solar Infrastructure	CEA Tech	Research Center	http://liten.cea.fr/cea-tech/liten/en/Pages/Liten%20text%20(general%20corporate...	https://www-cea-fr.admsite.extra.cea.fr/cea-tech/liten/en/Pages/techno%20Low%20...	France	CEA is a Partner
CEA PICTIC - large area electronics	CEA Tech	Research Center	http://liten.cea.fr/cea-tech/liten/en/Pages/Liten%20text%20(general%20corporate...	http://liten.cea.fr/cea-tech/liten/en/Pages/Contact-Form.aspx	France	CEA is a Partner
CEA Thermal Technology	CEA Tech	Research Center	http://liten.cea.fr/cea-tech/liten/en/Pages/Liten%20text%20(general%20corporate...	http://liten.cea.fr/cea-tech/liten/en/Pages/Contact-Form.aspx	France	CEA is a Partner
CETMA - European Research Center for Technologies Design and Materials		Research Center	http://www.cetma.it/en/labs.aspx	http://www.cetma.it/en	Italy	-
Center for Materials and Microsistems (CMM)	Fondazione Bruno Kessler (FBK)	Research Center	https://mnf.fbk.eu/facilities	https://mnf.fbk.eu/service	Italy	-

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PRECEND		Cluster	http://www.precend.fr/notre-reseau/	http://www.precend.fr/notre-offre/	France	-
Rinnova soc.cons.a.r.l.		Private research centre	http://www.rinnova.org/eng	http://www.rinnova.org/eng/services.html	Italy	-
MIST E-R S.C.R.L.		Private research centre	http://www.laboratoriomister.it/attrezzature/	http://www.laboratoriomister.it/ricerca/	Italy	-
CRAST (Spatial Analysis and Remote Sensing Research Center)	Università Cattolica del Sacro Cuore	Research Center	http://centridiricerca.unicatt.it/crast-servizi-e-attivita-di-ricerca-industria…	http://centridiricerca.unicatt.it/crast-servizi-e-attivita-di-ricerca-industria…	Italy	-
MediCon Ingegneria srl		Private research centre	https://www.mediconingegneria.it/en/equipment/	https://www.mediconingegneria.it/en/services/	Italy	-
HOLO3		Private research centre	http://holo3.com	http://holo3.com	France	-
IRT JULES VERNE		Private research centre	https://www.youtube.com/watch?v=cWnw7Oym72s	https://www.irt-jules-verne.fr/industrial-research-institute/	France	-
Seamthesis Srl	-	Private research centre	http://www.seamthesis.com	http://www.seamthesis.com	Italy	-
HII-DI – High Impact Initiative – Digital Industry (FBK - ICT Centre)	FBK – Fondazione Bruno Kessler	Research Center	https://ict.fbk.eu/about-fbk-ict/	https://ict.fbk.eu/smart-digital-industry-units/	Italy	-
CEDRAT TECHNOLOGIES	CEDRAT TECHNOLOGIES	Small and medium-sized Enterprise	https://www.cedrat-technologies.com/en/services/manufacturing.html	https://www.cedrat-technologies.com/en/services.html	France	-
ALCIOM	ASRC/France Innovation	Small and medium-sized Enterprise	https://www.alciom.com/en/our-expertise/laboratories-equipment/	https://www.alciom.com/en/our-trades/research-and-development/	France	-

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A.III.5. Identified CTs in Iberia (South West) from ATIP

Table 19 – List of identified CTs from ATIP in ISW as reported in D1.4

Organisation	Upper organisation	Type of organisation	Web-link for equipment	Web-link for services	Country	Membership Status
AIMEN Technology Centre		Research Center	http://www.aimen.es/en/aimen/instalaciones-y-equipamiento	http://www.aimen.es/en/servicios-tecnologicos	Spain	-
AIMPLAS - Instituto Tecnológico del Plástico | Plastic Technological Centre		Research Center	http://www.aimplas.net/AIMPLAS/technological-skills	http://www.aimplas.net/en/en/technical-assistance.html	Spain	
Aitiip Technology Centre		Research Center	http://www.aitiip.com/en/activity-areas/technology-services.html	http://www.aitiip.com/en/activity-areas/technology-services.html	Spain	
EURECAT Technology Centre		Research Center	http://eurecat.org/en/services/	http://eurecat.org/en/services/	Spain	
Fundacion CARTIF		Research Center	http://www.cartif.com/en/industrial-solutions/infrastructure-and-equipment/equi...	http://www.cartif.com/en/industrial-solutions/technological-services.html	Spain	
IK4 Ideko	IK4 Technology Alliance	Research Center	http://www.ideko.es/eng/facilities-and-equipment	http://www.ideko.es/eng/services-for-industry	Spain	
IKERLAN	BRTA Basque Research Technology Alliance	Research Center	https://www.ikerlan.es/en/infrastructures-and-equipment	https://www.ikerlan.es/en/collaboration-with-companies	Spain	
LEITAT Technological Center		Research Center	http://leitat.org/descargas/Scientific_curriculum_Leitat_2013.pdf	http://ipo.leitat.org/expertise/	Spain	
Fundacion PRODINTEC		Non-Profit Organisation	http://www.prodintec.es/en/our-activity/advanced-manufacturing	http://www.prodintec.es/en/our-activity	Spain	
Ceit-IK4	IK4 Technology Alliance	Private research centre	http://www.ceit.es/en/areas-of-r-a-d	http://ceit.es/en/industrial-sectors	Spain	
Institute for Bioengineering of Catalonia (IBEC)		Research Center	http://www.ibecbarcelona.eu/for-industry/	http://www.ibecbarcelona.eu/for-industry/	Spain	
INEGI		Non-Profit Organisation	http://www.inegi.up.pt/instituicao/meiossuporte_detalhe.asp?idm=1&idsubm=7&idd=...	http://www.inegi.up.pt/mercadossetores.asp?idm=3&idsubm=1&id=0&LN=EN	Portugal	
CCG - Centro de Computação Gráfica		Private research centre	http://www.ccg.pt	http://www.ccg.pt	Portugal	
INESC - Instituto de Engenharia de Sistemas e Computadores		Non-Profit Organisation	http://www.inesc.pt/en/	http://www.inesc.pt/en/	Portugal	
Institute of Nanoscience of Aragon	University of Zaragoza	Research Center	http://lma.unizar.es/	http://lma.unizar.es	Spain	
CIRCE Foundation		Research Center	http://www.fcirce.es/web/page.aspx?id=labs	http://www.fcirce.es/index.aspx	Spain	
Footwear Technology Center of La Rioja		Research Center	http://www.ctcr.es/images/Catalogos_Folletos/FolletoGenericoCTCRInglesDEF.pdf	http://www.ctcr.es/images/Catalogos_Folletos/FolletoGenericoCTCRInglesDEF.pdf	Spain	
ITI - Instituto Tecnológico de Informática		Research Center	http://www.iti.es	http://www.iti.es	Spain	
INESC MN - Instituto de Engenharia de Sistemas e Computadores – Microsistemas e Nanotecnologias		Non-Profit Organisation	http://www.inesc-mn.pt	http://www.inesc-mn.pt	Portugal	
AIN - Asociación de la Industria Navarra		Research Center	http://www.ain.es/wp-	http://www.ain.es/en/	Spain	

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			content/archivos/AINtech-2014_Eng.pdf			
MCIA Innovation Electronics	Universitat Politècnica de Catalunya. BarcelonaTech (UPC)	Academic Institution	http://mcia.upc.edu/en	http://mcia.upc.edu/en	Spain	
Catalan Institute of Nanoscience and Nanotechnology		Research Center	http://www.icn2.cat	http://icn2.cat/en/industry-services/services	Spain	
TECNALIA Headquarters	Tecnalia	Unspecified			Spain	
TECNALIA – Industry and Transport division	TECNALIA	Unspecified			Spain	
TECNALIA – Industry and Transport división – Smart Systems	TECNALIA	Unspecified			Spain	
TECNALIA – Technological Services division	TECNALIA	Unspecified			Spain	
CD6 - Center for Sensors, Instruments and Systems Development	Universitat Politècnica de Catalunya. BarcelonaTech (UPC)	Academic Institution	https://www.cd6.upc.edu/cd6-equipment.php	http://www.cd6.upc.edu	Spain	
ITENE - Instituto Tecnológico del Embalaje, Transporte y Logística /// Packaging, Transport & Logistics Centre		Research Center	http://www.itene.com/en/facilities	http://www.itene.com/en/-2	Spain	
INESCOP – CENTRE FOR TECHNOLOGY AND INNOVATION		Private research centre	http://inescop.es/en/services/tests-and-quality	http://inescop.es/	Spain	
REDIT - Network of Technological Centres of Valencia Region		Non-Profit Organisation	http://www.redit.es/infraestructuras/	http://www.redit.es/institutos-tecnologicos/#infraestructuras	Spain	
FUNDACION CENTRO TECNOLOGICO DE COMPONENTES	CTC	Research Center	http://ctcomponentes.es/en/laboratory/	http://ctcomponentes.es/en/	Spain	
INSTITUTO TECNOLÓGICO DE CASTILLA Y LEÓN		Research Center	http://WWW.ITCL.ES	http://WWW.ITCL.ES	Spain	
CTIC Centro Tecnologico		Private research centre	http://www.fundacionctic.org	http://www.fundacionctic.org/proyectos	Spain	
INL - International Iberian Nanotechnology Laboratory		Research Center	http://inl.int/user-facilities/facilities/	http://inl.int/user-facilities/facilities/	Portugal	
IK4-TEKNIKER	IK4	Research Center	http://www.tekniker.es/en/technological-solutions	http://www.tekniker.es/en/technological-solutions	Spain	
CETEMET		Research Center	http://www.cetemet.es/en/laboratorio-de-ensayos-climaticos/	http://www.cetemet.es/en/ing-de-producto-y-proceso/	Spain	
COMPUTER VISION CENTER		Research Center	http://www.cvc.uab.cat/	http://www.cvc.uab.cat/	Spain	
Applus Laboratories	Applus	Large private organization	http://www.appluslaboratories.com	https://www.appluslaboratories.com	Spain	
NAITEC - Automotive and Mechatronics Technology Centre		Private research centre	http://www.naitec.es/en/infrastructure-and-equipment/	http://www.naitec.es/en/industry-solutions/	Spain	
Instituto de Tecnología Cerámica - Asociación de investigación de las industrias cerámicas (ITC-AICE)	Instituto de Tecnología Cerámica - Asociación de investigación de las industrias cerámicas (ITC-AICE) (ITC-AICE)	Research Center	https://www.itc.uji.es/sobreitc/equipamiento-centifico/	https://www.itc.uji.es/servicios/	Spain	
#Instituto de Tecnologías e Ingeniería del Software (ITIS)	#Universidad de Málaga	Academic Institution	http://itis.uma.es/index.php/instalaciones/	http://itis.uma.es/	Spain	
Centro Tecnolóxico de Telecomunicacións de Galicia (GRADIANT)		Private research centre	https://www.gradiant.org/en/	https://www.gradiant.org/en/services/	Spain	

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A.III.6. Identified CTs in North East Europe from ATIP

Table 20 – List of identified CTs from ATIP in NEE as reported in D1.4

Organisation	Upper organisation	Type of organisation	Web-link for equipment	Web-link for services	Country	Membership Status
VTT industrial biotechnology, synthetic biology and food processing	VTT	Research Center	http://www.vttresearch.com/services/business-essentials/pilot-plants-and-r-d-in…	http://www.vttresearch.com/services/bioeconomy/key-technology-platforms-for-bio…	Finland	-
VTT PrintoCent	VTT- University of Oulu, Oulu University of Applied Sciences and Business Oulu	Research Center	http://www.printocent.net	http://www.printocent.net	Finland	-
VTT Technical Research Centre of Finland		Research Center	http://www.vttresearch.com/services/business-essentials/pilot-plants-and-r-d-in…	http://www.vttresearch.com/services	Finland	-
Machine Technology Center Turku Ltd		Research Center	http://www.koneteknologiakeskus.fi/content/en/1/1045/Machinery%20and%20Equipmen…	http://www.koneteknologiakeskus.fi/content/en/1/1039/Development%20Services.html	Finland	-
IMECC OÜ		Small and medium-sized Enterprise	http://www.imecc.ee	http://www.imecc.ee	Estonia	-
Center for Physical Sciences and Technology		Research Center	http://www.ftmc.lt	http://www.ftmc.lt	Lithuania	-
DTI - Centre for Robot Technology	The Danish Technological Institute (DTI)	Non-Profit Organisation	https://www.dti.dk/specialists/robot-technology/about-dti/23617,6	https://www.dti.dk/specialists/robot-technology/home/23617	Denmark	-
MADE - MAnufacturing Academy of Denmark		Research Center	http://www.en.made.dk	http://www.en.made.dk	Denmark	In the DIH list
FORCE Technology		Large Enterprise	https://forcetechnology.com/en	https://forcetechnology.com/en	Denmark	-
VTT SMACC Smart Machines and Manufacturing Competence Centre	VTT Technical Research Centre of Finland and Tampere University of Technology	Research Center	http://smacc.fi/en/labs/	http://smacc.fi/en/services/	Finland	-
Institute of Photonics	University of Eastern Finland	Academic Institution	http://www.uef.fi/en/web/photonics/laboratories	http://www.uef.fi/en/web/photonics/research-topics	Finland	-
VTT 5G Test Network Finland	VTT Technical Research Centre of Finland and Oulu University	Research Center	http://5gtnf.fi/	http://5gtnf.fi/	Finland	-
The Danish Technological Institute		Non-Profit Organisation	https://www.dti.dk/specialists/pilot-production/34109	https://www.dti.dk/specialists/pilot-production/34109	Denmark	-
VTT MIKES Metrology	VTT Technical Research Centre of Finland	Research Center	http://www.mikes.fi/en/research	http://www.vttresearch.com/services/vtt-mikes-metrology	Finland	-
Institute of Electronics and Computer Science (EDI)		Research Center	https://www.edi.lv/en/available-infrastructure/	https://www.edi.lv/en/digital-innovation-hub/	Latvia	-
Arctic Drone Labs	Oulu University of Applied Sciences	Academic Institution	https://www.arcticdronelabs.com/our-fleet	https://www.arcticdronelabs.com/services	Finland	In the DIH list
STACC OÜ		Small and medium-sized Enterprise	https://www.stacc.ee/	https://www.stacc.ee/solutions/	Estonia	-

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A.III.7. Identified CTs in North West Europe from ATIP

Table 21 – List of identified CTs from ATIP in NWE as reported in D1.4

Organisation	Upper organisation	Type of organisation	Web-link for equipment	Web-link for services	Country	Membership Status
Equipment & Prototype Center	Eindhoven University of Technology	Academic Institution	https://www.tue.nl/en/university/about-the-university/organization/support-serv...	https://www.tue.nl/en/university/about-the-university/facts-and-figures/organiz...	Netherlands	-
IMO-IMOMEC	Hasselt University	Academic Institution	http://www.uhasselt.be/UH/IMO/Services.html	http://www.uhasselt.be/UH/IMO/Services.html	Belgium	-
CeADAR: Ireland's Centre for AI and Applied Data Analytics	CeADAR	Research Center	http://www.ceadar.ie	http://www.ceadar.ie/outputs/our-demos/	Ireland	-
Tyndall National Institute		Research Center	https://www.tyndall.ie/services	https://www.tyndall.ie/services	Ireland	-
Multitel		Private research centre	http://www.multitel.be	http://www.multitel.be	Belgium	-
ACTPHAST		Research Center	http://www.actphast.eu	http://www.actphast.eu	Belgium	-
Flamac, a Division of SIM	Strategisch Initiatief Materialen Flanders	Research Center	http://www.flamac.be/our-platforms/	http://www.flamac.be/our-services/	Belgium	-
Department of Materials, Textiles and Chemical Engineering	Ghent University	Academic Institution	https://www.ugent.be/ea/match/en/services	https://www.ugent.be/ea/match/en/services	Belgium	-
AMBER	Trinity College Dublin	Research Center	http://www.crann.tcd.ie/Facilities/Advanced-Microscopy-Laboratory/Research-Infr...	http://ambercentre.ie/facilities/#facilities	Ireland	-
Biophotonics research group	Katholieke Universiteit Leuven (KU Leuven) - Division MeBioS	Academic Institution	https://www.biw.kuleuven.be/biosyst/mebios/biophotonics-group/equipment-and-inf...	https://www.biw.kuleuven.be/biosyst/mebios/biophotonics-group/industrial-r-d-se...	Belgium	-
Flanders Make	NA	Research Center	http://www.flandersmake.be	http://www.flandersmake.be	Belgium	In the Catalogue and DIH List
Centre of Excellence in Information and Communication Technologies		Research Center	https://www.cetic.be/spip.php?page=groupes-mots&id_groupe=40&lang=en	https://www.cetic.be/Working-with-CETIC	Belgium	-
Sirris		Private research centre	http://www.sirris.be/expertise	http://www.sirris.be/services	Belgium	-
Solliance	TNO	Research Center	http://www.solliance.eu	http://www.solliance.eu	Netherlands	-
AMSYSTEMS Center	TNO TU/e HTSC	Research Center	http://amsystemscenter.com/facilities/	http://amsystemscenter.com/facilities/	Netherlands	In the DIH List
Dutch Optics Centre	TNO Netherlands organisation for applied research	Research Center	http://www.dutchopticscentre.com	http://www.dutchopticscentre.com	Netherlands	-
Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek		Research Center	https://www.tno.nl/en/collaboration/expertise/	https://www.tno.nl/en/about-tno/contact/tno-infodesk/	Netherlands	-
Inagro		Research Center	https://www.inagro.be/inagro_en/FactsFigures	https://www.inagro.be/inagro_en/	Belgium	-
Wageningen University & Research	Wageningen University & Research	Research Center	https://www.wur.nl/en/Research-Results/Research-Institutes/food-biobased-resear...	https://www.wur.nl/en/Research-Results/Research-	Netherlands	-

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				Institutes/food-biobased-resear...		
Confirm| Smart Manufacturing Research Centre		Research Center	https://confirm.ie/infrastructure/	https://confirm.ie/dih/	Ireland	-
Advanced Manufacturing Technology Research Centre	Dublin City University	Research Center	https://aptcentre.ie/our-network/#equipment-resources	https://aptcentre.ie/our-network/#working-with-us	Ireland	-
CELABOR	CELABOR	Research Center	http://www.celabor.be/site/agro_alimentaire_br_extraction-257-999-257-fr.html	http://www.celabor.be/site/accueil-208-999-208-fr.html	Belgium	-
I-Form Advanced Manufacturing Research Centre	Science Foundation Ireland	Research Center	https://www.i-form.ie/	https://www.i-form.ie/	Ireland	-
TSSG	Waterford Institute of Technology	Research Center	https://tssg.org/testbeds/iot-testbeds/	https://tssg.org/industry/services/	Ireland	-

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