



**Building a European framework
for the secure and trusted data space for agriculture**

**D6.2: Summary report of collaboration and the
operational joint activities carried out with (inter)national
networks**

WP6: Project management and coordination

Lead Authors: Gaëlle Chéruey Pottiau (ADH). Thomas Gomez (ADH),

Contributors: Marc-Jeroen Boogaardt (WR), Mireille van Hilten (WR), Sjaak Wolfert (WR),
Inessa Seifert (VDI-VDE)



**Funded by
the European Union**

Document Information

Grant Agreement No.	101083401
Project Acronym	AgriDataSpace
Project Title	Building a European framework for the secure and trusted data space for agriculture
Type of action	DIGITAL-CSA
Call	DIGITAL-2021-PREACTS-DS-01
Start – ending date	1 October 2022 – 30 April 2024 19 months
Project Website	https://agridataspace-csa.eu/
Work Package	WP6: Project management and coordination
WP Leader	ADH
Relevant Task(s)	T6.3 Liaison with other projects
Deliverable type ¹ Dissemination level ²	Document, report Public
Due Date of Deliverable	31 March 2024
Actual Submission Date	31 March 2024

Disclaimer

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the granting authority can be held responsible for them.

Copyright message

©AgriDataSpace Consortium, 2022

This document contains unpublished original work unless clearly stated otherwise. Previously published material and the work of others has been acknowledged by appropriate citation or quotation, or both. Reproduction is authorised provided the source is acknowledged.

¹ R: Document, report; DEM: Demonstrator, pilot, prototype, plan designs; DEC: Websites, patents filing, press & media actions, videos, etc.; DATA: Data sets, microdata, etc; DMP: Data management plan; ETHICS: Deliverables related to ethics issues; SECURITY: Deliverables related to security issues; OTHER: Software, technical diagram, algorithms, models, etc.

² PU – Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project’s page); SEN – Sensitive, limited under the conditions of the Grant Agreement; Classified R-UE/EU-R – EU RESTRICTED under the Commission Decision No2015/444; Classified C-UE/EU-C - EU CONFIDENTIAL under the Commission Decision No2015/444; Classified S-UE/EU-S – EU SECRET under the Commission Decision No2015/444

Document History

Version	Changes	Date	Contributor
1.0	Document drafted	26/03/2024	Gaëlle Chéry Pottiau (ADH), Thomas Gomez (ADH)
2.0	Added descriptions of network meetings based on information from VDI VDE and related projects in the network and an Introduction	27/03/2024	Gaëlle Chéry Pottiau (ADH), Thomas Gomez (ADH), Mireille van Hilten (WR), Inessa Seifert (VDI-VDE)
3.0	Adding information about DSCC events and related EU projects.	28/03/2024	Marc-Jeroen Boogaardt (WR), Mireille van Hilten (WR), Sjaak Wolfert (WR), Gaëlle Chéry Pottiau (ADH)
3.1	Review of the deliverable and complete missing information	30/03/2024	Thomas Gomez (ADH). Gaëlle Chéry Pottiau (ADH)

AgriDataSpace Consortium

Participant Nr.	Participant organisation name	Short name	Country
1	AGDATAHUB	ADH	FR
2	FOODSCALE HUB GREECE ASSOCIATION FOR ENTREPRENEURSHIP AND INNOVATION ASTIKI MI KERDOSKOPIKI ETAIREIA	FSH	EL
3	INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK	PSNC	PL
4	UNIVERSIDAD DE LLEIDA	UdL	ES
5	EIGEN VERMOGEN VAN HET INSTITUUT VOOR LANDBOUW- EN VISSERIJONDERZOEK	EV ILVO	BE
6	FONDAZIONE BRUNO KESSLER	FBK	IT
7	VDI/VDE INNOVATION + TECHNIK GMBH	VDI/VDE-IT	DE
8	STIFTUNG FACHHOCHSCHULE OSNABRUCK	HSOS	DE
9	STICHTING WAGENINGEN RESEARCH	WR	NL
10	1001 LAKES OY	1001 Lakes	FI
11	ASOCIATIA NATIONALA A INDUSTRIILORDE MORARIT SI PANIFICATIE DIN ROMANIA	ANAMOB	RO
12	COMITE EUROPEEN DES GROUPEMENTS DE CONSTRUCTEURS DU MACHINISME AGRICOLE	CEMA	BE
13	FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV	Fraunhofer	DE
14	AGRICULTURAL INDUSTRY ELECTRONICS FOUNDATION AEF	AEF	DE
15	FEDERATION NATIONALE DES SYNDICATS D'EXPLOITANTS AGRICOLES	FNSEA	FR

Glossary of terms and abbreviations used

List of Abbreviations, Acronyms, and Symbols	
AB	Advisory board
AIA	Artificial Intelligence Act
ADS	AgriDataSpace (project)
CAP	Common Agricultural Policy
CEADS	Common European Agricultural Data Space
CEDS	Common European Data Space
CSA	Coordination and Support Action
DA	Data Act
DGA	Data Governance Act
DSA	Digital Services Act
DSI	Data Space Initiative
DSSC	Data Spaces Support Centre
EIF	European Interoperability Framework
EUCC	European Code of Conduct for Agricultural Data
FMIS	Farm management information system
GA	General assembly
GDPR	General Data Protection Regulation
IACS	Integrated administration and control system
IACS	Integrated Administration and Control System
MoU	Memorandum of Understanding
MS	Member State
SME	Small and medium-sized enterprise
SSI	Self-sovereign identity
TEF	Testing and experimentation facility
WP	Work package
WS	Workshop

Executive Summary

AgriDataSpace project coordinate a preparatory action to pave the way for the European Data Space for Agriculture that facilitates data exchange, processing and analysis in a secured, trusted, transparent and responsible manner to create new opportunities for monitoring and optimising natural resource use stimulating data-driven innovations.

The AgriDataSpace consortium brings together an excellent team of experts from leading research institutes, agriculture data intermediaries and industry associations representing 10 countries that are rooted in the EU Data Space ecosystem.

In close interaction with stakeholder groups, representing all Member States and relevant ecosystem players, they will map the current data space landscape and record experiences with data sharing, analyse and assess governance and business models and evolving legislation, define a technical reference architecture and integrate them in a roadmap that compiles all requirements and needed actions into a comprehensive pathway towards implementation of the EU Data Space for Agriculture.

AgriDataSpace project has been integrated into the DSSC community, since the beginning of the project fostering close collaboration with the DSSC team and other sectoral data spaces.

To meet its objectives, the AgriDataSpace consortium has built on a solid knowledge base derived from the work of several Horizon Europe projects, including OPEN DEI, ATLAS, SmartAgriHubs, Demeter etc. but also has worked closely with several projects still in progress inside the "European Digital Transformation Ecosystem" as Data4Food2030, DIVINE, AgriTEF Food etc.

At the same time, a broad stakeholder consultation process has been set up to disseminate initial thoughts and results, with the aim of getting the majority of stakeholders on board in order to achieve broad consensus.

Members States were also called upon, as were players from the private sector and academic research, to review and question the results of the work on aspects of governance, business models and legal issues.

Table of Contents

Executive Summary	6
1 Introduction.....	8
2 Relationships with DSSC.....	9
2.1 Community of Practice	10
2.2 DSSC Symposium in 2023 and 2024	11
3 Relationships with the European Ecosystem on Digital Transformation.....	12
3.1 Knowledge base	12
3.2 Projects in progress	14
4 Stakeholder Consultation Process.....	17
4.1 Objective	17
4.2 The consultation groups	17
4.3 Implementation	18
5 Synergy Days 2023	19
6 Références	22
7 Annexes.....	23

List of Figures

Figure 1: European Ecosystem Development on Digital Transformation (Waneningen Research, 2024).....	12
Figure 2 - Stakeholder groups of the CEADS.....	17
Figure 3 Consortium management and decision-making chart	18

1 Introduction

According to the European data strategy of February 2020 (European Commission, 2020) data spaces will play a leading role in the economic exploitation of data for various industries. It announced the creation of data spaces in ten strategic fields, including agriculture. The aim is to unlock the value of data by removing barriers and digitally connecting objects in Europe. The initiative for Common European Data Spaces (CEDS) accompanies the passing of new regulations, which clarify how data can be used, shared and accessed in a fair and trustworthy manner.

For agriculture, the importance of data cannot be overestimated, “moving into an era of digitally enhanced farming, where data is generated during the various stages of agricultural production and all related operations” (European Feed Manufacturers' Federation, 2020)). Digital farming solutions will contribute to the required sustainable food production in context of climate change.

With the call for preparation of a Common European Agricultural Data Space (CEADS), the European Commission aims at leveraging business opportunities of data-driven value chains in the agriculture sector. In line with the current digitalisation efforts in the agricultural industry, the landscape of so-called Data Sharing Initiatives in Europe is rapidly evolving. Many regional, national and also international initiatives emerged, to support the data sharing in the agricultural value chain and to provide data-based services.

The objectives of the AgriDataSpace project are the following:

- **Objective 1:** map the current landscape and take stock of ongoing data sharing initiatives and design approaches in agriculture, including experience with the European Code of Conduct
- **Objective 2:** analyse and assess current governance models and approaches in this landscape and develop a multi-stakeholder governance scheme for the CEADS
- **Objective 3:** analyse and assess current business models and approaches in this landscape and explore potential business models for various stakeholder relations, addressing both economic and environmental performance
- **Objective 4:** explore the evolving legislative framework and derive its implications for the design approaches of the Agriculture Data Space and account for its shortcomings by providing solutions and technical enablers for ethical tensions related to data sovereignty
- **Objective 5:** develop a conceptual reference architecture for a common data space framework in agriculture and a reference technology canvas for navigating through heterogeneous repositories, ensuring backward compatibility with most prominent existing initiatives

- **Objective 6:** engage stakeholders in various activities for evaluation and validation in order to reach broad consensus and support for the development of the Agriculture Data Space
- **Objective 7:** develop a roadmap that compiles all requirements and needed actions into a comprehensive pathway towards implementation of the EU Agriculture Data Space

This document is a summary report of collaboration and the operational joint activities carried out with (inter)national networks during the project. It describes the essential task of the AgriDataSpace project to establish a connection with other initiatives and projects in Europe that are dealing with a creation of a common dataspace and the exchange of data in the agricultural sector (T6.3). This contributes to Objective 6 listed above, because the network that was engaged provided individual stakeholders to validate several project results, e.g. the Roadmap for the Common European Agriculture Data Space (CEADS). Throughout the project, the partners involved in WP6 have organised the contacts, meetings and exchanges with other programs and organisations, such as Horizon Europe projects and the AgriFood Testing and Experimentation Facility (TEF). Also, partners from the Steering Board committee have supported and participated in these activities.

2 Relationships with DSSC

The Data Space Support Center (DSSC) is a European project tasked with delineating the requirements for the development of data spaces. Their activities encompass various areas, including governance, business, legal aspects, and detailed technical specifications. The DSSC brings together key stakeholders from the data space community, such as IDSA, MyDataGlobal, or Gaia-X.

Sectoral Coordination and Support Actions (CSAs), such as the Health Data Space, Green Deal Data Space, or Energy Data Space, closely collaborate with the DSSC. Naturally, the AgriDataSpace project is integrated into the DSSC community, fostering close collaboration with the DSSC team and other sectoral data spaces.

The overarching goal of the DSSC is to establish standardized guidelines for implementation across sectoral data spaces. Ultimately, this harmonization will facilitate interoperability among different sectoral data spaces.

1.1 DSSC Relationship manager

As part of its collaboration with the DSSC, the AgriDataSpace project maintained a dedicated liaison with the Relationship Manager from the DSSC team. Throughout the project's duration, a bi-weekly call was established. Jörg Dörr, the Technical Manager, and Thomas Gomez, the project coordinator, represented the Consortium in these meetings. The aim was to establish a regular

communication channel between the two projects, facilitating the exchange of challenges and progress updates.

1.2 Thematic working groups

Thematic groups (TG) are community-driven forums fostering knowledge sharing and co-learning among the DSSC stakeholders engaged in data space developments. Thematic Groups are open to individuals representing initiatives or organisation that have an exhibited relationship with the DSSC through participation in the Community of Practice, Strategic Stakeholder Forum and Liaisons & Collaborations.

Currently, there are three active groups - Business, Governance, and Technology of Data Spaces.

Thematic groups meet regularly online (usually once a month) and co-design their agenda. The evolving landscape of data space assumes an open and inclusive collaboration, and hence, all TG participants are expected and encouraged to share and highlight their work related to the data spaces.

The members of the AgriDataSpace Consortium (ADH, PSNC, FBK, HSOS, WR, 1001lakes, EV ILVO, UdL) actively participated in the Thematic working groups organized by the DSSC.

- Technology of Data Space
- Gouvernance and Legal
- Business

ADS presented their interim results for each group.

2.1 Community of Practice

Interaction and synergies between DataSpace CSA projects.

- **GREAT** – Green Deal Data Space:

Several meetings to present respective projects and exchange results. An NDA has been signed between AgriDataSpace Project and GREAT Projects.

Potential synergies have been discussed but at the CSA project's level and timing, there has been no formal work done.

Uses cases could be defined between both agriculture and environmental sectors in the next implementation phase.

For the other Sectoral data space project as:

- **DS4SSCC** (European Data Space for Smart Communities)
- **PrepDSpace4Mobility** - European Data Space for mobility and logistics sectors
- **EU DATA SP4CE** - European Data Space for manufacturing
- **DS4Skills** - European Data Space for Skills
- **DATES** European Data Space for Tourism

The exchanges were mainly in the DSSC working groups and during the Symposium in March 2023 and in March 2024

2.2 DSSC Symposium in 2023 and 2024

Data Spaces Symposium in The Hague, Netherlands - 2023

Six months after the kick off meeting of the project AgriDataSpace, the first Data Spaces Symposium and Deep Dive Day took place in the Hague on 21-23 March 2023. This three-day event was organized by the Data Spaces Support Centre (DSSC) and had been visited by about 700 people. Several consortium partners (AgDataHub, Wageningen Economic Research, PSNC) of the project AgriDataSpace visited this symposium for networking and gaining insights of other data spaces initiatives in Europe. Also, on the first day our partner Viivi Lahteenoja of 1001Lakes gave a keynote about interoperability challenges and ways forward for personal data space implementations. On the second day our partner Sebastien Picardat of AgDataHub presented our project AgriDataSpace in a separate session beside two other data space initiatives namely Data Spaces for Mountain Agriculture and Green Deal Data Space. In the afternoon our partner Marko Turpeinen of 1001Lakes took part in an interactive panel session about ways to make a data space fully operational.

Conclusions

Some of Consortium's members as ILVO and 1001 Lakes are deeper involved in DSSC Strategic Stakeholder Forum.

<https://dssc.eu/space/DC/28049509/Strategic+Stakeholder+Forum#Members-of-the-SSF>

Data Spaces Symposium in Darmstadt, Germany - 2024

The 2024 symposium took place from 12 to 14th of March in Darmstadt, Germany. It was organized by the Data Spaces Support Centre (DSSC) and the Data Spaces Business Alliance (DSBA), a pivotal gathering for those at the forefront of data space innovation and strategy. It served as a platform to showcase the latest market-ready use cases, advanced technology solutions for existing and emerging data spaces, and the essential work done by the DSSC in crafting a foundational blueprint for common European data spaces, aligning with the European Data Strategy.

AgriDataSpace attended through its partners ADH, VDIVDE-IT, WR, PSNC, EV-ILVO, Fraunhofer and 1001Lakes. In particular, AgriDataSpace was actively participating in the Vertical session 'Data spaces for the green deal, energy and agribusiness' and the session 'Data Space Sustainability: Business Stories, Strategy & long-term Impact'. Besides, many interactions with other projects and initiatives around the DSSC took place, exchanging information and ideas about the various DSSC building blocks such as the new version of the blueprint. This has led to several final adjustments to the AgriDataSpace deliverables.

Finally, an info session by the European Commission on the deployment calls for data spaces for the green deal, energy and agribusiness were attended.

3 Relationships with the European Ecosystem on Digital Transformation

3.1 Knowledge base

The Consortium's work is based on the results of several European projects in which the partners have participated.

The results of these projects have been reused to design the CEADS proposal.



Figure 1: European Ecosystem Development on Digital Transformation (Waneningen Research, 2024)

3.1.1 OPEN DEI

The Digital Transformation strategy of the European Union has, among others, a particular priority: the creation of common data platforms based on a unified architecture and an established standard. Manufacturing, agriculture, energy and healthcare represent key fields for the deployment of the EU strategy for digitalisation. In this framework, the EU-funded OPEN DEI project aims to detect gaps, encourage synergies, support regional and national cooperation, and enhance communication among the Innovation Actions implementing the EU Digital Transformation strategy. More specifically, OPENDEI is aligning Reference Architectures, Open Platforms and Large-Scale Pilots in Digitising European Industry. Two H2020 Innovation Actions, ATLAS and DEMETER and some other pre-existing more mature projects, IoF2020 IoT LSP, SmartAgriHubs and AgROBOFood, for a total of 5+ projects all working in the agriculture sector, represent the “Agri-food Ecosystem” of OPEN DEI.

Many partners were actively participating in various OPEN DEI events and activities. Especially part of the reference architecture and its building blocks were aligned and re-used in WP3 of AgriDataSpace. <https://www.opendei.eu/>

3.1.2 ATLAS

The ATLAS project aimed to develop an open interoperability network for agricultural applications and to build up a sustainable ecosystem for innovative data-driven agriculture. Advanced digital technology and data play a vital role in ensuring sustainable production in today's agricultural industry. The Horizon 2020 project addresses the lack of data interoperability in agriculture by combining the use of agricultural equipment with sensor systems and data analysis. The ATLAS platform aims to deliver a service offering hardware and software interoperability using data from sensors to demonstrate the benefits of digital agriculture in a wide range of sectors affecting modern agriculture.

For more information, please refer to <https://www.atlas-h2020.eu>.

3.1.3 SmartAgriHubs

The SmartAgriHubs was a €20 M European project funded by Horizon2020 instrument. It built a vast ecosystem by 'connecting the dots' of organisations and digital innovation hubs (DIHs) involved in digitalisation of the agri-food sector in Europe which to this day remains active. The aim to boost adoption of digital solutions by the sector was contributed to by consolidating, activating and extending the existing ecosystem. The project also worked with European regions to make maximum use of regional structural funds and private capital. The innovation action ended in November 2022 and brought together a consortium of well over 164 partners from several European countries and 106 innovation experiments.

For more details, please refer to <https://www.smartagrihubs.eu/about>

AgriDataSpace as a consortium is connected to many organisations and stakeholders that are involved in the digital innovation community stemming from SmartAgriHubs, as can be seen from the active participation in the annual Synergy Days (Section 5), a large event organised by this community that bring together the representatives from the ecosystem, often times involved in current projects (see Section 3.2).

3.1.4 Demeter

The H2020 DEMETER project is a large-scale deployment of farmer-driven, interoperable smart farming-IoT (Internet of Things) based platforms, delivered through a series of 20 pilots across 18 countries (15 EU countries). Involving 60 partners, DEMETER adopts a multi-actor approach across the value chain (demand and supply), with 25 deployment sites, 6,000 farmers and over 38,000 devices and sensors being deployed.

AgriDataSpace followed closely the output of this project as Data Sharing Initiative.

For more details, please refer to <https://h2020-demeter.eu/>

3.1.5 IoF2020

The large scale EU project Internet of Farm and Food (IoF2020), which ended in March 2021, provided funding for further implementation of Internet of Things (IoT) technology across 5 sectors (arable, dairy, fruit, meat, vegetables) and consisted of 33 use cases in these sectors. Several results from this project were at the base of the AgriDataSpace, such as work coming out of the Business Support work package, technology integration, ethics and responsible

design and of course, making use of the ecosystem. For a full overview of results of this project we refer to: <https://www.iof2020.eu/library>.

3.1.6 FIWARE

FIWARE Open Source technology is used for developing Smart Solutions, Digital Twins and Data Spaces in a wide variety of domains of digital transformation – shaping the world of tomorrow. Smart AgriFood is one of the five focus domains of FIWARE. The Reference Architecture of Smart Farm Management Systems “Powered by FIWARE” relies on a “system of systems” vision. The existence of a context information management layer breaks the silos of information associated to the several vertical smart solutions, information systems and connected devices, enabling an overall management of Farm processes.

Like the OPEN DEI project, various AgriDataSpace partners are actively participating in various FIWARE events and activities. Especially part of the reference architecture and its building blocks were aligned and re-used in WP3 of AgriDataSpace.

3.1.7 NIVA

NIVA aims to modernise Integrated Administration and Control System (IACS) by making efficient use of digital solutions and e-tools, by creating reliable methodologies and harmonised data sets for monitoring agricultural performance while reducing administrative burden for farmers, paying agencies and other stakeholders.

The AgriDataSpace project follow NIVA’s in the Governance to Business (BtoG) relationship perspective, and especially the use case identified in this project.

For more details, please refer to Niva4Cap.eu – Niva4Cap.eu

3.2 Projects in progress

This section presents the current EU projects and ongoing initiatives for future developments for the Agricultural Data Space in Europe.

3.2.1 Data4Food2030

The EU project Data4Food2030 is in its second year and researches the data value aspect of data sharing for agriculture and food systems. It aims to describe the current data economy for food systems by involving stakeholders in several dialogues, investigating micro level data economies in 9 case studies and developing a conceptual framework of what this data economy entails. The research will also provide future scenarios and a roadmap to improve the data economy into one that is fair and inclusive, aiming to not exclude certain groups and contributing the value of data where it should be, to data owners. A monitoring system will show the performance of the data economy and how to move to this improved version, along with a set of policy recommendations.

Firstly, the AgriDataSpace project has collaborated extensively with the partners in this Data4Food2030 consortium by identifying the maturity of the 9 case studies, which are each a different approach of a Data Sharing Initiative (DSI), to various extends or levels of maturity. Secondly, collaboration took place to involve stakeholders between the 2 projects, also making sure that stakeholders are not too overburdened by engaging in both projects. Lastly, ongoing

activities are identifying which data sources can be shared between the 2 projects, also to provide data for the Data4Food2030 monitoring system. Please refer to <https://data4food2030.eu> to follow the project until its completion end of 2026.

3.2.2 DIVINE

The Horizon Europe project DIVINE (Demonstrating Value of agri data sharing for boosting data Economy in agriculture) started on October 1st, 2022 at the same starting date as the CSA AgriDataSpace Project. A bilateral NDA has been signed in July 2023 between the two projects to share the respective results.

The coordinator, Prof. Ioanna Roussaki, had the chance to present the DIVINE Project to the Agridataspace consortium, with a particular attention to their technical architecture. This landmark event marks the beginning of a promising collaboration with the AgriDataSpace Project.

On July 12th, a first joint virtual meeting has been set up to mark the first step of collaboration between both projects. During this session, we explored collaboration channels between the two projects, examining both technical and business perspectives. Representatives from DGAGRI and DGCNECT also participated in the discussion, highlighting the potential benefits of our joint efforts.

Both DIVINE and AgriDataSpace aim to leverage agridata to pave the way for transformations in the agricultural sector. DIVINE plans to demonstrate the value of agriculture data sharing to boost the data economy in agriculture while AgriDataSpace is dedicated to building a European framework for the secure and trusted dataspace for agriculture.

In August 24th, our teams came together once again to identify targeted tasks for creating synergies, exchange invaluable knowledge and experience, and explore the potential of producing joint outputs.

Our bilateral discussions revolved around three key areas:

- Business modelling, market analysis, and exploitation strategies
- Data sharing governance models and policy making
- Data innovation, digital strategies and frameworks

Both projects remain committed to our shared mission of strategically transforming the agriculture sector in Europe.

The collaboration between the 2 projects could not be deepened because the two projects were not evolving over the same period. In fact, the DIVINE project is a three-year project funded by Horizon Europe, whereas AgriDataSpace is a CSA Digital Europe project over a period of 18 months, with deadlines that are too short to engage in long-term collaboration. However, exchanges could continue during the next phase of development of the Common European Agriculture Data Space.

3.2.3 AgriFoodTEF

The Testing and Experimentation Facility (TEF) for Agrifood Innovation is a network of physical and digital facilities across Europe. The project is funded through the Digital Europe program and provides services that help assess and validate third party AI and Robotics solutions in real-world

conditions aiming to maximise impact from digitalisation of the agricultural sector. Several partners from the AgriDataSpace project are involved in the AgrifoodTEF project, such as Fondazione Bruno Kessler (FBK) and Wageningen Research (WR). The physical, but also digital testing facilities can be regarded as a go to point for DSIs in the sense that the (shared) data of related use cases are required to operate the technology (IoT, AI and/or robotic) in these cases. For more information, please refer to <https://www.agrifoodtef.eu>.

3.2.4 Partnership 'Agriculture of Data'

The Partnership Agriculture Data aims to enhance sustainable agricultural production and to strengthen policy monitoring and evaluation capacities through exploiting the potential of Earth Observation (EO), environmental, agricultural and other data, in combination with state-of-the-art data technologies. The partnership falls under Horizon Europe and is supposed to start in 2025 as a co-funded action between the European Commission and its member states. It will run for seven years.

In November 2022 a draft of AgData Partnership R&I activities was discussed at an in-person workshop with various R&I projects operating in the field of agricultural data, amongst which AgriDataSpace.

The AgData Partnership will build upon and supplement AgriDataSpace, draw lessons learnt, contribute to its further development, and support the building of capacities in the sector to comply with new legal regimes. It aims to make effective use of the instruments by developing innovative solutions for implementing the instruments in the domain of agriculture.

In the future the partnership may supplement the work of the CEADS and may also elaborate innovative data-based solutions highlighting ways in which data shared through the data space could be used. Moreover, the AgData partnership can provide input to the data space by providing Europe-wide data layers supplementing high-value datasets, which will be made available for all Common European Data Spaces. Depending on the final set-up of the data space, the AgData partnership may gather reference data, e.g. for training AI applications, through this space.

4 Stakeholder Consultation Process

4.1 Objective

The AgriDataSpace must lead to a common agreement to be adopted by European stakeholders of the agricultural sector in the design of the CEADS. To reach this ambitious and complex objective, a consultation process of the stakeholders has been conceived all along the project and implemented during the last semester of the project, when we had gathered tangible material to discuss. To reach this consensus, a specific attention has been paid to build a **representative ecosystem** of the agricultural sector among the organizations selected.

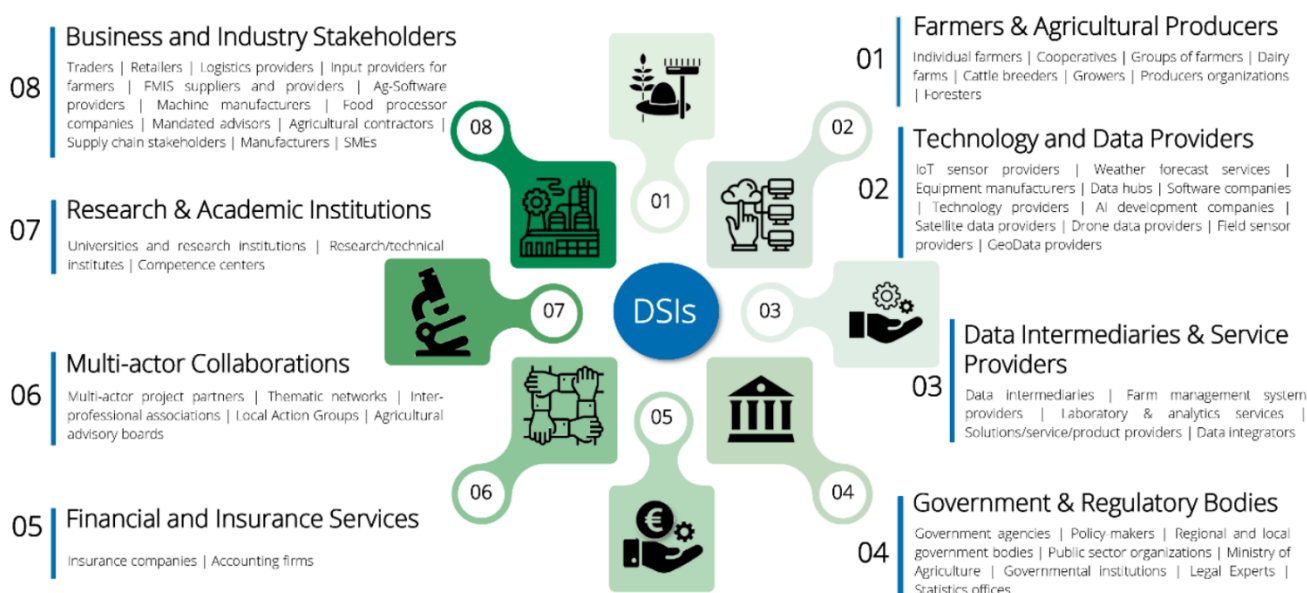


Figure 2 - Stakeholder groups of the CEADS

The methodology and the implementation of the consultation process has been taken care of by the WP5 for the dissemination and communication aspect and WP6 for the methodology and the planning of the activities.

4.2 The consultation groups

Several consultation groups have been identified to gather their requirements concerning the data space and data exchange in general, present the project proposal, and gather feedback. We defined three main categories of groups:

- **Member States representatives** (10 participants): the CEADS will attach great importance to the participation of Member States at the governance level, but also through the implementation of DSIs and BtoG use cases. The consulting MS representatives helps to understand to posture and expectation the EU countries on the design of the data space.

- **Stakeholder Committee** (17 participants): this group represents all the categories of stakeholders identified in WP2 (Figure 2 above). The objective is to gather the diversity of opinions and needs presents in the agricultural sector to discuss, challenge the project proposal, and eventually find a consensus between the participants.
- **Advisory Board** (7 participants): it brings together experts from public and private sectors in the agricultural and digital fields, with profiles ranging from technical, legal and business specialists. The aim of this group is to share a critical view of the project proposal based on their experience and give advice to the Consortium.

It should be noted that the Stakeholder Committee and Advisory Board consultative groups are separate. No member is part of both groups. Also, the size of each group is relatively small to encourage dynamic discussions during the meetings.

Additionally, the project proposals were challenged by the project Consortium itself through dedicated meetings, and the interim version of the project deliverables were accessible on the website for review to everyone, subject to the signature of an NDA.

4.3 Implementation

The consultation process implementation followed the methodology presentation in the Grant Agreement:

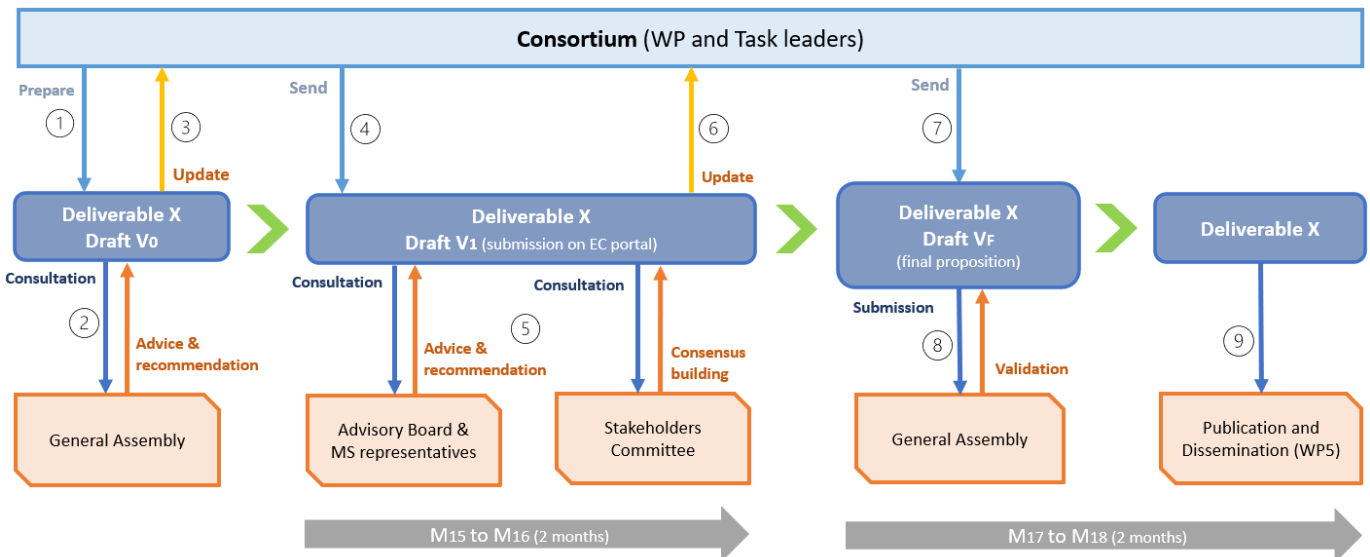


Figure 3 Consortium management and decision-making chart

In addition to sharing the interim deliverables to each group, we organisation dedicated session hear their stakeholders' expectations, present the project result and collect feedback.

The implementation of the consultation process started with a series of 4 webinars, of 4 hours each, dedicated to the Members States representatives:

- 27/09/2023: Introduction to the European Strategy for Data, presentation of the AgriDataSpace project and the stock taking of DSIs
- 17/10/2023: Presentation and discussion of the Governance and the Business Model for the data space
- 30/10/2023: Presentation and discussion of the EU Code of Conduct, the application of the legislative framework and the technical
- 23/11/2023: Tour de table of each MS representative

Then we organised Stakeholder Meetups of 2 hours each:

- December 2023 - First session: presentation of the project results
- January 2024 - Second session: discussion and validation of the project proposals

At the same time, we have planned two sessions with the Advisory Board, where MS representatives were invited to attend these sessions, following the webinars already organized.

- January 2024: presentation of the project results, with a focus on the Roadmap
- March 2024: discussion and validation of the roadmap for the CEADS

The feedback received from the various consultation groups (Advisory Board, MS representatives and Stakeholder Committee) is included in the final version of the deliverables.

In parallel to the Advisory Board, the Stakeholder Committee and the Member States consultation, we gave access to the preliminary results – deliverables already submitted or still “under consultation”, subject to the signing of a confidentiality agreement. Next to the earlier mentioned consulted groups, any other organization interested in the development of the data space can also request access to the deliverables by signing the confidentiality agreement. The process to access the deliverables will be detailed on the project website (<https://agridataspace-csa.eu/deliverables>)

We received 16 formal requests via the web site (see list in annex) from January to March 2024. A participatory process will be implemented as follows to include all the actors’ feedback. Each deliverable will go through this consultation process. The type of consultation tools used to collect feedback will be elected by each WP and/or Task leaders.

5 Synergy Days in Thessaloniki

SmartAgriHubs continues the legacy of the project with the Synergy Days organised on the 4th and 5th of October 2023 in Thessaloniki (Greece). The event aimed to meet, debate and exchange knowledge connecting the digital innovators of the European agri-food sector. Workshops and booths were organised by several EU projects which provided for good networking opportunities.

With more than 250 participants in attendance, the Synergy Days 2023 built on the momentum of the SmartAgriHubs Final Conference in 2022, emphasising the importance of "connecting the dots." A space of collaboration and knowledge exchange, where 28 European Projects intersected to create a dynamic ecosystem for innovation. The 24 workshop sessions and

plenary sessions covered topics related to the agri-food sector, setting the stage for future advancements. For more information, visit <https://www.smartagrihubs.eu/latest-events/synergy-days-2023>

In 2024, the Synergy Days are organised again to make the network come together. For more information, please refer to <https://www.smartagrihubs.eu/synergy-days>.

AgriDataSpace had the opportunity to present its work on the plenary sessions and to organize three interactives' workshops:

- **WS 1: "Data Spaces: Ethical Aspects of Data (Self-)Sovereignty in Data Spaces."** (WP1) on 04/10/2023
- **WS 2: "Data Spaces: Validating and updating the governance and business models for the future CEADS"** (WP2) on 04/10/2023
- **WS3: "Data Spaces: Technical Considerations for Data spaces in Agriculture"** (WP3) 05/10/2023

For each WS, the attendance was about 30 – 40 participants. The sessions were run using animation tools such as Mentimeter and post-it notes to make them interactive. The results of these workshops were incorporated into the final AgriDataSpace deliverables.

The aim of these numerous presentations of our work and the initial results obtained was not only to present our ideas, but also to compare our hypotheses with players more familiar with the industrial sector than the agricultural sector.

This enabled us to fine-tune our results in a complex ecosystem involving players from different backgrounds (Technical service providers; farmer's organization, public or governmental agencies; research center...)

In this section, we present some of these events:

- **Presentation of AgriDataSpace to the members of the joint EPoSS and INSIDE Edge AI Working Group (Chips JU) (16 June 2023)**

EPoSS and INSIDE are two European industry associations who joined their forces to shape the future research and innovation focus topics in the area of Edge AI. The members of the WG are Systems Integrators and Chips and Sensor vendors, who provide solutions also for the agricultural sector. An interested member Stefan Gindl with project AgriSense from research studio (AT) joined the Advisory Board of AgriDataSpace and contributed with his expertise in embedded solutions for agricultural sector.

- **Meeting with Dr. Daniel Senff, VDI TZ (Manufacturing X) - 27. November 2023**

Manufacturing X is a German funding program with a strong focus on data spaces for manufacturing and logistics. The main goal of the program is to cover different sectors of manufacturing and to establish a seamless data sharing along the whole manufacturing value chain. The approach taken in AgriDataSpace is of particular interest for Manufacturing X, since it also employs Gaia-X functions and aims at connecting different data spaces and data sharing initiatives. The discussion with Daniel Senff addressed basic enabling services that would allow for the growth and upscale of a data spaces ecosystem. Manufacturing X research and innovation projects have started in 2024. A follow up is planned.

- **EU Cloud Edge IoT: Workshop: Demand pull drivers for Cloud Edge IoT in agricultural sector (17. February, 2023)**

The team of AgriDataSpace together with IT providers and suppliers for agricultural sector joined the workshop and contributed with their expertise to UnlockCEI project, a coordination and supporting action under the umbrella initiative EU Cloud Edge IoT.

The AgriDataSpace experts assessed the presented use cases that, according to the collected survey results conducted by IDC, will leverage the demand for Cloud Edge IoT technology. The insights of the workshop discussion were used for recommendations for the large-scale-pilots that will be funded in Horizont Europe work program 2024-27.

AgriDataSpace partner AEF also participated in the follow up in-depth interviews to elaborate on the data and value chains in agricultural domain. Thanks to the collaboration between the projects UnlockCEI and AgriDataSpace the knowledge about the data streams and value chains and key stakeholders was used in both projects.

- **Webinar: Cloud Edge IoT Innovations in Agriculture (20. February 2024)**

AgriDataSpace partners Sjaak Wolfert (WUR) and Roberto Garcia Gonzales *Universitat de Lleida* presented the results of AgriDataSpace and use cases for data sharing in agricultural sector.

- **Presentation of the results of AgriDataSpace to the German Ministry of Economic Affairs and Climate Act. (14. July, 2023 and 2. February, 2024)**

The German Ministry for Economic Affairs funded two lighthouses projects Agri-Gaia and NaLamKI. Both projects implement service platforms for AI-driven innovation and have strong links to AgriDataSpace through participation of Professor Stefan Stiene, Hochschule Osnabrück, and Professor Jörg Dörr, Fraunhofer IESE in the AgriDataSpace project. The results of AgriDataSpace will have impact on the research and development activities in the lighthouse projects, especially regarding the Gaia-X building blocks. All three projects benefit from knowledge transfer and exchange.

The German Ministry is interested in the development of Common European Data Spaces in order to understand, how the insights and frameworks can be applied to the national funding projects. Especially the adoption of Gaia-X at the European level is of particular interest for the German Ministry of Economic Affairs, who provides funding for Gaia-X Federation Services and Research and Innovation projects that assess and employ these technologies.

6 Références

European Commission. (2020). *Proposal for a regulation of the European Parliament and of the Council on European Data governance (Data Governance Act).*

European Feed Manufacturers' Federation. (2020). *EU Code of conduct on agricultural data sharing by contractual agreement.*

7 Annexes

7.1 Annexe 1: Composition of Consultation process 's groups

Stakeholder Committee members

Stakeholder Category	Organisation	Name
Farmers and Agricultural Producers	COPA-COGECA	Patrick Pagani
Farmers and Agricultural Producers	Austria Chamber of Agriculture	Patrick Majcen
Technology and Data Providers	AMETIC	Belén Piorno Mario Mahr Avila
Technology and Data Providers	SIVICO	Gabriel Lospa
Data Intermediaries and Service Providers	Farmleap	Anaël Bibard
Data Intermediaries and Service Providers	JoinData	Sener Celik
Business and Industry	Claas / 365 Farmnet	Klaus Rolf
Business and Industry	International Dairy Federation / CNIEL	Fanny Tennenhaus
Research and Academic Institutions	Eurecat	Josep Pijuan
Research and Academic Institutions	ATB	Harald Sundmaeker
Multi-actor Collaboration	GS1 Finland	Jenni Särkkä
Multi-actor Collaboration	GAIA-X / Agoria	Nathalie Nicolas

Advisory Board members

Stakeholder Category	Organisation	Name
Research and Academic Institutions	IISYS	Prof. Dr. Beatrix Weber
Research and Academic Institutions	Researchstudio	Stefan Gindl
Government and Regulatory Bodies	Sitra - MydataModel - DSSC	Antti Poikola
Farmers and Agricultural Producers	Proagro National Federatiom - Romania (COPA COGECA)	Marius Mihai Micu
Business and Industry	KTBL	Daniel Martini
Research and Academic Institutions	INRAE	Clément Jonquet
Technology and Data Providers	Agoria	Jelle Hoedemakers

MS representatives

All MS have been invited to join the working groups.

The active MS (which accept to sign an NDA) are : The Netherlands, Germany, Austria, Ireland, Slovakia, Spain; Belgium and France

Website contacts

Stakeholder category	Organisation	Country
Research and Academic Institutions	Dept. of Agroecology Aarhus University	Denmark
Multi-actor Collaboration	Swedish Institute for Standards SIS	Sweden
Research and Academic Institutions	Institute of agricultural and food economics national research institute	Poland
Farmers and Agricultural Producers	Plataformatierra.es Grupo Cooperativo Cajamar	Spain
Technology and Data Providers	GALEO TECH SL	Spain
Technology and Data Providers	VisualNacert S.L.	Spain
Research and Academic Institutions	Josephinum Research	Austria
Technology and Data Providers	TG Consulting	Korea
Technology and Data Providers	LEITAT Managing Technologies	Spain
Technology and Data Providers	Trust Relay	Switzerland
Research and Academic Institutions	EURAC RESEARCH	Italia
Technology and Data Providers	Bilgi Grubu A.Ş.	Turkey