Data sharing in agriculture. Towards a European agriculture data space.

Organised by:

[AIoTI Alliance for Internet of Things Innovation]
[CREATE-IoT]
[European Large-Scale Pilots Programme]

Data sharing in agriculture.
Towards a European agriculture data space.

Luis Pérez-Freire
Executive Director - Gradiant
Chair “Smart farming and food security” - AIOTI
Data sharing in agriculture. Towards a European ag. data space
Data sharing in agriculture. Towards a European ag. data space

European Data Space

genuine single market for data, open to data from across the world where personal as well as non-personal data, including sensitive business data, are secure and businesses also have easy access to an almost infinite amount of high-quality industrial data, boosting growth and creating value, while minimising the human carbon and environmental footprint.
Data sharing in agriculture. Towards a European ag. data space

European strategy for data

a genuine single market for data, open to data from across the world where personal as well as non-personal data, including sensitive business data, are secure and businesses also have easy access to an almost infinite amount of high-quality industrial data, boosting growth and creating value, while minimising the human carbon and environmental footprint.

What data? For what? By whom?

How to implement it?

Co-organised and supported by:

IoT Large-Scale Pilots Programme
European Commission
AIOTI
CREATE-IoT
Data sharing in agriculture. Towards a European agriculture data space.

Joel Bacquet
European Commission
DG CONNECT
Data sharing in agriculture. Towards a European agriculture data space.

Doris Marquardt
European Commission
DG AGRI
During the webinar: questions for the speakers

After the webinar: questionnaire for helping in the definition of the agriculture data space

http://www.agridataspace.eu/
# Morning session agenda

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<td>10:00-10:20</td>
<td><strong>Welcome and Introduction</strong>&lt;br&gt; Luis Pérez-Freire. <strong>Gradiant</strong>, Executive Director. <strong>AIOTI</strong>, chair of WG06 “smart farming and food security”&lt;br&gt; Joel Bacquet. European Commission. DG CONNECT&lt;br&gt; Doris Marquardt. European Commission, DG AGRI</td>
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<td>10:20-10:30</td>
<td><strong>Presentations</strong>&lt;br&gt; <strong>Code of conduct for agricultural data sharing by contractual agreement</strong>&lt;br&gt; Daniel Azevedo. <strong>COPA-COGECA</strong>, agricultural technology director.</td>
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<td>10:30-10:40</td>
<td><strong>Societal relevance of data sharing: reflections beyond the Code of Conduct</strong>&lt;br&gt; Simone van der Burg. <strong>Wageningen University &amp; Research. IoF2020</strong> work package leader</td>
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<td>10:50-11:20</td>
<td><strong>National approaches to agriculture data sharing</strong>&lt;br&gt; Steffen Beerbaum. <strong>German Ministry of Food and Agriculture</strong>.&lt;br&gt; Théo-Paul Haezebrock. <strong>Agdatahub</strong>, Products and Services Manager.&lt;br&gt; Miguel Ángel Arroyo-Alcaraz. <strong>Spanish Ministry of Agriculture, Fisheries and Food</strong>, Sub-Directorate General of Innovation and Digitalisation</td>
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<td>11:20-12:05</td>
<td><strong>Roundtable discussion</strong>&lt;br&gt; Moderated by Thomas Engel. <strong>John Deere</strong>, Manager Technology Innovation Strategy</td>
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<td>12:05-12:15</td>
<td><strong>Closing of the morning session</strong>&lt;br&gt; Summary/wrap-up and closing</td>
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Data sharing in agriculture.
Towards a European agriculture data space.

10.20 h. Code of conduct for agricultural data sharing by contractual agreement

Daniel Azevedo
COPA-COGECA
Agricultural technology director
The united voice of Farmers and their cooperatives at European Level
In 1962, a joint Secretariat was created, making it one of the largest and most active organizations in Brussels for the past 60 years.
Mission

To ensure a viable, innovative, competitive EU agriculture and agri-food sector guaranteeing food security to half a billion people throughout Europe.

Objective

Promoting the view of European farmers and agri-cooperatives to influence the EU decision-making process and public opinion.
Farming Community committed to EU common policies

Green Deal – need for a coherent and supportive framework

- Common Agricultural policy
  - Internal market, Food safety, environment, animal health and welfare

- Climate Change
  - Committed to the implementation of Paris agreement
  - Limit the world’s temperature increase to 1.5°C above pre-industrial levels while not endangering food security;

Digital Single Market (EU Data strategy, GDPR)

The EU farming community is committed and proud of the EU model of production!

Please enable our investment on modernization and sustainability of EU agriculture!
Agri-food Chain is a driver of the EU economy...

.... Increasingly, European foodstuffs gain attention for their sustainability

- 44 million jobs in the EU
- representing 3.7% of EU GDP
- contributing to the EU trade surplus – almost €21.5 (1/3 of EU’s total net trade balance)

Agriculture is the backbone of EU rural areas

- provides food at affordable prices as well as raw materials for the processing industry
- agriculture and forestry cover more than 75% of the land
- play a crucial role in protecting the environment and managing our natural resources sustainably.
- culture & traditions

Agriculture is key to deliver on the United Nation’s Sustainable Development Goals and moving towards a climate-neutral European continent
Innovation needs to provide concrete solutions and all farmers need to access latest technology in order to respond to dynamic markets, improve sustainability and maintain high quality of EU agricultural produce!
Optimise the use of resources

Precision agriculture provide the tools and knowledge for farmers to take more precise and sustainable decisions. Right time, right place, right dose!

🌟 Most adopted PLF technologies are:
- Sensors for production, GPS, etc
- Management information system
- Health monitoring

🌟 Expected to be adopted within 5 years:
- Camera monitoring in barn, Health monitoring, Animal tracking, etc.

🌟 Hopefully other technologies such as AI and robotics could be widely available soon..

🌟 Improve functioning of food-chain, find new markets, improving the life conditions of farmers and their families, etc...
Simplification and modernization of administrative procedures

- Digital technologies enable online applications for payments, pre-filling of application forms, decrease costly controls but increasing compliance;

- Copernicus, Galileo

- Give farmers a larger room of manoeuvre to make good farming decisions;

- Provide online advisory and training, etc.

It should provide clear benefits for the farmer in the form of simplification, smarter regulation (e.g. friendly innovation regulation), access to data & services (e.g. soils maps, records), anticipate payments, and incentives to use new technologies.
It is Strategy - Not technology – the Real Driver for Technological and Digital Transformation!

ALL EU POLICIES TO ALIGN THEIR EFORTS TOWARDS CREATING THE BASELINE FOR THE UPTAKE OF TECHNOLOGIES BY ALL FARMERS

Cross sectorial Integrated decision making systems, supported by AI;

Transparency and Trust on Data Sharing, Improve the access of data by farmers;

Infrastructure - connectivity & interoperability, reliability, standards and security;

Digital Skills and Jobs Coalition - Advisory and Training

Access to investment, financing, capacity building

Digital Innovation Hubs

Access to talent and generational renewal

Innovation, research – starting in the farm...

Innovative friendly regulatory framework (e.g. drones)
EU code of conduct on agricultural data sharing by contractual arrangement

Transparency, defining responsibilities, creating trust!

- Right on data produced on the farm or during farming operations is attributed to the farmer and may be used extensively by him/her;
- Leading role in controlling the access to and use of data from their business
- Benefit from sharing the data with different partners
- It addresses, portability of data, opt out, sensitive information, security, etc;
- National codes (e.g. FR);
- Referred in the Commission data strategy;
EU code of conduct on agricultural data sharing by contractual arrangement

Transparency, defining responsibilities, creating trust!

- Implementation (e.g. translation ES, IT, FR, FI), IoF 2020 data package, Smart AgriHubs
- Usability: Technological facilitators of Code of conduct (e.g. Multipass)
- Brochure with clear evidence of data sharing and its benefits
- Should we explore the possibility to move towards governance rules? Under what conditions?

How can we ensure that we create more value .....? 
How can we ensure that the farming community benefits from data sharing?
Thank you for your attention!
Societal relevance of data sharing: reflections beyond the Code of Conduct

Simone van der Burg
IOF2020
Wageningen University & Research
Beyond the Code of Conduct

Simone van der Burg
Europe chooses its own strategy

• China: the state determines what is being done with data
• US: large companies are in charge of farm data
• Europe: avoid power concentrations; strive towards a diverse landscape of larger and smaller parties that determine together how data should be governed (avoid monopolies/oligopolies)

• Complex and exciting task!
Request for self-regulation

- GDPR protects personal data, which concerns ‘any information which is related to an identified or identifiable natural person’
- For non-personal data: free flow regulation.
- Article 6 of FFR asks to foster self-regulation, such as by means of the creation of codes of conduct
Five principles

- Data ownership
- Data access/control/portability
- Data protection and transparency
- Privacy and security
- Liability and intellectual property rights
EU Code: Shape trust by means of a contract, which

- Acknowledges the right of all parties to protect sensitive information (like IPs)
- Recognizes the right of the ‘data originator’ to control the use of the data and determine who can have access to it
- Contract should be stated in a clear language, which specifies
  - (a) terms and definitions,
  - (b) the purpose of collecting, sharing and processing data,
  - (c) rights and obligations that parties have related to data,
  - (d) information on how data are stored,
  - (e) verification mechanisms for the data originator,
  - (f) transparent mechanisms for adding new/future uses
Evaluation?

Strengths
• Serious attempt to protect personal interests, rights and freedoms
• Shaped by actors in the ecosystem; is therefore supported by them
• Helps to move towards a practical solution: a contract

Weaknesses
• No specific attention for societal values that are at stake in data sharing
• Actors think like business (wo-)men, but not like citizen ‘self-regulators’ of a shared European society
• A contract is not that practical when the data sharing network expands...digitization of contracts helps, but tends to make contracts a bit hollow....
Beyond the EU Code?
Proposal: a layered approach

1. Contracts when data originators start sharing data on a platform
2. We develop ‘playrules’ together for the use of data on data platforms, which also specify who can use what data for societal purposes

-> Look at data on platforms as ‘commons’
Societal values?

Society has high expectations:
Investments in digital farming are expected to contribute to the goals explained in Food 2030 and the Green Deal

• Increase production of high quality, nutritious and safe food for the growing population
• Less burden for the environment
• Less use of natural resources

Demand to share data for societal purposes

• Need to monitor whether and to what extent digital farming actually contributes to realizing these ends
  • Access to data by researchers and policy makers?
  • Access of citizens at large?
  • .....data are also a basis for knowledge which could be considered a ‘common’?

• ‘Citizens should be empowered to make better decisions based on insights gleaned from non-personal data. And that data should be available to all – whether public or private, big or small, start-up or giant. This will help society to get the most out of innovation and competition and ensure that everyone benefits from a digital dividend. This digital Europe should reflect the best of Europe - open, fair, diverse, democratic, and confident.’ (A European Strategy for Data (2020), p.1)
Questions to consider for the ‘playrules’...

- About what data are we talking?
- Who can use these data?
- How can they use the data?
- For what (private, societal) goals do we allow to use the data?
- What conditions should use of our data satisfy?
- Who can decide how we use the data?
• Thank you!
  • Simone.vanderburg@wur.nl
Data sharing in agriculture. Towards a European agriculture data space.

10.40 h. Strategy for full deployment of agricultural machinery data sharing

Vik Vandecaveye

European Agricultural Machinery Association, chair project team “Digital Farming”.

Co-organised and supported by:

- European Large-Scale Pilots Programme
- AIOTI
- CREATE-IoT

CNH Industrial, Mgr Advanced Data Analysis and Application Development
Strategy for full deployment of agricultural machinery data sharing

Vik Vandecaveye
Chair PT3 Digital Farming
10 June 2020
AIOTI Workshop “Data sharing in agriculture. Towards a European agriculture data space.”
Agricultural machinery and data

- Big data generators
- Need data to operate
- Committed to farmers
- Data for better equipment
Requirements

- Easy
- Protected
- Automated
- Different platforms
- Code of conduct
Approach

- Value data
- In the cloud
- Minimal and compatible data formats
- Standardised access with API
- Certification
- Governance scheme
- Automatic consent
What we’re doing

Standards development

European projects
Paper

Steffen Beerbaum
German Ministry of Food and Agriculture

Data sharing in agriculture. Towards a European agriculture data space.

10.50 h. National approaches to agriculture data sharing
Digital innovation for agriculture

Federal Ministry of Food and Agriculture (BMEL)
Questions about data sovereignty, data security and the provision of data.

→ Agricultural machines generate a lot of data.
→ Farmers are primarily entitled to the **right of use** of this data.
→ The BMEL supports and promotes an **open and transparent data use** in agriculture which serves both farmers and the common good.

→ Currently conducted: **Feasibility study**
Questions of data sovereignty, data security and the provision of data - by whom?

→ Looking into questions such as:
   → Technological challenges
   → Legal aspects/ data handling
   → Analysis of individual stakeholders (farmers, authorities, companies etc.)
→ End of 2019: Interviews/ Questionnaires with stakeholders
→ First results: Autumn of 2020.

“Consideration of the entire emerging ecosystem that can develop around a public digital platform.”
GAIA-X: A federated data infrastructure as the cradle of a vibrant European ecosystem.

- Joint forces with France – further MS and other countries welcome to take part in the project.
- Currently 8 domains in various areas (e.g. agriculture, health, finance, …), over 40 Use Cases established.
- Two parallel approaches:
  - **Workstream 1**: user perspective and use cases.
  - **Workstream 2**: conception of the technical foundations.
GAIA-X and the BMEL: The emerging agricultural domain and the identification of Use Cases.

→ Identification of agricultural Use Cases: currently ongoing
→ relevant for the agricultural domain:
  → Data sharing and storage
  → Ownership/sovereignty of data
  → Data availability and interoperability
→ For farmers, agtech, research, start-ups.
→ Innovations, technological advances, new applications

→ Next steps: Selection of Use Cases, further formation of the agricultural domain
National Initiative on data sovereignty, data security and the provision of data - by whom?

→ Creating model terms involving different stakeholders
  → respecting the farmers interest in the use of data generated by agricultural machines
  → balancing the relationships and interests between the different stakeholders in the industry
  → establishing the use of the FAIR data principles (findable, accessible, interoperable, reusable) within the data flow
  → Consideration to stipulate the establishment of API’s (application programming interfaces)

→ The results of the feasibility study will be taken into account
Stakeholder consultation on a European level

→ German Council Presidency 2020

→ Taking the Commission’s European strategy for data into account

→ Taking stock of the experiences gained with the stakeholder code of conduct on agricultural data sharing by contractual agreement

→ Consultation of various stakeholders in summer

→ Conference on the digitalisation of agriculture, 2nd – 3rd December 2020
Data sharing in agriculture. Towards a European agriculture data space.

10.50 h. National approaches to agriculture data sharing

Théo-Paul Haezebrouck
Agdatahub
Products and Services Manager.
Creating a collaborative digital future for agriculture

#ActForAgriData
Agriculture is one of the sectors most affected by the digital transition

- 2.5 billion of billion data produced daily worldwide\(^*\)
- 67% of French farmers use new technologies to manage their farms\(^*\)
- 15 billion invested in Agtech during 5 last years worldwide, only 2% in France\(^**\)

**FACILITATING THE ACCESS TO AND USE OF AGRICULTURAL DATA IS A CRUCIAL ISSUE IN PROMOTING THE DEVELOPMENT OF INNOVATIVE SOLUTIONS FOR SUSTAINABLE AND EFFICIENT AGRICULTURE.**

\(^*\) source: French Ministry of Agriculture  
\(^**\) source: EVA Group study, 'Néo-agriculteurs', February 2019  
\(^***\) source: La Ferme Digitale, France
Meeting the needs of the agricultural ecosystem

**CREATING VALUE FOR THE BENEFIT OF FARMERS AND CONSUMERS**

Managing the use of farmers’ data.

**SHARING TECHNOLOGICAL TOOLS**

Creating shared technological infrastructure to send and/or receive data in an industrial, secure and standardised manner, while respecting the consent of farmers.

**DISSEMINATING INNOVATIONS IN VALUE CHAINS AND TERRITORIES**

Sharing innovative models and tools to boost the number of projects closely matching the needs of end users.
Rolling-out collaborative digital technology for agriculture

Created to meet the needs of farmers and value chains, Agdatahub employs shared and sovereign technological infrastructure combined with a collective and structured standardisation process to guarantee the development of agricultural digital technology.
"A la carte" service offer

Agdatahub supports economic actors and agricultural value chains in the implementation of their projects.

AGDATAHUB CONSULTING
SUPPORTING THE DEVELOPMENT OF YOUR DIGITAL ACTIVITIES WITH OUR PROJECT MANAGERS.

AGDATAHUB SOLUTIONS
BUILDING YOUR BESPOKE EXPERIENCE ACCORDING TO YOUR NEEDS.

- **STANDARDIZATION**
  Analysing, managing and developing new standards for farms in all sectors.

- **CONSENT**
  Management: administering data usage via a dedicated interface. Router: collecting and centralising the consent of farmers.

- **CLOUD**
  Storing data and applications securely in a trusted cloud environment.

- **EXCHANGE**
  Disseminating, exchanging, sharing and drawing value from data on a secure and sovereign platform.
EXCHANGE PLATFORM
• 1 plenary session
• 7 workshops
• 3 months

• 82 irritants identified

• 35 expectations expressed

• + 700 contributions

• ~ 65 cumulative days

• 20 participants per session (average)

• 180 requirements
Located in the heart of territories

With a presence in France and elsewhere in Europe, Agdatahub relies on a network of partners to encourage the emergence of collective initiatives led by actors in innovation.
A network of expert partners

With a presence in all sectors and regions, Agdatahub relies on a network of operational partners who support the roll-out of its solutions.
Values to be shared

Acting together for Europe’s food future and the sovereignty of agricultural data.

**GUARANTEEING DATA SECURITY**
Managing the expression of informed consent by agricultural producers and value chain actors.

**PROMOTING EUROPEAN DIGITAL INDEPENDENCE**
Storing and securing farm data on independent infrastructure free from extraterritorial measures such as the American Cloud Act.

**SHARING THE VALUE**
Ensuring the fair distribution of value between all actors in value chains. Creating business data standards, open to all and accessible for free.

#ActForAgriData
Digital independence: a shared priority

"To build the Europe of tomorrow, our norms can’t be under American control. Our infrastructures, our ports and airports can’t be controlled by Chinese capital, neither can our digital networks be under Russian pressure."

Emmanuel Macron
French President
LA TRIBUNE / 10 FEBRUARY 2020

"With Christiane Lambert, President of FNSEA, we are working to support farmers in the digital transformation on the issues of data sharing and the development of Agtech."

Cédric O
Secretary of State for digital technology
TWITTER / 16 DECEMBER 2019

"It’s on industrial platforms that the successive, sector by sector, layers of software will be found, ultimately supporting sectoral or specific artificial intelligence applications."

Thierry Breton
European Commissioner for the Internal Market
LES ECHOS / 23 FEBRUARY 2020
A collective commitment

Agdatahub's approach follows the logic of the ‘Manifesto for Europe’s food future and the sovereignty of agricultural data’ launched in 2019 by API-AGRO, DAWEX and 3DS OUTSCALE, supported by FNSEA, France’s Agricultural Technical Institutes (ACTA) and the country’s Chambers of Agriculture (APCA).

#ActForAgriData

ACTING TOGETHER FOR THE EXPERT USE OF AGRICULTURAL DATA

COMING TOGETHER TO SHARE THE VALUE OF AGRICULTURAL DATA

INNOVATING ITS USES

BUILDING SECURE AND SOVEREIGN TECHNOLOGICAL INFRASTRUCTURE
THANK YOU

#ActForAgriData
Miguel Ángel Arroyo-Alcaraz
Spanish Ministry of Agriculture, Fisheries and Food
Sub-directorate general of digitization and innovation

Data sharing in agriculture. Towards a European agriculture data space.

10.50 h. National approaches to agriculture data sharing
DATA SHARING IN AGRICULTURE

TOWARDS A EUROPEAN AGRICULTURE DATA SPACE

ONLINE WORK / 10 June 2020 / Digitalization
AGRI-FOOD AND FORESTRY SECTOR CONTEXT IN SPAIN

**Significant economic impact:** 900,000 agricultural holdings, 28,000 agri-food industries; 95% SME, +/- 10% GDP, **2 million jobs**, main sectors in rural areas, heavy impact on other sectors (services...)

Exports: 50 billion €. Main player in global market and leadership within EU market.

**Rural territories:** 84% of Spanish surface area but 16% of population; 66,000km² sparsely populated areas (inner peripheries); 1,350 municipalities <100 inhabitants; masculinized, and aged.

**Digital infrastructure:** 78% homes in rural areas have internet connection (82% in the EU). 26 Digital Innovation Hubs with capacities in the agri-food and forestry sectors (55% of total) lower than EU average.
PREPARATORY WORKS TIMELINE

2010 Europe 2020
   SWG SCAR-AKIS
2012 EIP, EIP-Agri
2013 RIS3
2014 H2020
2015 Digital Single Market
2016 Cork 2.0
2017 Smart Villages
2018 New ACP, proposal: Strategic Plans idea
2018 Startup Cities

2013 Spain Digital Agenda
2013 R+D+i Spanish Strategy
2015 Approval NRDP:
   1st call for Ogs 2016
2017-19 FG on digitalization and big data.
2017 Smart Territories Nacional Program
2018 Añora Statement
2019 Change Agenda
2019 MAPA Digitization Strategy:
   I Action Plan 2019-2020

- Regional Govs. Enquiry
- Public Enquiry
- Cabinet Gov. Approval
- Public Presentation
- Web link
- I Action Plan (draft)

• Inter-Departments, Spain Gov.
INNOVATION & TICs
Key elements to fight

Rural depopulation
Revitalization of rural economy
Incorporation of young people

Answer in crisis time COVID-19

MAIN DIGITAL SOLUTION

THE DIGITALIZATION OF THE ECONOMY MAKES POSSIBLE THE DEVELOPMENT OF NEW BUSINESS MODEL AND NEW FORMS OF ECONOMICAL AND SOCIAL ORGANIZATION THAT WILL CHANGE THE WAY IN WHICH THE CITIZENS RELATE WITH THEMSELVES AND WITH PRIVATE AND PUBLIC ENTITIES
Its main aim is to eliminate or reduce currently existing technical, legislative, economic and educational barriers, thereby helping an economically, socially and environmentally sustainable agri-food sector to lead and to actively repopulate rural areas, making them more attractive, lively, dynamic and diverse places that generate wealth and quality jobs, paying special attention to young people and women.
OBJECTIVE O1

TO NARROW THE DIGITAL GAP between rural and urban areas, as well as between small and large companies, aiming for all parties to be connected.

To achieve this, work is to be done on connectivity in order to narrow the physical digital divide as regards infrastructure, and also on training to narrow the divide in adopting new technologies.
As an engine to boost the sector

Addressing the interoperability of the sector’s data and the openness of data

Understanding the latter concept in the widest sense so as to encourage this openness in,
- the Public Administration
- in research
- the private sector
OBJECTIVE O3

TO BOOST BUSINESS DEVELOPMENT AND BUSINESS MODELS
taking into account Industry 4.0 and the opportunities for economic diversification provided by new technologies.

To do so, it is essential to bolster the digital innovation ecosystem as a key aspect in modernising the sector and to provide advice for digital adoption in Knowledge and Innovation Systems in the agri-food and forestry sector and rural areas, in addition to fostering new business models, which often arise on applying and adopting technologies in certain fields.
01. NARROWING THE DIGITAL DIVIDE

01. L1. CONNECTIVITY
01.L1.M1. Coordination to improve connectivity
A18. Competence center for digital/agro/rural training
A19. Pilot course of the Competence Center
A20. Create Future Program
A21. Youth experience exchange program

02. FOSTERING THE USE DATA
02.L1. INTEROPERAIBILIDAD
02.L1.M2. Interoperability projects that respond to specific problems in which interregional stakeholders cooperate
A22. Call for interoperability for Innovative Projects
A23. Open data in Public Administrations
A24. Launch of the open MAPA data publication
A25. Aporta initiative, agri sector
A26. Aporta Challenge 2019
A27. Data from the value chain and environmental data
A28. Support for the Code of Conduct to Exchange and use agricultural data and data from the chain
A29. Dissemination of the Code of Conduct for the Exchange of agricultural data
A30. Promoting incentives to digitise farm logbooks
A31. Boost to the digitization of the logbooks
A32. Cooperatives as data generators
A33. Spanish and European consumption data
A34. Call for the use of consumption data for Innovative Projects
A35. Collaboration to improve the Common Agricultural Policy’s Integrated Administration and Control System
A36. Digital improvement of the Integrated Management and Control System

03. BOOSTING BUSINESS DEVELOPMENT AND NEW BUSINESS MODELS
03.L1. STRENGTHENING THE DIGITAL INNOVATION ECOSYSTEM
03.L1.M1. Foresting Digital Innovation Hubs
A37. Positioning Digital Innovation Hubs
A38. Innovative Public Procurement
A39. Promotion of innovation from the Demand of the agri-food and forestry sector
A40. Fostering collaboration among knowledge hubs, technological companies, and companies from the sector
A41. Support for digitization in the framework of Agricultural Knowledge and Innovation Systems
A42. Food Start Tech 2019
A43. Implementation of Connected Industry 4.0
A44. Support for introducing the Living Labs method into Spain
A45. Call Living Labs for Innovative Projects
A46. Advice on Digital Adoption in the Agri-Food and Forestry Sector and Rural Areas’ Knowledge and Innovation Systems
A47. Fostering knowledge and Information Exchange among digital advisors
A48. Inventory of digital decisions support tools and services
A49. Advice for SMEs and Startups in their process of digital adoption
A50. ACTIVA Industry 4.0 Program
A51. Business Growth Program
A52. Boosting advice via events and demonstration activities
A53. Inventory of digital decisions support tools and services
A54. Platform for digital entrepreneurship in rural areas
A55. Support to platforms for digital entrepreneurship in rural areas
A56. Coordination between Public Administration to bring in line aid for entrepreneurship in rural areas
A57. Diffusion of aid lines for entrepreneurship in rural areas
A58. Dissemination of European initiatives linked to digitisation in the spheres of Smart Villages, rural entrepreneurship and StartUp Europe
A59. Diffusion of Smart Villages Initiatives
A60. Participation in Startup Chi 2020
A61. Participation in DATAGRI 2019 and 2020
A62. Participation in Smart Agridfood Summit 2019 and 2020
A63. Dissemination of European initiatives linked to digitisation in the spheres of Smart Villages, rural entrepreneurship and StartUp Europe
A64. Smart Rural Territories
A65. Leadership and momentum of Startup Villages Initiative

04. BUSINESS GROWTH PROGRAM (2019-2020)

40 actions
O2. TO FOSTER THE USE OF DATA

9 ACTIONS

**O2. FOSTERING THE USE DATA**

**O2.L1. INTEROPERABILIDAD**

O2.L1.M2. Interoperability projects that respond to specific problems in which interregional stakeholders cooperate.

A12 Call for interoperability for Innovative Projects

**O2.L2. OPEN DATA**


A13 Launch of the open MAPA data publication

A14 Aporta Initiative, agro sector

A15 Aporta Challenge 2019

O2.L3. Data from the value chain and environmental data


A16 Dissemination of the Code of Conduct for the Exchange of agricultural data

O2.L3.M2. Promoting incentives to digitise farm logbooks

A17 Boost to the digitization of the logbooks


A18 Cooperatives as data gatherers


A19 Call for the use of consumption data for Innovative Projects


A20 Digital improvement of the Integrated Management and Control System

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An specific credit for interoperability will be allocated within the framework of the NRDP.

Launch of the open MAPA data publication.

Specify what information needs to be opened.

Create an open MAPA data catalog.

Avance harmonización of published data in order to publish increasingly valuable data.

Using these new technologies to control the CAP’s aid will make it easier to manage, progressing in monitoring the performance of agricultural production with more reliable, interoperable data that can be extended to the rest of the agricultural sector.
CONCLUSIONS

Efforts must be made at all levels, both European, national and regional level.

So that the transformation is transversal and occurs in all productive sectors.

It has been introduced in the post 2020 CAP through a common transversal objective that seeks to modernize the agricultural sector through knowledge, innovation and digitization in rural areas.

Digitalization Strategy for the Agri-Food and Forestry Sector and Rural Areas is aligned with the European Strategy for data
THANKS FOR YOUR ATTENTION!!

bzn-AgendaDigital@mapa.es
Data sharing in agriculture. Towards a European agriculture data space.

11.10 h. Round Table Discussion

Moderated by:
Thomas Engel
John Deere
Manager Technology Innovation Strategy.
Data sharing in agriculture. Towards a European agriculture data space.

Organised by:

AIOTI
Alliance for Internet of Things Innovation

CREATE-IoT

European Large-Scale Pilots Programme

Have your say!!!

http://www.agridataspace.eu/

Open until June 17th
Some preliminary results

**Barriers in the Agriculture sector.** Which problems identified in the European data strategy are of a particular concern for the agriculture sector?
Some preliminary results

**Barriers in the Agriculture sector.** Which problems identified in the European data strategy are of a particular concern for the agriculture sector?

Which sector should be the first to start sharing data at EU level?

- Lack of useful data (SQ001)
- Lack of technical infrastructures (storage, processing, trusted intermediaries etc.) (SQ002)
- Lack of governance rules (uncertain rights over data, insufficient standardisation) (SQ003)
- Arable production (SQ001)
- Dairy (SQ002)
- Fruit and vegetables (SQ003)
- Livestock (SQ004)
- Food supply chain (SQ005)
- Other
# Afternoon session – from 15:00 to 17:00

## Welcome and Introduction
15:00-15:20  
Luis Pérez-Freire. [Gradiant](#), executive director. [AIOTI](#), chair of WG06 “smart farming and food security”  
Joel Bacquet. European Commission. DG CONNECT  
Doris Marquardt. European Commission, DG AGRI

## Presentations
15:20-15:30  
High-level distributed architectures for agriculture data sharing  
Tom de Block. Nearcom. [AIOTI](#), chair of “distributed ledger technologies”

15:30-15:50  
Practical implementation of data sharing in agriculture and lessons learned  
The case of DJustConnect. Jurgen Vangeyte, [ILVO](#), scientific director.

15:50-16:10  
Approaches for data sharing in current agriculture Large Scale Pilots  
Stefan Rilling. [Fraunhofer IAIS](#). [ATLAS](#) project coordinator  
Kevin Doolin. [TSSG](#). [DEMETER](#) project coordinator

## Roundtable discussion
16:10-16:50  
Moderated by: Grigoris Chatzikostas. [Biosense Institute](#). Senior Advisor for EU Initiatives, Deputy Coordinator of [SmartAgriHubs](#) project.

## Closing of the afternoon session
16:50-17:00  
Summary/wrap-up and closing
Thank you!