D3.7 REPORT ON MAXIMIZATION OF IES MARKET TAKE-UP

WP 3

This is the public version of the deliverable.

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LIST OF ABBREVIATIONS

Abbreviation	Explanation
CCs	Competence Centres
DIHs	Digital Innovation Hubs
DAP	Demonstration Activity Procedure
EP	Execution Plan
Expand OC	EXPAND the SmartAgriHubs Community Network
FIEs	Flagship Innovation Experiments
IEs	Innovation Experiments
IP	Innovation Portal
ICT	Information and Communication Technology
IoF2020	Internet of Food and Farm 2020
KPIs	Key Performance Indicators
LXP	Learning and Exchange Platform
OCs	Open Calls
RCs	Regional Clusters
Respond OC	RESPOND to the Covid-19 crisis
Restart OC	RESTART the European Agri-Food Economy after the COVID-19 Crisis
SAHs	Smart Agri Hubs
UAT	User Acceptance Testing
WPs	Work Packages
WUR	Wageningen University and Research

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PROJECT SUMMARY

Digital technologies enable a transformation into data-driven, intelligent, agile and autonomous farm operations, and are generally considered as a key to address the grand challenges for agriculture. Recent initiatives showed the eagerness of the sector to seize the opportunities offered by ICT and in particular data-oriented technologies. However, current available applications are still fragmented and mainly used by a small group of early adopters. Against this background, SmartAgriHubs (SAH) has the potential to be a real game changer in the adoption of digital solutions by the farming sector.

SAH will leverage, strengthen and connect local DIHs and numerous Competence Centres (CCs) throughout Europe. The project already put together a large initial network of 140 DIHs by building on its existing projects and ecosystems such as Internet of Food and Farm (IoF2020). All DIHs are aligned with 9 regional clusters, which are led by organizations that are closely related to national or regional digitization initiatives and funds. DIHs will be empowered and supported in their development, to be able to carry out high-performance Innovation Experiments (IEs). SAH already identified 28 Flagship Innovation Experiments (FIEs), which are examples of outstanding, innovative and successful IEs, where ideas, concepts and prototypes are further developed and introduced into the market.

SAH uses a multi-actor approach based on a vast network of start-ups, SMEs, business and service providers, technology experts and end-users. End-users from the agri-food sector are at the heart of the project and the driving force of the digital transformation.

Led by the Wageningen University and Research (WUR), SAH consists of a pan-European consortium of over 160 Partners representing all EU Member States. SAH is part of Horizon2020 and is supported by the European Commission with a budget of €20 million.

EXECUTIVE SUMMARY

Report on the maximization of the market take-up is the first iteration of such a report, delivered in M36 of the project, while the second iteration of the report is planned for M48. This is an extensive report, presenting activities implemented under Task 3.4 Demonstration of IEs outputs and Market Take-up maximization. The task is implemented by WP3 in collaboration with WP4.

The report elaborates on several actions aiming to maximize FIEs market potentials, each in a different way. The report will in more detail elaborate implemented activities related to:

Implemented demonstration activities by FIEs, IEs and RC events

Organization and realization of demonstration activities is an important segment of FIE product/service development. Feedback received is one of the outcomes of demo events and it is perceived as an important element towards product/service further development, based on received feedback. Farmers, SMEs, DIHs, universities, other projects, or organizations are key target audiences of these events. In addition to putting presentation skills in practice, which is an important element when presenting to potential customers, FIEs are also in direct contact with their target groups, expanding their network which is also opening the doors to new collaborations.

Demonstration activities presented within this report are implemented on an ongoing basis, from the beginning of the project until M36, while more events will be conducted within the third reporting period. As reported during the first and the second reporting period, approximately 66 demo events were organized by FIEs and OC IEs. When merged with the events attended or organized by RCs from both reporting periods, it is approximately 234 individual events. If we look at the current reporting period only, RCs, FIEs, and IEs have reported about 99 events in total, 73 events were conducted in a virtual environment, while 26 were held as live (face-to-face) demonstrations. An overview of demonstration events organized and conducted by FIEs and IEs, provides the reader with better insight into the type of demonstrations that were conducted, collected feedback from the audience, types of audiences, materials used for communication and dissemination purposes, lessons learned, etc. While the organization of demonstration events was envisaged under FIE Execution Plans (EP), OC IEs have also organized several events, which were not a mandatory element within their EPs.

To both types of IEs, the Demonstration Activity Procedure (DAP) was introduced during the second reporting period with the aim to present a mechanism when planning, organizing, and reporting on demonstration events. At the same time, aligning project expectations regarding the demo events allowed the creation of a standardized approach towards all FIEs. The procedure for face-to-face and online events allowed collection of information such as promotional material used, tools used to collect feedback, feedback analysis, and feedback from FIEs in regard to the event implementation, allowing improvements of future events.

While not initially anticipated by the project, the Event Procedure was created and applied by Regional Clusters, in cases when they are organizing an event, or attending an event and presenting SAHs and its achievements. As with the FIE DAP, the RC event procedure provides guidelines on how to organize an event, how to report

to the project, and collect feedback but also allows the provision of feedback from an event organizer.

Analysis of the feedback received from farmers through the User Acceptance Testing questionnaire

In order to ensure better market accessibility, WP3 developed a User Acceptance Test (UAT), as a tool to increase user acceptance of digital products and solutions, offered by FIEs. Analysis of collected users feedback provides an interesting insight that will be helpful for the identification of potential acceptance problems during the product development cycle. After the testing period, 11 FIEs introduced 28 respondents within an online questionnaire, which included a set of general questions, regarding the respondents' and farms' general information, and a set of specific questions, related to usability, technical quality, cost-efficiency, and user-friendliness of the tested solution. In depth analysis of all answers, which is provided in Chapter 2 of this document, showcases some of the most interesting and useful features developed by FIEs and presents the overall acceptance of digital solutions in different agri-food sectors.

The final results of conducted user acceptance tests are more than satisfying, as they clearly demonstrate a positive experience within their end-users. Implementation of the UAT survey will be continued in the next reporting period as well, while overall results will be presented within the final version of D3.7-2.

Activities implemented under FIE business support for FIEs

Building a set of skills for the market maximization take up is another activity that aims to provide FIEs with a sufficient set of skills and knowledge when positioning their products/services on the market. Training planned within this subtask will be implemented by DIHs, allowing capacity building not only for FIEs but for DIHs also, in line with their services. The implementation modality of this activity was modified based on the knowledge gained within the project during the first 36 months while working with FIEs and DIHs. At the same time, strengthening of DIHs capacities and expanding their services is one of the priorities of the project within the third reporting period. Methodology of task implementation is provided within the business program section, while business training will take place during the third reporting period. Networking activities

Last, but not least, this subtask presents several networking opportunities implemented within the current reporting period. WP3 lasses with WP1 to boost networking potential for FIEs by exploiting networks of stakeholders attracted through the project for the purpose of developing synergies across the value chain. FIE achievements are promoted via the IP, allowing the presentation of these results to the IP community. As an ongoing activity, new actions will take place during the third reporting period as well.

This is the public version of the deliverable.

COLLABORATION WITH OTHER WPs

Within the implementation of Task 3.4, close collaboration was established with WP1 (DIH Ecosystem building) and WP4 (DIH Capacity building and monitoring).

Collaboration with WP1

One of the overall tasks of WP1 is to assist DIHs in enhancing their communication and dissemination capabilities, as well as in expanding their network so that they can support and develop an increasing number of Innovation Experiments. Primarily, WP1 has set a cohesive strategy and tools to facilitate communication and information exchange among project partners and relevant stakeholders. All supporting materials that were used prior, during, and after each organized event, such as presentations (shown in figures below), questioners, event promotion ads, etc. were designed according to visual identity pack, and pre-defined templates provided by WP1, within D1.1 (SAH Visual Identity).

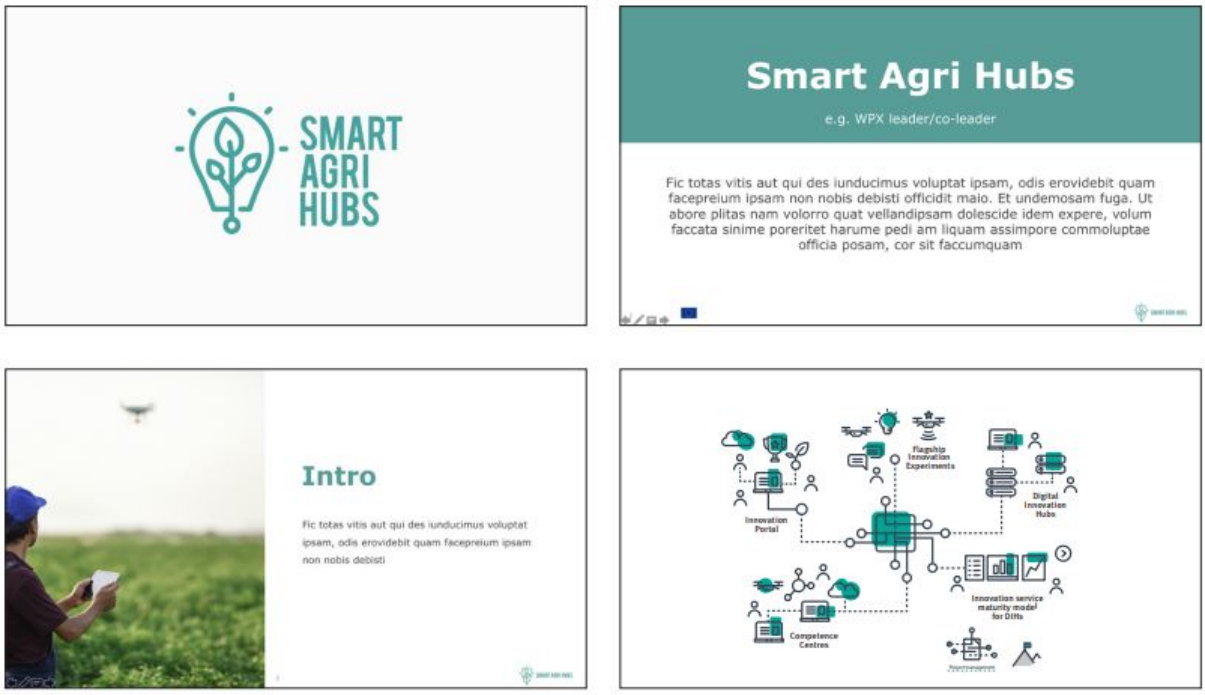

Figure 1 - Presentation template for FIEs

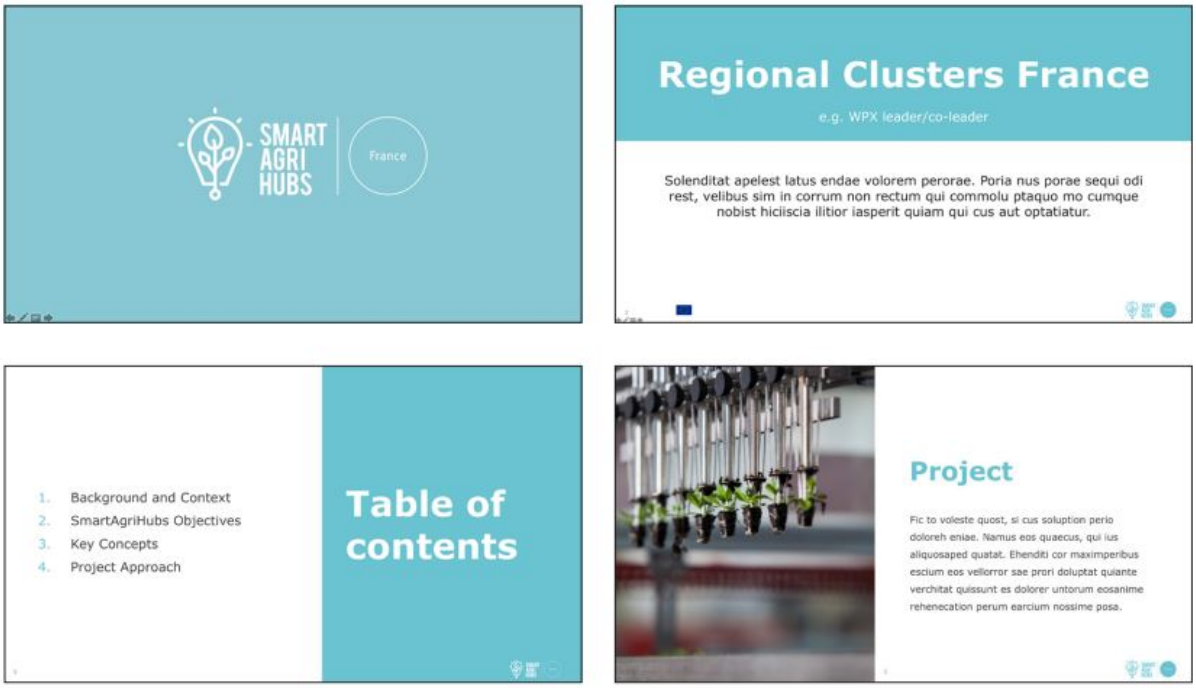

Figure 2 - Presentation template for Regional Clusters

Another important objective of WP1 is the two levels of dissemination and communication: on the project level and the regional/national level. The main objective is to raise awareness about DIHs services, attract innovators, mainstream the knowledge developed, and disseminate the results from Innovation Experiments to key stakeholders and interested parties. WP3 has a key role in this objective since Task 3.4 (*Demonstration of IEs outputs and Market Take-up maximization*) aims to exploit broad networks of stakeholders attracted through the project to engage users, develop synergies across the value chain and mobilize risk capital for the market expansion of IEs outputs, which will help WP1 in the dissemination of the demonstration activities and the experiment outputs. Collaboration between these two WPs is still ongoing under the task and is primarily related to disseminating information on demo events, promotion of FIE achievements through the Innovation Portal and social media networks. Jointly the two PS have prepared and conducted match-making activity regarding FIE reusable components that could be put in place by DIHs.

Collaboration with WP4

In close collaboration with WP4, Task 3.4, guidelines and framework of the mechanisms for setting up demonstration activities for FIEs, IEs, and RCs were established. Further to this, the two WPs will work jointly in supporting DIHs to implement a so-called Business program for FIEs, by the creation of relevant business modules that will be attended by DIHs with the aim to equip them with knowledge and tools prior to passing this knowledge to FIEs. Identified topics of these modules are related to the Business plan development, Mission, Vision, Strategy, Creating and managing startups (e.g., Lean Startup Methodology), Pitching, Financial Plan – funding ops, investors, Marketing Plan and Market Analysis, Ecosystem, collaboration and competition, Regional Embedding, Governance and organizational structure.

In this manner, both types of IEs will be able to develop a business program that will foster the exploitation of results and sustainable growth in order to boost the

market potential of the outputs. Furthermore, WP3 will again liaise with WP4 to co-ordinate the provision of these services, as well as collect end-users' feedback.

CHAPTER 1: DEMONSTRATION EVENTS WITHIN SAH

1.1 APPROACH & METHODOLOGY

Within SAHs, demonstration of achievements is an important element, not only for the purpose of showcasing these achievements but also for establishing contacts with potential end-users, collecting their feedback, and finally incorporating this feedback into the future product/service development. When we refer to demonstration activities, we mean demo events that have been organized and conducted by FIEs and IEs, but also events that have been organized or attended by RCs. Even though, demonstration activities of FIEs and RCs have different outcomes, establishing a standardized approach within the project was an important element towards defining steps and roles in the context of demonstration activities set-up, during the implementation of the demo activity and the reporting once the event is finalized. The purpose of this procedure is to provide FIEs and RCs with a set of guidelines and templates guiding them tough the process. For this reason, within the second reporting period, WP3 in collaboration with WP4 has created the guidelines and framework of the mechanisms for setting up demonstration activities:

- **FIE Demonstration Activities Procedure for online and face-to-face events**, defining all necessary steps and roles in the context of demonstration activity set-up. The purpose of this procedure is to provide guidelines when preparing, conducting, and reporting on demonstration events.
- **RC Event procedure for both online and face-to-face events**, guiding RC through the process of event organization and realization and the reporting procedure. The procedure is applied in cases when RC is organizing and/or attending an event and presenting the project.

Key elements of each procedure are described in more detail on the following pages, while procedures are presented in Annex 1 of this deliverable.

1.1.1 FIE Demonstration activity procedure for FACE-TO-FACE events

As mentioned above, the purpose of this procedure is to provide guidelines for organizing, conducting, and reporting on the face-to-face demonstration events, within the course of the project. Since the success of FIEs demonstration activity closely relies on the proper event promotion, attraction of targeted audiences and the event attendance rate, proper preparation for the event is of crucial importance. For that purpose, DAP foresees a strong involvement of WP1 (DIH Ecosystem Building).

The term *demonstration activity* refers to activity complementing the work of FIEs by taking their supported solutions closer to the full realization of their market potential. Demonstration activities are aiming at presenting work done within each FIE, including knowledge/experience exchange on three levels – among SAH partners,

with other relevant H2020 projects, and with external participants interested in the topic of the demonstration. The common characteristics of demo activities are:

- Knowledge/ experience exchange,
- Involvement of different stakeholder groups (farmers, IT community, researchers, policy makers, etc.),
- Broad promotion of the event (both as an announcement, prior to the event
- as well as after),
- Lessons Learned (LL) collection, which could be used in later a phase of the project.

Demonstration activities can be hosted on farms/laboratories/facilities, wherever the solutions are being developed. Alternatively, the solution demonstration can be conducted during fairs, demo shows, or other similar events, that can bring added value to the demonstration of SAH successes.

In addition, demonstration activity should present the impact of the developed solutions to a wide range of stakeholders from the public and private sector, including farmers, large organizations, SMEs, government officials, etc. This shall be done through the scale-up demonstration activities that will include the primarily on-site demonstration of developed solution, but also FIE demonstrations within relevant fairs, forums, conferences, printed articles in journals and magazines, etc.

In order to have a clear overview of each step and action, the Demonstration Activities Procedure has three envisaged phases:

- Planning phase,
- Executing phase, and
- Performance monitoring (closing) phase.
- Roles and responsibilities of all actors included within demonstration activities are defined, for every phase separately:

Planning phase: WP3 is responsible for the preparation of the dissemination package for demonstration events, which includes SAHs logos and templates, Invitation letter template, Questionnaire for participants, and other relevant promotional materials previously developed by WP1. WP3 is also responsible for providing reporting templates (as included within DAP): Annex 1 (General information about the event) (Figure 1), which should give the overview of the whole demonstration activity setup and provide the answers to the who, when, what, where and how questions. Annex 2 (proposed questionnaires for the audiences) (Figure 2), and Annex 3 (Lesson learned report) (Figure 3).
It is the responsibility of the FIE coordinator to announce the event within the Innovation Portal and send Annex 1 to WP3 prior to the event.

Topic: FIE:	*Your answer*
Event overview	*Please, indicate:* • *Event title* • *Date and time* • *Location* • *Main technologies that will be presented*
Constraints	*Are there any restrictions in the number of people that can/might be invited (if it's a closed demonstration, open to external participants, members of some organizations, etc.)*
Planned stakeholders' groups	*Please indicate the main stakeholders groups that you intend to invite (e.g. Farmers association – XYZ; Advisory…)*
Planned number of attendees	*Please indicate a targeted number of visitors at the event*
What do you want to achieve with this particular demonstration	*Inform the general public, come in the local press, represent my organization, arouse the interest of private capital bodies, …, or actually attract customers for my products, present the solution to a specific target group, etc.*
Dissemination channels envisioned	*Please, indicate through which channels you plan to inform stakeholders about the event (e.g. newsletters of the organization; social media – please indicate accounts; local media, targeted mailing …)*
Potential collaboration with other H2020 projects	*Please indicate main components of your demonstration that can act at as a link to other H2020 projects and initiatives (e.g. Place: vineyard in Austria; Specific audience: young farmers…). We will use this information to select appropriate H2020 project/initiative and to invite representatives to attend.*
Roles and responsibilities	*Please, indicate the organizational team (name and email) – contact points for following topics:* • *Demonstration Activity Main responsible – FIE coordinator* • *Facilitator* • *Presenter/s* • *Communication responsible – for local stakeholders and EU/H2020 stakeholders* *Please, have in mind that one person can be in charge for more than one topic*
Feedback from participants	*Please, indicate topics you would like to be covered by feedback questionnaire. E.g.:* – *Usefulness of presented technologies* – *The functionalities are easy to understand.* – *Suggest solution adjustments to address your needs*

*In case of more than one event, please copy-paste the table as many times as events planned.

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Figure 3 – FIE Annex 1: Demonstration Activity Plan Template – General information about the even

Execution phase: The FIE coordinator is fully responsible for organizational aspect of the event. The Executing phase is supposed to be organized in accordance with the provided Demonstration activity plan.
During the execution phase, the coordinating team distributes the questionnaire to event attendees to collect their feedback on the presented technology (Figure 2). Modifications of the questionnaire are welcomed to fit the specific demo purpose.

Questions below should be included in the questionnaire form; however, you are encouraged to add and moderate questions to fit your specific demo purpose.

1. Feedback to Flagship Innovation, related to demonstrated product/services (tick boxes)

2. Usefulness of presented technologies - How do you appreciate the various aspects of the demo event (tick boxes)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The **additional benefit** for the farm is clear					
This product can be **useful** for the daily work					
The product **improves** the **end user's (farm) management**					
The product provides a better **decision making**.					
The product makes the **production** more **transparent**					
The product is **easy to use** and **understand** by all persons working with it					
The **design** of the solution is easy to understand					

	Very useful	Useful	Neutral	Not useful
Lecture				
Field walk				
Technologies				
...				

3. Replicability potential – can the suggested solution be adjusted to address your needs?

4. What is your wiliness to pay for the solution?

5. Open suggestions

6. *...additional questions to be added based on UC specific needs)*

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Figure 4 – FIE Annex 2: Proposed questionnaire for attendees

Performance monitoring (closing) phase: FIE coordinator ensures that event attendees are providing feedback within the Feedback form and delivering its analysis to WP3 after the event. Also, the FIE coordinator is responsible for filling in the Lessons Learned Report (Annex 3 of DAP), (Figure 2), and returning the feedback form to WP3, no later than one month after the event. Pictures and/or screenshots from the event are highly recommended.

Lessons Learnt report		
DA field	**Highlights**	**Attention points**
Presented solution features – observation (based on interaction with attendees)		
Solution presentation (how, what additional material was used, structure of demonstration, etc.)		
Communication with stakeholders		
Target audience and feedback		
Total number of participants (from all target groups):		

Below, please provide a total number of participants per each target group (feel free to add any other relevant target group)

Scientific	Industry	Civil Society	General Public	Policy makers	Media	Investors	Customers	Others

How will you implement feedback you have received form the participants?	

Please include pictures/screenshots from the event – provide a link to Basecamp FIE dedicated folder.

Figure 5 – FIE Annex 3: Lessons Learnt Report

1.1.2 FIE Demonstration activity procedure for ONLINE events

With the outbreak of Covid19 in the first quarter of 2020, a separate procedure and guidelines for organizing and conducting **online demo events** were prepared by WP3 and delivered to the FIEs. During 2020 and 2021, due to Covid19, most European countries were closed for traveling or had strict restrictions on movement, and all of them had numerous bans related to gatherings. These circumstances inhibited the organization of some face-to-face demo events, so WP3 developed a document that provide a step-by-step guide for setting up demonstration webinars.

Demonstration activity procedure for online events defines the role of the **event facilitator** – whose responsibility is to promote the event, arrange and launch the online platform, open the webinar, accommodate the technical support, and ensure a proper follow-up, and the role of the **event presenter** - usually an expert on the subject's matter, who forms and presents the demonstration content of the webinar, and engages the participants through interaction. Every event can have more than one presenter, and in some cases, a single person can be both the facilitator and the

presenter. A list of reliable online facilitation platforms is provided within the document, together with technical and practical recommendations for every phase of the event. Like face-to-face events, webinar organization also have three phases:

- **Preparation phase** – which foresees the selection of the most suitable online platform, creation of adequate timeline, drafting the event's agenda, announcing the event to different stakeholder groups, and, finally, practicing the presentation.
- **Execution phase** – which foresees the testing of the equipment, starting the online event in time (15 minutes ahead), presenting the content clearly, making enough time for Q&A session and interactions with the attendees, recording the event, and closing the session.
- **Follow up** - Thank the stakeholders via email and make an assessment after the webinar as soon as possible - distribute the *Questionnaire for attendees (Annex 2)* and provide links to presentations, recordings, and other relevant reference materials.

Within the execution phase, the presentation of the prepared content is of high significance. DAP also provides guidelines on how to conduct a successful presentation.

Responsibilities regarding the activities within the planning, executing and closing phase are the same as for the face-to-face events.

For planning the demo webinar, the first step is to fill in the Online Demonstration activity plan template (Annex1) and share it with WP3. During the webinar, attendees are expected to fill in the Annex 2 – Questionnaire for attendees, which can be shared via email or as an online form. After the event is conducted, the FIE coordinator fills in Annex 3 – Lessons Learnt report, and sends it to WP3, together with the participant's feedback.

1.1.3 RC procedure for face-to-face and online events

In addition to FIE demo activities, nine Regional Cluster of SAHs project (North East Europe, North West Europe, Central Europe, South East Europe, France, Iberia, Ireland & UK, Italy & Malta, and Scandinavia) are actively involved in presenting SAHs project, RC activities, and FIE results to its network. To facilitate the process and collect valuable feedback from the target groups, **Guidelines for Organization of RC Events** was prepared and customized to RC specific needs (Presented within Annex 1 of this report).

This document provides guidelines for organizing, conducting, participating at, and reporting online and face-to-face events within the course of the project. Taking into account the ongoing COVID-19 pandemic and diverse measures in force in Europe, including bans or limitations for gatherings (events and demonstrations), some RCs were unable to organize face-to-face events, so they needed to switch to online modalities.

The first part of the document includes information on how to present and organize an event - step by step guide, while the second part of the document includes mandatory elements to be tackled before, during, and after the event.

Different steps are required when RCs are invited to attend an event as presenters and in the case when they are event organizers. A detailed guide is provided within the RC Event procedure document - Chapter 2. RCs should prepare the presentation

material before the event, and make sure they included all proper logos in the presentation (SAH logo, RC logo, the EU flag, the notice that SAH is funded by EU). All communication-related materials, such as templates, basic elements, movies, postcards, leaflets, etc. are available in Basecamp's dedicated folder, and Innovation Portal Library section. RCs are strongly advised to take pictures or screenshots of the presentation during the event.

Reporting on the event is slightly different for RCs, and it includes:

- Annual reporting – the table (Figure 4), that is the part of the RC Annual report template, should be filled out for each event to which RC have been invited or have organized;
- Continuous reporting to WP3 – the event shall be announced on the Innovation Portal (IP), and Annex 1 distributed to the WP3 representative. Also, Annex 2 (Figure 5) is to be distributed to the WP3 representative no later than one month after the event, together with the analysis of the questionnaires collected from the attendees, in case the questionnaire is facilitated.

RELEVANT EVENTS				
Event title				
Date and place (if online event- platform used)				
Event organizer				
Description				
Number and names of internal (SAH) participants/presenters				
Target audiences	Please indicate the structure of the target audience at the event			
Please provide web link to the event				
Promotional materials used	Please indicate promo materials used during the event/presentation			
Please provide supporting materials	DAP (Annex 1)	(Please insert links to dedicated Basecamp folder)	Lessons learned report (Annex2)	(Please insert links to dedicated Basecamp folder)
Pictures, screenshots, etc.	(Please insert links to dedicated Basecamp folder)			

Figure 6 – Demonstration section from RCs annual progress report template

Lessons Learned report, presented within Annex 2 of the RC event procedure (Figure 6) is a highly important document, since it contains some key elements that can help RCs when analyzing conducted events, thus allowing further improvements. This document is to be delivered to the WP3 representative no later than one month after the event, together with the analysis of the questionnaires collected from the attendees, in case the questionnaire is facilitated.

Topic: **RC:**	*Your answer*
Event overview	*Please, indicate:* • *Event title* • *Date and time* • *Platform* • *Main technologies that will be presented*
Constraints	*Are there any restrictions in the number of people that can/might be invited (if it is a closed online event, open to external participants, members of some organizations, etc.)*
Planned stakeholders' groups	*Please indicate the main stakeholders groups that you intend to invite*
Planned number of attendees	*Please indicate a targeted number of visitors at the event*
What do you want to achieve with this particular demonstration	*Inform the general public, come in the local press, represent RC, represent the project, etc.*
Dissemination channels envisioned	*Please, indicate through which channels you plan to inform stakeholders about the event (e.g. newsletters of the organization; social media – please indicate accounts; local media, targeted mailing, SAH portal …)*
Feedback from participants	*Please, indicate topics you would like to be covered by feedback questionnaire.*

*In case of more than one event, please copy-paste the table as many times as events are planned.

Figure 7 – RC Event procedure Annex 1: General information about the event

Lessons Learnt report		
	Highlights	**Attention points**
Outcome and conclusions form the presentation		
What additional material was used, structure of presentation, etc.		
Target audience and feedback		
Total number of external participants (from all target groups):		
Below, please provide a total number of participants per each target group (feel free to add any other relevant target group)		

Scientific	**Industry**	**Civil Society**	**General Public**	**Policy makers**	**Media**	**Investors**	**Customers**	**Others**

Main observations/ from the communication with target audiences. Opinions form the participants	
Feel free to add any other observations and information	

Figure 8 - RC Event procedure Annex 2: RC Lesson Learned Report

1.2 RESULTS

1.2.1 Demonstration events organised by initial FIEs

This chapter provides an overview of FIE demonstration events conducted between M3-M36 of the project. According to FIEs EP, each FIE is obligated to organize and conduct at least one demonstration event during its lifetime.

1.2.1.1. Conducted demonstration and dissemination activities within the first reporting period (M3-M16)

Within the first reporting period, 17 FIEs have organized 22 demonstration events, while OC FIEs were not the subject of the first reporting period. As DAP was introduced during the second reporting period, between M3 and M16 reporting about conducted demo events was part of the FIE progress report template. Table 1 provides an overview of all demonstration events conducted prior to M17. As COVID-19 outbreaks have happened at the end of the first reporting period, all but one demo event was organized in a face-to-face environment. Events took place mostly on the farms, a couple of demonstrations took place during the fairs and within FIE facilities. Solutions/services were presented to farmers as the primary target group, but also to researchers, technicians, SMEs, the agriculture food industry, etc.

Participants' feedback and lessons learned from the first and the second reporting period are presented in Chapter 1.2.1.5.

During the first reporting period, 68% or 109 (out of 160) **dissemination and exploitation activities** were performed as live events, including presentations, workshops, seminars, trade fairs, and meetings. Besides farmers, as the predominant presented target group, events were also presented by representatives of media, industry, science institutions, and citizens. In general statistics, one-half of all visitors were potential customers and the other half were previously mentioned representatives.

Online dissemination and exploitation activities take around 36% of all activities implemented, which includes published material in electronic and paper forms like leaflets, posters, brochures, and booklets. Printed promotional material was distributed during live events, while electronic forms were used for social networks, websites, and electronic distribution. Facebook, Twitter, and LinkedIn are the most common social media channels used for dissemination purposes as well as organizations' and partners' websites.

1.2.1.2 Conducted demonstration and dissemination activities within the current reporting period (M17-M36)

As expected, the Covid19 pandemic had a strong impact on the demonstration plans of each FIE. Strict measures and lockdowns in Europe during 2020 completely changed the approach of demonstrating FIE products/solutions and their interaction with the interested audiences. The majority of reported demonstration events were conducted virtually, and those which were conducted as face-to-face events had constraints regarding the number of participants.

Within the current reporting period (March 2020 - October 2021), 42 demonstrations were conducted by 21 FIE, both as online and face-to-face events. This number includes all events during which the FIEs' specific results were presented and specific FIE solutions were demonstrated in front of the various target audiences. Out of 39 events, 23 were conducted in an online environment, and 19 were conducted as face-to-face events. Demonstrations were supported by local DIHs, such as Teagasc, Digifermes, DATAlife DIH, Clust-ER Agrifood, Gaiasense DIH, and different organizations, such as Farmers Parliament of Latvia, Danish technological Institute, The Agriculture Chamber of Pays de la Loire, etc. Both online and offline events were organized as interactive, with different interactivity aspects, such as Q&A sessions,

experience exchange sessions with experts in the field, live testing of the application features, field tours, demonstration of the real-time visualization of drone filming on a projector screen, live presentation of spraying machine spraying the field, etc. The interactivity aspect of the event largely depends on the environment and available tools; online events used presentations and video material to demonstrate the solution and provide topics for discussion sessions afterward, while face-to-face events were mostly conducted on fields and in farms, which allowed participants to be more engaged.

FIE7 and FIE8 established good cooperation with Horizon2020 project **NEFERTITI**, whose main objective is to establish an EU-wide, highly connected network of demonstration and pilot farms, designed to enhance knowledge exchanges, cross-fertilization among actors, and efficient innovation uptake in the farming sector. They participated in the Les Culturales event together, demonstrating the innovations and presenting both SmartAgriHubs and NEFERTITI projects at the Arvalis European projects booth.

Out of eight FIEs that did not conduct demo events within the current reporting period, six have reported that they are planning demonstrations during the third reporting period, within Task 3 of the FIE execution plan (From November 2021). FIE8 did participate at Les Culturales, together with FIE7, but haven't organized or conduced any events within the current reporting period. FIE6 is structured in a way that is providing support to SMEs, while FIE itself is not a demo event organizer. By the time of this deliverable, FIE10 did not provide any inputs regarding demonstration events.

The following table presents all conducted demonstration events between M17-M36, per FIE, providing detailed information on the demonstrated subjects:

This is the public version of the deliverable. The confidential version contains specifics of demonstration events for FIEs.

Within the second reporting period, Covid-19 restrictions had an overall impact on conducted **dissemination and exploitation activities**. This is the main reason why approximately 65,5% of workshops, presentations and meetings were held online. More precisely 120 out of 183 events were organised as online events. A significant part of promo and marketing activities are performed via social media networks (Twitter, Facebook, and LinkedIn). In most cases, organizational websites are also used as means of communication towards interested target groups regarding new achievements. Due to Covid-19, this period was not characterised by many opportunities for open discussions with citizens and other interested groups. Printed and promo material was also reduced to a minimum, the main communication was in an online form. Less than 35% of all activities were performed in the face-to-face environment. Within these several face-to-face events, the main target groups were farmers but also researchers and the industry.

1.2.1.2 Target audiences

In general, target audiences reached during demo events, were scientists, engineers and researchers in the agri-food domain, agro-technology companies, farmers and farm managers, beekeepers, agricultural suppliers, dairy professionals, advisors, value chain stakeholders, and policymakers.

It was expected that online events would attract more audiences, given that such events could be attended from anywhere on the planet. **About 1200 individuals attended reported online events**, including media representatives, national experts in the field of agri-food and IT, students, government representatives and the general public.

On the other hand, **face-to-face demonstrations involved more than 400 people**, despite all Covid-19 restrictions. All on-farm or on-field demos were conducted with a high level of respect for the declared protection measures. Participants were farmers and people working in the cereals sector, dairy farmers and farm advisors, students and researchers in environmental technologies, beekeepers, legislators and decision makers, representatives firm public institutions, members of the Farmers Parliament of Latvia, representatives of the irrigation community, aquaculture operators (technicians, students), NEFERTITI partners.

Finally, physical, and online demonstration events (including open days, co-organized webinars, and different online trainings) organized by all initial FIEs, **have gathered more than 1600 people**, interested in presented solutions.

1.2.1.3 Promotional channels

To attract as many participants as possible, and reach all relevant stakeholders, FIEs used different channels to announce and promote planned events. Besides the event announcement within the events section of SAHs IP, usually one or two months in advance, the most frequently used channel for inviting participants was via direct email communication – email invitations in a form of a newsletter were sent to different stakeholders and organizations of special interest. To a wider audience, both online and offline events were promoted through different online channels, such as social networks (Twitter, Facebook groups, and LinkedIn were heavily used for posting and reposting relevant news and announcements), news portals dedicated to agriculture and rural development (Ypaithros), promo banners on home pages of the relevant institution (Chamber of Agriculture of Lower Saxony). Some FIEs would also include promotional banners as part of their electronic (email) signature.

Different promotional materials were used during events, in order to attract the attention of the attendees, such as posters and roll-up banners. Pens, keychains, and notebooks, branded with the SAH project logo, were distributed to the attendees of some face-to-face events, as tokens of gratitude for the participation.

1.2.1.4 Lessons learned (M3-36)

From the project beginning until M36, valuable lessons were learned regarding FIE **solutions' market readiness status**, or the solution/service already on the market

but which required further improvement. FIEs 1 and 4 reported that more data, which is flowing into the project, needs to be validated and linked to the final production results, and that clearer economic analysis has to be done before taking the new technology out in the market. FIE14 learned about their prototype attention points, such as the lateral movement mechanism of the mower and automatic turning manoeuvres, and will make improvements based on the feedback from the participants.

The majority of FIEs reported important lessons learned regarding **farmers' behavior** and readiness to use innovative technologies. In most cases, end-users (farmers) show interest in new technology and are looking for solutions to help them with decision-making processes (by estimating field losses, giving irrigation recommendations, etc), in order to increase profit and improve production. However, FIE4 reported that many farmers who already have machinery with GPS features, don't use it simply because they don't know-how. This means that education of farmers on new technologies, both the benefits and how it is used, is necessary. Once farmers are familiar with the innovation and are not afraid of it, they will be more than happy to implement it. FIE25 learned that this period of social distancing helped to unlock farmers' use of computers, email and web meetings. This is a very important factor that will surely help not only the dissemination of results in the future but will also ensure an easier approach to technologies such as those of precision agriculture. FIE28 learned that blockchain-enabled solutions, like the automated dairy payments application, are very interesting for the dairy sector, but it takes a lot of exploration and research before companies are ready to implement them.

Many lessons were learned about the **difference between live and virtual demonstrations**, and the participants' interest during both. FIE16 learned about the importance of live presentation, as the equipment itself (drones) attracts the attention of the participants, much more than watching drones fly in an online video. For FIE23 it was difficult to conduct an online workshop for a group of people with different backgrounds and different levels of familiarity of the subject topic and expertise with ICT solutions. FIE26 reported that attendees' interest and engagement were much stronger during the practical demonstration of the tool, rather than the general presentation of the system. Therefore, practical-focused demonstrations of the solutions seem to be more efficient when engaging direct end-user / target groups such as farmers and cooperative managers. In the case of live (on-field) demonstrations, it is important to consider open field climate conditions while planning the event. Also, many FIEs learned that direct invitations are the best way to ensure the target audience at the event, rather than viral invitations and announcements.

1.2.1.5 Participant's feedback (M3-36)

The collection of participants' feedback is one of the aims of the demonstration event, as it presents a useful overview of potential improvements of the solution. The majority of FIEs reported that participants perceived a demonstration event as an opportunity to be in direct communication with development companies while being able to explain in more detail their concrete needs and issues they are facing. FIE1 reported that **participants expressed great interest** in including animal body condition score and lameness detection as additional measures of on-farm sustainability. The farmers were very positive and looking forward to seeing the results of the project and ways for each of them to individually improve the sustainability of

their farms. FIE6 however reported interesting feedback that farmers finally felt included in what they usually perceive as the "innovation world of agriculture", something they usually tend to perceive as a distant world disconnected from their needs. The possibility to contribute to the construction of future digital solutions was seen as a great opportunity. FIE16 received very positive feedback and farmers showed great interest in the services presented since the live show draws the attention of the audience who asked many practical questions. Most of the participants agreed that demonstrated solution provided them with additional benefits, useful within their food production work. Attenders also reported that the solution is easy to use and easy to understand. Collected feedback helped FIE6 understand that there is a lot of work to be done in order to improve the knowledge of farmers and their understanding of benefits by using services with drones. For example, farmers don't see that there is a correlation between the damage caused by the European grouse and the occurrence of fungal diseases on the flasks and the solution can provide pest control with the use of drones. For FIE19, participants' feedback was highly valuable in terms of assessing:

- data editing: most users are satisfied, but there is a need to work on detail improvements in data editing interfaces,
- data representation: table layout is significantly more popular than box table layout,
- map composition content: availability of forest data and visibility of nearby apiary locations to be included,
- data sharing: most users are not ready to share their apiary location in public, but would share it with other users who shares their locations,
- problems in system usage: login and access - which puts a priority on solving these issues in the next development iteration,

It is reported that most users would like to see native mobile apps and if possible mobile apps with online-offline data synchronization functionality. Also, beekeepers, in this particular case, stated that they prefer e-mail communication or direct call to support, and Q&A in the system is less interesting for them.

FIE20 noted that the explanatory materials (such as video tutorials, descriptions, etc.) are of high importance, considering that the level of new ICT usage in farms is not very extensive. Many attendees have stated that the way information is presented within the solution, is not convenient nor transparent and suggested adding explanations, representing data with bigger letters, in a different order, changing the names and removing unnecessary sensors, fixing the problem with timestamp data, making sensor data to work daily or remove if it's not possible, and showing the mean, maximum, and minimum values of the data. In addition, feedback indicated that the least interesting analysis type is crop climate risk monitoring and forecast, but most likely one of the reasons is the resulting graph which is not simple and requires some time to go into this analysis to understand the result and be able to apply this knowledge and data. It was also reported by FIE20 that farmers were rather sceptical of the solution offered by FIE at the beginning of the project while finding framers to test the solution was rather a challenge. However, with the success of FIE20 within the "FAO-ITU Call for Good practices in the field of digital agriculture in Europe and Central Asia" this has changed. In mid-March 2021 the solution was selected as one of 360 projects to the WSIS Prizes 2021 from the total of 1270 submitted proposals, farmers and organisations became much more interested in the solution, which lead to new contacts and business opportunities for FIE20.

FIE24 reported that all participants were very satisfied with the demonstration of activities. In particular, at the end of the FIEs demo event, they were able to operate the technology. As for data interpretation and understanding, different levels of learning, depending on the age of attendees (easier for younger people) were noted. All feedback received by participants, in particular those regarding the use of the app, were taken into consideration to improve the app itself. As an example, app charts (where data are presented) were simplified with the introduction of more specific information, e.g., on the meaning of the title of axes in the charts, etc. The developed system could be implemented by adding more information on environmental water quality parameters to sensitize fish farmers to the protection of the marine and coastal environment. During the FIE25's demonstration event, more precisely - during the Q&A session, many farmers pointed out how difficult it is today to adopt precision farming techniques when using over-complex technologies. For this reason, the ECS sensor was received with good interest for its simplicity. FIE26 collected very valuable feedback from the participants who were unanimous in their opinion that it would be very useful to organize a face-to-face demonstration case, live in the field, in order to see practically how the smart farming system works. The project's result, which is to grow farm yield while improving resource efficiency, was considered as important and valuable, especially when taking into consideration the rapid advancements of technology in combination with the new Common Agricultural Policy directives that are climate protection and "producing more using less". Finally, this FIE reported that the feedback will help them to:

1. Improve the Smart Farming Solution services in order to be able to address the individual needs of the potential end-user.

2. Better disseminate and communicate our results in order to effectively inform the general public about Smart Farming Solution services" potential in the agri-food/tech sector.

1.2.2 Open call IEs

This chapter will showcase the results of demo activities from RESPOND, RESTART and EXPAND Open Calls, conducted within the current reporting period.

1.2.2.1 RESPOND Conducted demonstrations

Due to the specific structure of the **RESPOND1 - DIHs** OC, which focus was on the organisation and realisation of hackathon type of activities, none of the 13 DIHs have conducted demonstration event. Subject of this OC were hackathons, focused challenges, and datathons.
Beneficiaries of the **RESPOND2 - SME** Open Call are eight SMEs, proposing solutions that will respond to the effects of the COVID-19 crisis.
During the current reporting period, each DIH participating in the RESPOND1 - DIH OC have organized and conducted hackathons and challenges, which lasted for several days, or even weeks. The following table will present all **13 hackathon type activities**, implemented by participating DIHs, within this reporting period. Projects from the both Respond OCs are presented within D3.2-2, while their results are presented within D3.4-2.

Event name	Event organizer
HACK4FOOD | TO FEED THE FUTURE [H4F]	DIH - Innovacoop
StrengthAgriChain	DIH CONSORTIUM: DIH-ITK Andalucia Agrotech DIH Polo of Digital contents of Malaga
AgrIsland Hackathon	CIDIHUB – Canary Islands Digital Innovation Hub
LL2FRESH	COTHN-CC – DIH INESTEC - CC
HACK'20	AgriFood Lithuania DIH
COVID-19 INSPIRE Hackathon 2020 - Plan4All	Plan4all (NGO) Czech Centre for Science and Society (an independent, non-profit association of legal entities)
Food Log Proximity	Agri Sud-Ouest Innovation (DIH) Digital 113 We4log
RADAR - Resilience through automation and digital acceleration in response to Covid 19	Agri-EPI Centre, DIH
FARM2FORK HACK	ITC – Innovation Technology Cluster DIH Agrifood
Hack72h - The cre'active marathon to find solutions to local food chain problems emerging from the COVID-19 crisis	CRAPDL – DIH and CC, public body

RO AgriFood Hacking – HAR 2020	DIH - Asociatia Pentru Promovarea Alimentului Romanesc – APAR
FarmHack: F:IGHT against Corona	Innovate GmbH
3F: The Future of Farm to Fork – digital solutions for short food chains	Innovate GmbH

Table 2 - Conducted events: RESPOND OC

1.2.2.2 RESTART Conducted demonstrations

RESTART open call is focused on hackathon type of activities as well, but on ones that will RESTART the economy around the agri-food related sectors and affected food systems. Its objective is to generate ideas for potential IEs that can be realised by related teams and that go beyond initial conceptual implementations. At the time of the deliverable submission, one IE is finalised, and its only type of demo event is presented below. The subject of the remaining four IEs that are currently being implemented are hackathon-type events, that are yet to be conducted.

Platform "ON:E Agrar" Online-Events for Food & Agrar Innovations
Demonstration date: **07 July 2021**
Demonstration environment: **Online**
Demonstration subject: **GAFS shareholders' meeting** An online meeting with shareholders of the German AgriFood Society was held in July, in order to present the "ON:E Agrar" platform and demonstrate its features. After the demonstration, Q&A session took place, where all relevant answers were provided to participants questions. The result of this demo event is partnership with GAFS, starting from September 2021.

Table 1 - Conducted events: RESTART OC

1.2.2.3 EXPAND Conducted demonstrations

EXPAND open call is focused on the implementation of programs by DIHs to support the realization of IEs. This call specifically contributes to the expansion of the network of DIHs and Competence Centres (CCs) as well as making new knowledge and results from digital innovation activities available. **Only one out of three** IEs resulting from this open call conducted a live demonstration event, while others are

expected to organize such events in the upcoming period. Additional two FIEs under this OC are implemented at the time of the deliverable submission but are in the early stage of implementation. Both IEs will conduct a demo event in the upcoming period. More details can be found in the following table:

IntelWines
Smart palletization system for the optimization in winery logistics

IntelWines will organize demonstration events in the next reporting period, since COVID-19 prevented the team from holding all the necessary face-to-face meetings.

WIN-WIN-WIN

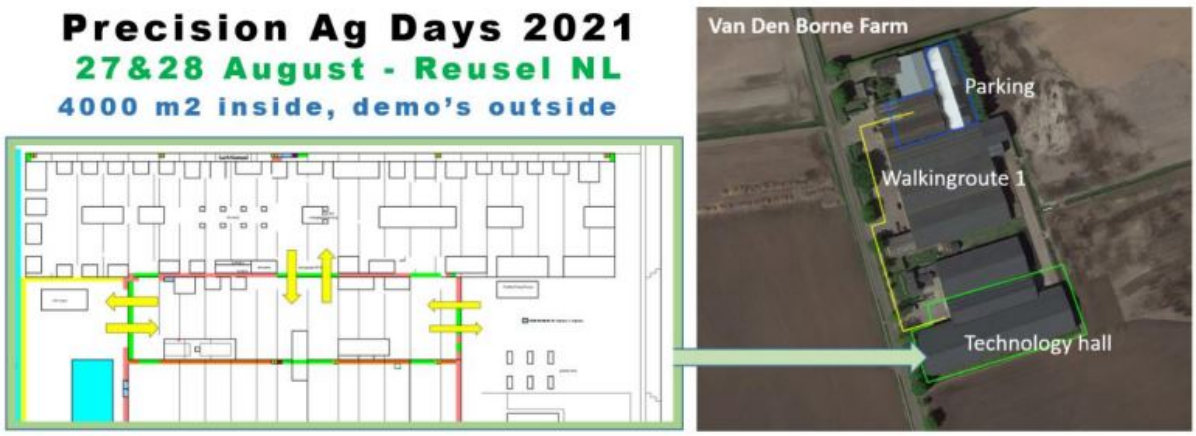
Business model for potato ecosystem

Demonstration date: **27 & 28 August 2021**

Demonstration environment: **Farm of Jacob Vandenborne**

Demonstration subject: **AVR harvester with measurement sensor**

Demonstration of AVR harvester took place during the "Precision Ag Days 2021" event, attended by interested farmers, students, and professionals. The event was organized in line with all COVID-19 rules.



F2FHUBCONNECT

Expanding and linking the Farm2Fork network to serve large canteens

No demonstration conducted during the current reporting period.

Table 2 - Conducted events: EXPAND OC

Within the current reporting period, Covid-19 restrictions had an overall impact on conducted **dissemination and exploitation activities**. All IEs, resulting from Open Calls, implemented about 25 disseminations activities, mostly performed via social media networks (Twitter, Facebook, and LinkedIn). In most cases, organizational websites are also used as means of communication towards interested target groups regarding new achievements.

1.2.2.4 Target audience

Due to the different structure of conducted events within all open call experiments, different audiences were targeted and attracted. Hackathons and challenges, organized and implemented by RESPOND OC experiments were mainly targeting solution providers, such as technology students and companies, and experts in the field, in order to gather relevant actors to share knowledge and brainstorm together. RE-START OC experiment "ON:E Agrar" conducted a dedicated event, involving only shareholders of the German AgriFood Society, while EXPAND OC experiment "WIN-WIN-WIN" demonstrated AVR harvester to the actual end-users: farmers and different industry representatives.

1.2.2.5 Promotional channels

In order to announce and promote planned events, OC IEs heavily used digital channels, such as SAH IP, projects' social networks and other relevant industry news portals. After the events are implemented, the same channels were used to disseminate events results, which was of great value for hackathon winners, as their winning solutions received a lot of online attention.

1.2.2.6 Lessons learned

IEs which resulted from the RESPOND open call reported important lessons learned during the hackathon and challenge events organization and implementation, which are related to the communication flow between project partners and event participants. They all highlighted the importance of continuous communication with all stakeholders, flexibility and willingness to assist in different situations, as the first condition that must be met for the event to be successful. Another common lesson is related to the importance of planning and preparatory activities, which will ensure the smooth implementation of the event. Unforeseen risks and obstacles can create major issues in the predicted timeline, so it is very important to think ahead. Also, it was learned that the dissemination phase must start long before the challenge begins, as people need some time to comprehend the information and prepare their presentations. An important lesson learned by all experiments is that DIH plays a

key facilitation role in IE, and that different community building sessions and Peer Exchanges, organised by SAH, are key for the exchange of knowledge.

IE "ON:E Agrar" reported a valuable lesson related to a strategic approach, resulting in a quick increment of viewers. Namely, they have learned that well-known interview partners are a crucial element to increasing the number of viewers, as their popularity will result in further mobilization of new followers. This experiment highlighted the fact that one registration for all events is a very handy option since attendees will not be requested to go through the registration process every time they want to participate in an event.

1.2.2.7 Participant's feedback

In general, feedback collected from the participants of all conducted events was more than satisfying. The majority of attendees were impressed by the ideas and technological solutions which were presented and demonstrated.

During the demonstration event of "ON:E Agrar" platform, board members stated that they are happy to be able to bundle their event activities on the platform, and thus have a long-term relationship with their attendees. They also recognized the synergy effects and synergy potential of the platform as soon as a critical mass of viewers is reached. The majority of attendees agreed that the design of the solution is easy to understand, and the added benefit for society is clear. Also, most of the participants strongly agreed that the presented solution can be very useful for the daily work, that improves the end societies management, and that it is easy to use and understand by all persons working with it. However, the majority of participants were neutral when it comes to the question if the solution is providing better decision-making or more transparent production.

1.2.3 Regional Clusters

Each RC represents a group of agricultural Digital Innovation Hubs, Competence Centres and Innovation Experiments. RC are led by organisations that are closely related to national or regional digitisation initiatives and funds. SmartAgriHubs has nine RC spread across Europe.

1.2.3.1 Conducted and attended events

Information on attended and organized events within the first reporting period is provided within D3.4-1, so this information will not be repeated here. In comparison to the first reporting period during which RCs have reported on approximately 113 events, the second reporting period is characterized by much fewer events. RCs have reported on **55 different types of events**, with the uprose to promote and demonstrate projects' results. 48 events were held online, while seven were organised as face-to-face events. The main reason behind this drop in numbers can be assigned to the Covid-19 effect, since large gatherings and fairs within which RCs have mostly promoted the project, during the first reporting period, were cancelled.

This chapter will provide a brief overview of attended and organised events by each SAH RC during the second reporting period.

RC Central Europe

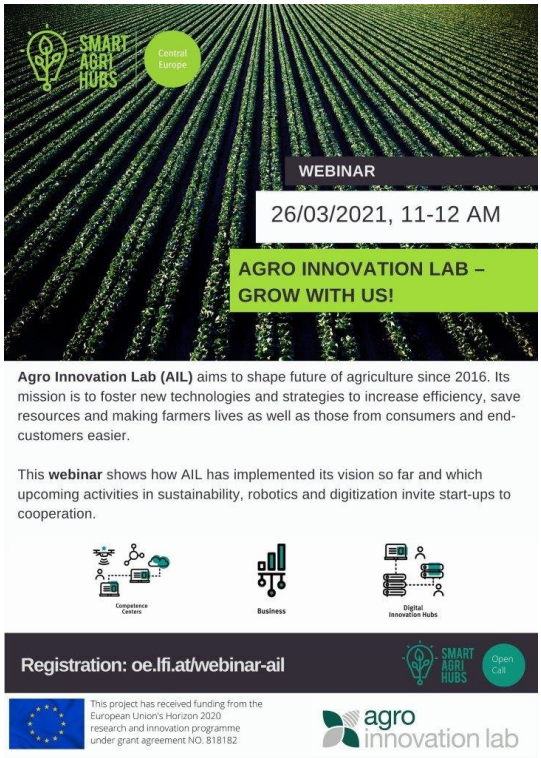
No of events: 19

Demonstration date: **26 March 2021**

Demonstration environment: **Online**

Demonstration subject: **Agro Innovation Lab – Grow with us!**

An online event, organized by SmartAgri-Hubs Regional Cluster Central Europe, with the objective to present Agro Innovation Lab (AIL). AIL aims to shape the future of agriculture since 2016. Its mission is to foster new technologies and strategies to increase efficiency, save resources and making farmers lives as well as those from consumers and end customers easier. This webinar shows how the Agro Innovation Lab has implemented its vision so far and which upcoming activities in sustainability, robotics and digitization invite start-ups to cooperation. In addition, SmartAgriHubs project and especially the "Open Call" funding opportunities are presented to participants aiming to expand SAH network.



Demonstration date: **21 May 2021**

Demonstration environment: **Online**

Demonstration subject: **Innovation Farm – Farming for Future**

The event was organized by SmartAgriHubs Regional Cluster Central Europe, with the objective to present the Innovation Farm. Founded in 2020, Innovation Farm has already become one of the most popular digital farming hubs in Central Europe. Based on three main locations in addition to dozens of regularly operating farms Innovation Farm corporates with research organizations, machinery producers, software appliers, cooperatives, farmers organizations and advisory services. The overall goal is to test new technologies in plant and livestock production, validate results and disseminate knowledge to entrepreneurs and farmers. In addition, SmartAgriHubs project and especially the "Open Call" funding opportunities are presented to participants aiming to expand SAH network.

Demonstration date: **28 May 2021**

Demonstration environment: **Online**

Demonstration subject: **Does one size really fit all?**
Applying the GDPR to agricultural data

The event was organized by SmartAgriHubs Regional Cluster Central Europe, with the objective to tackle the issue of GDPR in agriculture. Much like other fast-developing technologies, smart farming raises multiple questions on how to apply existing data protection law, first and foremost the General Data Protection Regulation (GDPR), in a rather new and unknown terrain. Besides providing an overview of the somewhat ambivalent relationship between Agriculture 4.0 and data protection law, this presentation aims to discuss the core issue of the "hybrid nature"

of agricultural data and the effects it might have on the applicability of the GDPR and the rights and obligations deriving from it. In addition, SmartAgriHubs project and especially the "Open Call" funding opportunities are presented to participants aiming to expand SAH network.

Demonstration date: **12 January – 20 April 2021**

Demonstration environment: **Online**

Demonstration subject: **Open Spring 2021 webinars series**

A series of 15 webinars called Open Spring is intended for those who are interested in using open data in agriculture, education, the environment, spatial planning, tourism, tourism and transport. The audience will be acquainted with how to use open data in their own activities and applications for the needs of agriculture and other industries, as well as with modern trends in spatial data. In the second half of this marathon, the traditional INSPIRE Hackathon will also be organized with

the opportunity to try out practically new technologies and where the presented infrastructures will also be openly provided to developers.

Conducted webinars within the Open Spring 2021:

12.01.2021 - Creation of map data for variable applications in precision agriculture using a web tool

19.01.2021 - Spatial data sharing - example of QGIS LayMan Plugin and HSLayers- NG web technology

26.01.2021 - SensLog - solution for sensor integration and sensor data management

02.02.2021 - Agronode - autonomous telemetry IoT station

09.02.2021 - AgriHub - Czech Agricultural Innovation Center

16.02.2021 - Lesprojekt Cloud - environment for applications and data

23.02.2021 - Regional specialties - an internet platform to support local producers and direct sales of their products

02.03.2021 - OpenLandUse - open database for land use evaluation and basis for building digital twins (Digital Twin) for the needs of complex models of development and condition of the earth's surface

09.03.2021 - Use of Earth remote sensing data in agriculture with regard to the use of time series from Copernicus Sentinel-1 and Sentinel-2 data

16.03.2021 - How to measure and compare the attractiveness of regions

23.03.2021 - Climate services for agriculture

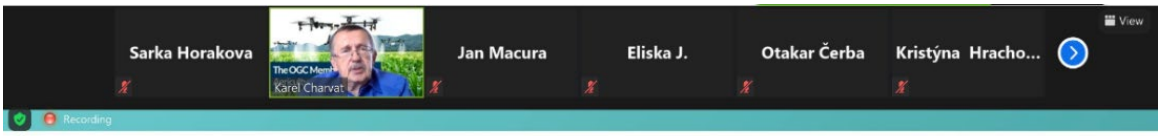
30.03.2021 - How to use the concept of map compositions in education

06.04.2021 - Traffic modelling

13.04.2021 - Whiteboard - a tool for collaborative

20.04.2021 - SPOI - Large open tourist data


Zoom Meeting
You are viewing Hana Kubíčková's screen
View Options
Sarka Horakova
Petr Uhlir (WRLS)
Hana Kubíčková
Kristýna Čerbov...
Karel Charvát jr.
Otakar Čerba
View
Recording
SMART AGRI HUBS
Projekt financovaný z evropského rámcového programu Horizon 2020
více než 164 partnerů z evropského zemědělsko-potravinářského odvětví
Cíl: digitalizace evropského zemědělství prostřednictvím digitálních inovačních hubů
140 digitálních inovačních center v rámci 9 regionálních klastrů
Vlastní inovační portál
Benefity pro členy
www.smartagrihubs.eu
Jsme členy SAHs a co-leadry regionálního klastru pro střední Evropu - RCE
Unmute
Start Video
Participants
Chat
Share Screen
Record
Reactions
Leave


Sarka Horakova
Jan Macura
Eliska J.
Otakar Čerba
Kristýna Hracho...
View
Recording

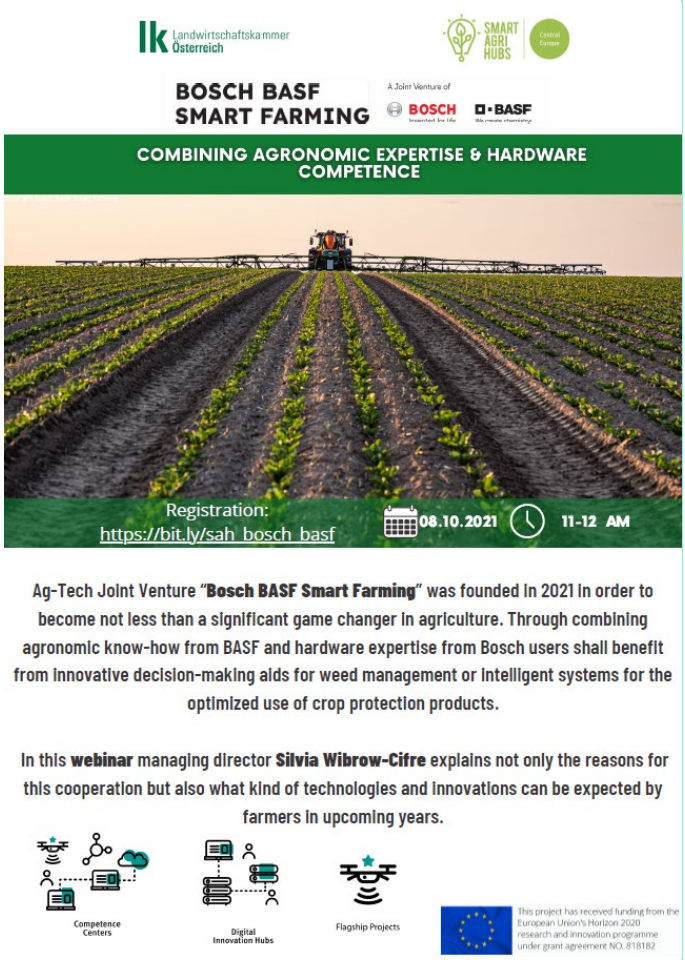

otevřené jaro

Demonstration date: **8 October 2021**

Demonstration environment: **Online**

Demonstration subject: **Combining agronomic expertise & hardware competence**

Ag-Tech Joint Venture "Bosch BASF Smart Farming" was founded in 2021 in order to become not less than a significant game changer in agriculture. Through combining agronomic know-how from BASF and hardware expertise from Bosch users shall benefit from innovative decision-making aids for weed management or intelligent systems for the optimized use of crop protection products. In this webinar managing director Silvia Wibrow-Cifre explains not only the reasons for this cooperation but also what kind of technologies and innovations can be expected by farmers in upcoming years.



RC Central Europe has planned the following activities in the upcoming period:

1. **DIH INNOVATE – Implementing practical digital strategies on the ground**
   Sheduled for 12 November 2021

Since this spring Austrian Digital Innovation Hub INNOVATE works together with SMEs and startups dealing with in digital farming, timber and energy. In this webinar they give profound insight into their tailor-made programs for pioneers out of these industries – always implemented by international technology and innovation experts.

2. **AgriHub INSPIRE Hackathon 2021**
   Scheduled for November 2021

The INSPIRE Hackathon is a collaborative event for developers, researchers, designers and

others interested in open data, volunteered geographic information and citizen observatories. The main driving force for the INSPIRE Hackathon is provided by experts from existing EU projects, and its primary objective is to share knowledge and experience between the

participants and demonstrate to wider audiences the power of data and information supported by modern technologies and common standards, originating from INSPIRE, Copernicus, GEOSS and other initiatives.

Table 3 - Conducted and planned events: RC Central Europe

RC France
No of events: 7
Demonstration date: **30 June 2020**
Demonstration environment: **Online**
Demonstration subject: **Follow-up RC France** Four presenters: Armand Sachot (FIE 6 startup), Emmanuelle Gourdain (FIE 7 & 8 coordinator), Nicolas Nguyen (DIH AgriSudOuest Innovation), and Francisco Bujan (SAH WP2) had a presentation of the RC France, presentation of the 3 French FIEs, presentation of the DIH AgriSudOuest Innovation, and a presentation of the open call RESTART and EXPAND.
Demonstration date: **08 October 2020**
Demonstration environment: **Online**
Demonstration subject: **Meeting with the selected projects for the RESPOND OC** Anne-Claire Branellec and Lucie Philippe-Jan had a presentation of the RESPOND projects from the candidates and focus on their expectation and the way the RC can help them achieving their projects.
Demonstration date: **09 March 2021**
Demonstration environment: **Online**

Demonstration subject: **AgriFarmLab** The purpose of this event was to **i**nform the public of the particularity of the AgriFarmLab dispositive and how it benefits farmers.
Demonstration date: **21 April 2021, 19 May 2021, 23 June 2021**
Demonstration environment: **Online**
Demonstration subject: **Lunch with the team** A series of open events, where all RC members were invited, with the purpose to create own ecosystem and learn about participating DIHs. Also, this event had an aim to inform the public on current technologies and services our portfolio of DIH represents. Therefore, it should be a regular event, in order to achieve a full presentation of French ecosystem.
Demonstration date: **4 June 2021**
Demonstration environment: **Online**
Demonstration subject: **"L'europe s'engage pour l'AgTech en Pays de la Loire"** RC France invited people from their local group of stakeholders from local agrifood hub, to present the SAH project, have new OC proposals, have new members joining SAH and more people informed on EU projects in general, to create a dynamic on these opportunities.

Table 4 - Conducted events: RC France

RC Iberia
No of events: 3
Demonstration date: **October 2020**
Demonstration environment: **Online**

Demonstration subject: **Elevator pitch and matchmaking event assessment**

The objective of this action is to give Iberian DIHs the opportunity of showing who they are to the rest of European DIHs and to find interesting potential partners for the RESTART/EXPAND open calls. Presentations had a duration of 5 minutes and were followed by bilateral meetings between Iberian DIHs and interested European DIHs. The event lasted 2 hours. Bilateral meetings were established using a shared google excel according to a short catalogue of Iberian DIHs sent 2 weeks in advance. Bilateral meetings were done by Skype, Zoom, Teams, Gotomeeting, etc. Each connection wasassured in advance of the meeting by RC Iberia and each Iberian DIH. Having investors amongst the attendees was very interesting for our DIHs.

Demonstration date: **October 2020**

Demonstration environment: **Online**

Demonstration subject: **Breakfast with RC Iberia**

1 webinar each 2 weeks until all DIHs have participated. 1-hour webinar where 2 different DIHs presented their organizations, experiences and interests and with room for questions from other DIHs and FIEs. DIHs were the first and the last ones in the list ordered alphabetically. Order was ocasionally modified according to availability.

Participants: DIBAITUR, ANDALUCIA Agrotech DIH, DIH ITK, Almeria SAH DIH, ADVID Tech for Eficiency DIH, IOT DIH, COTHN DATA Life DIH, Smart Farm Colab.

Demonstration date: **Monthly**

Demonstration environment: **Online**

Demonstration subject: **Monthly meetings**

Monthly meetings were conceived with the objective of building connections and finding new opportunities of collaboration amongst DIHs, FIEs and IEs. Also, to provide information from the project to the regional ecosystem and vice versa. Meetings are organised on a monthly basis. The average number of participants was around 12.

RC Iberia has planned the following activities in the upcoming period:

1. **FIE 21 demonstration day**

Together with FIE21, specifically Tekever and INIAV, we are organizing a demonstration day. We found a synergy with another H2020 project, MIXED, that is also

having their field day with farmers. The idea of this day is to take advantage o the 20+ farmers that are going to be present and do a field demo of the remote sensing, app, and disease identification.

2. **Agroglobal**
   Scheduled for September 2021

Agroglobal, the most important technical agriculture fair in Portugal. In this fair we have the opportunity to meet with old and new DIH that are part of our network and discuss project activities. We also took the chance to further promote the SmartAgriHubs project by holding several meetings, explaining the project objectives and its network members.

3. **Smart Agri Food Summit**
   Scheduled for October 2021

Smart Agri Food Summit is an international event in the sector and is a face-to-face and virtual meeting point where you can find partners, increase financing and internationalization channels, as well as publicize new products, services and innovative projects.

Table 5 - Conducted and planned events: RC Iberia

RC Ireland & UK No of events: 3
Demonstration date: **12 May 2021**
Demonstration environment: **Online**
Demonstration subject: **Updates on Open calls and Tools offered by SAH** The event was hosted to: - Support the Competence Centres in their use of the Innovation Portal and the tools offered. - Present the new DIH exchange programme for the DIH' in our region and encourage them to use this tool. - Distribute information on FAQs about the PREPARE open call for AgTech Companies.
Demonstration date: **24 November 2020**
Demonstration environment: **Online**

Demonstration subject: **Funding opportunities in the Agri-Tech Sector**

The event was promoting the open calls for both Smart Agri Hubs and AgROBO-Food EU Project.

Demonstration date: **29 June 2020**

Demonstration environment: **Online**

Demonstration subject: **Smart Agri Hubs Tour for the Ireland and UK Network**

As part of this event, Regional Cluster Ireland and UK gave an overview of the Regions challenges and achievements since the beginning of the Smart Agri Hubs Project. Harald Sunmaeker presented on the upcoming open calls within the Smart Agri Hubs Projects, and we heard from NIVA, AgROBOFood and ATLAS on pilots/innovation experiments that are underway within these EU Projects. FAIRShare also presented on how digital advisory tools and services can be utilised by the European farm advisory community to respond to the challenges presented by Covid-19. Finally, we heard from Agri-EPI, a Digital Innovation Hub/CC and one of the 4 Agri-Tech Centres in the UK and from Knowledge Transfer Network (KTN), on Knowledge Transfer and Funding Opportunities in the UK.

RC Ireland & UK has planned the following activities in the upcoming period:

1. **AgriTech Research and Industry: A Snapshot**

Join us on Monday 20th September for our exciting new open forum funded by Cork County Council that will explore and demystify todays and tomorrow's AgriTech research and look at why the future of global AgriTech resides in industry. This webinar will give a snapshot of the different AgriTech research organisations and projects currently under way and explore how your tech business can build links to research. We will also look at why technology and agriculture need to be intertwined to ensure the long-term sustainable future of global agriculture.

2. **How to successfully develop an agri technology that can make a real on-farm impact**

There are many food production challenges and opportunities for technology developers to provide solutions for. Whether you have extensive knowledge of the Agri sector or are new to the market, it is important to involve the end-user when developing your technology to ensure greater adoption and impact on-farm. This workshop will highlight the 'how' and 'when' to involve the end-user and real case studies from tech developers.

Table 6 - Conducted and planned events: RC Ireland & UK

RC Italy & Malta
No of events: 5
Demonstration date: **16 April 2021**
Demonstration environment: **Online**
Demonstration subject: **L'utilizzo Di Tecnologie Digitali a Sostegno Della Produzione in Acquacoltura** The RC was a guest presenter. A presentation by the RC leader of the SAH project in general and on the open call has been provided. Moreover, the RC co-leader was the moderator of the round table. The event was aimed at presenting digital solutions for the aquaculture sector. It involved the FIE24 but also other experiences in this sector from other funding programmes.

Demonstration date: **16 July 2021**

Demonstration environment: **Online**

Demonstration subject: **Regional Cluster Italy & Malta Tour**

The event has been organized by the RC with the support of WP1 leader. As part of a general communication plan of the SAH project, this event was aimed at presenting to a wide RC audience the progresses of the project. In particular, the agenda of the event included: a general presentation of SAH and in particular of the innovation portal, updates from FIE24 and FIE25, a presentation from a DIH (ClustER agrifood) and from an operational group of the EIP-Agri, a presentation of the open call.

Demonstration date: **17 November 2020**

Demonstration environment: **Online**

Demonstration subject: **La trasformazione digitale nel settore agrifood: casi studi concreti in viticoltura**

The RC was a guest presenter. An overall picture of the project has been provided. The organizer of the event was DIH ClustER Agrifood.

The event presented the results of the FIE25 and of other innovative projects in the viticulture sector.

Demonstration date: **18 February 2021 and 27 September 2021**

Demonstration environment: **Online**

Demonstration subject: **Big data and traceability for Agrifood**

The RC Leader was guest presenter. A presentation of the SAH project and specifically of the open calls has been done. The working group on Big data and Traceability for Agrifood is a table organized by ArtER which meets 1 or 2 times every year. At each event, a presentation about the SAH state of implementation is presented. It is a closed event on invitation. It was a closed event, only invited participants could attend.

Table 7 - Conducted events: RC Italy & Malta

RC North East Europe
No of events: 11
Demonstration date: **24 March 2021**
Demonstration environment: **Online**

Demonstration subject: **North East Europe Regional Cluster Results & Achievements Virtual Workshop**

On 24th March 2021 North East Europe Regional Cluster organized a Webinar for DIHs, research institutes, agriculture advisors and policy makers, as well as other relevant stakeholders in the region. The invited speaker Aivars Lapins, the Latvian representative in the Agriculture and Fisheries Committees of the OECD talked about the Digitalisation of agriculture – global perspective of the region. The Webinar included the presentation from the FIE in the region, describing their achievements and results, presentations from DIHs in the region, which promoted their latest's achievements and news, as well as presentations of the latest's features of the innovation portal and the open call of SmartAgriHubs.

SMART AGRI HUBS | WEBINAR

North East Europe Regional Cluster Results & Achievements

Virtual Workshop - 24.03.2021 12.30 CET

Target audience: DIHs, Research Institutes, Advisors, Policy Makers and other stakeholders related to the agri-food sector

North East Europe Regional Cluster is organising a Webinar for DIHs, research institutes, agriculture advisors and policy makers, as well as other relevant stakeholders in the region. The event will feature as invited speaker Aivars Lapins, the Latvian representative in the Agriculture and Fisheries Committees of the OECD, who will talk about the Digitalisation of agriculture – global perspective of the region. The Webinar will include presentation from the innovation experiments in the region, describing their achievements and results, presentations from DIHs in the region to promote their latest's achievements and news, as well as presentations of the latest's features of the innovation portal and the open call of SmartAgriHubs. The latter will be presented by Harald Sundmaeker and will include a hand-on session with a practical guidance to the application forms. Furthermore, the Webinar will feature presentations of success stories of cooperation and exploitation of results from experiments in Poland and Lithuania. The Webinar aims to inform the existing network and to engage new organisations in joining the cluster to co-design, co-develop and benefit from the opportunities offered by the SmartAgriHubs network.

- 12:30 - 12.40 Welcome and North East Europe updates
  - Inga Berzina, Raul Palma
- 12.40 - 13.00 Digitalisation of agriculture – global perspective of the region
  - Aivars Lapins, Latvian representative in the Agriculture and Fisheries Committees of the OECD
- 13.00 - 13.50 Flagship Innovation Experiments NEE results
  - Flagship Innovation Experiment 16
  - Flagship Innovation Experiment 17
  - Flagship Innovation Experiment 18
  - Flagship Innovation Experiment 19
  - Flagship Innovation Experiment 20
- 13.50 - 14.15 SmartAgriHubs updates
  - Innovation portal updates
    - Raul Palma
  - SmartAgriHubs RESTART & EXPAND Open Calls for Proposals
    - Harald Sundmaeker
- 14.15 - 14.30 Break
- 14.30 -15.20 DIH presentations
  - DIH Agro Poland/DIH Agro Polska
  - Farmers Parliament DIH
  - AgriFood Lithuania DIH
  - Smart Industry Centre DIH
  - Torun Regional Development Agency DIH
- 15.20 - 15:50 Cooperation success stories
  - Integration of SAH results with existing advisory services (EPSU)
    - Adam Fojud
  - Polish national farm management platform (eDwin) - opening for integration agriculture and advisory services
    - Maciej Zacharszuk
  - DIH collaboration experiences in SAH and future opportunities
    - Kristina Sermuksnyte-Alesiuniene
- 15.50- 16.20 SmartAgriHubs RESTART & EXPAND Open Calls for Proposals - SmartAgriHubs RESTART & EXPAND Open Calls for Proposals' Applications forms- practical guidance
  - Harald Sundmaeker
- 16.20-16.30 Conclusions

Registration link: https://forms.gle/YcFmREUHp64f16gf9
Contacts: Inga Berzina (inga@zsa.lv), Raul Palma (rpalma@man.poznan.pl)

SMART AGRI HUBS

Demonstration date: **11 May 2021**

Demonstration environment: **Online**

Demonstration subject: **DIH LEAF launch event**

This Digital Innovation Hub (DIH) is focused on the Livestock, Environment, Agriculture and Forest Sectors (DIH-LEAF). RC participated as a presenter at the event, presenting regional approach of SAH, open call and DIH agro Poland.

Demonstration date: **12-13 June 2021**

Demonstration environment: **Sielinko, Poland**

Demonstration subject: **XXVII Wielkopolska Agricultural Fair event – The Wielkopolska**

Agricultural Fair in Sielinek is addressed mainly to farmers and inhabitants of rural areas. During the two days of the fair, companies from the following industries: machinery, feed, fertilizers, PPC, agricultural equipment, construction and photovoltaics present their offer. During the fair, you can buy seedlings of ornamental plants, perennials, wicker products, etc. at the accompanying fair. An inseparable part of the fair is the Field Days, during which we present a wide range of seed companies, and representatives of these companies, advisors and industry specialists discuss the best varieties and species of crops. The event organiser is Wielkopolska Agriculture Advisory Center (WODR).

Demonstration date: **15 June 2021**

Demonstration environment: **Online**

Demonstration subject: **Workshop on activating and expanding CCs network**

Outcome and conclusions form the presentation: Discussion on challenges in involving CCs in the region, advises on how to activate and expand CCs network.

Demonstration date: **26 September 2021**

Demonstration environment: **Bednary, Poland**

Demonstration subject: **Conference: Innovation Here and Now: Effective implementation of innovations in the agri-food sector**

Conference was organised by Łukasiewicz Research Network - Industrial Institute of Agricultural Machines, and Adam Fojud, Maciej Zacharczuk (WODR), Tomasz Wojciechowski (PULS), Łukasz Łowiński, Julia Gościańska (PIMR), Marcin Plociennik (Netictech), Raul Palma, and Krzystof Kurowski (PSNC) held a presentation of results and achievements of each of the polish FIEs.

Demonstration date: **30 September 2021**

Demonstration environment: **Sielinko, Poland**

Demonstration subject: **A closed workshop on activating and expanding CCs network**

The event was organised by Wielkopolska Agriculture Advisory Center (WODR). The main subject of the workshop was the introduction and presentation of the Agriculture 4.0 technologies. The purpose of the workshop was to provide input to ARMiR (The Agency for Restructuring and Modernisation of Agriculture) for understanding what kind of categories of the hardware and services can be treated as Agriculture 4.0, to be funded under new funding programmes to be funded under the umbrella of Agency.

Demonstration date: **1st and 13th October 2021**

Demonstration environment: **Agricultural Fairs**

Demonstration subject: **Presentation of SAH and FIEs within the RC**

Regional Cluster's representatives were present at two agricultural fairs, in Armava and Tartu, with the aim to present SAH projects in general, Open calls, FIE20 and potentially expand the network. Both events were dedicated to discussions about digital solutions which promote the effective farming and water management and are important for young farmers.

Demonstration date: **02 September 2021**

Demonstration environment: **online**

Demonstration subject: **Potential Project Ideas for Digital Agriculture**

On September 2, representatives of the Farmers' Saeima remotely met with representatives of the Latvian agricultural sector to present potential SmartAgriHubs project ideas on digital agriculture - sensors and precision agricultural technologies.

Demonstration date: **11 August 2021**

Demonstration environment: **Sielinko, Poland**

Demonstration subject: **Digital Agriculture and CAP -Collaboration with Estonian Chamber of Agriculture and Commerce and Finish MTTK**

Representatives of the Farmers' Saeima (ZSA) met with representatives of the Estonian Chamber of Agriculture and Commerce and the Finnish Agricultural Research Center (MTTK) to discuss digital solutions that promote efficient agriculture and the new Common Agricultural Policy (CAP).

During the meeting, ZSA presented the SmartAgriHubs project, as well as digital solutions that help farmers plan precise crop and livestock production, reduce raw materials and follow specific mechanization activities that reduce environmental impact and are cost-effective.

European green course policy requires farmers to comply with strict environmental regulations, and farmers in Latvia, Estonia and Finland face these challenges. Therefore, it is through the exchange of experiences that it is possible to find examples that can be offered to politicians, officials, other farmers, the public, aggressive "green-minded" people and organizations.

Demonstration date: **11 February 2021**

Demonstration environment: **online**

Demonstration subject: **Digital Maps and Applications – Helper for Farmers**

The ZSA seminar "Digital maps and applications - a helper for farmers" took place remotely, where digital tools, maps and applications useful for farmers, which help to plan and organize field work, were told. During the event, trainings were held on digital technologies & applications, which help famers in their daily business. FIE20 was presented, and introduction of SAH, Open Call, Innovation Portal took place.

Demonstration date: **March-April 2021**
Demonstration environment: **online**
Demonstration subject: **IT solutions in agriculture** A series of online events were organized by RC NEE in March and April, with the purpose to provide trainings for young farmers, on digital solutions which can help them in their daily work. Also, SAH project was generaly presented to all participans, together with RCs' activities.

Table 8 - Conducted events: RC North East Europe

RC North West Europe No of events: 2
Demonstration date: **05 March 2021**
Demonstration environment: **Online**
Demonstration subject: **SmartAgriHubs network and open call NWE** The event was organized by ILVO – Co-lead of the RC NEW, with the aim to: - promote the SAH EXPAND and RESTART open call - attract new DIHs and CCs - explain and promote SAH tools: Maturity Model and Agricultural Technology Navigator tool
Demonstration date: **11 March 2021**
Demonstration environment: **Online**

Demonstration subject: **Informationsveranstaltung zum OPEN CALL von 6 Mio € im SmartAgriHubs Projekt Aufbau wettbewerbsfähiger und nachhaltiger Ökosysteme durch die Digitalisierung in der Agrar- und Ernährungswirtschaft**

The aim of the webinar was to present in the German language - the SmartAgriHubs Project (SAH) and its objectives, the structure of the project (work packages (WP), regional clusters (RC), Digital Innovation Hubs (DIH), and0 Flagship Innovation Experiments (FIE)) - the OPEN CALLs RESTART, EXPAND and PREPARE - and as examples DIHs from Austria and Germany as well as the Flagship Innovation Experiment SmartPigHealth (SPH). The webinar implied knowledge and experience exchange on three levels - among SAHs partners - with other relevant H2020 projects and - with external participants interested in the topic of the project SmartAgriHubs and the OPEN CALLs RESTART & EXPAND and PREPARE. The common characteristics of the event were:

- Knowledge and experience exchange
- Involvement of all relevant stakeholder groups of the agricultural sector in Germany (e.g., farmers, institutions, organizations, authorities, scientific)
- Broad promotion of the event (prior to the event as well as after)

Table 9 - Conducted events: RC North West Europe

RC Scandinavia
No of events: 4
Demonstration date: **21 June 2021**
Demonstration environment: **On field**
Demonstration subject: **Demonstration of robot technology** A demonstration was hosted by SLF at a Danish farmer in Gabøl in the southern Jutland. At the demonstration was compared the farmers current practice with new robot technology. Conventional sowing and spraying of maize compared to the selv-driving field robot Robotti with the Danfoil Spitfire.
Demonstration date: **07 July 2021**
Demonstration environment: **Online**
Demonstration subject: **SmartAgriHubs Regional Cluster Scandinavia tour** The event provided information on how SmartAgrihubs and Regional Cluster Scandinavia can help digital innovation hubs or Competence Centres. Are you uncertain if you are a Digital Innovation Hub or a Competence Centre? In this webinar you can find if you are and how can you get support for your activities. You can also

find out about the ongoing activities in our Flagship Innovation Experiments and how to get support for your own experiment.

Demonstration date: **21 June 2021**

Demonstration environment: **Online**

Demonstration subject: **AGRI-ROBOTICS FOR A SMART AGRICULTURE**

The event was organized by RC – Luke, SEGES and AgroVast. The subject of the event was the state-of the art field robots in Scandinavia and ongoing research on supporting background systems and feasibility of autonomous machinery in agriculture.

Demonstration date: **25 June 2020**

Demonstration environment: **Online**

Demonstration subject: **Arvostettu viljaketju (Valued grain chain)**

In the webinar,the Valued Grain Chain experiment step-by-step to farmers and other stakeholders. In the webinar, Similä Farm presented their farming system, aims in the experiment and the implementation plan to audience. Also, SmartAgriHubs project, the idea of DIHs, Regional Cluster Scandinavia were introduced.

Table 10 - Conducted events: RC Scandinavia

RC South East Europe No of events: 1
Demonstration date: **28 May 2021**
Demonstration environment: **Online**
Demonstration subject: **FIE Webinar** A webinar dedicated to the technological advancements and results of the three Flagship Innovation Experiments in the Cluster of South-East Europe. Presentations and discussions will be about:

- FIE#26 Digitising Open-Field Vegetables Deploying drones, satellites and IoT devices to figure out the right harvesting time and discover weed patches, thereby enhancing the production of organic open field vegetables.

- FIE#27 Tracking Animal Movements and Health Records Developing an online tool for the entire value chain tracking animals' movements through IoT technologies, in order to improve animal welfare.
- FIE#28 Decentralised Trust in Agri-Food Supply Chains Implementing blockchain technology to integrate data from stakeholders across the dairy and poultry supply chain to improve traceability of products.

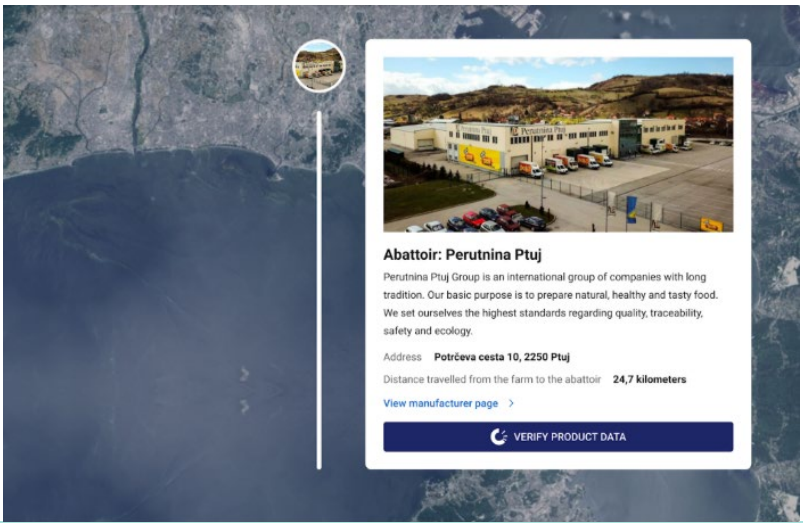


Table 11 - Conducted events: RC South East Europe

1.2.3.2 Target audience

All 55 events, presented in the previous chapter, gathered over 1500 individuals from different fields. CCs, DIHs, StartUps, SMEs, Research Facilities, Accelerators were present at the majority of events, together with policymakers, industry representatives, and scientists. In more detail, participants were European scientific researchers, farmers, AgTech private companies, stakeholders from local agrifood hubs, operators from the fishing sector, stakeholders of the viticulture sector, IT experts, machine and farm equipment manufacturers, and educators.

1.2.3.3 Promotional channels

In order to promote events, RC used SAH IP as the main communication channel. All events were promoted through the social networks of the SAHs project, reaching a wider audience. Many RCs used direct communication channels, such as emails and direct messages, to promote organized events and invite participants, as individual invitations are more efficient than general ones.

1.2.3.4 Lessons learned

During the events, interaction with the audience had an educational impact on event organizers, so many important lessons were learned by RC. RC France reported that the Region may pursue AgriFarmLab, supporting it financially, which shows that the whole process, and frequent updates to the public and the elected officials were convincing. Cluster learned that a better way to communicate on events must be implemented, in order to attract more people from more different regions. RC Central Europe learned that different speakers at the event ensure variety, and video presentations of the robotic challenge, site-specific maize seeding and site-specific fawn saving, are good attention attractors. Also, targeted invitations (direct mailing, database of addresses - SMEs, farms, agro companies, universities, etc), are highly recommended, as the general audience is difficult to attract. RC North West Europe reported a valuable lesson related to DIHs and CCs reputation. Namely, presenting success stories from DIHs and CCs is helpful to convince other stakeholders, as several companies registered as DIH and CC after the event. RC North East Europe reported that conducted events will "help" or "advise" to shape the priorities for distribution of national subsidies and funding, particularly for the national recovery plan. There were some interesting discussions about ways to strengthen the agricultural innovation ecosystem in Poland, where the deputy director of PSNC (RC-co leader) was a panellist together with the director of PIMR (FIE18). RC South East Europe learned that the demonstration in an online format, using videos and real-time demonstration of tools is more efficient than just presenting the solutions. Discussions focused on the priorities of participants, regarding the usefulness, practicality, capacity for scale-up and affordability of presented solutions. The Innovation Portal and social media of SAH prove to be very effective means for communication of events. Additionally, the creation of social media events is very helpful for promotion. RC Iberia reported that European DIHs are not really interested in getting to know nor meeting other DIHs, at least the Iberian ones. It is really difficult to get European DIHs. It has to be done through RCs or as an event or post in the forum in the Innovation portal. It would be very useful to have an automatic distribution of new events in the portal to target groups, such as DIHs. RC Ireland & UK learned that supply chain issues are topical at present because of Brexit, but it’s a perfect opportunity to run some experiments around supply chain tech to solve issues. RC is now experimenting with a lightweight 6-week accelerator that could help to connect the SAH community with similar organizations in other jurisdictions, to help our collective ecosystem scale. RC Italy & Malta reported an important lesson about Q&A sessions at the events and highlighted them as essential for successful communication. It is important to leave sufficient time for Q&A, above all when presenting practical solutions, as the audience is more engaged and more likely to ask questions.

1.2.3.5 Participant’s feedback

Feedback from the participants is the most reliable indicator of the success of an event. RC Central Europe gathered some valuable feedback on how to improve the event itself, and participants stated that they would make the program better by

explaining in more detail what are the differences between Agri hub / agro innovation lab, describing one use case in detail instead of presenting several use cases, giving more concrete examples, and most importantly, by sharing the presentation slides after the meeting. Also, many participants would appreciate the networking session after the webinar. Still, the majority of participants stated that events were highly helpful in terms of introducing cooperation and funding options, such as SAH open calls, and a better understanding of how the innovation farms are organized. Additionally, participants were pleased with the information about GDPR applied to AgriData that was presented. RC North-East Europe received useful feedback from the participants, mainly related to the role of drones and other IoT technologies in modern agriculture. Farmers, of small/medium farms, are willing to start adopting and testing innovations, e.g., drones from FIE16, especially if they are provided for free/low cost in a service mode, instead of needing to invest in buying the equipment and expertise themselves. Many participants stated that agriculture-focused cloud infrastructure, work with drones, and nutrient management are the technologies they would be interested in testing. Also, further support from DIH Agro Poland/DIH Agro Polska (Poland) is more than welcome for all attendees. Some participants suggested it would be great to provide some event leading to collective testing, taking soil samples, introducing innovations for organic farmers, training sessions. RC Ireland & UK prepared a good overview of the open calls, with a focus on the PREPARE call. Excellent examples of benefits of the Agricultural Technology Navigator (ATN) tool were part of the presentation, but participants highlighted that there should have been more examples of the ATN tool itself (different examples – e.g. system, competence and company). In addition, a live demo of the first wave of the DIH exchange program would be helpful for attendees.

In general, all conducted events were rated as very helpful and informative, covering highly interesting topics. Participants are satisfied if they can learn from experts during the events and feel more comfortable with innovative technologies if they are presented and demonstrated in detail, preferably through different practical examples (use cases).

CHAPTER 2: USER ACCEPTANCE TESTING

2.1 INTRODUCTION

To ensure better market accessibility, WP3 developed a User Acceptance Test, as a tool to increase user acceptance of digital products and solutions, offered by FIEs. In most cases, UAT is one of the last steps before the product or solution enters the market, but within the SAH project, the test was also used for technology users' feedback collection and identification of potential acceptance problems during the product development cycle.

A separate UAT was prepared for participating farms and companies. By the time of the deliverable submission, 28 farms and eight companies from 16 FIEs have provided their answers. Two online Google Forms have been used as a collecting tool. Unfortunately, the reliability of this software has been called into question. Namely, eight responses received from SMEs were permanently lost. Google support was contacted, but until the time of the report submission, it failed to identify the problem and recover the data. These eight responses were assigned to five FIEs.

FIEs that did not provide feedback to the UAT will be presented at the end of the third reporting period. Collected feedback is presented in the next chapter.

The survey was created by WP3 and sent to FIE partners testing the solution/service by FIE coordinators in the form of an online questionnaire. The questionnaires, presented within Annex 3, included a set of fill-in and multiple-choice questions, including:

- General information about the respondent, including the name of the SAH FIE it refers to, name of the solution,
- Specifics of the respondent farm, including the name of the test farm, name of the respondent, city and the country of the farm, email address and job position,
- Personal information, including age, gender, and education level of the respondent,
- Farm specifics, such as farm focus (i.e., arable, dairy, aquaculture, fruit, vegetables, etc.), farmed area, number of employees, and if the farm already uses or is planning to use the proposed solution,
- The usefulness of the product section includes different statements regarding the solution, with boxes for checking if the respondent agrees or disagrees with the proposed statements, such as if the additional benefit of the product/solution of our FIE for the farm is clear if the product/solution can reduce working time if the product/solution clearly provides a more accurate decision making if the application of the product/solution contributes to realizing societal goals,
- Naming three most important features of the product/solution, the three least interesting features of the product/solution, assessment of the product's ease of use (i.e., is it easy to install and understand, if the workflow of the solution is logical, etc), naming three most important reasons for using and not the product/solution,
- Information about technical quality and infrastructure – if the farm has all necessary infrastructure to install the product/solution, if the product/solution is interoperable with all existing digital solutions and machines on the farm if the farm struggles with an internet connection, GSM network availability, mobile coverage, etc.,
- Assessment of digital solution in general – if the respondent can repair and maintain digital solutions without external support, if the product/solution seems reliable, if the respondent understands which data is being collected by the digital solution and who has access to it, how much would the respondent pay for the product/solution,
- Assessment of cost-efficiency and feasibility include statements about increasing farms productivity and profits, reducing costs, recommending the solution to colleagues, which should be marked as strongly agree, agree, neutral, disagree, or strongly disagree. This section also includes fill-in questions, such as: Why does the product/solution of our FIE increase your farm productivity? Why DOESN'T the product/solution of our FIE increase your farm productivity? Why does the product/solution of our FIE increase your profit? Why DOESN'T the product/solution of our FIE increase your profit? Why does the product/solution of our FIE reduce your costs? Why DOESN'T the product/solution of our FIE reduce your costs? Why is the price/quality ratio of the product/solution of our FIE fair? Why ISN'T the price/quality ratio of the product/solution of our FIE fair? Why would you recommend the product/solution of our FIE to your neighbours and fellow farmers? Why WOULDN'T you

recommend the product/solution of our FIE to your neighbours and fellow farmers?

2.2 RESULTS

This chapter provides summary and analysis of gathered responses, per FIE. Personal data of the individuals that participated in the survey, such as names, email and physical addresses will not be revealed in this document. 11 FIEs conducted UAT survey, providing valuable feedback on tested solutions, from 28 farms in total.

This is the public version of the deliverable. The confidential version contains User Acceptance Testing results.

CHAPTER 3: BUSINESS SUPPORT TO FIES

Business support to FIEs

As mentioned previously, business support to FIEs is one of the outputs of Task 3.4. Within the second reporting period, several activities were conducted leading to the creation of such support. As envisaged within the task, this activity is implemented by WP3 in collaboration with WP4.

The first step within the process was to identify lacking skills and knowledge within FIEs, tightly related to the market expansion take up. The second step is related to the provision of soft skills and business support through a set of training and sector-specific consulting.

To identify FIE training needs within the scope of the task, a questionnaire, presented within Annex X of the report, was sent out for the purpose of assessing real needs for such support and to what extent. All 28 FIEs have addressed the questionnaire together with four projects from the Restart, Expand and Respond OC that were implemented at the time of the questionnaire circulation.

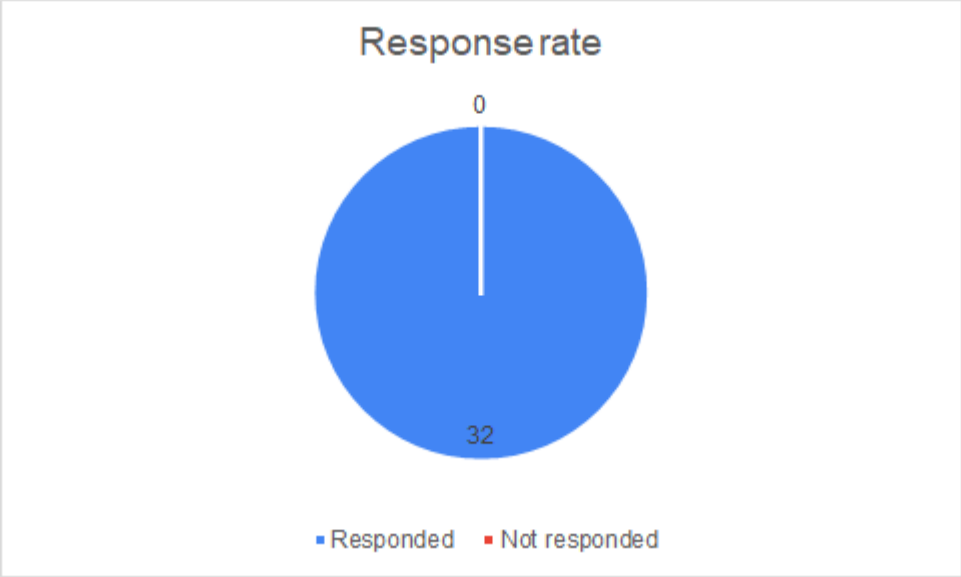


Figure 9 - FIE Response rate

The first question within the questionnaire was to identify whether such support is needed. 20/28 initial FIE have responded positively, while eight FIEs responded that they do not need such support due to the following reasons:

- Training support is not applicable for FIE at this stage,
- FIE has different needs related to regulatory standards, monitoring standards, and a decision by businesses,
- Already established cooperation with a DIH regarding the provision of business support,
- Market take-up is the responsibility of a company to which the solution is sold,
- The solution is already on the market,
- Marketing plan is already in place for the solution,
- Product is not ready to be marketed,
- Existing expertise within FIE, business courses already completed. It is a challenge to use the knowledge gained for the courses in practice due to a large gap between the project to the market.

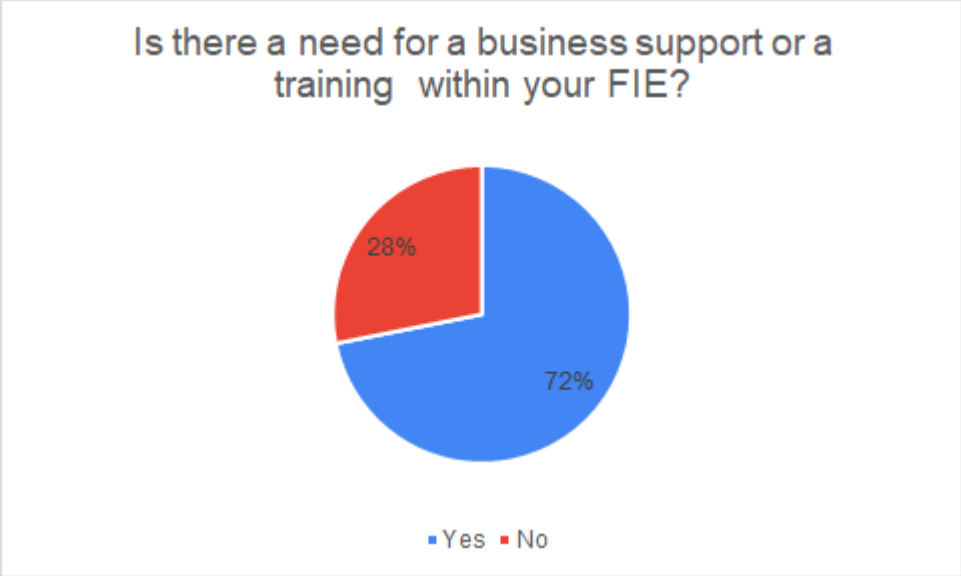


Figure 10 - Expressed need for business support

Surprisingly only three out of eight FIEs have responded that there is already sufficient knowledge within the team, while one FIE has mentioned a DIH as an established provider of the business support

Further, FIEs that have expressed a need for business training were asked to choose topics of their interest. The following ten business-related topics were offered including an option "Other" allowing them to propose other topics of their interest:

- Business plan development
- Mission, Vision, Strategy
- Creating and managing startups (e.g., Lean Startup Methodology)
- Pitching
- Financial Plan – funding ops, investors
- Marketing Plan and Market Analysis
- Ecosystem, collaboration and competition
- Regional Embedding
- Governance and organizational structure
- Other, please specify

The most requested training topic was Business plan development, followed by Ecosystem, collaboration and competition, Marketing plan and market analysis, financial plan – funding ops, investors, Mission, vision, strategy, Creating and managing startups, Governance and organisational structure, Pitching and Regional embedding with the least interest.

Two FIEs have proposed additional topics - Private-public cooperation, law aspects, public orders and Support for an expansion of market shares (national and international).

Following the training needs assessment, extensive consultations took place between WP3 and WP4 team members. The initial plan envisaged by the project was related to the training delivery by WP3 and WP4 team members. At the same time, the need for more proactive DIHs involvement within the SAHs project was becoming more evident, already steering several SAHs activities towards this. As an alternative to the training delivery by the project WPs, several additional options were considered among WP3 and WP4 members, including training delivery by DIHs. This approach would be contributing to further strengthening of DIHs skills and services toward FIEs, and at the same time assuring that the knowledge remains within DIHs allowing its transferability and replicability to the future customers.

Several options were considered by the Project Steering Committee (PSG) members, including risks, and added values for each option separately. As concluded by PSG, DIHs were proposed as training providers after attending a set of modules on business-related topics as identified above. These modules were to be prepared by WP3 and WP4 and facilitated through an existing Learning and Exchange Platform (LXP) in the ownership of WP4 partner.

Following the decision, WP3 reached out to 41 DIHs under 28 FIEs, separately. A list of contacted DIHs is presented below.

FIE 1	DIH Teagasc

	(DIH TGSC) DIH TSSG/WIT
FIE 2	DIH Teagasc
	DIH TSSG/WIT
FIE 3	DIH Food & Bio Cluster Denmark
	DIH Agroväst
	DIH SEGES
	DIH Agro Business Park
FIE 4	DIH Agroväst (LIvsmedel AB)
	DIH SEGES
FIE 5	DIH Luke DIS
	DIH AgroVäst
FIE 6	DIH Vegepolys-Valley
	DIH Chambre d'Agriculture Pays de la Loire
	DIH CEA Tech
	DIH Images & Réseaux
	DIH Inf'agri 85
FIE 7	DIH Digifermes
FIE 8	DIH Digifermes
	DIH Terrasolis
FIE 9	DIH Smart Digital Farming
	DIH Flanders' FOOD
	DIH IMEC
FIE 10	DIH Smart Digital Farming
	DIH JoinData
	DIH NPPL
	DIH E-Pieper
	DIH Praktijkcentrum voor precisielandbouw
	ZLTO
	FarmhackNL
FIE 11	DIH VzF GmbH Erfolg mit Schwein
FIE 12	DIH Smart Digital Farming (SDF)
FIE 13	DIH Smart Digital Farming (SDF)
	DIH IMEC
FIE 14	DIH Platform "Digitalization in Agriculture" of Federal Ministry of Agriculture
FIE 15	DIH Platform "Digitalisation in Agriculture" of Austrian Federal Ministry of Agriculture
FIE 16	Agriculture Digital Innovation Hub Poland

FIE 17	DIH Agro Poland
FIE 18	DIH Agro Poland
	DIH HUB4Agri
FIE 19	DIH Farmers Parliament Latvia
	DIH Wirelessinfo
FIE 20	DIH Farmers Parliament Latvia
	DIH Wirelessinfo
FIE 21	DIH FARM2030
	DATAlife DIH
	DIH COTR
	DIH Agrotech
FIE 22	DIH COTR
	DIH Agrotech
FIE23	DIH DATAlife
FIE 24	DIH Agrifood Clust-ER
FIE 25	DIH Agrifood Clust-ER
FIE 26	DIH Gaiasense
FIE 27	DIH mAgro
FIE 28	BioSense Institute

Table 12 - List of contacted DIHs belonging to each FIE

Out of 41 contacted DIHs, ten expressed interest to provide such support to FIEs while nine DIHs expressed no interest in the activity. Three DIHs asked for further elaboration on the activity but never contacted WP3 afterward. One DIH responded that although interested, they do not have the capacity for the training delivery. The remaining 18 DIHs never responded to the project proposal.

The response rate implies a lack of interest among DIHs, while the reasoning behind this might be that DIHs don't see the value of the offer. However, based on the experience within the project until now, the reasons could be also due to a lack of capacities within DIHs or lack of financial resources for such activity.
Once feedback from DIHs was collected, it was evident that some FIEs wouldn't have a dedicated DIH for the training delivery. The approach was slightly modified and relates to the engagement of those DIHs that have expressed interest previously in providing trainings. Trainings would be conducted by them, while FIEs would attend those sessions based on expressed interest but regardless of the region they belong to. This approach would ensure that each DIH that is interested in the activity is engaged, and each FIE that has expressed an interest in a particular topic would benefit from the knowledge gained.
In parallel to this, WP3 in collaboration with WP4 is in the process of preparing training material that will be uploaded to the LXP as modules and attended by DIHs, equipping them with the needed knowledge to deliver specific business-related training.

Module content is being prepared in line with identified FIE needs. Already developed content that is part of LXP will be utilised, such as a module on business plan development including marketing plans and market analysis and the proposal writing course that will be developed by TNO in the upcoming period. These existing contents will be reassessed and adapted to task 3.4 needs, while the content for topics such as Mission, Vision, Strategy, Creating and managing start-ups (e.g., Lean Start-up Methodology), Pitching, Ecosystem, collaboration and competition, Regional Embedding, Governance and organizational structure the new content will be created.

All the activities presented above took place within the second reporting period, while the training delivery is envisaged within the third reporting period, according to the latest plan.
Timing of the Services OC is also in line with the plan, as the OC was launched on September 22nd and will close on June 29th, 2022. This OC is for DIHs that are developing and offering support services for agri-food stakeholders and related community networks for the digital innovation and transformation of their products, processes or business and governance models.
To ensure that trainings are delivered by DIHs to FIEs, WP3 will take a monitoring role within this process, including the preparation of evaluation materials and collecting the end-users' feedback.
Sector-specific consultations will take place once trainings are delivered. This activity will be done in cooperation with IoF2020 (Internet of Food and Farm 2020) Use Cases (UCs) whose solutions are already on the market and already possess a sector-specific knowledge. IoF2020 is H2020 project that is finalised in March 2021. The project was dedicated to the adoption of IoT technologies for securing sufficient, safe, and healthy food and to strengthening the competitiveness of farming and food chains in Europe. 33 UCs were developed under five trials - Arable, Fruit, Vegetables, Meat, Dairy, where solutions were developed, tested and some placed on the market within the project timeline. As Biosense Institute was a monitoring partner of 33 UC from IoF2020 in cooperation with ILVO, and these two organisations are monitoring the implementation of SAHs FIEs, a strong link is already established, allowing a transfer of knowledge from one project to another.

CHAPTER 4: NETWORKING

To bring FIEs closer to their potential customers, by expanding their network and opening the doors for new collaborations, WP3 has implemented several activities within the second reporting period aiming to engage users, develop synergies across the value chain and mobilize risk capital for the market expansion of IEs outputs.

As elaborated within D3.5-2, reusable components developed by FIEs, both technological and non-technological components are of a great potential value to other parties, primarily to DIHs considering the replication potential they have, but also to future FIEs. The networking potential is foreseen between current FIEs (reusable component owners) and DIHs interested in the component. Therefore, reusable components arising from the FIEs were collected and shared with DIHs of the SAHs, leading to further connections and exchange of information. The activity was implemented in collaboration with WP1.

Another activity related to reusability concerns the creation of a module on SAHs technological and non-technological reusable components within SAHs LXP, envisaged for the winners of the PREPARE OC. This is a useful opportunity for the PREPARE OC winners especially within their proposal preparation process. This activity is conducted by ILVO and is also elaborated in more detail within D3.5-2.

Envisaged business related networking opportunity, in collaboration with IoF2020 project, already elaborated under the Business support program tailored to FIEs, aiming to connect IoF2020 UCs with SAHs FIEs. These connections will be sector-specific and in addition to the knowledge transfer will enable further networking opportunities and collaborations between organisations from the two projects.
Within the scope of IoF2020 and SAHs collaboration, several organisations working on the development of solutions within the wine and grape sector were put together - FIEs 14, 21, and 25 from SAHs and other UCs from the IoF2020 project. The potential collaboration is envisaged also under organisation of mutual demo events as it was already proposed by one of the IoF2020 partners specialized in the wine sector from Italy.

As SAHs IP is already established channel for the exchange of best practices and success stories, the content arising from the D3.8 Best practices and success stories will be utilised in the upcoming period allowing further FIE specific promotion while unlocking visibility of various FIE achievements. To boost the visibility of the PREPARE OC projects, information regarding their final results will be shared via the Forum section of the IP, while the same modality was already applied to the RESPOND1 DIHs OC and its hackathon events in collaboration with WP2. Such online promotion allows better visibility of ongoing OC funded actions, in addition to ongoing social media usage and regular SAHs newsletter publications implemented under WP1.

Due to the Covid19 crisis, organisation of large face-to-face events was put on hold including the cancellation of the IoF2020 closing event to which all SAHs FIEs were invited. In addition, the annual event of the SAHs project is postponed due to the same reasons. Considering the current unfavourable situation resulting from Covid-19 all future networking activities will be shifted to an online format, which still tends to be less favourable for networking.

3. CONCLUSIONS

The report on maximisation of IEs market take up is the first iteration of such report, while the second version is due M48. This report describes demonstration activities implemented by FIEs and OC IEs. The report also presents the collected feedback from conducted demonstration events, including information on events attended and organised by RCs. Besides this, the report provided analysis of collected User Acceptance Testing questionnaires conducted by FIEs and their testing partners. While the above-mentioned elements are looking at the solutions demonstrated and tested, section on the business support and implemented modalities, in this regard, is providing an overview on requested business skills within FIEs bringing them closer to the market. Finally, the report looks at the conducted networking events initiated by WP3. Conclusion is therefore divided into these separate segments, providing a better overview of findings and recommendations.

Conducted events and demonstration activities

As reported during the first and the second reporting period, approximately 66 **demo events** were organised by FIEs and OC IEs (22 within the first and 44 within the second reporting period). When merged with the **events** attended or organised by **RCs** from both reporting periods (113 from the first and 55 from the second reporting period), it is approximately **234 individual events**.

If looking at the current reporting period only, RCs, FIEs, and IEs have reported about 99 events in total, 73 events were conducted in a virtual environment, while 26 were held as live (face-to-face) demonstrations. Events conducted within the second reporting period have gathered over 3500 individuals from different agriculture-related fields. **End users** - farmers, aquaculture and viticulture actors, policy-makers, Agri-food advisors, IT experts, technology providers, scientists, students and equipment dealers were present within these events. CCs, DIHs, StartUps & SMEs, Research Facilities and Accelerators were also involved or presented at the events organized by RCs. The most widely used **promotional channel**, for event announcements and promotion, was SAH IP, while events were also promoted on social media channels. The most efficient way to attract attendees was via individual email invitations.

From the beginning of the SAH project, reporting on the demonstration activities confirmed that **on-farm demonstrations** are an effective way to foster innovation, disseminate research results and best farming practices or systems to a wider audience. Effective demonstrations foster knowledge exchange among farmers, but also between students/farmers/advisors/researchers/businesses joining the events. Valuable **inputs** were collected regarding the event organisation and the event topic/content. It is confirmed that **live events and physical demonstrations** are much more efficient and will raise more interest among participants compared to online presentations, even though online events gather more participants. Because of Covid-19 pandemics, many demonstration events had to be conducted online. However, most participants agreed that the same event should be organised in a physical environment, once the circumstances related to Covid19 are changed. Several positive aspects were reported regarding online events - they are more convenient for attending, they last shorter than all-day demonstrations and presentations. The disadvantage of such a modality relates to potentially fewer interactions between demonstrators and the target audience. On the contrary, the discussions and Q&A sessions at the end of each event were very constructive and many practical questions were answered. From here it can be concluded that this aspect can vary from one event to another, depending on the target audience and their willingness to interact. Nevertheless, FIEs are advised to put additional efforts that will result in enhanced interactions during the event.

Regardless of the pandemic, it can be concluded that sufficient number of demo events by FIEs were conducted within the second reporting period. This is again due to their more mature solutions and services at this stage of the project. At the same time, fewer events were attended and organised by RCs, as they previously have attended many large fairs and events which were all cancelled following the Covid-19 outbreak.

Importance of continuous communication with all stakeholders is perceived as an important element, including flexible approach when running demonstration. Another common lesson is related to the **importance of the event planning** to ensure the smooth implementation of the event. The majority of FIEs reported very important lessons learned about **farmers' behaviour and readiness to use innovative technologies.** In most cases, end-users (farmers) show an interest in new

technology and are looking for solutions to help them with decision-making processes (by estimating field losses, giving irrigation recommendations, etc), in order to increase profit and improve production. Regarding the **feedback from the participants**, it is reported that attendees were highly satisfied with the topics discussed during events, since they find them interesting and important for the present moment. Another common feedback is related to the need to improve the knowledge of farmers and other end-users, relates to understanding of the benefits and needs for using innovative solutions and technologies.

Considering all findings presented above, it can be concluded that demonstrations bring additional benefits to their end users, as people are eager to learn about recent developments and technologies. Still, some reluctance is noticed among target audiences towards the use of these technologies and their benefits. This is well showed within FIE20, when much more interest for the solution within the farming community was reported following FIEs success within the FAO-ITU Call for "Good practices in the field of digital agriculture in Europe and Central Asia".

In the future, more demonstrations and practical trainings are needed to bring digital technologies closer to the potential end users. However, this is not a novelty nor a surprise, it is expected as that process of change requires several years and needs to be tackled strategically on all levels.

User Acceptance Testing

Findings from the UAT mostly support finding resulting from conducted FIE demonstrations. Farmers that have tested FIE specific solutions/services have shown interest and satisfaction with the solutions. 27 out of 28 farms have reported that the solution was **useful and brought additional benefits**, while one farm was neutral. Concerning the usefulness of the product/solution, only one farm was neutral about the additional benefits of the solution, while 27 respondents agreed that additional benefits for the farm are clear. Seven were neutral regarding the statement that offered solution can reduce the amount of working time, while 21 farms agreed that the solution is helpful in this case. Also, the majority agrees proposed solutions can provide more benefits than their current practices, that it can contribute to realizing societal goals, such as making farming more environmentally friendly, and fostering public acceptance of farming, as it helps to inform consumers about the production process of their food.

On the contrary, information gathered through implemented demonstration activities, shown to some extent reluctance in using novel technologies at the farm level. This shows that those users that have tested the solution have more specific experience and are well informed, while those that have only taken part in the demo events still potentially lack knowledge on the benefits that digital solutions promise to bring.

According to the respondents, some of the most important **features** which benefit their farms are related to increasing production (by providing recommendations on different aspects of each production phase), reducing the amount of physical documentation, and supporting better decisions. Eleven out of 28 respondents think that a special (ICT) expertise is required for using the offered product/solution, and two reported difficulties with accessing the solution on a mobile devise. 15 out of 28 respondents were confident of support services and guarantees in cases of solutions' malfunction, while the rest were quite neutral on the subject.

Some **issues**, reported as hinders of the product/solution applications at the farm, are mainly related to none or slow-speed internet connection and lack of GSM coverage. Only one farm reported that there were no such problems during the testing period.

Most respondents are already familiar with different digital technologies, which are helping them in their daily activities. Using the products/solutions proposed by SAH FIEs was not a completely new experience, and 25 out of 28 respondents felt confident about using the FIEs solution and think that provided solution is reliable. Most respondents are aware of the level of data collected by the solution and who can access it, they think it is important to know the experience of other users about digital solutions and that the tested solution is not decreasing the feeling of being in charge of production.

Finally, when it comes to the **cost-efficiency** of the solutions, a great majority of respondents saw obvious benefits to increase farms profit and reducing production costs. 20 farms stated that tested solutions can increase productivity, by analyzing activities and resources, supporting better decisions, allowing more precise control of very important parameters, and reducing working time. 15 respondents believe that the solution can increase their profit in the same way and that the price/quality ratio of the proposed solution is fair. Most respondents, 23 of them, believe that using the solution can help them reduce production costs by providing recommendations for better resource planning, and would recommend it to their neighbours and fellow farmers.

The main conclusion, based on presented feedback, is that FIEs solutions are well accepted by end-users, and are rated as useful and cost-effective. Several experiments that didn't take part in the activity during the second reporting period but will provide their feedback during 2022. We will integrate these results in the final version of D3.7.

Business support to FIEs

As envisaged by the project, support to FIEs within the business domain was recognised as a necessity towards bringing FIE specific solutions closer to the market. The most requested training topic was Business plan development, followed by Ecosystem, collaboration and competition, Marketing plan and market analysis, financial plan – funding ops, investors, Mission, vision, strategy, Creating and managing start-ups, Governance and organisational structure, Pitching and Regional embedding with the least interest. Two FIEs have proposed additional topics - Private-public cooperation, law aspects, public orders and Support for an expansion of market shares (national and international).

The approach within the project was changed, to allow DIHs to be actively engaged within the delivery of needed skills, instead of WP3 and WP4 partners. This process of communication with DIHs was coordinated by WP3. However out of 41 contacted DIHs, only ten expressed interest to provide such support to FIEs while nine DIHs expressed no interest in the activity and 18 DIHs never responded to the project proposal.

The response rate implies a lack of interest among DIHs, while the reasoning behind this might be that DIHs don't see the value of the offer or the lack the capacity to implement the training.

In the upcoming period, focus will be placed on those proactive DIHs as a training provider. WP3 and WP4 are working on the contend development and the topics will be offered to DIHs in a form of modules via LXP, to equip them with additional knowledge and content regarding each topic mentioned above. In addition, DIHs are encouraged to apply to the currently running SERVICE OC, funding DIHs that will develop, innovate, provide, validate and/or improve services provided.

Networking

Several networking activities were implemented within the second reporting period, allowing better visibility of the OC projects via the Innovation Portal and individually organised events (e.g. webinar presenting the RESPONS OC project). To allow better visibility of networking events, WP1 is providing support by promoting activities via the IP and social media channels and distributing messages to SAHs community. In the upcoming period, more emphasis will be placed on cooperation between IoF2020, as more mature solutions and FIEs. Also, actions toward improved visibility of FIE results via the SAHs website and social media will be enhanced, allowing better outreach and potential new cooperation's. The third reporting period will allow more FIE related promotions as the solutions are at this time of the project more mature, and therefore can offer more proven results.

The second reporting period was a fruitful period for SAHs and its FIEs, allowing better outreach to potential end users, better understanding of FIE specific needs and potentials and was an opportunity to learn and fine-tune project activities in line with the real requirements. These learnings will be integrated and put into action within the third reporting period, to maximise the potentials of the project and its impact within the sector.

REPORT ON MAXIMISATION OF FIES MARKET TAKE UP

ANNEXES

ARE PART OF THE CONFIDENTIAL VERSION OF A DELIVERABLE

Content