REGIONAL CLUSTER IBERIA

Co-funded by the Horizon 2020
Framework Programme of the European Union

JUNTA DE ANDALUCIA
CONSEJERÍA DE AGRICULTURA, GANADERÍA, PESCA Y DESARROLLO SOSTENIBLE

CONSULAI

SMART AGRI HUBS
Iberia

REGIONAL CLUSTER IBERIA

This brochure has been published by the Regional Ministry of Agriculture, Livestock, Fisherie and Sustainable Development of the Andalusia Region in the framework of the SmartAgriHubs project.

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement Nº 818182

Depósito Legal : SE426-2019



INDEX

REGIONAL CLUSTER IBERIA

Iberian Cluster - **joining forces for a real digitisation of the agrifood sector in Spain and Portugal.**

The Regional Cluster Iberia aims at fostering a digitisation network open to all agrifood businesses, creating an ecosystem where innovation can anticipate the sector's needs.

Iberia Regional Cluster: a space of cooperation and common learning

Who are we ?

The greatest Mediterranean agrifood community: with a high crop diversity (fruits and vegetables, berries, olive trees, extensive livestock ...). We represent the 11% of the EU's farms with 1,229,420 agricultural holdings, the 26% of the EU's agro-industries with 37,540 companies and the 12% of the EU's territory.

A cluster of contrasts with a highly-technified agriculture, environmentally sustainable and more efficient in the use of resources.

Irrigation is a key factor for production development, therefore technologies are focused on it.

A large technological community linked to the agrifood sector: 21 Digital Innovation Hubs (DIHs), more than 60 competence centres, ICT companies and start-ups.

Cluster mission

Ensure an innovative and sustainable-in-time **ecosystem within the agrotech community**, able to develop new projects and to become a demonstration lab.

To achieve this objective the Regional Cluster is based on three pillars:

- **3 Flagship Innovation Experiments** (FIE) as a tool to promote **new agrotechnological business models.**
- **Young farmers** as main actors of this network, taking into account their digital capacities.
- **Open calls** planned within the project representing a great **opportunity** for agritechnological innovation through Digital Innovation Hubs.

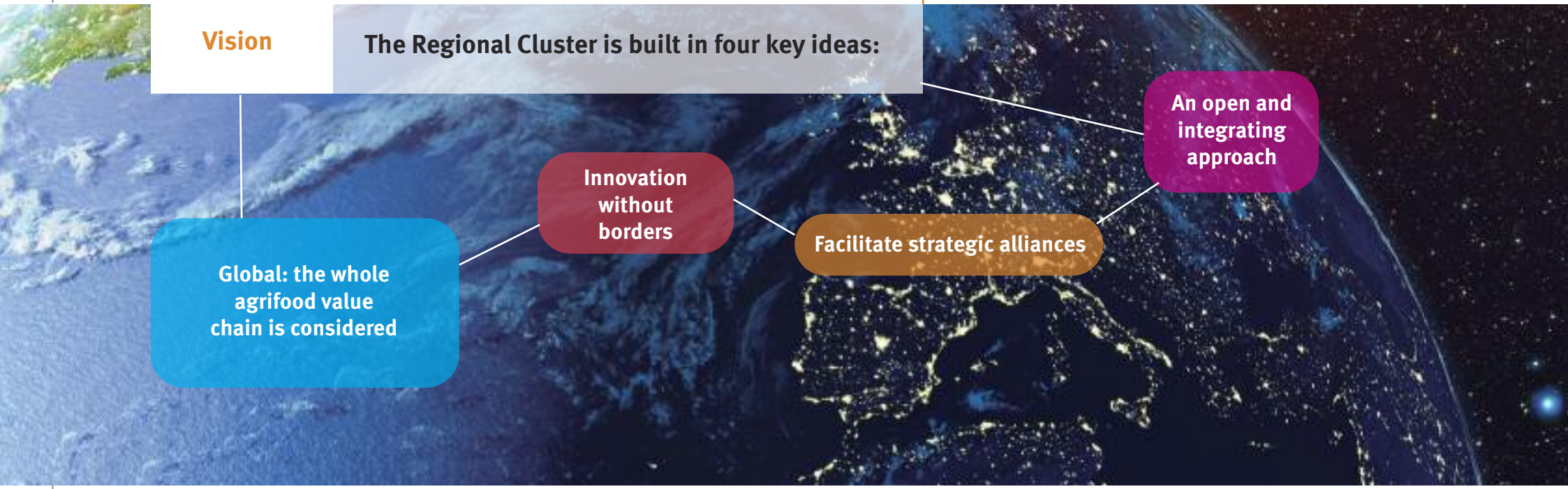
SMART AGRI HUBS Iberia

Added value

The Regional Cluster is a **public-private network** with a stroong focus on new policies to reinforce the agrifood sector digitisation, integrated with the Smart Specialisation Strategy by means of the S3P Agrifood on Traceability and Big Data in the agrifood value chain thematic partnership.

Vision

The Regional Cluster is built in four key ideas:



Challenges

- To integrate the new challenges and this expertise in the **public policies**
- To involve the **highest number of farmers and agroindustry**
- To bring the technological services **closer to the agrifood sector**
- To develop **new agrifood-ict capacities**
- **To internationalize** the DIH's services
- To close technologies to **poorer areas and small farmers**
- To promote **digital culture** and training amongst farmers

The Regional Cluster Iberia team and its role in the SmartAgriHubs project

The Regional Cluster Iberia is led by the **Regional Ministry of Agriculture, Livestock, Fisheries and Sustainable Development of Andalusia**[1] (Spain) and co-led by Consulai, an innovative agroindustry consulting company settled in Portugal.

The leader is the regional public body (Andalusia) responsible for policy development and planning for agriculture, livestock, fisheries and sustainable development. Is also the leader of the Thematic Partnership on Traceability and Big Data in the agrifood value chain under the S3 Agri-food European Platform. The Regional Ministry of Agriculture is currently participating in different Horizon 2020 projects linked to the agrifood sector digitisation. Besides, it is in charge of the innovation strategy for the agrifood sector in the region and of the development of the Operational Groups regional programme.

On the other hand, **Consulai**[2] is the largest advisory company in Portugal in the agrifood sector. It has developed projects in several areas, such as innovation, strategy, investments and sustainability. Its workforce is formed by 30 full time advisors and counts on more than 1.000 active clients, most of them farmers & food processing units. Consulai is currently involved in 20 Operational Groups and 5 H2020 projects – administration / communication / dissemination / exploitation.

Concerning the Regional Cluster Iberia role, it is to be the **contact point** in the territory for Flagship Innovation Experiments and Digital Innovation Hubs with the SmartAgriHubs project.

It is also in charge of the identification and integration of Digital Innovation Hubs in the cluster, as the project foresees to add new ones to the network in order to get involved around 400.

Besides, the Regional Cluster is in charge of facilitating the development of the different activities of the SmartAgriHubs project.

Regional Cluster Leader Contact details

Mrs. Judit Anda Ugarte
smartagrihubs.capder@juntadeandalucia.es
+34 955032515
skype ID: andalucia.internacional.agricultura

Regional Cluster Co-leader Contact details

Mr. Luís Mira da Silva
lmira@consulai.com
(+351) 912017444

[1] https://juntadeandalucia.es/organismos/agriculturapescaydesarrollorural.html
[2] www.consulai.com

Flagship Innovation Experiments (FIEs)

Flagship Innovation Experiments bring together technology providers and farming sector to trigger and boost the amount of digital solutions for a more sustainable food production. The Flagship Innovation Experiments are directly embedded in the project and executed by SmartAgriHubs consortium partners.

FIEs will be conducted through Digital Innovation Hubs (DIHs), enabling them access to the latest knowledge, expertise, technology, and business services while testing and experimenting digital innovations relevant to the experiment.

FIEs

1. GENERAL FLAGSHIP INNOVATION EXPERIMENT DESCRIPTION

Flagship Innovation Experiment name	Flagship Innovation Experiment coordinator(s) and e-mail
SAIA – Sensoring and Artificial Intelligence Algorithms for early detection of crop disease symptoms	Pedro Petiz Pedro.petiz@tekever.com Ricardo Arjona ricardo.arjona@ec2ce.com

FLAGSHIP INNOVATION EXPERIMENT GENERAL INFORMATION	
FIE general goal	SAIA FIE aims at exploring the usability and taking advantage of some key technologies for crops observation and algorithms to assist and help in the early detection of pests and, thus to reduce the negative impact in production and environment.
FIE short description	SAIA FIE aims the exploitation of remote sensors and development of artificial intelligence algorithms to identify diseases symptoms, create risk maps and establish data patterns of symptoms. Therefore, it is proposed to develop a set of solutions to gather and analyse data for the development of early detection, identification and characterization of plant pests and environmental conditions favourable for their appearance in relevant crops in the Iberian region.
FIE specific objectives	The main objectives of the IE are the following: - Use sensors to collect crops data - Explore crops pests detection algorithms - Evaluate the sensors / algorithms performance according to pest conditions - Establish a service exploitation plan - Contribute to support IPM AI based to reduce the use of pesticides in agriculture - Evaluate the level of technological acceptance by End-User farmers
FIE specific challenges	The main challenges of the IE can be of the following nature: - Technological: To explore/use of remote sensing and artificial intelligence to early identification of crop diseases and pests' symptoms. - Data volume: The number of samples required to successfully obtain the necessary data to establish an automatic algorithm is very high. The challenge is to have an algorithm that will require a low number of samples. - Representativeness: the data acquired will be based on a few campaigns and the representativeness could be limited - Variability: Different diseases present similar symptoms, as well as the symptoms of a disease, are different according to the bio stage of the plant and season of the year. The challenge is to have a reduced number of algorithms to handle the different conditions of the crops. - Operational: Establish a solution that presents an operational performance that can be used in large crops, especially in cases where the quick and fast coverage of large areas is a key point to ensure early detection of contamination. - Service: The technology and results obtained with drones and other new solutions should be cost effective and easy to use in order to be adopted. - Service: The use of AI algorithms recommendations must be accepted by the legislation as a threshold to authorise the use of pesticides

FLAGSHIP INNOVATION EXPERIMENT CHARACTERISTICS		
FIE sector(s)	Agro/phytosanitary: Olive trees; vineyards; Cork trees	
Technology Readiness Level (TRL)	**Current value**	**Target value**
	4	5 / 6
Geographical coverage	IBERIA	
Area(s) / facility(ies) of experimentation	Field	
Agrifood Subsector	Wine production / cork production / olive oil	

2. FLAGSHIP INNOVATION EXPERIMENT PARTICIPANTS INVOLVED

TEKEVER AS (SME)
EC2CE (SME)
Monet (SME)
UMA (RTD)
UCO (RTD)
FARM2030 (DIH)
COTR (DIH)
Andalucía Agrotech (DIH)
Galicia (DIH)
INIAV (RTD)
AGACAL (RTD)

3. FLAGSHIP INNOVATION EXPERIMENT EXECUTION PLAN

The execution plan contains 7 activities which are:

1. FIE management
2. Develop the vineyard FIE experiment, technology, performing data gathering and analysis in the lab, and finally demonstrate its results.
3. Develop the Cork Tree FIE experiment, technology, and demo, performing data gathering and analysis in the lab, and finally demonstrate its results.
4. Develop the Olive Oil FIE experiment, technology, and demo, performing data gathering and analysis in the lab, and finally demonstrate its results.
5. Develop the End-User surveys based on the perception of the impact in End-users activity, its likelihood of adoption and derive key enablers and data in supporting the business models in the exploitation of the develop solutions.
6. FIE Communication and Dissemination

1. GENERAL FLAGSHIP INNOVATION EXPERIMENT DESCRIPTION

Iberian Irrigation Portal	Flagship Innovation Experiment name	Flagship Innovation Experiment coordinator(s) and e-mail
	Iberian Irrigation Portal	Rafael Angel Ferrer Martínez – rferrer@hispatec.com

FLAGSHIP INNOVATION EXPERIMENT GENERAL INFORMATION	
FIE general goal	Providing support to farmers in Portugal and Spain to: - Optimal management of irrigation from a technical, economic and environmental point of view. - Optimization of the water consumption - Rationalization of the exploitation and conservation costs - Supporting to irrigation decision using usable IT tool.
FIE short description	Deployment of an irrigation WEB portal in two demosites, one in Portugal and the other one in Spain, in order to define a virtual irrigation advisory board.
FIE specific objectives	- Create an experimental 'IberianIrrigation Portal' providing enhanced irrigation support services for farmers. - Define and trial a low-cost information infrastructure for the effective operation of the 'Iberian Irrigation Portal' services. - Validate and demonstrate the 'Iberian Irrigation Portal' solution in one Portuguese region (that's not in the Alqueva region) and one Spanish region.
FIE specific challenges	- Scale-up the Portal digital services for effective and sustainable irrigation for agriculture enabling a better use of water and productivity of the crops, to the farmer for farmers out of the Alqueva region. - Define a low-cost information infrastructure for sufficient and effective data provision to operate the irrigation support services to farmers at large. - Create irrigation management models for additional crops/regions of experimentation that is not in the Alentejo/Alqueva region.

FLAGSHIP INNOVATION EXPERIMENT CHARACTERISTICS		
FIE sector(s)	Agribusiness	
Technology Readiness Level (TRL)	**Current value**	**Target value**
	5	7
Geographical coverage	Portugal and Spain	
Area(s) / facility(ies) of experimentation	Selected farms in Portugal and Spain	
Agrifood Subsector	Crops	

2. FLAGSHIP INNOVATION EXPERIMENT PARTICIPANTS INVOLVED

HISPATEC - SME
EDIA – SME
UNPARALLEL
FENACORE – Irrigators association
ABOVIGIA - Associação Beneficiários da Obra da Vigia
COTR
Andalucía Agrotech DIH
IFAPA
UNPARALLEL

3. FLAGSHIP INNOVATION EXPERIMENT EXECUTION PLAN

The execution plan contains 7 activities which are:

1. Coordination and management of the activities execution
2. Identification of two farms for being the demosites. One in Portugal and the other one in Spain. These two demosites will be farms with irrigation systems that could be improved and optimized.
3. Analysis of the existing technologies regarding irrigation in the selected demosites and the possibilities of the usage of each one. Once identified, analysis of the usage possibilities of each one regarding the objectives of this FIE.
4. Design of the IT architecture and configuration of the irrigation WEB portal, based on the design, in the selected demosites. Once designed, this activity will configure the IT Platform with the irrigation portal for the end-users.
5. Deployment of the IT Platform in each demosite. Once done, the Irrigation Portal will be ready to go.
6. Calibration of the irrigation models on site and the corresponding user interfaces.
7. The validation of the irrigation models will be done in parallel with the calibration, since the end-users will be testing in realtime, debugging and validating the results of these models.

1. GENERAL FLAGSHIP INNOVATION EXPERIMENT DESCRIPTION

Flagship Innovation Experiment name	Flagship Innovation Experiment coordinator(s) and e-mail
Data-Intensive Dairy Production	Manuel López Luaces: manuel.lopez.luaces@xunta.gal José Antonio Portos Mouriño: jose.antonio.portos.mourino@xunta.gal

FLAGSHIP INNOVATION EXPERIMENT GENERAL INFORMATION	
FIE general goal	Our FIE plans to effect improvements in different steps of the early dairy production chain by exploiting the benefits that digital/data technologies bring. These improvements will become part of the product and service offerings of the 5 SMEs participating in the FIE, that provide such products and services to end-users (farmers and cooperatives). Such end-users are members of the Galician DIH for Agrifood, and their participation will be guaranteed when required through the hub's activities.
FIE short description	The dairy sector is of high importance in the Galician region, the 7th largest milk producer in the EU. The dairy sector is undergoing a progressive modernization process, in which digital technologies are becoming more and more important. The lack of data (and often, quality data) hinders the productivity of dairy farms. Our FIE seeks a data-aided optimization of dairy production in an integral way, considering from forage growing, feed mixture, in-stable herd and operations management and overall farm management. Optimization drivers are resource efficiency, milk quality, animal welfare, environmental impact, quality of life of the farmer, and overall farming business sustainability. An intelligent use and integration of multiple data sources, machinery, models and analytics, the know-how of experts, and market knowledge will allow the involved SMEs to generate, test and demonstrate a number of improved products and services that will improve their market position and improve that of their customers.
FIE specific objectives	- Improve the efficiency in the utilization of resources for forage production, optimization of the use of own resources of agricultural holdings combining data from multiple sources - Achieve a better performance in the animal production through the optimization of the grow conditions and the quality of the data available. - Increase the sustainability of the process: Increase feed precision intake in dairy stables, improve the use of natural resources - Improvement in the monitoring and management of in-stable operations and conditions - Improved decision making by integrating multiple data sources in the resource planning system - Test and demonstrate the readiness of the improved products and services in real conditions and specific sites
FIE specific challenges	Improve the efficiency in the use of resources through proper exploitation of the data available along the indoor/outdoor dairy production cycle (including pasture, fodder, animal health, milk composition), thus contributing to a better and more sustainable performance. Specific challenges: - Extracting value from data at the different stages identified above, but also in combined manner, though parametrization, joint analysis, pattern identification and translate into actionable information for decision support. - Successful integration of such digital knowledge into the products and service offerings of the SMEs involved in the FIE. - Making this technology affordable to small-medium sized farms, such as those that are more common in the Galician region.

FLAGSHIP INNOVATION EXPERIMENT CHARACTERISTICS		
FIE sector(s)	Livestock: Dairy farming Arable farming: forage production for dairy feeding	
Technology Readiness Level (TRL)	**Current value**	**Target value**
	5	7
Geographical coverage	Galician region (Spain)	
Area(s) / facility(ies) of experimentation	CIAM – Mabegondo experimental farm complex, provided by AGACAL. "Campus Terra" experimental farm, provided by USC. End-user dairy farms	
Agrifood Subsector	Livestock: dairy cows Crops (for dairy forage): corn, sorghum, forage legumes	

2. FLAGSHIP INNOVATION EXPERIMENT PARTICIPANTS INVOLVED

AGACAL (RTD)
SERAGRO (SME)
ELMEGA (SME)
MONET (SME)
ALLTECH Spain (SME)
3eData (SME)
USC (RTD)
Gradiant (RTD)
Digital Innovation Hub for the Galician Agrifood Sector
AGACAL
USC
Gradiant

3. FLAGSHIP INNOVATION EXPERIMENT EXECUTION PLAN

The execution plan contains 7 activities which are:

1. Coordination and management
2. Multispectral images and sensorization to predict yield and protein content in maize crop. This activity is focus on providing useful information to farmers to improve the decision making in crop management. The study will be carried out for crops, as maize crop, in two plots located on CIAM experimental farm.
3. Optimization of automated unifeed forage-based diets for a higher efficiency in dairy production
4. Development of a robotic prototype for remote monitoring of the activity with the following characteristics:
    - capacity of movement in the environment of a barn
    - capacity to collect environmental data (temperature, humidity, air quality)
    - capacity to collect pictures and video
    - capacity to send alarms and pictures to the barn supervisor
5. Improved farm management software with interoperability with multiple machinery vendors
6. Awareness creation and dissemination

Digital Innovation Hubs (DIHs)

Digital Innovation Hubs are one-stop-shops that help companies to become more competitive with regard to their business/production processes, products or services using digital technologies. They are based upon technology infrastructure (competence centre) and provide access to the latest knowledge, expertise and technology to support their customers with piloting, testing and experimenting with digital innovations. DIHs also provide business and financing support to implement these innovations, if needed across the value chain. 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 organizations like RTOs, universities, industry associations, chambers of commerce, incubator/accelerators, regional development agencies and even governments) and can also have strong linkages with service providers outside of their region supporting companies with access to their services.

The status of the following DIHs is according to the Catalogue of DIHs of the Joint Reseach Centre (JRC).

Definition of DIH according to: http://s3platform.jrc.ec.europa.eu/digital-innovation-hubs

DIHs

ANDALUCÍA AGROTECH DIGITAL INNOVATION HUB

BASIC INFORMATION

NAME OF THE DIH: ANDALUCÍA AGROTECH DIGITAL INNOVATION HUB
SHORT NAME: Andalucía Agrotech DIH
STATUS: Fully operational
GEOGRAPHIC SCOPE: Andalucía (España)
YEAR OF ESTABLISHMENT: 2017
Nº OF MEMBERS/PARTNERS: 120
MEMBERS/PARTNERS:

PUBLIC ADMINISTRATION

Regional Ministry of Agriculture, Livestock, Fisheries and Sustainable Development
Regional Ministry of Economy, Knowledge, Enterprise and University
Regional Ministry of Employment, Training and Self Employment
Regional Ministry of Health and Families
IFAPA Andalusia Institute of Research and Training on Agriculture, Fisheries, Food and Ecological Production
AGAPA Andalusia Agency for Agriculture and Fisheries Management
IDEA Agency for the Innovation and Development of Andalusia

COMPETENCE CENTERS

ACADEMIA

Andalucía Tech Campus of International Excellence
CeiA3 Campus of International Excellence on Agrifood
CEIMAR Campus of International Excellence of the Sea
University of Almería, University of Córdoba, University of Cádiz, University of Málaga, University of Loyola Andalucía Foundation, University of Seville, Coexphal Chair

RESEARCH AND TECHNOLOGICAL CENTERS

ADESVA, Agroindustry Technological Center
Andanatura Natural Spaces Foundation of Andalusia

CATEC Center for Advanced Aerospace Technologies
CIDAF Center for Research and Development of Functional Food Foundation
CITIC Andalusia Center for Innovation and Technologies of Information and Communication
CETEMET Technological Center for Metal-mechanics and Transports
Andaltec Technological Center for Plastics
CITOLIVA Technological Center for Olive grove and olive oil
COIAA Official College of Agricultural Engineers of Andalucia
CTAQUA Technological Center for aquaculture
Cajamar Foundation
CSIC Institute of Fat
CTA Technological Corporation of Andalusia, GEOLIT Scientific-Technological Parc of Jaén
PITA Scientific-Technological Parc of Almeria, TECNOVA Technological Center for the auxiliary agriculture industry, post-harvest and packaging
Rabanales 21 Scientific-Technological Parc of Córdoba

ICT BUSINESSES

AgroBigDate Solutions S.L., Agroplanning Smart Agriculture S.L., Agrosap Precision Agricultural Solutions S.L., Alcuza Software S.L., AMETIC Association of electronics companies and information technologies, Anserlog S.A., ATOS, BASF, Bioazul, Bluumi, Dattechs Analytics S.L., ec2ce, Eman Engineering, Eticom Business Association Information and Communication Technologies, Evenor-Tech, GIESA, GMV innovating Solutions, Group Hispatec Business Computing S.A., Heimdall Technologies, Herba Ricemills, HP Enterprise, IAGT, Innovasur, Internet of Things, Inventia Agrarica SL, IRSOLAV, Intelligent, ITSOFT, Izertis S.L., Kodysa, Kowat Biomimetic Control, Metadology, MGS SOFT SLU, MUEVO Projects and Communication Systems S.L., Naturcode, nDevices, NoSoloSoftware, Pri Ops Data Science S.L., RSC Talent 2016 S.L., SAIG, Secmotic, Sensacultivo, Sigrow, Singular People Andalucia S.L., SLU S-dos, Smart Biosystem S.L., Symbia Solutions S.L., Telefonica., UTW Unmanned Technical Works SLL., Verdtech-Verde Smart Co, Vodafone Spain S.A.U., Wellness Telecom S.L., WENDU Wearable S.L, Zabala Innovation Consulting S.A.

AGRIFOOD BUSINESSES

AIMCRA Association for the Research and Improvement of sugarbeet culture, Alhóndiga La Unión, APROA Association of Producers' Organizations of Andalusia, ASAJA Andalusia, UCA-UCE Union of Consumers of Andalucia, ASEMESA Association of Exporters and Industrial traders of table olives, APROSE: Professional Association of Selected Seed Produce Companies, ASAJA Sevilla Agrarian Association of Young Farmers, C.R. D.O. "CONDADO DE HUELVA" AND "VINEGAR FROM CONDADO DE HUELVA", C.R. D.O. "MONTILLA-MORILES" AND "VINEGAR FROM MONTILLA-MORILES", C.R. D.O.P. "ESTEPA", C.R. D.O.P. "JAM FROM HUELVA", C.R. D.O.P. "PRIEGO DE CORDOBA", C.R.D.O.P. "ALOREÑA OLIVE OF MÁLAGA", C.R.I.G.P. "MANTECADOS DE ESTEPA" Y ''POLVORONES DE ESTEPA'', CAEA, COAG Andalucia, COEXPHAL, AGRI-FOOD COOPERATIVES, COVAP, Inddeco Investigation of Ecological Dehesas, DCOOP, FIAB (Spanish Federation of Food and Beverage Industries), FRESHUELVA Huelva Association of Producers, Galpagro, GDR Valle del Guadalhorce, GLOBAL GAP, Global Olive, Grupo La Caña, LANDALUZ Andalusian Food Business Association, MERCADONA, Oleoestepa SCA, RURAPOLIS, Subafresh, TEPRO Agricultural Consultants SL, TROPS, UPA Andalucía.

SERVED SECTORS:

Agricultural sector:

Arable farming, fruits, poultry, greenhouses, olive grove, dehesa ecosystem, dairy, vegetables, piggery, organic, vineyard and animal husbandry (beef, sheep, goat)

Technical sector:

IoT, data mining, sensors, drones, robotics, artificial intelligence, machine learning, Open Data,Cloud, Blockchain, interoperability, measuring and predicting model, HAPS (high altitude pseudo satellite), satellite image.

CONTACT DETAILS

DIH ADDRESS: Tabladilla s/n, 41071, Sevilla (Spain)
WEBSITE:
http://juntadeandalucia.es/organismos/agriculturapescaydesarrollorural.html
SOCIAL MEDIA: Twitter (@DIHAndAgrotech)
EMAIL: dih.andalucia.agrotech@juntadeandalucia.es
CONTACT PERSON: Judit Anda

MISSION

MISSION / OBJECTIVES: Making digitization avaible to all the companies of the sector from the economic and technical points of view.
Objectives:

- Improving the competitiveness.
- Becoming a benchmark hub
- Connecting all the resources
- Promoting valuable cooperation between the actors involved in the ecosystem

COMPETENCES: Digital Agro Technologies

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure
- Testing and validation

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Brokerage
- Market intelligence
- Access to Competence Centres

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)

Examples: Olive Tree Lab (FIWARE); Monitoring system using "FIWARE-Ready IoT device" collars; Incubator Programmes (Minerva, the Cube); ComPlat (direct communication platform between producers and consumers for the agrifood sector in real-time); promoting valuable cooperation between the actors within the ecosystem (100 Operational Groups); predictive models for pests and deseases.

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Geoportal.

OBJECTIVES: The GEOPORTAL is a spatial data infrastructure that makes up an agricultural georeferenced data service.

WEBSITE: http://www.geoportalagriculturaypesca.es/portal/

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: RAIF - PREDICTIVE MODELS FOR PESTS AND DESEASES

WEBSITE: http://juntadeandalucia.es/agriculturapescaydesarrollorural/raif

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Education

- Máster en Transformación Digital en el sector agroalimentario, University of Cordoba.
- Máster en Agricultura Digital e Innovación Agroalimentaria, University of Sevilla.

OBJECTIVES:

University of Cordoba:

The Master Digital Agri: provides a multidisciplinary training to professionals specialized in agri-food, in the field of new information and communication technologies applied in their fields of action.

University of Sevilla

The Máster en Agricultura Digital e Innovación Agroalimentaria: aims to train professionals in the new agricultural technologies that companies in the sector seek to lead their SmartAgro and digital transformation projects.

WEBSITE:

University of Cordoba

https://digitalagri.es/

University of Sevilla

http://master.us.es/agrodigital/

AGRITECH BIG DATA, BIG DATA INNOVATION HUB AT THE SERVICE OF THE AGRIFOOD SECTOR

BASIC INFORMATION

NAME OF THE DIH: AGRITECH BIG DATA, BIG DATA INNOVATION HUB AT THE SERVICE OF THE AGRIFOOD SECTOR
SHORT NAME: Agritech Bigdata DIH
STATUS: Fully operational
GEOGRAPHIC SCOPE: Cataluña (España)
YEAR OF ESTABLISHMENT: 2016
Nº OF MEMBERS/PARTNERS:
SERVED SECTORS:

Agricultural sector

Arable farming, fruits, poultry, agricultural machinery, dairy, piggery and irrigation & water management

CONTACT DETAILS

CONTACT PERSON: Gabriel Anzaldi
EMAIL: gabriel.anzaldi@eurecat.org

MISSION

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Testing and validation
- Other: Living labs

Business services

- Access to finance and funding
- Skills and education
- Brokerage
- Market intelligence
- Access to Competence Centres
- Other:

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)
- Other: BigData CoE Barcelona

AGROCLUSTER DIH

BASIC INFORMATION

NAME OF THE DIH: AGROCLUSTER DIH
SHORT NAME: Agrocluster DIH
STATUS: Out of JRC Catalogue
GEOGRAPHIC SCOPE: Alentejo (Portugal)
YEAR OF ESTABLISHMENT: 2018
Nº OF MEMBERS/PARTNERS: 94
MEMBERS / PARTNERS:

ICT companies: 3; Competence centers/University: 6; Incubator: 1; associations: 5; SME: 71; large enterprises: 8.

SERVED SECTORS:

Agricultural sector

Fruits, greenhouses, charcuterie, sauces and vinegars, wine, dairy, vegetables, olive oil, dry products (biscuits, jams, marmalades…)

Technical sector

ICT, testing, web designing, sensors, AI and big data.

CONTACT DETAILS

DIH ADDRESS: CIES - Centro de Inovaçao Empresarial de Satarém, Largo Infante Santo, 2005-246 Santarém
WEBSITE: www.agrocluster.com
EMAIL: geral@agrocluster.com
SOCIAL MEDIA: Facebook: www.facebook.com/agrocluster
CONTACT PERSON: Ana Araujo

MISSION

MISSION / OBJECTIVES: Agrocluster is a nom profit association of companies, competence centers and universities related to the agro industrial sector. we are focused on the development of the sector and promoting competitiveness. our mission is to increase the collaboration and the cooperation between the companies an entities related to the agro-industrial sector, thus ensuring a broad participation of the entities directly related with this sector in the international, national commercial circuits.

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Testing and validation

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Brokerage
- Market intelligence
- Access to Competence Centres

Ecosystem services

- Community building
- Mentoring (in the work)

POLO DE INNOVACIÓN DIGITAL DE NAVARRA. DIGITAL INNOVATION HUB OF NAVARRE

BASIC INFORMATION

NAME OF THE DIH: POLO DE INNOVACIÓN DIGITAL DE NAVARRA. DIGITAL INNOVATION HUB OF NAVARRE
SHORT NAME: DIH Navarra
STATUS: In preparation
GEOGRAPHIC SCOPE: Navarra (España)
YEAR OF ESTABLISHMENT: 2019
Nº OF MEMBERS/PARTNERS: 9
SERVED SECTORS:

Agricultural sector

Arable farming, fruits, poultry, greenhouses, dairy, vegetables and organic.

Technical sector

Geodata, digital platforms, infrastructures management, R&D.

CONTACT DETAILS

CONTACT PERSON: Delia Sola Giménez
EMAIL: delia.sola.jimenez@cfnavarra.es

MISSION

MISSION / OBJECTIVES: R&D&i strategy and industry in Navarre.
COMPETENCES: The R&D environment focus on the technologies needed to promote the R&D and the challenges of the strategy of intelligent specialization, artificial intelligence, IoT, Big Data, Robotics and Biotechnology. Technologies that will facilitate the transition of the industry towards the 4.0, the development of sustainable mobility, renewable energies and the food chain.
KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Testing and validation

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Access to Competence Centres

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)

ALMERÍA SMARTAGRIHUB

BASIC INFORMATION

NAME OF THE DIH: ALMERÍA SmartAgriHub
SHORT NAME: ALMERÍA SmartAgriHub
STATUS: In preparation
GEOGRAPHIC SCOPE: Andalucía (España)
YEAR OF ESTABLISHMENT: 2017
Nº OF MEMBERS/PARTNERS: 20
MEMBERS/PARTNERS:

Core members: Cajamar Caja Rural, COEXPHAL. Association of F&V Producer Organisations, University of Almería and Foundation Cajamar. Associated members: Hispatec, Agrocolor, Biocolor, Proyecta Ingenio, PITA, Foundation Aneccop-UAL, CIAMBITAL, CIESOL, selected members of Cohexphal, public entities, etc.

SERVED SECTORS:
Agricultural sector

Greenhouses, vegetables, fruits conventional & organic and related industry and value chains.

CONTACT DETAILS

DIH ADDRESS: University of Almería, CITE V, D-1-20, Ctra. de Sacramento, s/n. (04120) Almería. Spain
WEBSITE: www.almeriasah.eu / www.almeriasmartagrihub.eu
SOCIAL MEDIA: Twitter: @AlmeriaSah
CONTACT PERSON: Roberto García Torrente / Luis Miguel Fernández Sierra
Cynthia Giagnocavo
EMAIL: info@almeriasah.eu

MISSION

MISSION / OBJECTIVES: Facilitate and accelerate the digital transformation of the Almería horticultural sector and related value chains, leading to competitive advantage, improved products and processes, social benefits and improved environmental stewardship. Consolidate resources, update products and processes, and adapt business models. In addition, encourage cooperation among the agents of the ecosystem, promoting financial, scientific, technical and networking support to implement these innovations throughtout the agrifood value chain.

COMPETENCES: All competences related to precision greenhouse production, auxiliary businesses and supply chain (from seed to fork), incluiding as well ecosystem services. Also energy (wind, solar, etc) water, residues, etc.

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure
- Testing and validation
- Other: DSS for IPM. Fertigation, climate control, etc.; climate sensors; soil sampling & soil sensors, yield mapping; on plant sensors & plant data/analysis; Farm IoT; agricultural robots & drones; greenhouse automation; greenhouse modeling & control; smart farming; smart irrigation; farm ERP; Big Data advance analysis; precision agriculture and predictive analytic; food processing and packing; sensor networks technologies; traceability and certification; control of labour; farm and crop management; digital commercialization; and market intelligence.

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Brokerage
- Market intelligence
- Access to Competence Centres
- Other: HRLegal services, subsidy application support.

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)
- Other: Liaison with National and EU entities.

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: FAIRshare. Farm Advisory digital innovation tools realised shared.

OBJECTIVES: Electronic data generation, analitycs and communication technologies potentially enable more accurate, faster and better decision-taking on farms, with huge potential to improve agricultural sustainability. There is major focus on digitisation by EU and national/regional policy makers to ensure that digital innovation in agriculture keeps pace with other sectors and the benefits of digitisation and future innovations will be hampered unless the rural advisory community is mobilised to take ownership of digital tools and to advocate at the user interface. This CSA will engage, enable and empower the independent farm advisor community, through sharing of tools, expertise and motivations.

FAIRshare has two main programmes. Firstly, WPs 1, 2, and 3 will gather an evidence base of the digital tools and services used internationally, leveraging the social networks of partner institutions that span EU and non-EU countries. The inventory of tools will be acFAIRRercessible to end-users on an intuitively navigale online interface that has been co-designed using a multi-actor approach. Accompanying the tools in the online inventory will be information, for instance short 'good practice' vignettes, on how the tools may be used/adapted for use. Secondly, WPs 4, 5, and 6 will generate and resource a participatory 'living laboratory', empowering advisor peers from across the EU. Special focus will be in co-designing powerful communication and engagement approaches for advisors to advocate and inspire their peers and farmer clients, driving a social movement for the wider and better use of digital tools.

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: INTERNET OF FOOD AND FARM 2020 (IoF2020)

WEBSITE: https://www.iof2020.eu

OBJECTIVES: Internet of Food and Farms 2020 aims to develop solutions for the internet of things for the agri-food sector: creating a disruptive change, improving in a very marked way the productivity and sustainability of the agricultural and livestock practices. IoF2020 is organized around 5 sectors with the creation of 19 cases of the suties with different subjects.

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: HORTISYS

WEBSITE: https://www.hispatec.es/proyectos/hortisys-innterconecta-feder/

OBJECTIVES: The project develops a management solution for a qualitative and quantitative improvement of horticultural production, through the implementation of a systematic learning system that facilitates remote control and, even, the automation of operations in greenhouses or recommendations; all this integrated with the marketing process for, helping with meteorological forecasts, to adjust and to satisfy in a more efficient way the current and expected demand of the market, and to obtain thus to benefit of a better and more stable prices of sale.

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: MODELCROP. Study and development of a tool for decision Support (DSS) on climate management, production and economic cost applied to a greenhouse.

OBJECTIVES: Develop an agronomic model predictive simulation and a system of assistance to decision-making (DSS). This model will be supported by a TIC platform that implements its computerized and that can present advices in the management of the greenhouse and the management of crops to maximize production.

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Transfer of INNOvative techniques for sustainable WAter use in FERtigated

WEBSITE: https://www.fertinnowa.com

OBJECTIVES: The three topics of the project are: water sources; water (re)use efficiency and end pipe solutions. FERTINNOWA will apply a bottom-up approach. First, they will identify the existing bottolenecks at farms, after which they will look for concrete solutions that can be made avaible to farmers. Technologies from other sectors will be evaluated for their suitability to solve existing gaps.

DIGITAL INNOVATION HUB ON HPC-CLOUD AND COGNITIVE SYSTEMS FOR SMART MANUFACTURING PROCESSES, ROBOTICS AND LOGISTICS

BASIC INFORMATION

NAME OF THE DIH: DIGITAL INNOVATION HUB ON HPC-CLOUD AND COGNITIVE SYSTEMS FOR SMART MANUFACTURING PROCESSES, ROBOTICS AND LOGISTICS
SHORT NAME: Aragón DIH
STATUS: Fully operational
GEOGRAPHIC SCOPE: Aragón (España)
YEAR OF ESTABLISHMENT: 2017
Nº OF MEMBERS/PARTNERS: 3
MEMBERS/PARTNERS: 3
SERVED SECTORS:

Agricultural sector:

Arable farming, fruits, organic, vegetables, animal husbandry, piggery, poultry, cereals, fruits, wineyards and wine, olive oil, almond trees, egg production farms, cow, sheep and goat meat; derivated products of pig meat (charcuterie).

Technical sector: Yes.

CONTACT DETAILS

DIH ADDRESS: C/ María de Luna 7, 50018, Zaragoza
WEBSITE: www.aragondih.com
EMAIL: afernandez@itainnova.es
CONTACT PERSON: Ángel Fernández Cuello

MISSION

MISSION / OBJECTIVES: Aragon DIH is the Aragonese initiative that, within a framework of European cooperation, extends the strategy for Economic and Industrial Promotion and the SS3 of Aragon, forming the technological and innovative action of the Aragonese Innovation System towards the digitization of the Industry. It includes ROs, Competence Centers, innovative companies and, the business development agencies and competent authorities to define and support the Aragon Industry Strategy 4.0 (AI4.0).

KEY SERVICES:

Technology services

Collaborative R&D
Technical support on upscaling
Testing and validation
Other: Aragon DIH includes services based on IA technologies, Big data, ioT, Blockchain, Robotics, Modelling and simulation, High Performance Computing, etc. to offer services of high technological value.

Business services

Incubator/ accelerator support
Access to finance and funding
Skills and education
Access to Competence Centres

Ecosystem services

Community building
Visioning & strategy development
Mentoring (in the network)

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Agroslab-Go: Geolocalización y optimización de los procesos agrarios en entornos abiertos.
OBJECTIVES: Improvement of the levels of automation and optimization of agricultural processes linked to the traceability of products, and to the planning and execution of activities in the field.
WEBSITE: www.agroslab.com/agroslab-go


ESAR

CENTRO OPERATIVO TECNOLÓGICO HORTOFRUTÍCOLA NACIONAL
CENTRO DE COMPETENCIAS

BASIC INFORMATION

NAME OF THE DIH: CENTRO OPERATIVO TECNOLÓGICO HORTOFRUTÍCOLA NACIONAL - CENTRO DE COMPETENCIAS
SHORT NAME: COTHN_CC
STATUS: Out of JRC Catalogue
GEOGRAPHIC SCOPE: Portugal
YEAR OF ESTABLISHMENT: 2014
Nº OF MEMBERS/PARTNERS: 70
SERVED SECTORS:

Agricultural sector: 54
Technical sector: 16

CONTACT DETAILS

DIH ADDRESS: Estrada de Leiria S/N, 2460-054 Alcobaça
WEBSITE: www.cothn.pt
EMAIL: geral@cothn.pt
CONTACT PERSON: Maria do Carmo Martins

MISSION

MISSION / OBJECTIVES:

- To promote the development of the sector through the applied investigation, improvement of the knowledge level, deepening the cooperation and partnerships in the areas of technology and organization.
- It intends to promote the approach between the industries and the investigation, as well as between public and private institutions.
- We were recognized as a competence centre for the fruit and vegetable sector and as a technological interface centre in 2017

COMPETENCES:

a) Dissemination and transference of knowledge;
b) Specialized services for increment quality
    1. Meteorological data service for agriculture
    2. Certification and quality control on Packinghouses
    3. Sprays inspection service
c) Irrigation system evaluation and water management
d) Technical dissemination and communication service

KEY SERVICES:

Technology services

Collaborative R&D
Technical support on upscaling
Testing and validation

Business services

Access to finance and funding
Skills and education
Brokerage
Access to Competence Centres

Ecosystem services

Community building
Visioning & strategy development

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: FitoAgro
OBJECTIVES: Monitoring and study of the life cycle of emerging enemies in the Region in order to define the risk estimation and the NEA with the objective of producing information for its control based on alternative strategies to the chemical fight
WEBSITE: https://fitoagro.webnode.pt/

NAME OF THE PROJECT: FruitFlyProtec
OBJECTIVES: To improve fruit fly control by monitoring and evaluating the efficacy of alternative protection media for Ceratitis capitata and Drospohila suzukii and risk assessment of potential introduction and distribution to Bactrocera dorsalis
WEBSITE: https://fruitflyprotec.webnode.pt/

NAME OF THE PROJECT: Smart Farm Colab
OBJECTIVES: CoLAb will be a center for generating digital innovative approaches to agriculture, with a very focused on the latest technology and focused on Vegetable, Fruit and Vegetable Area.

The objectives will be:

- Creation of sustainable production strategies
- Integrate the efficient use of resources with the use of innovative techniques
- Develop intelligent machines and monitoring systems in real time, using high technology.

COTR-CENTRO OPERATIVO DE TECNOLOGÍA DE REGADIO IRRIGATION AND TECHNOLOGY CENTER

BASIC INFORMATION

NAME OF THE DIH: COTR - CENTRO OPERATIVO DE TECNOLOGÍA DE REGADIO IRRIGATIONAND TECHNOLOGY CENTER
SHORT NAME: COTR
STATUS: Out of JRC Catalogue
GEOGRAPHIC SCOPE: Beja (Portugal)
YEAR OF ESTABLISHMENT: 2015
Nº OF MEMBERS/PARTNERS: 440
MEMBERS/PARTNERS:
40: Governmental agencies, universities, research institutes, ICT SME's, farmers associations.
›400 farmers: farm network
SERVED SECTORS:
Agricultural sector:
Arable farming, fruits, olives, vineyards, cereals, vegetables and irrigation

CONTACT DETAILS

CONTACT PERSON: Gonçalo Rodrigues
EMAIL: goncalo.rodrigues@cotr.pt

MISSION

KEY SERVICES:
Technology services
- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure
- Testing and validation

Business services
- Skills and education
- Access to Competence Centres
- Other: Trainning

Ecosystem services
- Community building
- Visioning & strategy development
- Other: Irrigation advisory services

DIH IOT

BASIC INFORMATION

NAME OF THE DIH: DIH IOT
SHORT NAME: DIH IOT
STATUS: Fully operational
GEOGRAPHIC SCOPE: Castilla y León (España)
YEAR OF ESTABLISHMENT: 2015
Nº OF MEMBERS/PARTNERS: 25
SERVED SECTORS:

Agricultural sector:

Arable farming, fruits, poultry, greenhouses, dairy, vegetables, piggery

CONTACT DETAILS

CONTACT PERSON: Javier Prieto Tejedor
EMAIL: jprieto@usal.es

MISSION

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure
- Testing and validation

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Brokerage
- Market intelligence
- Other: Commercial infrastructure

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)
- Other: Ecosystem building, scouting, brokerage, networking and conference organization.


250 ml
250
200
100

DIGITAL INNOVATION HUB FOR THE GALICIAN AGRIFOOD SECTOR

BASIC INFORMATION

NAME OF THE DIH: DIGITAL INNOVATION HUB FOR THE GALICIAN AGRIFOOD SECTOR

SHORT NAME: DIHGAS

STATUS: Fully operational

GEOGRAPHIC SCOPE: Galicia (España)

YEAR OF ESTABLISHMENT: 2016

Nº OF MEMBERS/PARTNERS: 64

MEMBERS/PARTNERS:

Cooperatives and producers: AGACA, CLUN, Martín Códax, Leite Río, Queizuar, OVICA, Viveiros Río Tollo, Casa Grande de Xanceda, Lácteos Casa Macán, Parandería Da Cunha, Estrella Galicia and Lúpulo Tecnología de Galicia.

ITC companies: Televés, Gainsa, Egatel, R-Esukatel, Arteixo Telecom, Inteligencia Visual, Seresco, Monet Viticultura, Macraut, Silicent Systems and Librebit.

Industrial cluster and professional associations: INEO, Cluster TIC and CLUSAGA.

Agronomist, agrotech, machinery, advisory and consultancy services: Tragsatec, Lagunal, Magrino, Alltech Spain, Seragro, Elmega, 3eData, AutoFarm, I+D Agroalimentaria, SPI consultores, Aresa Agrícola, Nutrimentos Deza, Agronovo, Libreinnova and Macrotest.

RTOs and Universities: Gradiant, USC-Campus Terra, Aimen, ITG, EnergyLab, ANFACO, CiTIUS, ITMATI, Universidad de Vigo, CESGA, CETAL, Centro Tecnolóxico da Carne, Colexio Enxeñeiros Agrónomos and Colexio Veterinarios.

Non-profits, foundations, other associations (4): Fundación Juana de Vega, Asociación, de Grupos de Desenvolvement Rural, EFA Galicia and FEUGA.

Public Administration: Galician Innovation Agency, Regional Ministry for Rural Affairs, AGACAL, AMTEGA and IGAPE.

SERVED SECTORS:

Agricultural sector:

Agri-food value chain: animal production / livestock (dairy, pork, poultry, cattle...), vegetable production (animal food-fodder grain, pastures, silages...; human food-cereal, vegetables...)

Technical sector:

Coops, farmers and producers, SMEs, agrarian adn farming associations, rural development groups, large enterprises, ICT developers/providers, equipment providers, manufacturers...

CONTACT DETAILS

CONTACT PERSON: Luis Pérez-Freire (Gradiant) and Rogelio Conde-Pumpido (USC)

EMAIL: lpfreire@gradiant.org / rogelio.conde-pumpido@usc.es /agrodixital@gradiant.org

WEBSITE: www.polodeinnovaciondixital.org/en/

MISSION

MISSION / OBJETIVES: Gradiant and Universidade de Santiago de Compostela (USC), through Campus Terra, boosted in 2016 the creation of the digital innovation hub for Galician agri-food sector, a key initiative to encourage the future sustainability of the sector in our region.

The objectives of this joint initiative are focused on establishing a dynamic profitable open and responsibe collaboration to achieve greater competitiveness for agri-food sector, expand business opportunities and export potential for technologic.

COMPETENCES: The Galician Digital Innovation Hub facilitates the confluence (on the demand side) of a productive and transformating sector opened to add technologies and innovative services adapted to their reality with (on the supply side) technological suppliers and services; and innovation centers, in order to generate solutions and improvements demanded by the sector. It is intented to act as a one stop demand.

KEY SERVICES:

Technology services
- Collaborative R&D
- Technical support on upscaling
- Testing and validation

Bussines services
- Access to finance and funding
- Skills and education
- Brokerage
- Access to Competence Centres

Ecosystem services
- Community building
- Visioning & strategy development

DINAPSIS OPERATION & LAB

BASIC INFORMATION

NAME OF THE DIH: DINAPSIS OPERATION & LAB
SHORT NAME: dinapsis
STATUS: Fully operational
GEOGRAPHIC SCOPE: Comunidad Valenciana (España)
YEAR OF ESTABLISHMENT: 2017
Nº OF MEMBERS/PARTNERS: 13
SERVED SECTORS:

Agricultural sector:

Fruits, irrigation communities and vegetables

Technical sector:

ICT, Irrigation

CONTACT DETAILS

DIH ADDRESS: Av. Alfonso Puchades, 3 03502 Benidorm (Spain)
SOCIAL MEDIA: Twitter (@dinapsis)
EMAIL: jballesta@hidraqua.es
CONTACT PERSON: Jorge Ballesta Paredes

MISSION

MISSION / OBJECTIVES: To develop the digital economy, technology and knowledge-based industries of the future, helping to develop digital solutions at companies that improve the quality of life of the people who live and visit the cities in the province of Alicante

COMPETENCES: Due to the extensive experience of our partners in business-viable models, we believe that projects with clear customer objectives based on a utility that improves the end-user processes should be established.
Technology must be a means and not an end in itself.
Therefore, each project we carry out is present from the Centers of Competence (Universities, Research Centres), innovative technology-based companies that will develop and market the product and the final users of the product.
KEY SERVICES:

Technology services

Collaborative R&D
Technical support on upscaling
Testing and validation

Business services

Brokerage
Access to Competence Centres

Ecosystem services

Community building

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Hazur
OBJECTIVES: Demonstrate the usability of HAZUR, the first city-resilience-oriented online tool that provides holistic city cross-management methodologies, strategic service monitoring and systemic simulation to go through the whole process of integrating resilience concepts into operations of basic municipal services and infrastructures.
WEBSITE: http://opticits.com/

ASSOCIAÇÃO PARA O DESENVOLVIMENTO DA VITICULTURA DURIENSE

BASIC INFORMATION

NAME OF THE DIH: ASSOCIAÇÃO PARA O DESENVOLVIMENTO DA VITACULTURA DURIENSE
SHORT NAME: ADVID
STATUS: Fully operational
GEOGRAPHIC SCOPE: Douro (Portugal)
YEAR OF ESTABLISHMENT: 1982
Nº OF MEMBERS/PARTNERS: 175
SERVED SECTORS:

Agricultural sector:
- Vineyard and wine

CONTACT DETAILS

CONTACT PERSON: Rosa Amador
EMAIL: rosa.amador@advid.pt

MISSION

KEY SERVICES:

Technology services
- Collaborative R&D
- Technical support on upscaling
- Testing and validation

Bussines services
- Skills and education
- Access to Competence Centres

Ecosystem services
- Visioning & strategy development

ECOSISTEMA W

BASIC INFORMATION

NAME OF THE DIH: ECOSISTEMA W
SHORT NAME: Ecosistema W
STATUS: In preparation
GEOGRAPHIC SCOPE: Extremadura (Spain)
YEAR OF ESTABLISHMENT: 2016
Nº OF MEMBERS/PARTNERS: 34
SERVED SECTORS:

Agricultural sector:

Arable farming, fruits and poultry.

CONTACT DETAILS

PERSONAL CONTACT: Servando Saavedra Sanguino
EMAIL: conecta@conectoride.com

MISSION

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure

Business services

- Incubator/ accelerator support
- Skills and education
- Market intelligence

Ecosystem services

- Community building
- Other: Business Angels

FARM2030- DIGITAL INNOVATION HUB IN THE AGRICULTURE SECTOR IN PORTUGAL FOR RESEARCH AND INNOVATION FOR SUSTAINABLE AND COMPETITIVE FARMING

BASIC INFORMATION

NAME OF THE DIH: FARM2030- DIGITAL INNOVATION HUB IN THE AGRICULTURE SECTOR IN PORTUGAL FOR RESEARCH AND INNOVATION FOR SUSTAINABLE AND COMPETITIVE FARMING
SHORT NAME: FARM2030
STATUS: Out of JRC Catalogue
GEOGRAPHIC SCOPE: Alentejo (Portugal)
YEAR OF ESTABLISHMENT: 2016
Nº OF MEMBERS/PARTNERS: 30
MEMBERS/PARTNERS:
ICT SME's, farmers, universities, research institutes governmental agencies, farmer's associations, large companies, startups and advisors.
SERVED SECTORS:
Agricultural sector:
Arable farming, fruits, cereals, vineyards, vegetables and olives.

CONTACT DETAILS

CONTACT PERSON: Rui Almeida
EMAIL: ralmeida@consulai.com

MISSION

KEY SERVICES:
Technology services
- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure
- Testing and validation

Business services
- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Access to Competence Centres
- Other: Trainning

Ecosystem services
- Community building
- Visioning & strategy development
- Other: Demonstration farms

TECHNOLOGY FOR EFFICIENCY DIGITAL INNOVATION HUB

BASIC INFORMATION

NAME OF THE DIH: TECHNOLOGY FOR EFFICIENCY DIGITAL INNOVATION HUB
SHORT NAME: T4E DIH
STATUS: Fully operational
GEOGRAPHIC SCOPE: Extremadura (España)
YEAR OF ESTABLISHMENT: 2018
Nº OF MEMBERS/PARTNERS: 4
MEMBERS/PARTNERS: Fundecyt-PCTEX / University of Extremadura / Supercomputing Center Computaex / Aextic
SERVED SECTORS:

Agricultural sector:

Arable farming / fruits / vegetables / animal husbandry / piggery / poultry / other: olives, vineyards, dehesa ecosystem

Technical sector:

Health and social work / transport, storage and communication / public administration and defence / education / other community, social and personal service activities

CONTACT DETAILS

DIH ADDRESS: AVDA. DE LA INVESTIGACION, S/N - 06006 BADAJOZ (SPAIN)
WEBSITE: www.dih4e.eu
EMAIL: cristina.gallardo@fundecyt-pctex.es
CONTACT PERSON: Patricia Da Costa / Félix Bermejo

MISSION

MISSION / OBJECTIVES: The Digital Innovation Hub Technologies for Efficiency (T4E DIH) is a physical and virtual space in which actions and services of the different agents of Extremadura are concentrated for the development and improvement of products and productive and business processes, through the use of technology.

T4E DIH ambition is based on the identification of agents, resources and capacities to design a wide catalogue of services in the challenges of energy, ecology, equality and economy that determines

COMPETENCES: Broadband and other communication networks (e.g. 5G) / Robotics and autonomous systems / IoT (connected devices, sensors and actuators networks) / Location based technologies (GPS, GIS, in-house localization) / Cyber security (including biometrics) /Advanced or High performance computing/ Data mining, big data, database management /Software as a service and service architectures /Cloud computing /ICT management, logistics and business systems /Internet services (web development, e-commerce)

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Testing and validation
- Other: Digital maturity assessment

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Market intelligence
- Other: Awareness creation

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)
- Other: Voice of consumer, product consortia

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Vidi 4.0
OBJECTIVES: PROMOTION AND DINAMIZATION OF A PROJECT FOR THE DIGITAL TRANSFORMATION OF THE WINE INDUSTRY
WEBSITE:
http://www.energiaextremadura.org/proyectos/cluster-la-energia-extremadura-consigue-proyecto-la-ultima-convocatoria-las aeis/

PORTUGUESE AGRICULTURAL DIGITAL INNOVATION HUB

BASIC INFORMATION

NAME OF THE DIH: PORTUGUESE AGRICULTURAL DIGITAL INNOVATION HUB
SHORT NAME: Hub4agri
STATUS: Fully operational
GEOGRAPHIC SCOPE: Portugal
YEAR OF ESTABLISHMENT: 2017
MEMBERS/PARTNERS: 15
SERVED SECTORS:

- **Agricultural sector:** Yes
- **Technical sector:** Yes

CONTACT DETAILS

DIH ADDRESS: Av. Prof. Dr. Cavaco Silva, 33 2740-120 Porto Salvo - Portugal
WEBSITE: www.hub4agri.com
EMAIL: info@hub4agri.com
CONTACT PERSON: António Dias

MISSION

MISSION / OBJECTIVES: HUB4AGRI provides a large combination of services aiming the digital transformation of the agrifood value chain.
KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure
- Testing and validation

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Brokerage
- Market intelligence
- Access to Competence Centres

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)

HUB 4.0 MANUFACTURING SECTORS IN VALENCIA REGION

BASIC INFORMATION

NAME OF THE DIH: HUB 4.0 MANUFACTURING SECTORS IN VALENCIA REGION
SHORT NAME: HUB4MANUVAL
STATUS: Fully operational
GEOGRAPHIC SCOPE: Valencia (España)
YEAR OF ESTABLISHMENT: 2017
Nº OF MEMBERS/PARTNERS: 5
SERVED SECTORS:

Agricultural sector:

Arable farming and fruits.

CONTACT DETAILS

PERSONAL CONTACT: Francisco Blanes
EMAIL: pblanes@ai2.upv.es

MISSION

KEY SERVICES:

Technology services

Collaborative R&D
Technical support on upscaling
Testing and validation

Business services

Incubator/ accelerator support
Skills and education
Brokerage
Access to Competence Centres

IMAN NORTE HUB - DIGITAL INNOVATION HUB FOR CUSTOMER-DRIVEN MANUFACTURING @ NORTE

BASIC INFORMATION

NAME OF THE DIH: IMAN NORTE HUB - DIGITAL INNOVATION HUB FOR CUSTOMER-DRIVEN MANUFACTURING @ NORTE
SHORT NAME: Iman Norte Hub
STATUS: Fully operational
GEOGRAPHIC SCOPE: North of Portugal (Portugal)
YEAR OF ESTABLISHMENT: 2016
Nº OF MEMBERS/PARTNERS: 7
MEMBERS/PARTNERS: PRODUTECH - Production Technologies Cluster; INESC TEC - Institute for Systems and Computer Engineering, Technology and Science; UPTEC - Science and Technology Park of University of Porto; CATIM - Technological Center for the Metal Working and Machinery Industry; CITEVE - Technological Center of Textile and Clothing Industries of Portugal; CTCP - Technological Center of Footwear of Portugal; CTCOR - Technological Center of Cork
SERVED SECTORS:
Agricultural sector:
General
Technical sector:
Digitalisation and Robotics

CONTACT DETAILS

DIH ADDRESS: Rua dos Plátanos, 197, 4100-414 Porto, Portugal
WEBSITE: https://www.imannortehub.com/
EMAIL: iman-norte.dih@produtech.org

MISSION

MISSION / OBJECTIVES: The mission of the iMan Norte Hub - Digital Innovation Hub for Customer-Driven Manufacturing @ Norte - is to foster the digital transformation of manufacturing companies of the Northern Region of Portugal (Norte) and to nurture the respective innovation ecosystem.

Objectives: Facilitate and foster manufacturing technology adoption and diffusion in the areas of cyber-physical production systems and robotics. Improve the collaboration in the ecosystem by linking research institutions, industrial technological centers, industrial associations, incubators, science and technology parks, industrial companies, technology companies, training institutions, and government agencies.
COMPETENCES: Digitalisation and Robotics
KEY SERVICES:
Technology services
Collaborative R&D
Technical support on upscaling
Testing and validation
Other: Other: Maturity assessment, technological roadmapping for Industry 4.0, feasibility studies; Support of Industry 4.0 implementation
Business services
Incubator/ accelerator support
Access to finance and funding
Skills and education
Brokerage
Access to Competence Centres

Ecosystem services

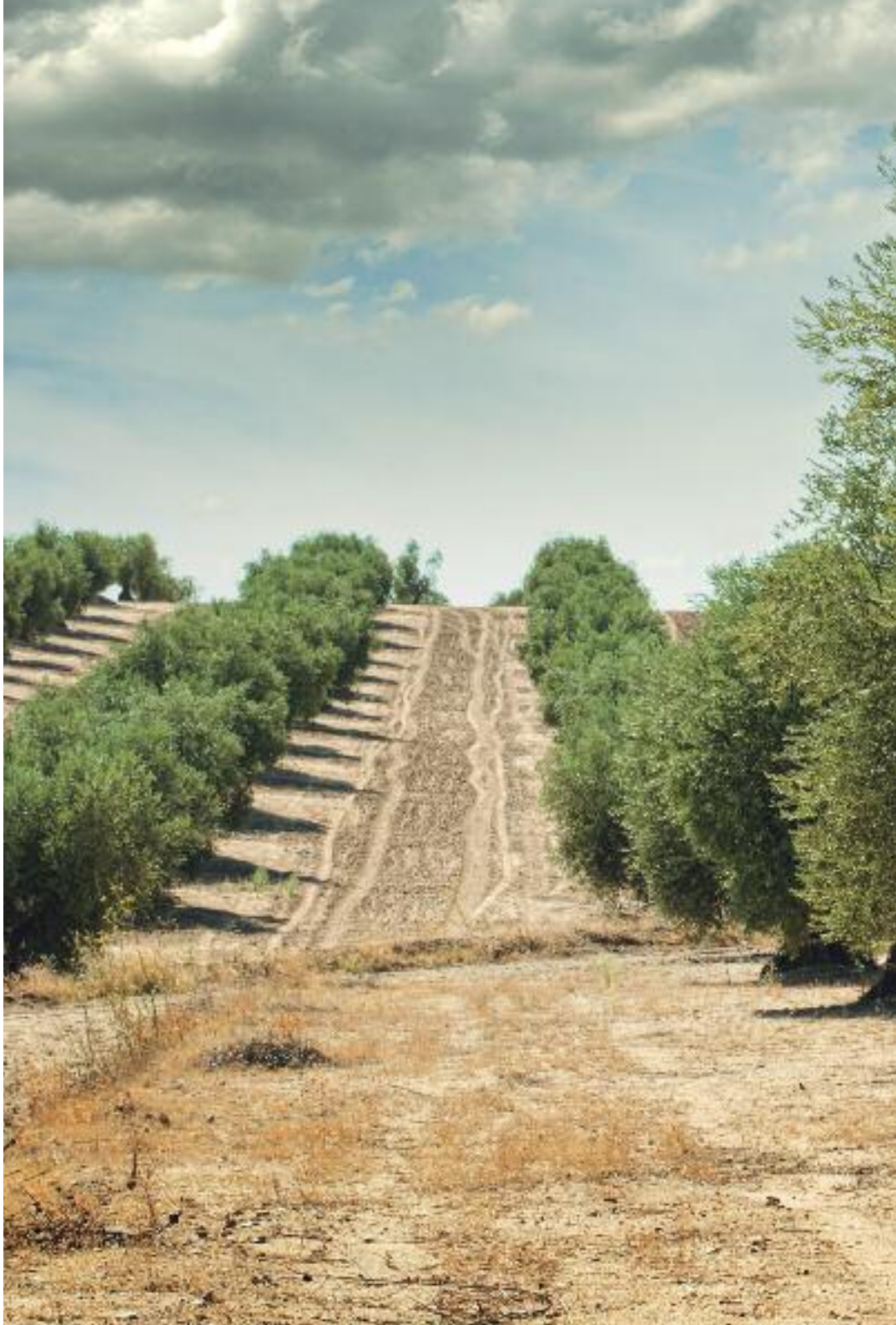
Community building
Visioning & strategy development
Mentoring (in the network)
Other: Other: Other Workshops, open-days and demonstration sessions

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Beincpps - BUSINESS EXPERIMENTS IN CYBER PHYSICAL PRODUCTION SYSTEMS

OBJECTIVES: BEinCPPS project aims to integrate and experiment a FI-based machine-factory—cloud service platform firstly intensively in five selected S3 Vanguard regions, afterwards extensively in all European regions, bv involving local competence centers and manufacturing SMEs. The final aim of this Innovation Action is to dramatically improve the adoption of CPPSs all over Europe by means of the creation, nurturing and flourishing of CPS-driven regional innovation ecosystems.

WEBSITE: http://www.beincpps.eu/



INDUSTRIAL TECNOLOGY KNOWLEDGE DIH

BASIC INFORMATION

NAME OF THE DIH: INDUSTRIAL TECNOLOGY KNOWLEDGE DIH
SHORT NAME: ITK-DIH
STATUS: Fully operational
GEOGRAPHIC SCOPE: Jaén, Andalucía (España)
YEAR OF ESTABLISHMENT: 2016
Nº OF MEMBERS/PARTNERS: 11
MEMBERS/PARTNERS:

- Linares chamber of commerce
- Cetemet
- EOI
- ES-Tech
- Fundación Incyde
- Linared Group
- Sicnova 3D
- Laserscan
- Vanadis
- Diputación de Jaén
- Linares Town Hall

SERVED SECTORS:

Agricultural sector:

- Agricultural Machinery and cold chain.

Technical sector:

- Advanced Maufacturing

CONTACT DETAILS

DIH ADDRESS: Campus Científico-Tecnológico de Linares, 23700 Linares, Spain
WEBSITE: http://dih-itkl.es/contact-us/
EMAIL: contact@dih-itkl.es

MISSION

MISSION / OBJECTIVES: DIH-ITKL's mission is to improve the competitiveness of regional companies through digitalization.
COMPETENCES:

1. Innovation activities and technology transfer. Definition of technologies to use and how to use them. Information about availability of digital enablers.
2. Business development.
3. Skill creation. Reduction of the lack of knowledge about the I4.0 initiative. Reduction of the lack of qualified, experienced resources to undertake the transformation, especially in smaller companies.

KEY SERVICES:

Technology services

- Collaborative R&D
- Technical support on upscaling
- Commercial infraestructure
- Testing and validation

Business services

- Incubator/ accelerator support
- Access to finance and funding
- Skills and education
- Brokerage
- Market intelligence
- Access to Competence Centres

Ecosystem services

- Community building
- Visioning & strategy development
- Mentoring (in the network)

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Xera
OBJECTIVES: To develop an automatic device for reading capacity and inventories of wine barrels using ultrasound
WEBSITE: https://www.casksandbotastechnologies.com/

CLUSTER ASSOCIATION GRANADA PLAZA TECNOLÓGICA Y BIOTECNOLÓGICA, ON GRANADA TECH CITY

BASIC INFORMATION

NAME OF THE DIH: CLUSTER ASSOCIATION GRANADA PLAZA TECNOLÓGICA Y BIOTECNOLÓGICA, ON GRANADA TECH CITY
SHORT NAME: Ongranada Tech City
STATUS: Fully operational
GEOGRAPHIC SCOPE: Andalucía (España)
YEAR OF ESTABLISHMENT: 2013
Nº OF MEMBERS/PARTNERS: 486
MEMBERS/PARTNERS:

Research & Technology organization:
University of Granada (UGR)
Foundation Centre of Excellence for Research into Innovate Medicines in Andalusia, Medina
Andalusia Public Foundation for Biomedical Research in Eastern Andalusia (FIBAO)
Spanish National Research Council (Institute of Astrophysics of Andalusia)
CSIC
Centre for Functional Food Research and Development (CIDAF)
Incubator/Accelerator:
UGR Entrepreneur
Business Development Support Centre, CADE
Start-up Company, SME:
409 SME's
Large enterprises:
BIDA FARMA, S.Coop. And.
SCA, HEFAGRA Pharmateutical Cooperative of Granada
Northgate Arinso Granada, S.A., ATHISA
Miguel García Sánchez e Hijos, S.A.
PC Componentes
Experis Manpower SLU
Indra Software Labs
Arenlace SL
Coviran SCA
Nokia Transformation Engineering and Consulting services
Telefónica SA
Networked/Cluster organization
Cluster Andalucía Smart Cities
ETICOM
Private Investors, institutes
Caixa Bank
Economic Development Agencies
Innovation and Development Agency of Andalusia (IDEA Agency)
Educational Institutes
School Mulhacen
Business Training Centre DIVISION FORMACION
Training Centre Hermanos Naranjo
Industry Associations
Association of electronics, information technologies, telecommunications and Digital Content Companies (FAITEL)
Spanish Science Industry Association (INEUSTAR)
Granada Association of Young Entrepreneurs (AJE)
Employers´Confederation of Granada
Employers´Confederation of Malaga
Association EUROCLOUD ESPAÑA
Provincial Association of Private Vocational and Training Centres
Association of Builders and Promoters of Granada
Regional Governments
Regional Governments of Andalusia, Junta de Andalucía
Provincial Council of Granada, Diputación de Granada
Granada Town Hall

Granada Chamber of Industry and Commerce
Official Association of Telecommunication Engineers of Eastern Andalusia
Trade Union :Comisiones Obreras (CCOO)
Trade Union; Union General de Trabajadores (UGT)
Unión Iberoamericana de Municipalistas

SERVED SECTORS:

Agricultural sector:

Fruits, greenhouses and vegetables

CONTACT DETAILS

WEBSITE: https://www.ongranada.com/
SOCIAL MEDIA: Twitter (@onGranadaTC) Facebook (@ongranada)
EMAIL: antonio@ongranada.com; comunicacion@ongranada.com
CONTACT PERSON: Antonio Alcántara

MISSION

MISSION / OBJECTIVES: On Granada Tech is a business ecosystem which comprises more than 600 associated companies. Its main objectives are to promote entrepreneurship, develop innovation, implement research and development projects, attract investment, promote the creation of qualified employment, promote digitalisation, as well as facilitate the transfer of knowledge between the knowledge centres, private entities and the companies.
COMPETENCES: On Granada Tech City aims to contribute to the digitalisation of the productive sectors of the region of Andalusia. Some activities and services provided by On Granada are the following:

- Research & Development projects.
- Dynamisation and promotion of the technologies to contribute to the digitalization process.
- Training and employment.
- Promotion of entrepreneurship and funding

KEY SERVICES:

Technology services

Collaborative R&D
Technical support on upscaling

PROJECTS AND SUCCESSFUL EXPERIENCIES

NAME OF THE PROJECT: Digiclusters
OBJECTIVES: The project´s objective is the industrial modernization of agrifood and packing sector towards Industry 4.0 and digital transformation. In addition to boosting the industrial competitiveness of the EU, it aims to create and consolidate a network of collaborations and synergies between associations, companies and clusters, in the ICT and agrifood & packing sector
WEBSITE: https://www.clustercollaboration.eu/node/6664

DIGITAL INNOVATION HUB OF LA RIOJA

BASIC INFORMATION

NAME OF THE DIH: DIGITAL INNOVATION HUB OF LA RIOJA
SHORT NAME: RIOHUB
STATUS: Fully operational
GEOGRAPHIC SCOPE: La Rioja (España)
YEAR OF ESTABLISHMENT: 2017
Nº OF MEMBERS/PARTNERS: 7
MEMBERS/PARTNERS:

ADER-Agencia de Desarrollo de La Rioja
AERTIC Agrupación Empresarial Innovadora del sector TIC de La Rioja
CTIC-CITA Centro Tecnológico Agroalimentario
dirección General de Innovación, Trabajo, Industria y Comercio Dirección Digital de Agenda Digital
CTCR-Centro Tecnológico del Calzado de La Rioja
ECONET consultants

SERVED SECTORS:

Agricultural sector:

Fruits, Dairy, vegetables, piggery and organic.

Technical sector:

All

CONTACT DETAILS

DIH ADDRESS: Francisco Muro de la Mata 13-14
WEBSITE: In preparation. Provisional info:
http://www.ader.es/servicios/proyectos-europeos/riohub/
EMAIL: riohub@larioja.org
CONTACT PERSON: Enrique Esteban

MISSION

MISSION / OBJECTIVES: The implementation of CPS technologies and Internet of Things (to be aligned with 4.0 Industry Regional Policy), in the manufacturing sectors where Rioja has traditionally been more active (to be aligned with Rioja RIS3), in order to become them more competitive.

COMPETENCES:

- Awareness creation
- Ecosystem building, scouting, brokerage, networking
- Collaborative Researches
- Testing and validation
- Incubator/accelerator support
- Education and skills developmen

KEY SERVICES:

Technology services

Collaborative R&D
Technical support on upscaling
Testing and validation

Business services

Incubator/ accelerator support
Access to finance and funding
Skills and education
Brokerage
Market intelligence
Access to Competence Centres

Ecosystem services

Community building
Visioning & strategy development

JUNTA DE ANDALUCIA
CONSEJERÍA DE AGRICULTURA, GANADERÍA, PESCA Y DESARROLLO SOSTENIBLE

CONSULAI

SMART AGRI HUBS

Iberia