ACTION PLAN

Regional Strategies 4 FOOD 4.0 Revolution

Pays de la Loire

REGIONS 4FOOD
Interreg Europe

Région PAYS de la LOIRE

TABLE OF CONTENTS

PART I:
Introduction

General information - Pays de la Loire Regional Council

PROJECT	REGIONS 4FOOD
PARTNER ORGANISATION CONCERNED	Pays de la Loire Regional Council
COUNTRY	France
NUTS2 REGION	Pays de la Loire
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Definitions

All along this action plan, some technical terms are being used. Here are some clarifications about their meaning.

- **Agrifood** - Concerns all the food value chain from Farming to COnsuming. The use of "Chain" or "sector" after agrifood does not change the meaning ;

- **AgTech** - Technology applied to the Agrifood chain. It is not related to one specific technology ;

- **ICT** - Information and communication Technology. It is part of the digital environement.

REGIONS 4FOOD Project

Objectives

REGIONS 4FOOD project focuses on maximising the innovative potential of all actors of the agri-food value chain by the means of improving regional policy instruments to promote agri-food sector digitization and better face new challenges in relation to ICTs.

> The aim of REGIONS 4FOOD project is to better exploit ICTs potential and deliver innovation to agri-food industry and hence, smart progress and growth.

Specific objectives of REGIONS 4FOOD project are:

- To bring together regional authorities / RIS3

- To involve quadruple helix actors of the agri-food value chain and connect the world of research and agri-food companies

- To guide future agri-food policies and strategies

- To generate added-value from R&I and Smart Specialisation to agri-food industry

- To promote public-private governance mechanisms

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Outputs and outcomes

For each region, the issue of digital innovation in the agri-food sector has been approached in relation to the specific policy instrument addressed.

The learning process throughout the project lifetime has concluded with the preparation of 7 Regional Action Plans to improve these Policy Instruments which are the main output of the project.

Other outcomes to be highlighted which have arisen from the REGIONS 4FOOD learning process are:

- An increase in the professional capacity at all levels: staff, organisational, regional and beyond the project
- A reinforcement of cooperation among quality quadruple helix actors, both at regional and interregional level
- Contribution to the new programming period by providing strategic recommendations

To achieve those objectives and results, relevant regional policy organisations from seven EU countries have worked together to exchange their experiences and share practices on the above-mentioned policy issue.

The REGIONS 4FOOD partnership is a balanced combination of regions of varying development levels and in terms of geographical coverage.

As a result of intensive work lasting over three years, partners have produced their regional Action Plans.

Overall and specific objectives of the Pays de la Loire's Action Plan

Global objective

Free the digital innovation potential of the entire value chain of the agrifood sector in Pays de la Loire, push innovation through in order to improve the economic, environment and social competitiveness of the local actors and disseminate the results throughout the region to inspire emulation.

Specific objective

- Gather regional actors from the agrifood value chain and connect the research community to the agriculture and food industry ones
- Orient policy making and public strategies regarding the agrifood sector on the basis of the needs and barriers observed on ground
- Generate added value by the digital innovation and smart specialisation of the agrifood sector
- Promote shared governance mechanism between the public and private sector

PART II:

Policy
Context

The Policy Instrument

The Action Plan aims to impact:

- ERDF 14 - 20 and 21 - 27
- Regional agrifood strategy 2016 - 2020

The Pays de la Loire Regional Council decided to address the Operational Program ERDF. Due to the topic, the Regional Agrifood Strategy of the Regional Council is also targeted.

Even if the initial policy instrument targeted by the R4F project is ERDF 14-20, the activities carried out have permitted to influence and impact also ERDF 21-27's development and to improve the regional agrifood strategy rather than the original policy instrument chosen: it is important to take into account that ERDF 14-20 was already under implementation, and that there was no more budget to finance new actions. Therefore there was no possibility to change the content of the thematic priorities of the OP, nor to impact directly the OP ERDF 14-20. Nevertheless:

The work carried out within R4F project (especially The needs and barriers study) has been helpful to identify some needs which are currently not met by ERDF 2014-2020 (i.e cooperation between agrifood and digital stakeholders ; development of appropriate innovative projects ; data management framework). As a consequence it has been decided to take these issues into account within ERFD 2021-2027 in order to boost the digitization of the agrifood sector in Pays de la Loire region. A specific action has been included in the Regional Operational Programme (which is presently still being drafted): "Assisting and supporting the enterprises' digital transition".

Pays de la Loire Regional Council had developed a regional agrifood strategy for 2016-2020 period. The R4F project has allowed to work closely with the local stakeholders in order to understand their specific needs and expectations regarding regional policies (Dedicated regional strategy, regional support, regional funds ⋯). As a consequence, Pays de la Loire Regional is currently developing a regional roadmap on digital challenges in the agrifood sector, on the basis of R4F project's inputs and results.

Background and rationale

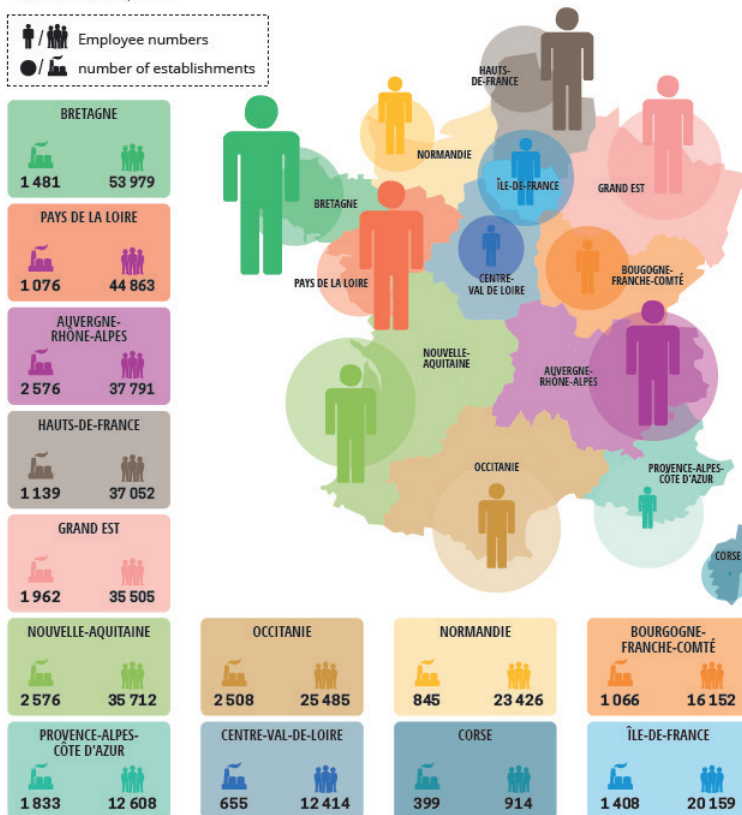## The regional policy context of the agri-food sector

The Regional Innovation Strategy for Smart Specialisation (RIS3) highlights the necessity of reinforcing the productive economic sectors and leader industries in the Pays de la Loire Region. This statement naturally includes agriculture and the agrifood industry as they represent an important part of the wealth created in the region. They also contribute to employment, design of the landscapes and preservation of quality products. Here are some key facts:

- Agrifood sector is the first industrial sector of the Pays de la Loire Region
- 254 quality labels identified for its agricultural products
- 70% of the Pays de la Loire territory is used for farming
- Agriculture represents 26 000 jobs divided between the 23 040 farms of the territory [1]

In addition, as show this infographic, the French Agri-Food industry as a strong ratio SME's/employment, especially the Pays de la Loire Region.

THE FRENCH AGRI-FOOD INDUSTRY : A DYNAMISM SPREAD THROUGH THE WHOLE COUNTRY

Source : Insee, Clap 2015.

Employee numbers

number of establishments

Region	Establishments	Employees
BRETAGNE	1 481	53 979
PAYS DE LA LOIRE	1 076	44 863
AUVERGNE-RHÔNE-ALPES	2 576	37 791
HAUTS-DE-FRANCE	1 139	37 052
GRAND EST	1 962	35 505
NOUVELLE-AQUITAINE	2 576	35 712
OCCITANIE	2 508	25 485
NORMANDIE	845	23 426
BOURGOGNE-FRANCHE-COMTÉ	1 066	16 152
PROVENCE-ALPES-CÔTE D'AZUR	1 833	12 608
CENTRE-VAL-DE-LOIRE	655	12 414
CORSE	399	914
ÎLE-DE-FRANCE	1 408	20 159

[1]Sources:http://ores.paysdelaloire.fr/699-agriculture-peche.htm#:~:text=Les%20Pays%20de%20la%20Loire,de%20la%20valeur%20des%20productions & https://pays-de-la-loire.

chambres-agriculture.fr/agriculture-pays-de-la-loire/chiffres-cles-baremes/

The diversity of agrifood companies in Pays de la Loire must also be highlighted:

If 96% of the agrifood companies in the Pays de la Loire Region are SME counting less than 20 employees', 4% are biggest companies operating trade worldwide and employing up to 2800 people[1].

Furthermore, due to its geographic situation, this region benefits from a climate that allows a large diversity of cultures. Its proximity to the ocean permits the fishery industry and shellfish farming to prosper:

Concerning the use of digital tools in agriculture:

- 79% of French Farmers use the Internet

- 46% of farmers in 2013 use GPS

- 70% of the farmers with the adequate device install professional apps[2]

Most importantly: 79% of connected farmers admit that new technologies are useful for agriculture [3].

1   http://ores.paysdelaloire.fr/1152-industries-agroalimentaires.htm
2   See annexe 1
3   https://agreste.agriculture.gouv.fr/agreste-web/download/publication/publie/Chd2008/cd2020-8_TIC.pdf

Concerning the agrifood industries and the use of TIC:

73% of them have a website, 71% use a integrated managing system, and 97% use at least one security measure offered by information systems to protect the business against the spread of private information.

Yet according to a study conducted in the Brittany Region[1] (very close from the Pays de la Loire Region geographically and which possesses the highest number of people employed by the agrifood sector of France) it is not these kinds of tools that permit these businesses to be more competitive. Indeed, according to agrifood industries, the first technology needed is related to robotics (52% of the 47 enterprises interviewed) and then connectivity (22%), IA (20%), blockchain (16%).

If the 97 equipment manufacturers interviewed in this region, if more than 60% answered they had competency in robotics and 24% in traceability, IA does not appear.

There is still great potential for digitalisation in the entire value chain of the agrifood sector in the Pays de la Loire Region and the Regions 4Food project was a great opportunity to set a first step in this direction.

After the implementation of the two methodologies developed within the framework of the REGIONS 4FOOD project:

1) the methodological guide for the identification of barriers, needs, relational capital and good practices and;

2) the methodological guide for the creation of data and technology catalogues, both related to the digitalisation of the agri-food sector;

Here are the results of the progress that are to be made to fully achieve it in this value chain:

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1 https://www.bdi.fr/wp-content/uploads/2020/03/1912057-BDI-CFIA-2020-ETUDE-numeri-que-agro-gri_DEF-web.pdf

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STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
A dynamic ICT/ Digital Sector	A tough economic and social context especially for farmers	An emerging start-up network working on digital technologies applied to Agrifood	Complicated renewal of the Agricultural population
Legitimacy of the Regional Council in the Agrifood and digital regional strategies (production, innovation, research, formation)	A weak link between digital companies and agrifood sector: lack of common vision	Modernization of the agrifood tools of production, which is a legal competence of the Regional Council.	An administrative pressure stifling the farmers
A structured clusters network	Lack of training of the Agrifood actors on the digital opportunities	A more and more efficient network coverage	An increasing international competition for the food products
Wide diversity of Agrifood enterprises productions	Internet network is a challenge	An increasing will of the consumers to eat high quality food	A decreasing CAP budget
Large diversity of enterprises sizes	Lack of specificity and adaptability of technologies and tools	Increasing will of the consumers to have guarantee on the products traceability	What business model for a fair use of the data across the value chain
	Lack of financial support	An ambitious budget on the Agrifood issues	Lack of data' interoperability
		New and innovative network	Public authorities' role: Need a real strategy
		Legal framework to be built adapted (no more paper)	Data protection and the notion of property
		Transparency in order to get trust from consumers	Data storage and environment
		Regulation on pesticides	

Ongoing legislative and policy initiatives related to the digitalisation of the agri-food sector and synergies with REGIONS 4FOOD project

In order to encourage the digital transition of all its territory, the Pays de la Loire Regional Council has recently set up a new grant: "Pays de la Loire investissement numérique" which helps SME's to invest in digital tools to add value to their business [1].

The Regional Council is also building a new digital strategy although it is on standby due to the Covid-19 crisis.

These kinds of policies are directly linked to the R4F project since they tend to facilitate the digitalisation of private actors of the territory, although they are not only dedicated to the agrifood sector. The Regions 4Food project could precisely permit to identify the specific needs of the sector in this matter.

Additional opportunities due to the Covid-19 situation

The present crisis implies new challenges for the actors of the entire value chain of the agrifood sector:

Relocalisation of food, creation of new relations between producers and consumers, risk management, administrative management : some of these challenges have found solutions thanks to the digitalization. Today, they need to be consolidated.

Lessons learnt from other REGIONS 4FOOD partners

Besides from the good practices, R4F has been interesting for several reasons:

- For our stakeholders such as academics, or private businesses stakeholders, the project has been an opportunity to meet peers from different European regions. These opportunities led to collaborations and initiatives (Weenat and Mr Harju) which were profitable for all members of R4F.

- The project also permitted to gather and to work with regional stakeholders on their needs and stimulate cooperation and a common ambition.

- R4F led to the collaboration between different projects (TRACK [2]) strengthening the network of both projects by doing so.

Contribution of the Action Plan to the improvement of the policy instrument

The current Action Plan should improve the OP ERDF 2014-2020 by defining precise objectives regarding the digitalisation of the agrifood sector. By means of the two actions submitted, the Pays de la Loire Regional Council wants to support digitalisation. This implies a definition of the related concepts, the federation of the actors of both agrifood and digital sector at a regional level first and an appropriation of the tools by the end-users. From the idea, the definition of concept, to the appropriation by the end-users.

The work achieved within the Regions 4Food project also contributed to the elaboration of the new ERDF Operational Program for 2021-2027.

PART III:

Methodological Approach

Challenges/needs addressed

Data has become a key asset for the economy and our society. The need to make sense of "Big Data" is leading to innovation in technology and the development of new tools and skills.

Generating value at the different stages of the data value chain will be at the heart of future knowledge economy.

Within the agri-food value chain, Big Data is gaining ground in areas such as security and traceability, customer services, or production improvements.

Big Data has also contributed to balancing the agri-food value chain: The large volume and diverse nature of data of agri-food value chains call for specific integration and management procedures to make the most of the new economic opportunities based on information, data and cognitive technologies and promote innovation-driven growth.

As a result of involving relevant regional authorities, the research sphere, ICT and agro businesses, and civil society in the exchange of experience process, partners have prepared action plans to include measures that will improve the technology transfer, close the gap between research and markets and display the greatest potential of innovation opportunities and smart specialisation areas.

The project has also contributed to addressing the major challenge to digitalisation which is to connect directly producers with consumers and agrobusinesses with tech sector companies and with knowledge sector.

Approach for the preparation of the Action Plan

REGIONS 4FOOD has a well-defined methodological approach with the following stages:

| Methodologies implementation | Study visits | Action Plan Draft | Peer-review | Action Plan |
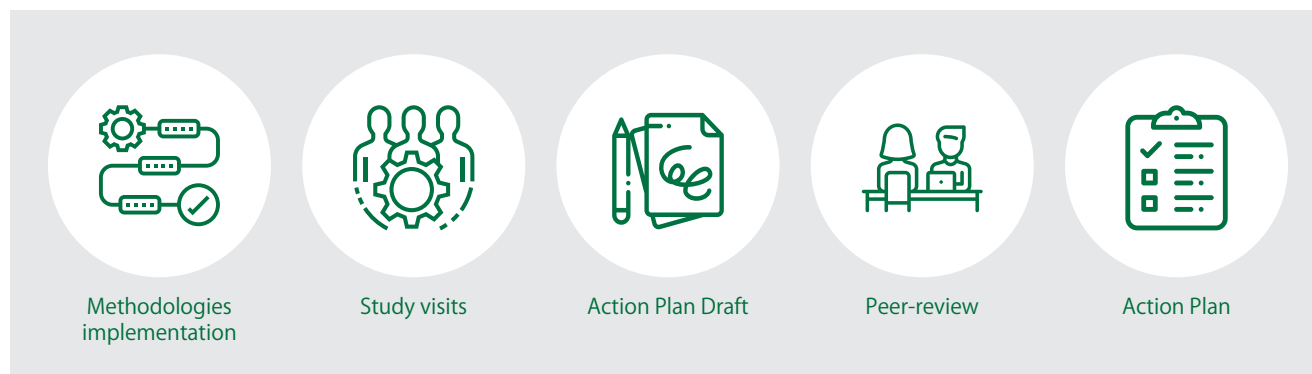
Identification

The Regional Ministry of Agriculture, Livestock, Fisheries and Sustainable Development of Andalusia, as REGIONS 4FOOD Lead Partner, prepared two methodologies to be implemented by project partners with the support of their stakeholders with the aim to identify in each partner region:

- Needs, barriers, relational capital and good practice related to the digitalisation of the agri-food sector.
- A catalogue of data and technologies in the agri-food sector.

Exchange of experiences and good practice

The results of these mapping works have been shared within the partnership in the interregional seminars organised back-to-back the steering committee meetings.

Good practice sharing has been implemented through the study visits, where both the project partners and their stakeholders took part. Partners had previously identified those practices that were the most interesting for them in terms of their capacity to improve the policy instrument addressed.

Preparation of Action Plans draft

Following the template prepared by the Lead Partners, the first draft Action Plans included the lessons learnt from previous stages, the interregional activities, and learning at all levels. Stakeholder groups also met to analyse the findings of previous work and contribute to the preparation of the draft Action Plan.

Presentation of first Action Plans draft

The REGIONS 4FOOD partners presented their first draft regional Action Plans during the Capitalisation Seminar held in May in South Transdanubian (Hungary).

Peer-review

The overall objective of the peer reviews was that the partner owner of the good practice inspiring the actions of other partner's Action Plan draft evaluates it taking into consideration this partner's context on innovation strategies.

The process has been carried out as follows:

- First, each project partner determined if the peer review concerned the whole Action Plan draft or just one concrete action
- Second, partners sent to peer the Action Plan draft with the instructions on what was to be reviewed (the whole Action Plan or just specific action(s))
- Third, the peer identified the key agents and/or stakeholders involved in the good practice that had most inspired the action(s)
- Four, once these agents had read the Action Plan draft, an online meeting was scheduled among both project partners. In that meeting, there was exchange of views, assessing the document and when needed, how it could be improved in order to obtain the final objective: improving the partner's policy instrument tackled by the project
- Finally, the peers drafted a review report with suggestions in view of improving the Action Plan draft reviewed
- These suggestions were later discussed with the stakeholders and were considered in the drafting of the final Action Plan

Action Plans

This methodological process concluded with 7 Action Plans that were submitted to the Interreg Europe's Joint Secretariat at the end of Phase I (*)".

(*) Some project partners are facing a delay due to COVID-19 in the elaboration and presentation of their second Action Plans draft. Therefore, their final versions will be finalised and submitted during semester 7.

PART IV:

Actions

ACTION (1):

From the AgriFood Hub to an Agrifood and Digital Innovation Hub (DIH)

Relevance to the project & background

The Pays de la Loire Region possesses many skills and assets in the agrifood and digital sector. However, it is necessary to develop cooperation and synergies between the two sectors in order to build adequate technologies, solutions that are adapted to the needs of the end-users from the agrifood chain and at the cutting edge of technology, thanks to the expertise of the digital professionals.

The Pays de la Loire Regional Council already has several hubs:

- Hub Europe[1] : focuses on European project engineering, it is composed of 22 members. It is a multisectoral group.

- Hub Agrifood: this hub was created in 2018. It is composed of a hundred stakeholders. About twenty of them participate to our meetings on a regular basis. They follow the progression of the Regions 4Food and SmartAgriHubs projects and attend other sessions on the agrifood thematic.

In addition to these two groups, a whole network has formed on the topic of the digitization of the agrifood sector. The creation of a specific hub (agrifood DIH) on this matter different from the two described above is a way for organizing coherency between these different entities. **This way, the Hub Agrifood would also find its initial vocation, which was to have a group dedidacted to bioeconomy.**

At the same time, the stakeholders are creating a "E-DIH" (European Digital Innovation Hub), DIVA (Digital Innovation Value Accelerator), concerning all economic sectors with the aim of supporting the digitization of all economic sectors in Pays de la Loire, including agrifood.

The DIVA is the EDIH for the Pays de la Loire, a one-stop shop for stimulating and helping companies become more competitive in designing and developing their products and services, as well as their business and production (manufacturing) processes, by using artificial intelligence technologies, including robotics. The DIVA pursues a human-centric, ethical approach to facilitate the adoption of technologies.

Thus, our DIH that we want to create within our first action, specifically adressing the agrifood sector could be integrated as a thematic working group of EDIH, DIVA. If it is selected by the European Commission, the EDIH DIVA will be able to provide its services to the agrifood hub. If not, part of the activities planned in the DIVA project, designed for applying to the European call, would still be implemented, specifically in the agrifood sector, thanks to the dynamic that rose from Regions4Food and DIVA.

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1   https://www.paysdelaloire.fr/le-hub-europe

Current Organisation(s)

European Hub
➢ Not specialized in agtech
➢ Targets EU projects for regional partners

EDIH DIVA
➢ Multi sector
➢ Focus AI
➢ Targets the development of AI & EU projects

Agrifood Hub becomes Hub Bioeconomy
➢ Originally not specialized in AgTech
➢ Targets EU project *(with a current focus on R4F and SAH due to the participation of the Region)*

Agrifood Digital Innovation Hub *(R4F Action)*
➢ Actors from the ICT + agricultural sector
➢ Targets the development of digitalization of the territory through the participation to EU projects

International Cooperation
Clust-Er, DIH Agrotech, AgroLiving Lab
S3 Platform…

Technocampus Alimentation
➢ Variety of actors
➢ Targets collaborative and EU projects

Structuration of the Agrifood Tech actors (WIP)
➢ Animation of the start-up ecosystem by the Regional Economic Development Agency Strategy (Solution&co)

Some good practices observed abroad have a very integrated agrifood tech network and should inspire us. That is the case of:

- Agroliving Lab (South Ostrobothnia, Finland). This DIH gathers universities and economic development agencies, farmers, agro-industries and agro-equipment businesses. It managed to make the needs of the farmers a priority so that machinists would adapt their solutions for example.

- Agrifood Clust-Er (Emilia Romagna, Italy). This cluster is one of the 7 other clusters from the Emilia Romagna Region. It is directed by its Development Agency and is fully aligned with the regional strategy as well as an entity mobilized to give its opinion on the orientation of the policies regarding the agrifood sector.

- DIH Agritech + FIWARE (Andalusia, Spain). This DIH is a very complete one as its gathers a lot of actors who are all very diversified in their profiles. It is also interesting because it is developing an open-source digital framework with the support of FIWARE that would collect and permit data-sharing more easily (as they also work on the question of the interoperability and standards).

The lessons learnt from those good practices can be summed-up as follows:

The collaboration between all stakeholders from the agrifood value chain and digital sector ease the emergence of numerous projects and creates a virtuous circle. It is even more efficient when it integrates farmers themselves in this network. A shared-knowledge initiative facilitates collective work habits and broadens collaborations thanks to the complementarity of competences and ecosystems of each sector.

The overall objective of the Hub is to gather actors from the AgTech sector in order to stimulate their creativity thanks to a level of expertise in that field. The present ecosystem in the Pays de la Loire Région is too scattered that is why it needs to be structured and animated.

The agrifood sector is not the only one that needs to be reorganized to achieve its digitalization : the building of DIHs at the European level (EDIH) shows that it affects other sectors.

In the Pays de la Loire Region, the EDIH candidate selected by the Regional Council is multi sectorial and integrate the agrifood sector. In order to complete the collaborative process of the Regions 4Food project as well as to achieve bigger projects, this DIH should at the same time connect our regional actors and European DIHs and clusters.

Nature of the action

1. Define the sectors of the agrifood the Pays de la Loire Region wants to target and what digital tools should be promoted. This should be defined with the actors the most implicated currently in the Hub Agrifood, depending on their needs and the services already offered in the region.

2. Communicate on this network and launch a call for interest among our stakeholders and the quadruple helix actors of the agrifood and digital sector. (Research, Universities, Businesses, Associations)

3. Create a board supervising the animation and the follow-up of the Hub activities and then define the different missions within the Digital Innovation Hub and role of each actor.

4. Elaborate of a roadmap with clear and shared objectives.

Examples from Andalusia DIH Agrotech services:

- Training and empowering: training sessions, workshops, discussion forums, courses and digital skills, meetings and success stories

- Ecosystems creation: open innovation programmes, technological challenges, creation of consortia for technological development, acceleration and entrepreneurship programmes, innovation and business models programmes

- Technological services: implementing of platforms such as living labs, testing innovations, developing end-users-oriented prototypes, evaluation of concepts, products and services

- Data science: open administration 's potential for added-value products and process efficiency

- Trends observatory: identification, analysis and interpretation of information. (Technological needs and opportunities, technology surveillance)

- Funds and financing strategies: identification of national and international calls, sessions on funding sources, access to private financing strategies.

This roadmap will be elaborated meanwhile the global regional reflexion around the digital sector for the agrifood sector is launched. This reflexion will be carried on in a collaborative way between the Region, experts from different horizons and local actors concerned by this matter.

5. Elaborate of a communication strategy

The tools used should allow every actor interested to find information on the DIH. It should also permit the members to communicate together

6. Evaluate the DIH performance at the end of the project and decide of the relevance of a legal form after 18 months

Stakeholders involved

- Founders: Pays de la Loire Regional Council, Solution&Co Agency
- Members: SME's, agrifood industries, universities, research centres, labs, public agencies and institutions, professional representatives, consular chambers, local administrations as well as consumers and/or existing living lab from both numeric sector and agrifood sector.

Timeframe

This first Action, "from an agrifood hub to an agrifood and digital innovation hub" would be implemented as follows:

Elaboration phase

1. **Definition of the challenges** concerning the agrifood and digital topic (in addition to the studies conducted at the beginning of the project, media monitoring and identification of new challenges and technology development, benchmarking)

2. **Conduct of a series of studies** to specify the challenges previously highlighted and have concrete figure (quantitative/qualitative study) and faithful representation.
Different targets: Farmers with digital and non-digital profiles, experts (researchers, farmer councils) and agrofood industries.

3. **Organization of workshops**
The goal is to identify challenges, sub-challenges and actions. This stage will involve a technical committee composed of actors from the agtech sector.

4. **Roadmap writing**
Actions, method of evaluation and objectives

Association with the Regional EDIH, DIVA

5. **Participation of our technical committee in the DIVA Board "Enterprises in transformation"** In the EDIH plan, this board is described as to be composed of "networks and clusters representative of activity field" it is in charge of the raising of the problematics and expectations of the field reality, in our case the agrifood sector. The Regional Council's involvement in DIVA board will also allow to impulse and implement changes within the actions supported by OP ERDF 21-27 depending on the evolution of the actors' needs. This will be a concrete example of impact on ERDF 21-27 as part of Action 1.

Note : If DIVA is not selected as an EDIH, part of its actions, especially in the agrifood sector, would still be set up. Indeed, the topic of the digitalization of the agrifood sector gained importance in Pays de la Loire and the Regional ERDF program mentions the support of the actions that DIVA should be leading. The Regional Council could also support the actions in the framework of the roadmap.
Anyway, Regional OP 21-27 will support new projects implementation, coming up from this new collaborative Hub.

REF	Objectives	Lead Partner	Other Partner	Activities	Budget (source)	Timeframe (temporary dates)
Action 1 – From an agrifood hub to an agrifood digital Innovation Hub						
1.1	Benchmarking, news monitoring	Pdl*		Definition of regional challenges	Regional funding	September - December 2021
1.2	Defining the State of the art, priorities and barriers seen by end-users and experts	Pdl	Farmers, agro-industries, experts (researchers and agricultural advisor)	Interview/studies	Regional funding	September - December 2021
1.3	Determining concrete actions depending on the challenges defined and the new issues identified thanks to our surveys. (some workshops will take place on a regional event : Nantes digital week)	Pdl	Agricultural Chamber, association of the agricultural, industries, digital sector, existing DIH	Workshops	Regional funding	September - December 2021
1.4	Defining and officializing the Hub	Pdl & cotech	Agricultural Chamber, association of the agricultural, industries, digital sector, existing DIH	Roadmap writing	Regional funding	January 2022
2	Following the objectives of the roadmap, giving DIVA inputs and opportunities to develop and deliver services adapted to the regional context	EDIH DIVA** & PdL		Participation to the EDIH within its board dedicated to the thematic actors	EU fund*, ERDF, Regional funding	T1 2022
3	Developing the services offered by DIVA: Diagnosis Training*** Proof of concept Project supporting program	DIVA**		Participation to DIVA within its board dedicated to the thematic actors	Regional funding, EDIH budget	S1 2022 taking into account the progress of DIVA

* : Pays de la Loire
** Note : If DIVA is recognized as an EDIH
*** Note: Action 2 follows the same process as the Action 1. However, it is dealt separately from the first one as it was identified as a major issue to be tackled. It's implementation also relies on the DIVA'services.

Indicative costs

Based on the ambition and reception by the actors of the creation of this DIH, the budget is estimated between 100K€ and 350K€ [1]

Indicative funding sources

- Pays de la Loire Regional Council funding
- Regional OP ERDF 21-27

  ERDF OP 21-27 will notably assist and support the enterprises' digital transition in order to better connect the different sector and encourage cooperation and open innovation. As part of this regional support, the Pays de la Loire Regional Council has worked at building the DIVA project with the DIVA Consortium (E-DIH call – Digital Europe Programme). Action 1 is then closely linked to the development of DIVA project since it aims at targeting the real issues of agrifood chain, regarding artificial intelligence topic. ERDF 21-27 could potentially fund projects coming up from the Hub's activities.

- European and national calls
- Public/Private Partnership

Output

- 1 Working Plan with Clear objectives (number of events per year, possibility to submit application for European projects...)
- 1 board which monitors the achievement of its policy on digitalisation of Agrifood in Pays de la Loire
- 1 Internet page dedicated to the regional strategy (Also used as a source of information on upcoming / ongoing European projects)

Result indicators

1) Number of stakeholders joining this Hub: 30

2) Number of collaborative projects and events between digital and agrifood sectors: 6

3) Number of success stories in providing solutions to the technological challenges: 2

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1   According to the figures of the Andalusian AgroTech DIH

ACTION (2):

Measuring the potential of interest for an Agri/digital Transversal Training

Relevance to the project & background

The Regional Council of Pays de la Loire already possesses some skills and a training offer on its territory both in agriculture, agrifood or digital. In order to create the best courses in both these sectors, these courses need to be linked together.

R4F confirmed, by some of the good practices observed in Andalusia in particular, that trainings, whether continuous or not, are a lever for the digitalisation of the agrifood sector. Transversal knowledge would facilitate the development of relevant, efficient and usable innovations.

R4F project has underlined some specific needs regarding training programs in the agrifood sector in link with the digital challenges. The good practice identified in our European partner's territories, can be replicable in Pays de la Loire so Action 2 aims at developing the framework conditions to implement an agri/digital transversal training.

To do so, the Regional Council needs to co-develop the future training programs with the relevant regional stakeholders (Universities, clusters ⋯) and will fund this innovative approach. Moreover, the future trainings could be supported financially by the Regional Council.

In France, education and training are seen as a continuous process possible at all time. From high school to higher education, as an adult during employment or unemployment periods, anyone at almost any time can develop their knowledge.

Besides the traditional education system let's mention the emergence of MOOCs, online courses, webinars, internal formations and moreover the trainings and demonstrations organized by the solution providers themselves or by agrifood organisations. In the agricultural sector, online training are booming as they are less compelling for the farmers.

The French system of agriculture education is directed by the State, through its agriculture and higher education, research and innovation Ministries. Despite the numerous possibilities of courses and trainings, few programs mix digital solutions/ICT and agrifood: indeed, only two engineering schools have a full program dedicated to this matter: Bordeaux Science Agro and Montpellier SupAgro through the Agrotic Program[1]. Starting in September 2020, a third one offers a training based on the digital and AgTech[2] and is located in the Pays de la Loire Region by two engineering schools ESA and ESEO.

In addition, the Laval Technopole organises different challenges where students help businesses to innovate in their sectors. That includes the agrifood companies.

Thus, school programs are very polarized[3] and it is difficult for students who graduated from short studies to carry and obtain an engineer diploma. Indeed, there is a lot of competition for engineering schools and for AgTech studies even more as there are not many room for all candidates.

In terms of relation between farmers, technicians and engineers:
Many farmers rely on technicians for some choices they make on their farms (production techniques and investment for example). It is important to highlight as we must therefore think training on the three sides:

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1   https://www.agrotic.org/
2   https://olage.groupe-esa.com/degree-seeking-programs/graduate-programs/master-ag-tech
3   See annex 2

If the objective is to have technicians to recommend the use of numeric tools, therefore they must learn about it and be trained for it. If the goal is to have farmers to adopt these tools they must be trained but should also be encouraged by technicians to adopt them. As for the engineers, they can only develop adapted tools if they have a minimum knowledge of the issues and needs of the farmers if they want to tackle them.

The study conducted for Regions 4Food in 2019 identified several ways to educate the actors in order to improve the digitalisation of the agrifood sector:

• On the technical approach – For the end-user to appropriate himself the tools

• On the security approach – In order to sensibilize and explain the possibilities as well as the risks of sharing data. Indeed, the knowledge of the legal frame is important because misconception leads to mistrust, whereas it is just a matter of awareness and the knowledge and proof of the right balance between risks and advantages. (Concerning data, the benefit is only real if thought as something gathering many users as it is the variety of data that makes it possible to design models for example).

• On the sustainability approach – The users should not be bound to one technology (interoperability), they should be able to be autonomous on the maintenance and repair work as well in order to feel fully actors of the digitalization and not simple consumers of the technology proposed.

The study also reveals that these trainings, just like the process of digitalisation should be financially supported to encourage its development.

The Region of Andalusia, in Spain, has already set up one of the two key points of training mentioned above with the creation of two Master degrees: "Digital transformation in the Agrifood sector" and "Master's degree in Digital agriculture and agrifood innovation".

The main lesson learnt from this good practise is that the sooner both agrifood and digital sectors are linked in a syllabus, the better the innovations are. Indeed, those programs offer a technical approach of the innovations possible (these masters aim engineer profiles) as well as a practical approach in the fields.

Therefore, they provide a complete view of the needs in agriculture and agrifood industry and the technological possibilities to answer those needs.

Before imagining the content of potential courses and trainings, this action aims to measure the maturity of Frenchs actors on this matter; if there is an interest to pursue the creation of specific course/training, is there already a dynamic in this sense?

Finally, it should be noted that we don't speak here of basic digital knowledge as most farmers are able to use common digital tools[4], such as phone apps or weather stations) but the digital skills related to the work tool, especially concerning the numerous aspects of the concept of "data".

Regional OP EARDF 23-27 will also support digital trainings for farmers. These new topis were included in the regional OP EARDF 23-26 notably thanks to R4F's inputs (Cf. Analysis of needs and barriers to digital transition in the agrifood sectors).

The EDIH DIVA, which application is in progress, would partly work on the training issue.

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4   See Annex 1

Nature of the action

-        Create of a comity of experts on all agrifood, ICT, Agtech and education sectors

-        Create a roadmap that should organize the following sub-actions:

   . Benchmark all existing AgTech educational program in France

   . Identify all opportunities to cross education actors of the Agtech

  . Conduct a study on the needs and opportunities of the potential of such educational program

  . Establish a report on the most appropriate form this program should take if set up (including funding, as EAFRD, ERASMUS...) With different scenarios

Stakeholders involved

Founders: Pays de la Loire Regional Council, universities

Members :

•   Universities and schools (Laval MT, ESA, ESEO, Université de Nantes, IMT...)

•   Research centres, Labs

•   Representatives of the agrifood sector

•   Representatives of the digital sector

•   The SmartAgriHubs Project

•   AgrifarmLab

•   Clusters dedicated to innovation (Valorial, Végépolys Valley, Images et Réseaux, DIVA...)

Elaboration phase

REF	Objectives	Lead Partner	Other Partner	Activities	Budget (source)	Timeframe (temporary dates)
Action 2 – Measuring the potential of interest for an Agri/digital Transversal Training
1	Creating a working group	Pdl	Universities and schools Research centres, Labs Representatives of the agrifood sector Representatives of the digital sector	Definition of regional challenges and identification of the needs and priorities	Regional funding	2022
2	Implementing a benchmark regarding to the challenges, needs and priorities (at least, at a regional and national level)	Pdl	Working group	Interview/studies	Regional funding	2022
3	Analyzing the situation with a SWOT matrix	Pdl	Working group	Workshops	Regional funding	2022
4	Identifying the actions of training to be developed	PdL	Working group	Workshops and official validation	Regional funding	2023
5	Getting a feasibility study	PdL	Working group + if necessary, experts	Study	Regional funding	2023

Timeframe

May - December 2022

Indicative costs

Max. 50K€

Indicative funding sources

- Pays de la Loire Regional Council
- Regional OP ERDF 21-27
- Public/Private Partnership

Output

- Creation of a working group
- 1 questionnaire
- 1 SWOT analysis with a focus on the needs and opportunities
- 1 feasibility study

Results indicators

- Number of answers to the questionnaire
  60 (public and private sector, farmers, businesses, universities)
- Number of scenarios foreseen by the group in charge of this question within the EDIH
  2 scenarios by the end of the last semester of implementation

These indicators should be updated at the end of the first year the Action Plan is set up.

PART V:
Monitoring

The monitoring period of the Action Plan will start once validated by the Joint Secretariat. During this period, project partners will report to the Interreg Europe Joint Secretariat on an annual basis.

There will be two monitoring mechanisms for each Action Plan:

1.   One is common to the seven Action Plans. It has been designed by the Lead Partner to monitor, analyse and report the implementation of actions. (Annex 4)

2.   An additional self-monitoring mechanism is defined by each partner according to their needs and internal structure. (See below)

Regarding the joint monitoring mechanism, it includes result indicators. It will allow project partners to measure their results according to their policy instrument tackled to be improved, and their self-defined performance indicators. Project partners will be required to report to the Lead Partner twice a year (each semester) to strengthen the monitoring mechanism and have the capacity to take corrective measures, if necessary. With the information provided, the Lead Partner will prepare a monitoring report per semester. In addition, the results will be discussed in the two project meetings foreseen in Phase 2 (one in Semester 8 and another one in Semester 10) to give project partners recommendations for improvement.

Also, one additional project meeting (not foreseen in the application form) will be organised online by the end of Semester 7 to monitor, evaluate and share information about the situation at the project level.

Additionally, a self-monitoring mechanism has been defined to complement and feed the joint monitoring mechanism and ensure the correct implementation of actions as foreseen, according to our organizational needs and internal structure.

The Pays de la Loire monitoring system is defined below:

The Pays de la Loire project team will implement a half-year monitoring in order to follow the implementation of the regional action plan and the achievement of the indicators' targets.
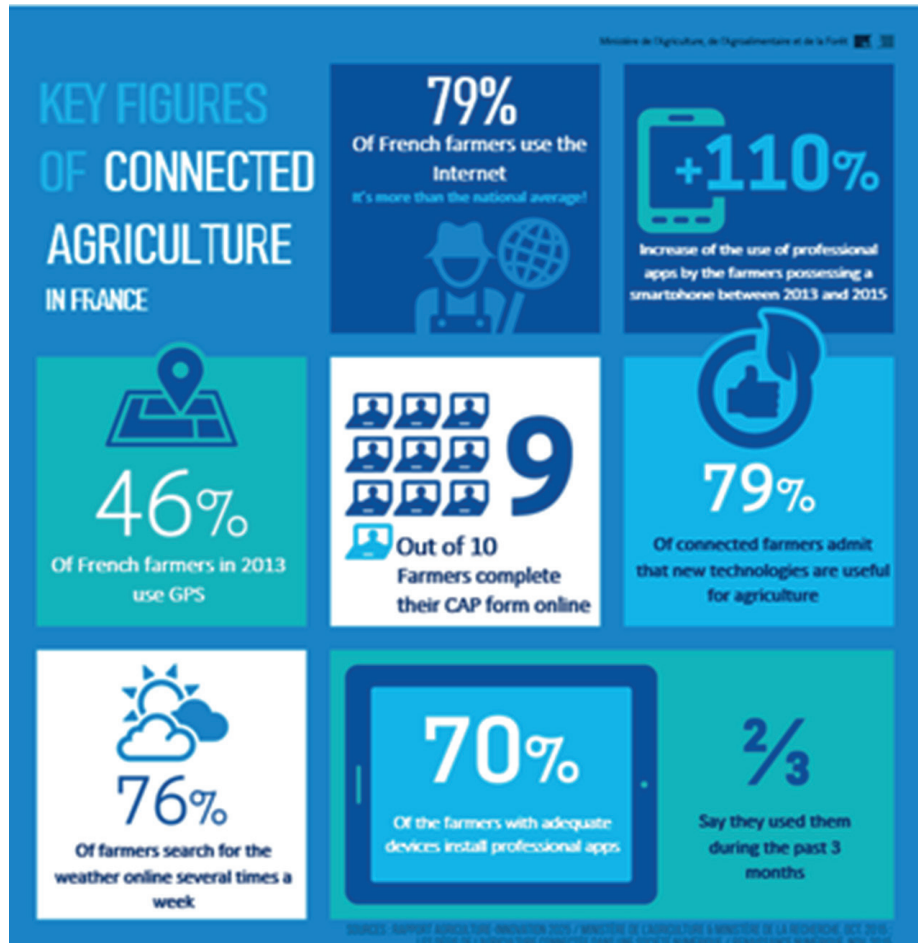
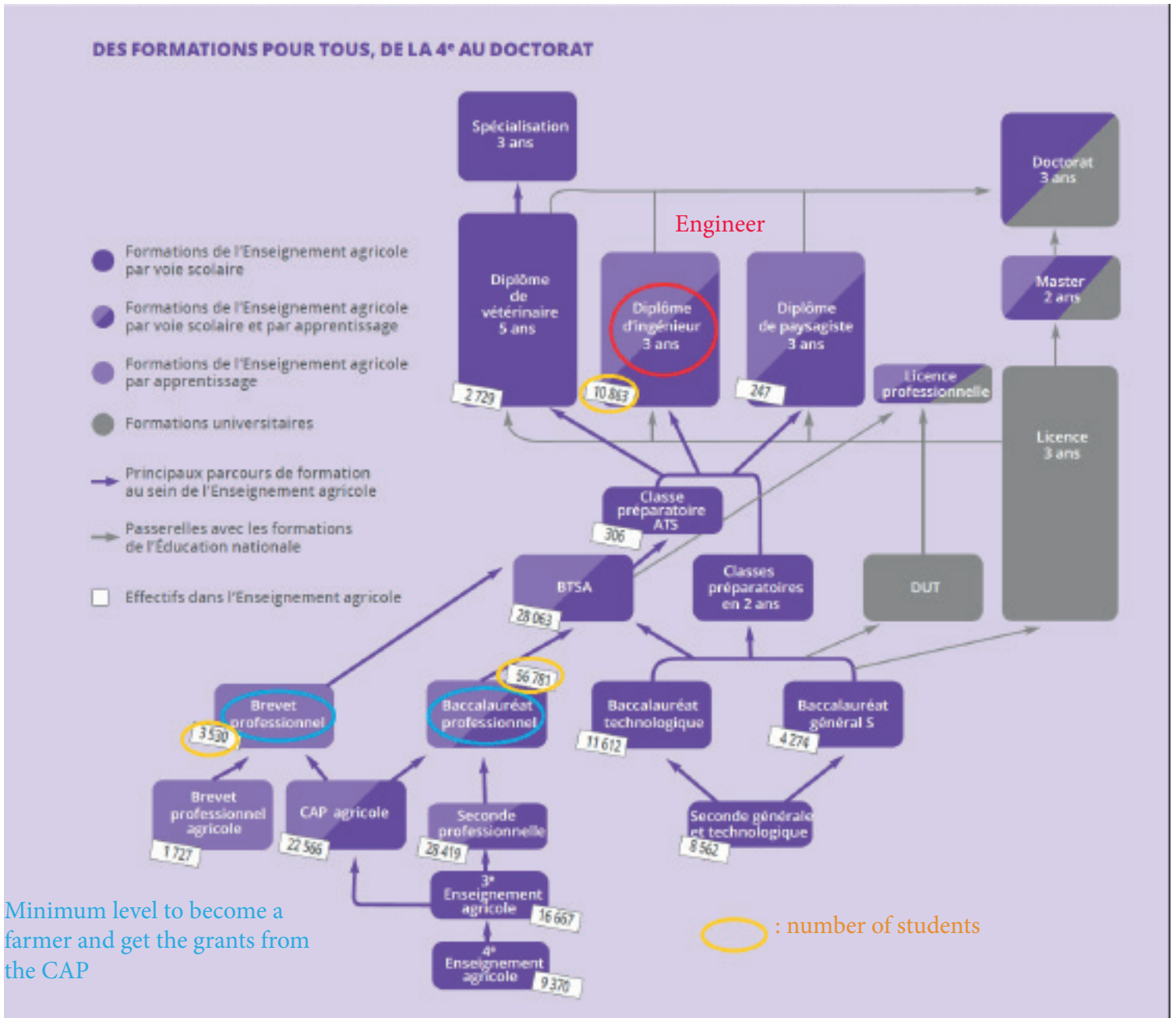| Actions	Indicators and targets foreseen	Half-year follow-up	Comments and methodology implemented to achieve the targets
1. FROM THE AGROFOOD HUB TO AN AGRIFOOD AND DIGITAL HUB	Number of stakeholders joining this Hub: 30		
	Number of collaborative projects and events between digital and agrifood sectors: 8		
	Number of success stories in providing solutions to the technological challenges: 2		
2. MEASURING THE POTENTIAL OF INTEREST FOR AN AGRI-DIGITAL TRANSVERSAL TRAINING	Number of answers to the benchmark: 60		
	Number of scenarios foreseen by the group in charge of this question within the EDIH: 2		

Annexes

Annexe 1

French Agrifood industry and the digital transition challenge

Annexe 2

French school programs system

DES FORMATIONS POUR TOUS, DE LA 4e AU DOCTORAT

Engineer

Minimum level to become a farmer and get the grants from the CAP

: number of students

Annexe **3**

Endorsement letters

Endorsement letter from the relevant organisation responsible for the action

Project acronym[1]	REGIONS 4FOOD
Project title	Regional Strategies 4 FOOD 4.0 Revolution
Name of the signing organisation (in French) including department if relevant	**ALDEV – Angers Loire Développement** **(Agence de développement économique d'Angers Loire Métropole)**
Name of the signing organisation (in English) including department if relevant	**ALDEV – Angers Loire Développement** **(Economic development agency of Angers Loire Métropole)**
Action supported (please color the right answer)	1) From the Agrifood Hub to an Agrifood and Digital Innovation Hub (DIH) 2) Measuring the potential of interest for an Agri/Digital Transervsal training in the Pays de la Loire Region **3) Full Action Plan**
Name of the policy instrument addressed (original)	FEDER 2014-2020 et Stratégie Régionale partagée agri-alimentaire
Name of the policy instrument addressed (English)	ERDF 2014-2020 and regional agrifood strategy
Name of partner concerned in the application form (English)	Pays de la Loire Regional Council

[1] *Information indicated in this table must correspond to the information provided in the application form.*

We hereby confirm:

- that we were informed about the preparation of the above-mentioned project,
- that the topic tackled by this project is in line with our organisation's policy and strategy,
- that we acknowledge the participation of the above-mentioned partner in the project,
- that we have actively collaborated in the design and elaboration of the action in charge/responsible,
- that we have involved with the stakeholder group in the exchanging experiences,
- that we agree with the action plan statement,
- that we support the actions included in the Pays de la Loire's action plan

In this scenario, we endorse the action plan presented by the Pays de la Loire Regional Council in the context of the REGIONS 4FOOD project.

Name of signatory	**Jean-Baptiste MANTIENNE**
Position of signatory	**General Manager**
Date and place	**16 / 03 / 2021**

Signature and institution stamp

aldev ANGERS LOIRE DÉVELOPPEMENT
122 rue du château d'Orgemont
49000 Angers
Tél. : 02 52 57 01 00 - Fax : 02 52 57 01 72
contact@angers-developpement.com

Endorsement letter from the relevant organisation responsible for the action

Project acronym[1]	REGIONS 4FOOD
Project title	REGIONal Strategies 4 FOOD 4.0 Revolution
Name of the signing organisation (in French) including department if relevant	Ecole Supérieur d'Agricultures (ESA-Angers) Direction de la Recherche et Valorisation
Name of the signing organisation (in English) including department if relevant	
Action supported (please color the right answer)	1) From the Agrifood Hub to an Agrifood and Digital Innovation Hub (DIH) 2) Measuring the potential of interest for an Agri/Digital Transervsal training in the Pays de la Loire Region 3) Full Action Plan
Name of the policy instrument addressed (original)	FEDER 2014-2020 et Stratégie Régionale partagée agri-alimentaire
Name of the policy instrument addressed (English)	ERDF 2014-2020 and regional agrifood strategy
Name of partner concerned in the application form (English)	Pays de la Loire Regional Council

[1] Information indicated in this table must correspond to the information provided in the application form.

We hereby confirm:

- that we were informed about the preparation of the above-mentioned project,
- that the topic tackled by this project is in line with our organisation's policy and strategy,
- that we acknowledge the participation of the above-mentioned partner in the project,
- that we have actively collaborated in the design and elaboration of the action in charge/responsible,
- that we have involved with the stakeholder group in the exchanging experiences,
- that we agree with the action plan statement,
- that we support the actions included in the Pays de la Loire's action plan

In this scenario, we endorse the action plan presented by the Pays de la Loire Regional Council in the context of the REGIONS 4FOOD project.

Name of signatory	Pierre PICOUET
Position of signatory	Co-directeur de la Direction de la Recherche et Valorisation
Date and place	Angers le 15/03/2021
Signature and institution stamp	55 rue Rabelais - BP 30748 49007 Angers Cedex 01 + 33 2 41 23 55 55 SIRET :342 382 637 00011 - NAF :8542Z

Endorsement letter from the relevant organisation responsible for the action

Project acronym[1]	REGIONS 4FOOD
Project title	REGIONal Strategies 4 FOOD 4.0 Revolution
Name of the signing organisation (in French) including department if relevant	AETS ESEO (Ecole Superieure d'Electronique de l'Ouest)
Name of the signing organisation (in English) including department if relevant	AETS ESEO (Higher Education School in Electronics)
Action supported (please color the right answer)	1) From the Agrifood Hub to an Agrifood and Digital Innovation Hub (DIH) 2) Measuring the potential of interest for an Agri/Digital Transervsal training in the Pays de la Loire Region 3) Full Action Plan
Name of the policy instrument addressed (original)	FEDER 2014-2020 et Stratégie Régionale partagée agri-alimentaire
Name of the policy instrument addressed (English)	ERDF 2014-2020 and regional agrifood strategy
Name of partner concerned in the application form (English)	Pays de la Loire Regional Council

[1] Information indicated in this table must correspond to the information provided in the application form.

We hereby confirm:

- that we were informed about the preparation of the above-mentioned project,
- that the topic tackled by this project is in line with our organisation's policy and strategy,
- that we acknowledge the participation of the above-mentioned partner in the project,
- that we have actively collaborated in the design and elaboration of the action in charge/responsible,
- that we have involved with the stakeholder group in the exchanging experiences,
- that we agree with the action plan statement,
- that we support the actions included in the Pays de la Loire's action plan

In this scenario, we endorse the action plan presented by the Pays de la Loire Regional Council in the context of the REGIONS 4FOOD project.

Name of signatory	HUGLO Frederic
Position of signatory	Managing Director
Date and place	11/3/2021 Angers
Signature and institution stamp	Le Directeur

Endorsement letter from the relevant organisation responsible for the action

Project acronym[1]	REGIONS 4FOOD
Project title	REGIONal Strategies 4 FOOD 4.0 Revolution
Name of the signing organisation (in French) including department if relevant	*VALORIAL*
Name of the signing organisation (in English) including department if relevant	VALORIAL
Action supported (please color the right answer)	1) From the Agrifood Hub to an Agrifood and Digital Innovation Hub (DIH) 2) Measuring the potential of interest for an Agri/Digital Transervsal training in the Pays de la Loire Region 3) Full Action Plan
Name of the policy instrument addressed (original)	FEDER 2014-2020 et Stratégie Régionale partagée agri-alimentaire
Name of the policy instrument addressed (English)	ERDF 2014-2020 and regional agrifood strategy
Name of partner concerned in the application form (English)	Pays de la Loire Regional Council

[1] *Information indicated in this table must correspond to the information provided in the application form.*

We hereby confirm:

- that we were informed about the preparation of the above-mentioned project,
- that the topic tackled by this project is in line with our organisation's policy and strategy,
- that we acknowledge the participation of the above-mentioned partner in the project,
- that we have actively collaborated in the design and elaboration of the action in charge/responsible,
- that we have involved with the stakeholder group in the exchanging experiences,
- that we agree with the action plan statement,
- that we support the actions included in the Pays de la Loire's action plan

In this scenario, we endorse the action plan presented by the Pays de la Loire Regional Council in the context of the REGIONS 4FOOD project.

Name of signatory	*PERROT Jean-Luc*
Position of signatory	*Directeur*
Date and place	*Rennes, le 12/03/2021*
Signature and institution stamp	Valorial 8 rue Jules Maillard de la Gournerie - 35000 RENNES T. 02 99 31 53 05 www.pole-valorial.fr Twitter : @Pole_Valorial

Endorsement letter from the relevant organisation responsible for the action

Project acronym[1]	REGIONS 4FOOD
Project title	REGIONal Strategies 4 FOOD 4.0 Revolution
Name of the signing organisation (in French) including department if relevant	LIGERIAA, Association Régionale des Entreprises Alimentaires en Pays de la Loire
Name of the signing organisation (in English) including department if relevant	LIGERIAA, Regional Association of Food Companies
Action supported (please color the right answer)	1) From the Agrifood Hub to an Agrifood and Digital Innovation Hub (DIH) 2) Measuring the potential of interest for an Agri/Digital Transervsal training in the Pays de la Loire Region 3) Full Action Plan
Name of the policy instrument addressed (original)	FEDER 2014-2020 et Stratégie Régionale partagée agri-alimentaire
Name of the policy instrument addressed (English)	ERDF 2014-2020 and regional agrifood strategy
Name of partner concerned in the application form (English)	Pays de la Loire Regional Council

[1] Information indicated in this table must correspond to the information provided in the application form.

We hereby confirm:

- that we were informed about the preparation of the above-mentioned project,
- that the topic tackled by this project is in line with our organisation's policy and strategy,
- that we acknowledge the participation of the above-mentioned partner in the project,
- that we have actively collaborated in the design and elaboration of the action in charge/responsible,
- that we have involved with the stakeholder group in the exchanging experiences,
- that we agree with the action plan statement,
- that we support the actions included in the Pays de la Loire's action plan

In this scenario, we endorse the action plan presented by the Pays de la Loire Regional Council in the context of the REGIONS 4FOOD project.

Name of signatory	Dominique LAUNAY
Position of signatory	Délégué Général
Date and place	9 mars 2021 à Nantes
Signature and institution stamp	ligeriaa Association Régionale des Entreprises Alimentaires en Pays de la Loire Technocampus Alimentation CS 92369 - 2, impasse Thérèse Bertrand-Fontaine 44323 NANTES Cedex 3

Endorsement letter from the relevant organisation responsible for the action

Project acronym[1]	REGIONS 4FOOD
Project title	REGIONal Strategies 4 FOOD 4.0 Revolution
Name of the signing organisation (in French) including department if relevant	VEGEPOLYS VALLEY *VEGEPOLYS VALLEY*
Name of the signing organisation (in English) including department if relevant	*VEGEPOLYS VALLEY*
Action supported (please color the right answer)	1) From the Agrifood Hub to an Agrifood and Digital Innovation Hub (DIH) 2) Measuring the potential of interest for an Agri/Digital Transervsal training in the Pays de la Loire Region 3) Full Action Plan
Name of the policy instrument addressed (original)	FEDER 2014-2020 et Stratégie Régionale partagée agri-alimentaire
Name of the policy instrument addressed (English)	ERDF 2014-2020 and regional agrifood strategy
Name of partner concerned in the application form (English)	Pays de la Loire Regional Council

[1] *Information indicated in this table must correspond to the information provided in the application form.*

We hereby confirm:

- that we were informed about the preparation of the above-mentioned project,
- that the topic tackled by this project is in line with our organisation's policy and strategy,
- that we acknowledge the participation of the above-mentioned partner in the project,
- that we have actively collaborated in the design and elaboration of the action in charge/responsible,
- that we have involved with the stakeholder group in the exchanging experiences,
- that we agree with the action plan statement,
- that we support the actions included in the Pays de la Loire's action plan

In this scenario, we endorse the action plan presented by the Pays de la Loire Regional Council in the context of the REGIONS 4FOOD project.

Name of signatory	Gino BOISMORIN
Position of signatory	Director
Date and place	Angers, 8th March 2021
Signature and institution stamp	

VEGEPOLYS VALLEY is recognized in France as the international plant competitiveness cluster that connects solution-providing companies, R&D organizations and producers related to plants. The main aim of the cluster is to build collaborative projects for co-innovation and economic growth all along the value-chain in the plant sector. Producing plants with a more favorable impact on biodiversity, health and environment is a major aim of the cluster.

VEGEPOLYS VALLEY covers the entire plant value chain: upstream (breeding, plant & soil health, machinery & equipment, digital & AgTech), plant production (seeds & seedlings, large crops, market gardening and arboriculture, ornamental horticulture, wine and cider productions, aromatic and medicinal plants) and processing / distribution (food & feed, nutrition prevention health, well-being & cosmetics, agro-materials & biotransformation, urban vegetation & living environment).

VEGEPOLYS VALLEY relies on a strong territorial anchorage in 4 French regions: Auvergne-Rhône-Alpes, Brittany, Centre-Loire Valley and Pays de la Loire, with 7 sites to be close to its members. The cluster mobilizes 28 FTE employees for over 500 members: companies (80% of SMEs), research and training centres, professional unions, development organizations and consular chambers.

VEGEPOLYS VALLEY offers support to its members in order to boost their innovation and competitiveness: providing information and stimulating ideas, supporting mechanisms for the emergence of projects, creating partnerships, promoting search for funding and labels, supporting the communication phase and animation of research projects on emerging themes, among others.

VEGEPOLYS VALLEY mobilizes its network around 7 innovation axes: Varietal innovation, and seed and plant performance, Plant health, New technologies and practices for production systems, Plants for food and feed, Nutrition, prevention, well-being, health and cosmetics, Agro-materials and plant biotransformation, Urban farming and plants in cities.

Annexe **4**

Common monitoring system

			ACTION PLAN IMPLEMENTATION							TERRITORIAL IMPACT						POLICY INSTRUMENT			
PROJECT PARTNER	ACTION NUMBER	ACTION NAME	1.1) OUTPUT TARGET	1.2) PROGRESS MADE: Completed (Co) Cancelled (Ca) Ongoing (O) Postponed (P)	1.3) EXPLANATION (problems encountered)	2.1) RESULT INDICATOR	2.2) TARGET	2.3) ACHIEVED (accumulated)	3.1) RELEVANT STAKEHOLDERS ACTIVELY INVOLVED (Yes / No, description)	4.1) SELF-DEFINED PERFORMANCE INDICATOR	4.2) TARGET	4.3) ACHIEVED (accumulated)	5.1) NEW SELF-DEFINED PERFORMANCE INDICATOR (if added)	5.2) TARGET	5.3) ACHIEVED (accumulated)	6.1) PI ADDRESSED (Application Form, page 10)	6.2) IMPROVEMENTS (Yes, nature of change)	6.3) NOT IMPROVED YET (No, Main reasons)	7.1) OTHERS INFLUENCED (which one/s, how)
PP2	1	From the Agrifood hub to an agrifood and digital innovation hub	1 Working Plan with Clear objectives (number of events per year, possibility to submit application for European projects...)			Number of stakeholders joining this Hub	30		Farmers, agrifood industries, Chamber of agriculture, digital sector, existing DIH	Number of projects funded especially by the ERDF on the topic of innovation in the agri-food sector	6	12	Number of collaborative projects between digital and agrifood sectors	6		ERDF O.P. 2014-2020 Pays de la Loire	/	OP ERDF not improved because of the project's timing (2018-2023) since the regional OP was already ongoing.	Pays de la Loire OP ERDF 2127 : SO 1.2 digital uses (supporting enterprises' digitization; strengthening smart territories, data management and protection)
			1 board which monitors the achievement of its policy on digitization of Agrifood in Pays de la Loire			Number of collaborative projects and events between digital and agrifood sectors	8												
			1 Internet page dedicated to the regional strategy	Also used as a source of information on upcoming / ongoing European projects			Number of success stories in providing solutions to the technological challenges	2		DIVA-EDIH partners and stakeholders										
	2	Measuring the potential of interest for an Agri/digital Transversal Training	Creation of a working group			Number of answers to the benchmark	60		ESEO, University of Nantes, IMT...), Research centres, Labs, Representatives of the agrifood sector										
			1 benchmark			Number of scenarios foreseen by the groupe in charge of this question within the EDIH	2		ESEO, University of Nantes, IMT...), Research centres, Labs, Representatives of the agrifood sector										
			1 SWOT with a focus on the needs and opportunities			/	/	/	Same										
			1 feasibility study			/	/	/	Same										

ACTION PLAN - PART IV - ACTIONS sub-section "Output & Result Indicator" (according to the information included in the validated regional Action Plan)

SELF-DEFINED PERFORMANCE INDICATOR specific to each policy instrument, it measures the beneficiaries that are better off thanks to this instrument (according to the Application Form, page 48)

NEW SELF-DEFINED PERFORMANCE INDICATOR if added to better reflect territorial impact (previously JS & LP must be informed)

RESULT INDICATORS (Application Form, page 47)	TARGET (at project level)	ACHIEVED (accumulated at regional level)	ORIGINAL EXPECTED CONTRIBUTION (by partner)
Number of Growth & Jobs or ETC programmes addressed by the project where the measures inspired by the project will be implemented 100% of policy instruments addressed with structural funds link	5	1	1
Number of other policy instruments addressed by the project where measures inspired by the project will be implemented 100% of policy instruments addressed without structural funds link	2	0	0
Estimated amount of Structural Funds (from Growth & Jobs and/or ETC) influenced by the project (in EUR)	27 600 000 €		1 600 000 €
Estimated amount of other funds influenced (in EUR)	10 600 000 €		0 €

Accumulated figures at project level

To be achieved by project

To be completed by partner according to the original information provided before project started

To be achieved by partner at the end of project