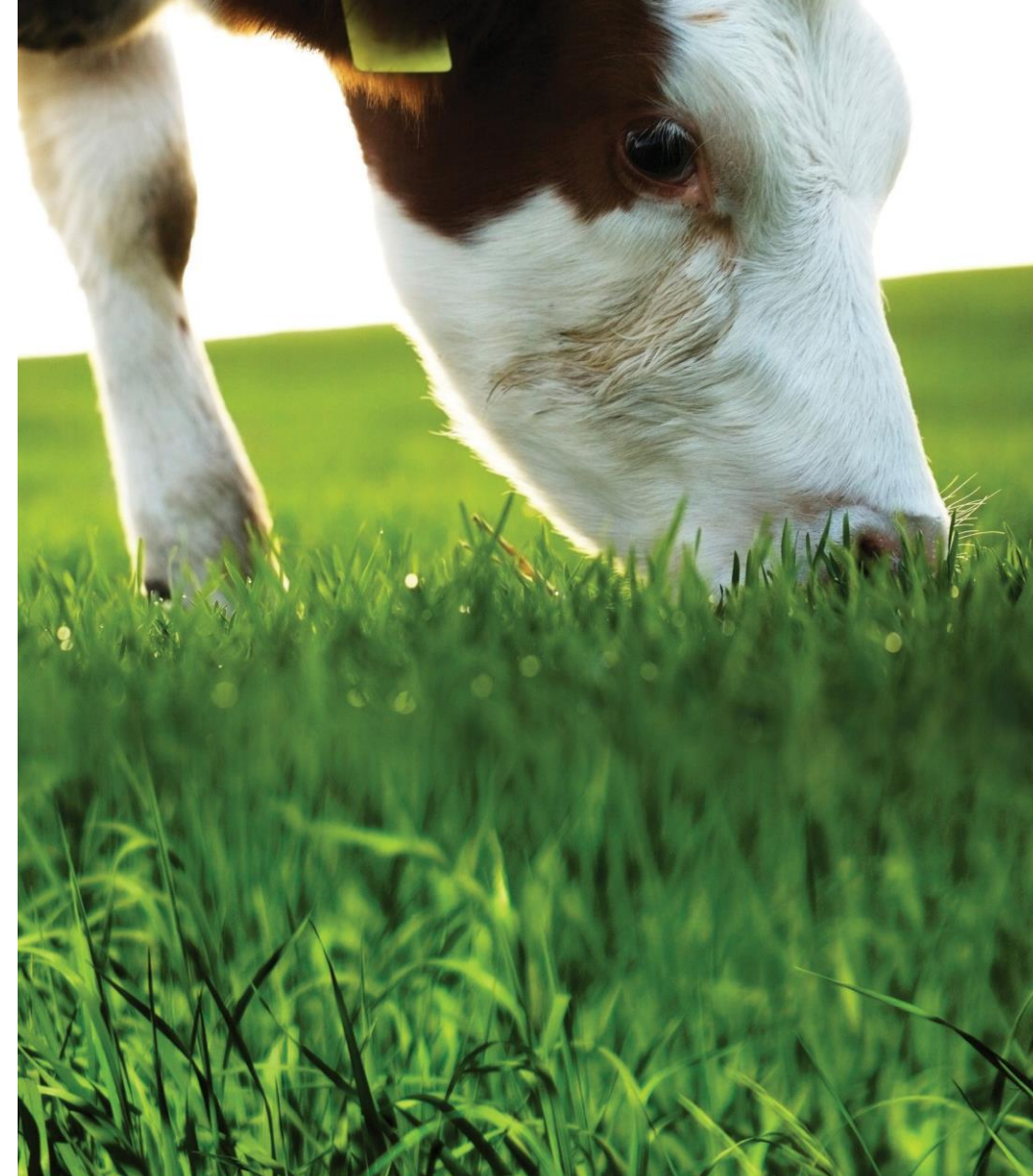




## DEMETER 101

Kevin Doolin

TSSG, Waterford Institute of Technology







## EU Perspective

Joël Bacquet - Programme Officer – Internet of Things  
DG CNECT - European Commission



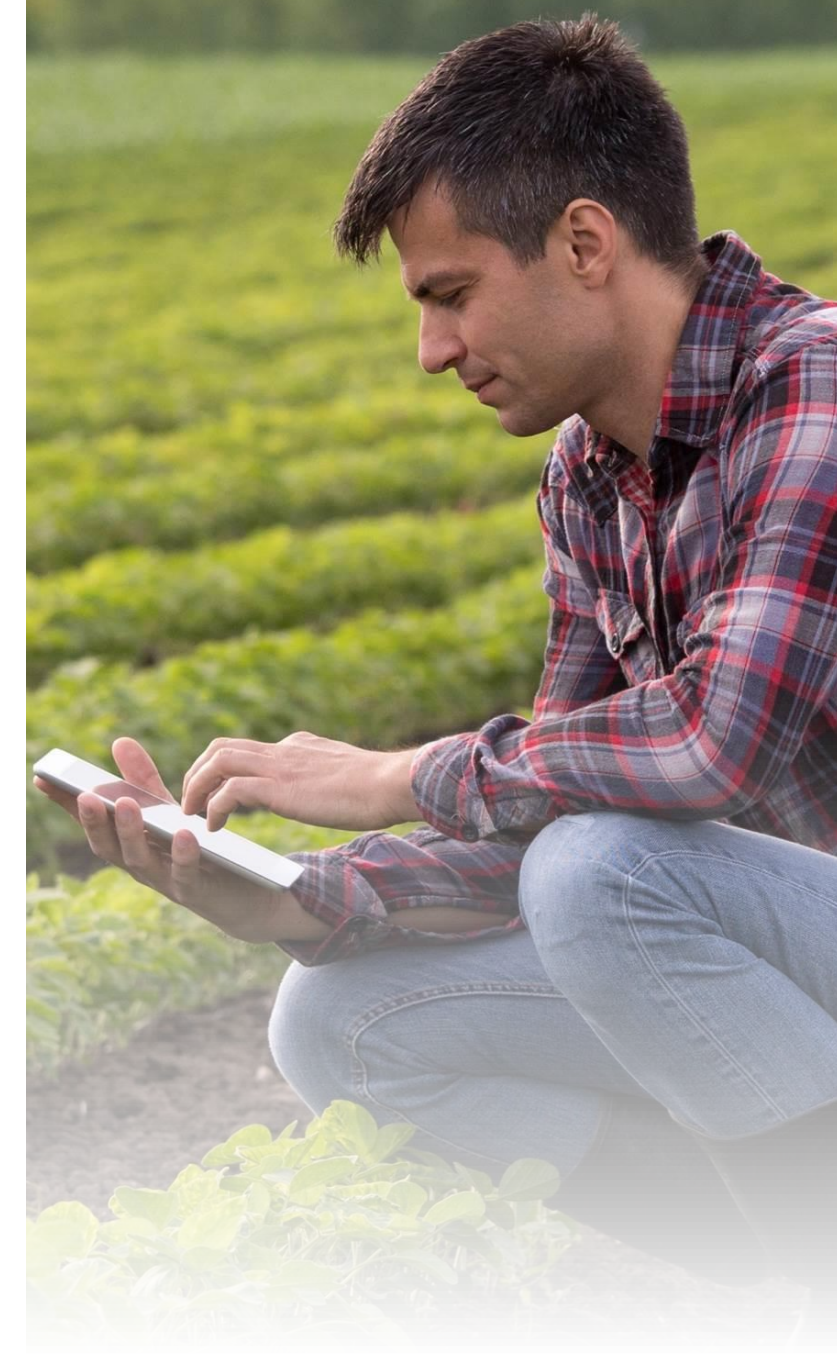
### Digitising European Industry



Digitising European Industry Brochure

<https://ec.europa.eu/digital-single-market/en/news/digitising-european-industry-2-years-brochure>

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# EU Perspective

Joël Bacquet - Programme Officer – Internet of Things  
DG CNECT - European Commission



## FA Digitisation Topics – WP 2018-2020



*Focus Area 'Digitising and transforming European industry and services',  
Platforms and Pilots – implement DEI strategy through projects cutting  
across techno boundaries and linking with Societal Challenges*

### LEIT-ICT

	Budget
• DT-ICT-07-2018-2019: Digital Manufacturing Platforms for Connected Smart Factories	95 M€
• <b>DT-ICT-08-2019: Agricultural digital integration platforms</b>	30 M€
• DT-ICT-09-2020: Digital service platforms for rural economies	30 M€
• DT-ICT-10-2018-2019: Interoperable and smart homes and grids	30 M€
• DT-ICT-11-2019: Big data solutions for energy	30 M€
• DT-ICT-12-2020: The smart hospital of the future	25 M€
• DT-ICT-13-2019: Digital Platforms/Pilots Horizontal Activities	4 M€

### SC1

• DT-TDS-01-2019: Smart and healthy living at home	60 M€
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## EU Perspective

Joël Bacquet - Programme Officer – Internet of Things  
DG CNECT - European Commission



### Digitising European Industry digitisation in Agriculture and farming - Status

Mainstreaming digital innovations  
DIHs

SmartAgriHub

AgROBOFood

Integration, platforms, pilots

IoF2020  
ATLAS  
DEMETER

Adapting regulations

Sept 2017: FFD regulation,  
portability

Cybersecurity package

Spring 2018: Revised PSI, ..

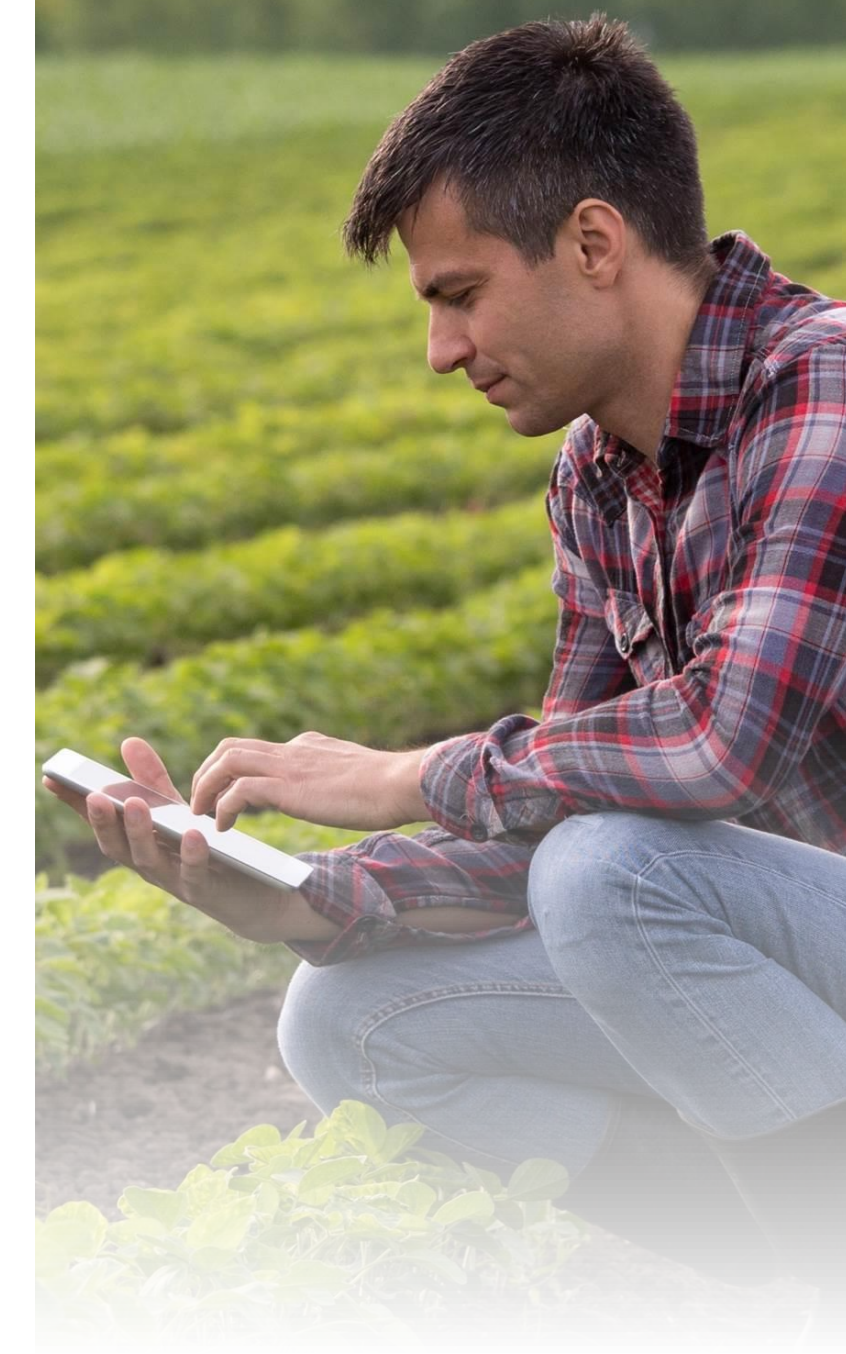
Preparation of the workforce

Training, skills, work environment

RUR-02-2018: Socio-economic impact  
digitisation in agriculture and rural  
areas

RUR-13-2018: Enabling the farm  
advisor community to prepare farmers  
for the digital age

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## EU Perspective

Doris Marquardt

DG Agriculture & Rural  
Development

Unit B.2 Research & Innovation

### Digitalisation brings opportunities to the EU farming sector and rural areas...

... but there are limiting factors and bottlenecks to  
overcome

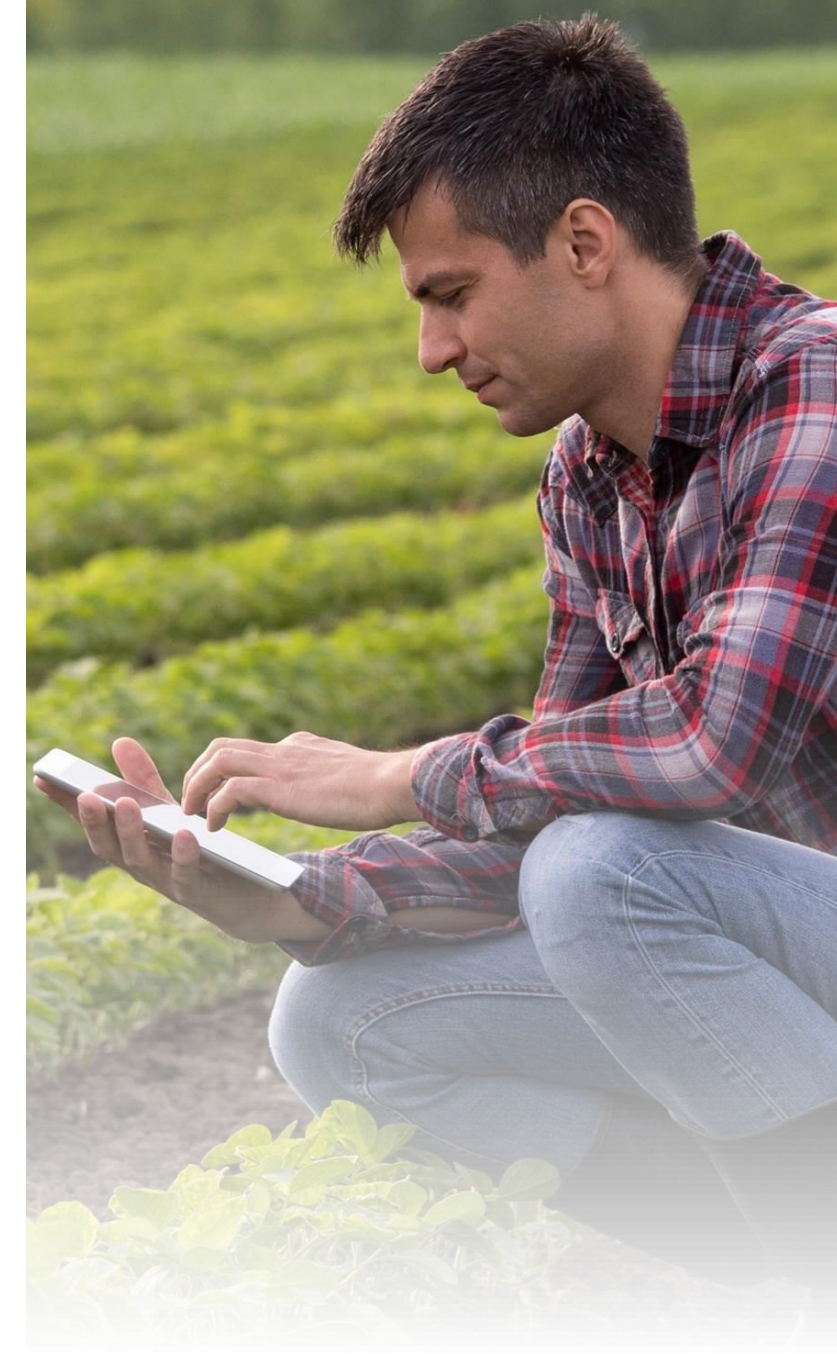
- Infrastructure / connectivity / broadband
- Farmers' awareness about benefits
- Farmers' skills
- Standardisation/interoperability of systems
- Data ownership
- Financing investments

...and potential risks to consider

- Digital divide
- Data ownership
- Increased concentration in the agri-food chain
- Uncertain impact on jobs
- Socio-economic impact overall

 European  
Commission

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## EU Perspective

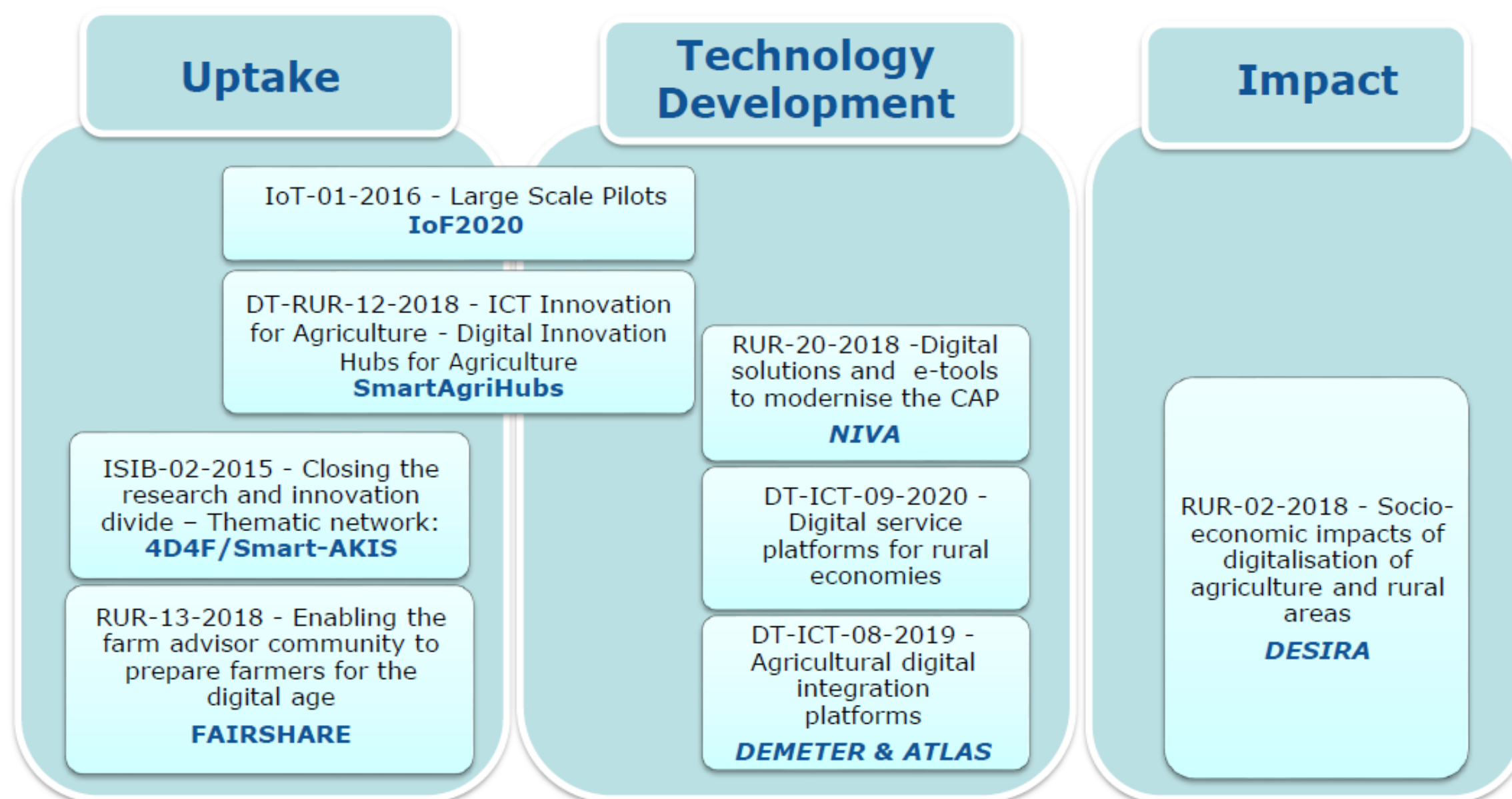
Doris Marquardt

DG Agriculture & Rural  
Development

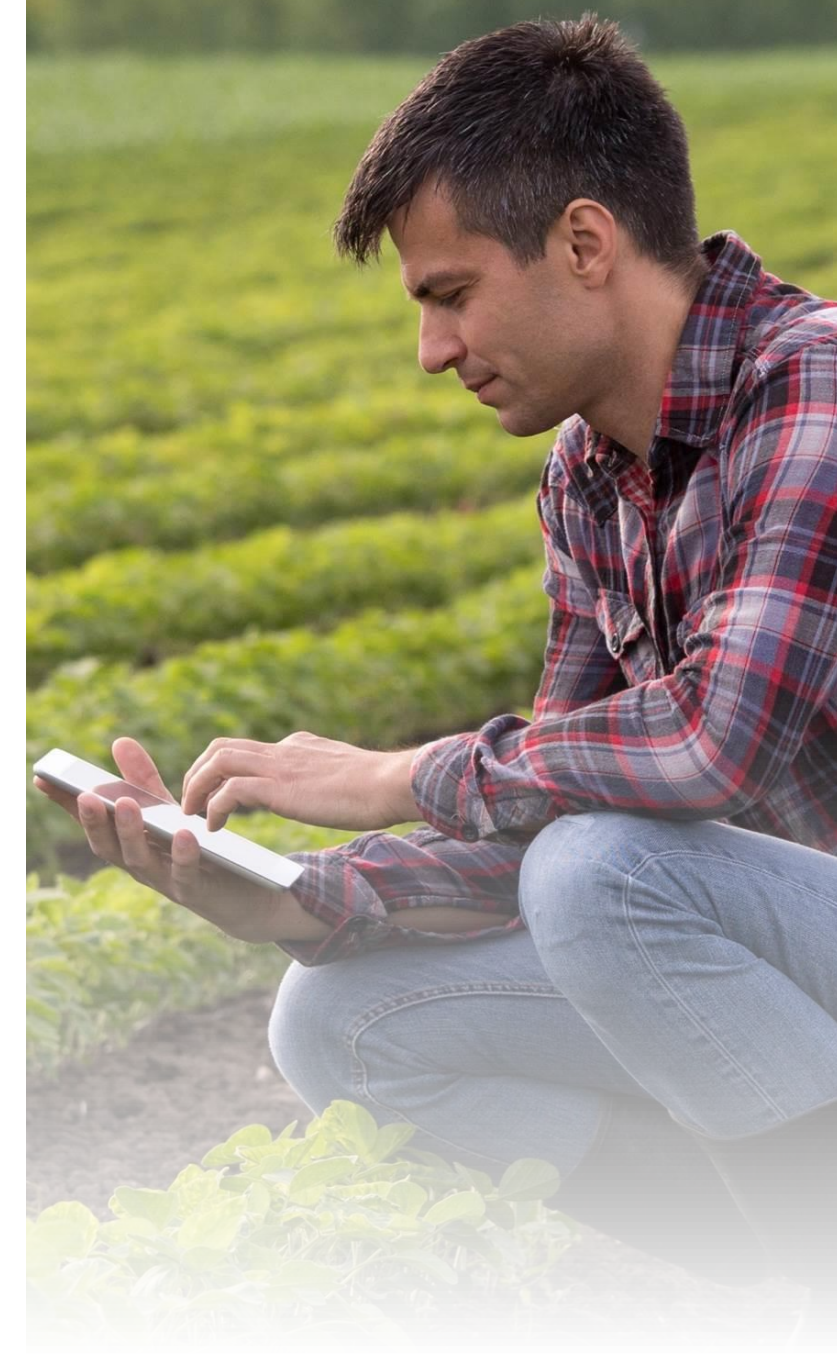
Unit B.2 Research & Innovation

## Research & Innovation

H2020 WP 2018-2020 Topics: Digital transformation in agriculture and rural areas



Other SFS topic supporting the Focus Area "Digitising and transforming EU industry and services":  
DT-SFS-14-2018: Personal nutrition, DT-SFS-26-2019: Food cloud demonstrator







# In a nutshell

 **15** member states



**18** Countries

**60**  
Partners

**318k** hectares of land

Working with

**5.7k**  
Farmers

**29k** Sensors used across

**80** sites

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**20** Pilots



**5** Agri Sectors

Global Outreach:

**69**

farming associations

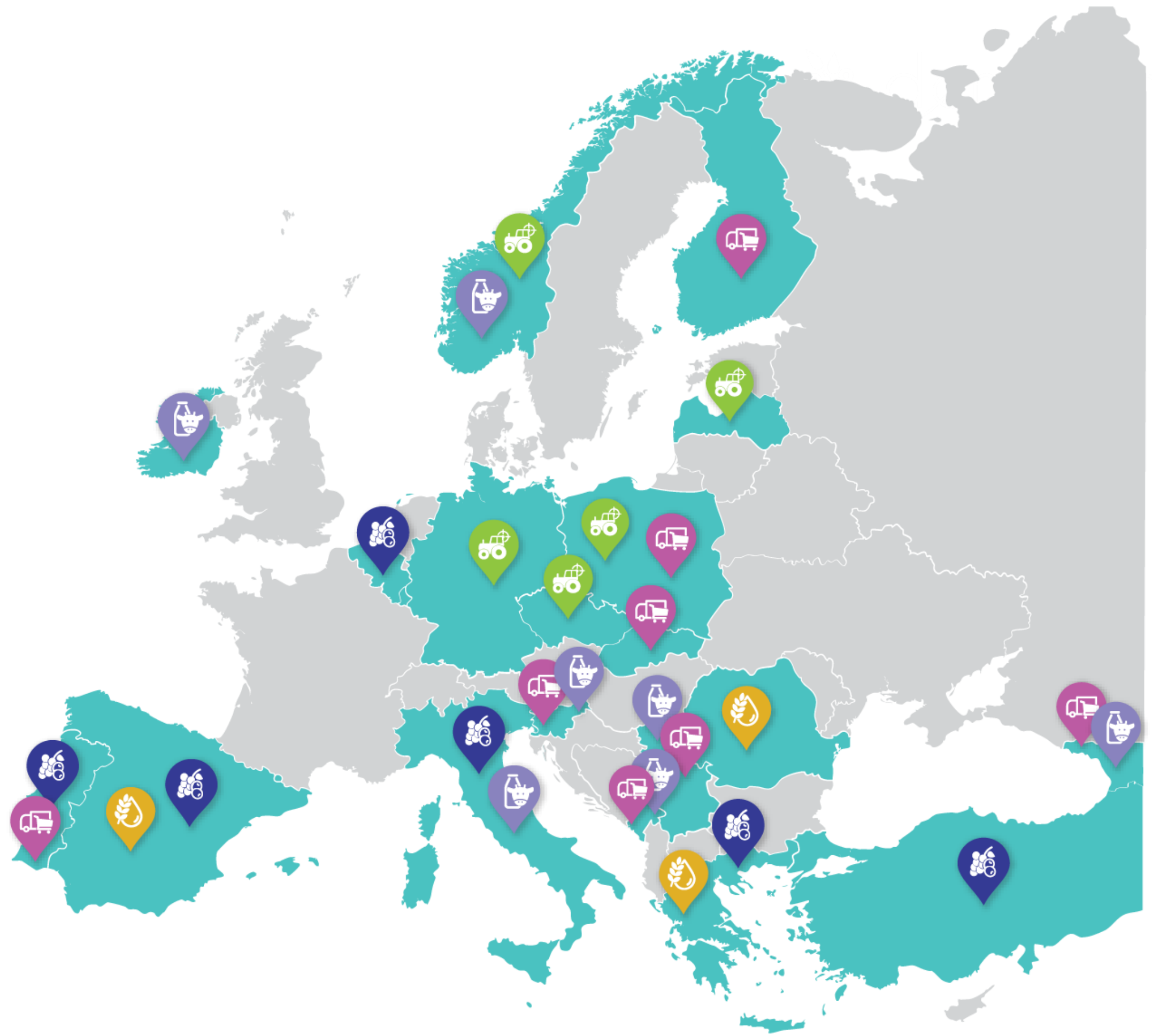
**47** Countries

**1.5 Billion** People

Multi-Actor Approach



Using Practical skills  
& knowledge to  
target real life  
needs, problems  
& opportunities.







# Pilot(s) Overview



**Sector: Arable Crops**  
**Focus: Water & Energy Management**

- Water savings in irrigated crops
- Smart energy management in irrigated & arable crops
- Optimal Quality Rice Irrigation
- IoT Corn Management & Decision Support Platform





**Sector: Arable Crops**  
**Focus: Agricultural Machinery, Precision Farming**

- In-Service Condition Monitoring of Agricultural Machinery
- Automated documentation of arable crop farming processes
- (Farming)Data Brokerage Service and Decision Support System for Farm Management
- Benchmarking at Farm Level Decision Support System





**Sector: Fruit & Vegetables**  
**Focus: Health and high-quality crops**

- Decision Support System to support olive growers
- Precision Farming for Mediterranean Woody Crops
- Pest Management Control on Fruit Fly
- Open platform for improved crop monitoring in potato farms





**Sector: Livestock**  
**Focus: Animal Health, High Quality**

- Dairy Farmers Dashboard for the entire milk and meat production value chain
- Consumer awareness: Milk quality and animal welfare tracking
- Proactive milk quality control
- Optimal chicken farm management





**Sector: Cross-sectorial**  
**Focus: Full supply chain, interoperability, robotics**

- Disease prediction and supply chain transparency for orchards/vineyards
- Farm of things in extensive cattle holdings
- Pollination optimisation in apiculture
- Transparent supply chain in poultry industry







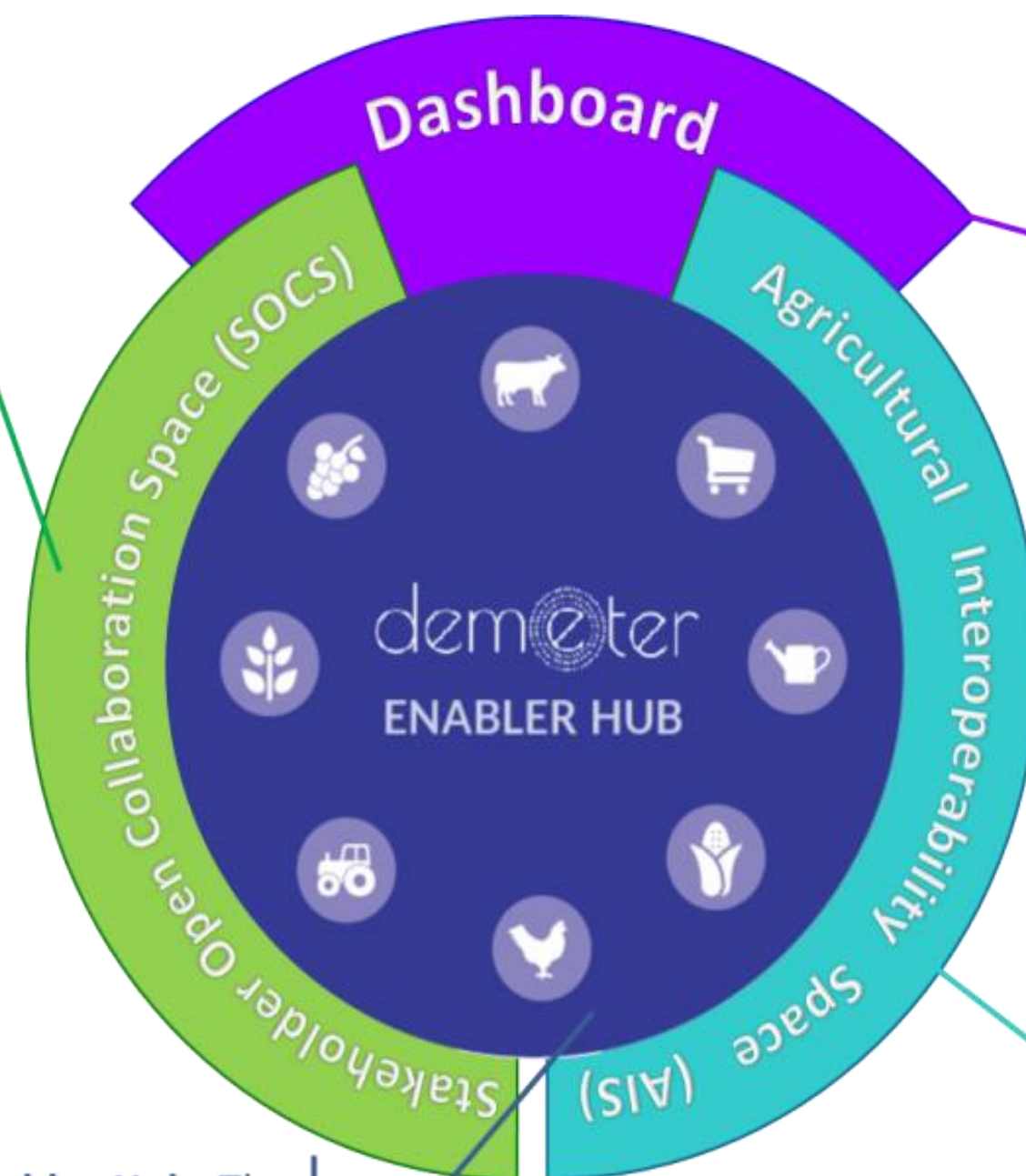


# Architecture from a height



## Knowledge sharing and co-creation space where

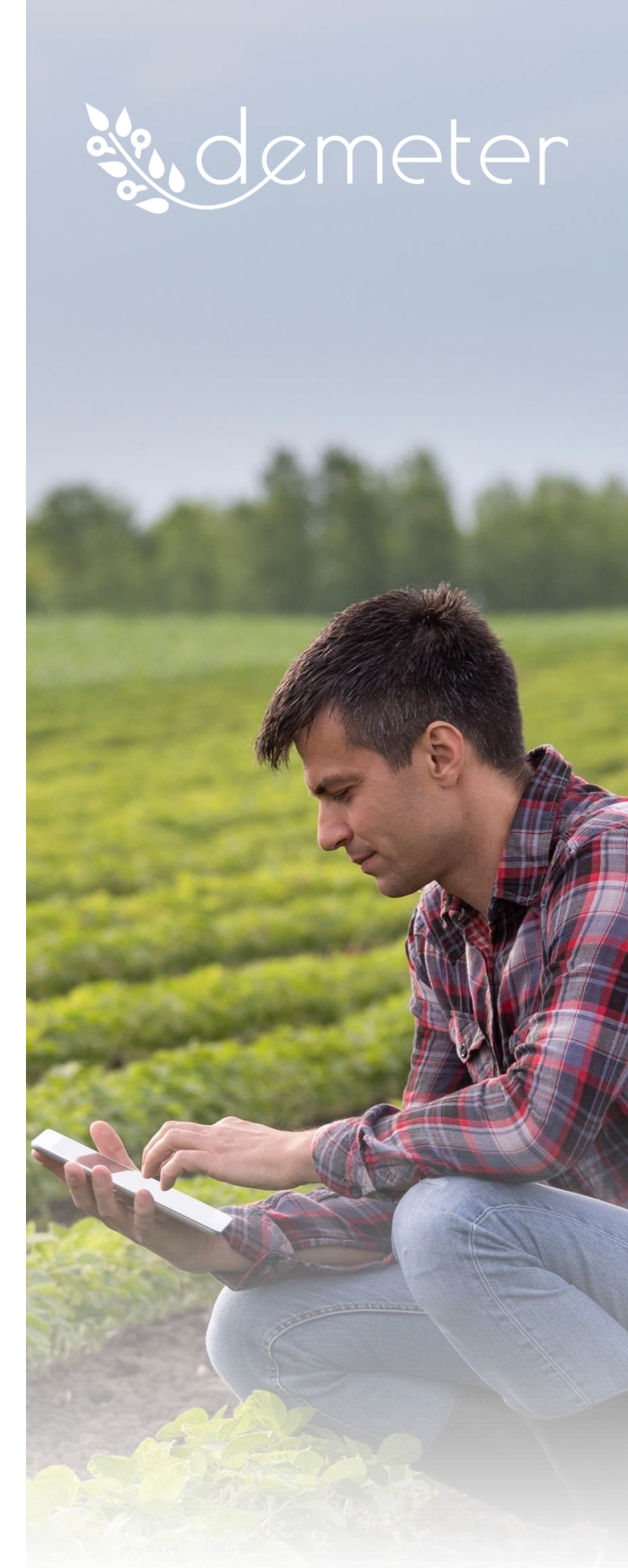
- Farmers/service advisors express their needs and
- Service advisors and providers team-up to define the most appropriate combination of tools.



**DEMETER Dashboard:** Sole entry point to the DEMETER ecosystem for all DEMETER Stakeholders.

**DEMETER Enabler Hub:** The available collaboration spaces (SOCS and AIS) are built around this hub that enables access to all resources that are available for integration and deployment.

**Implementation Space:** A virtual space where providers team-up and interoperate to develop and deliver the appropriate combinations and customisations of tools to the farmers ensuring interoperability with existing solutions.





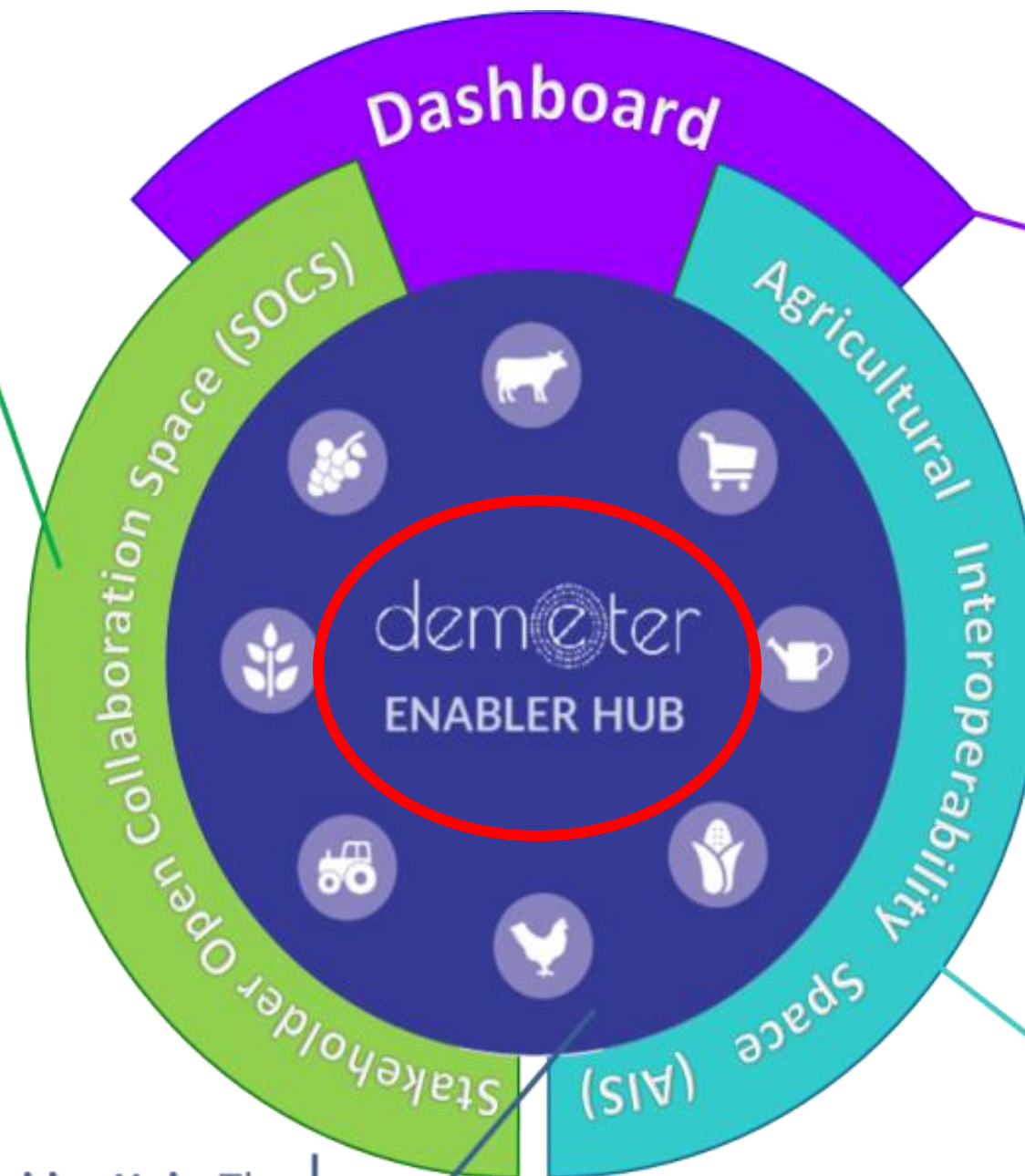


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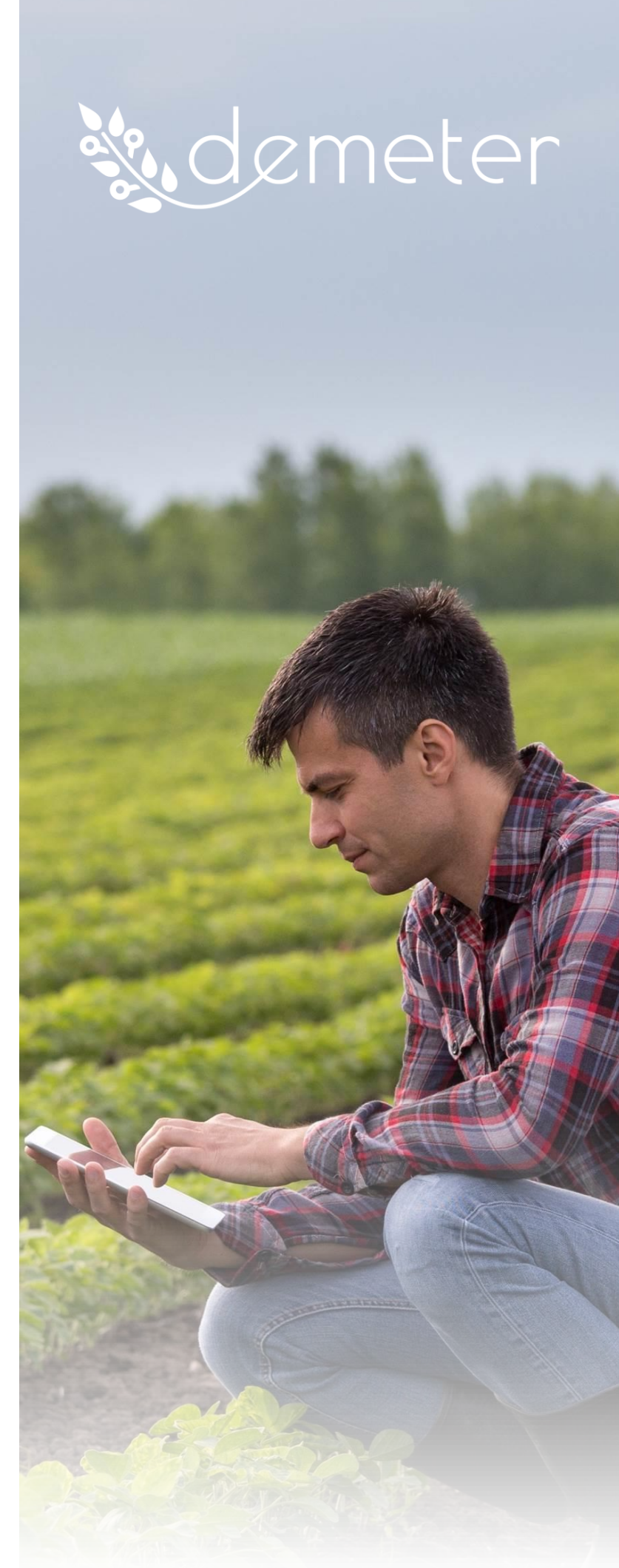
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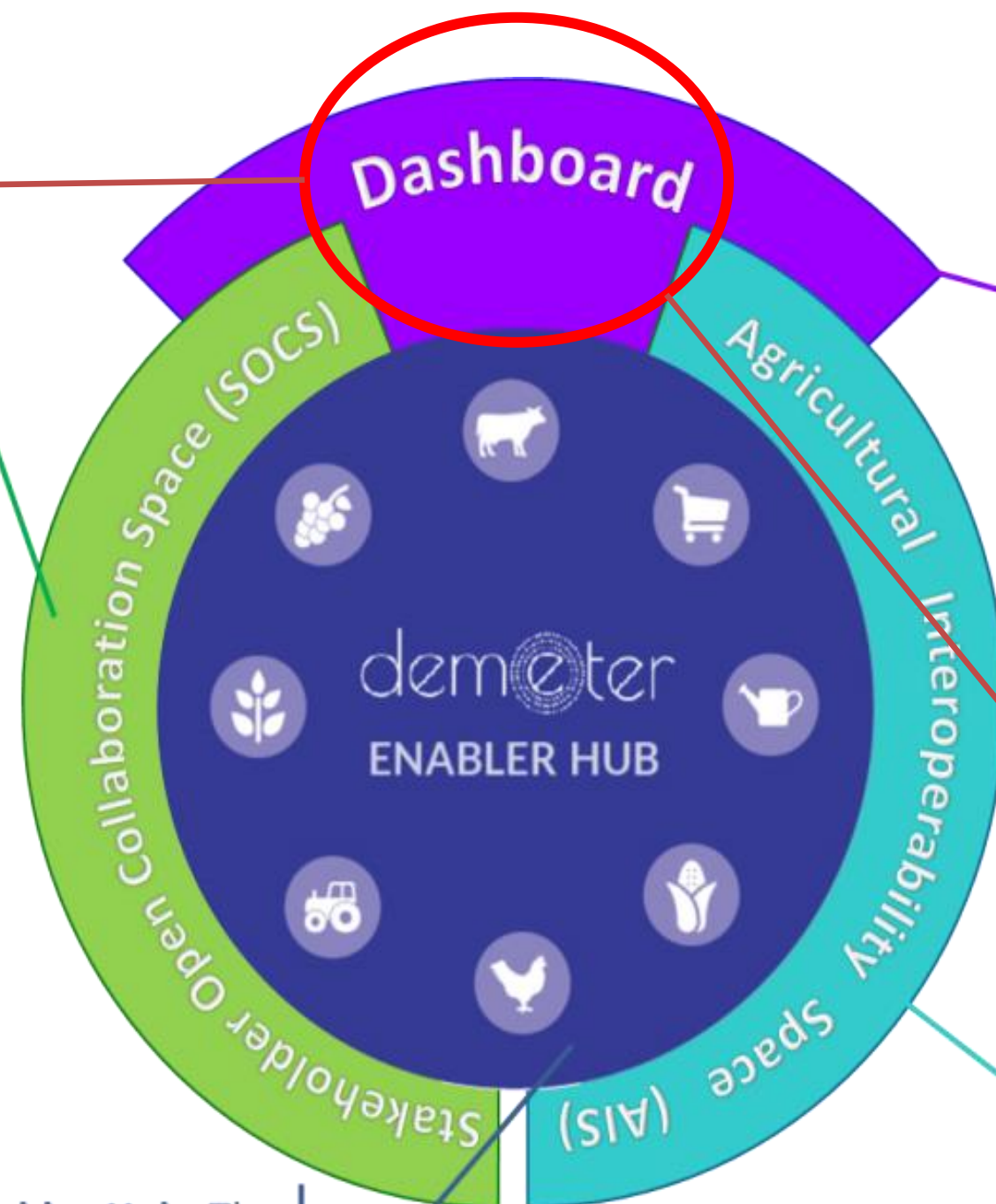


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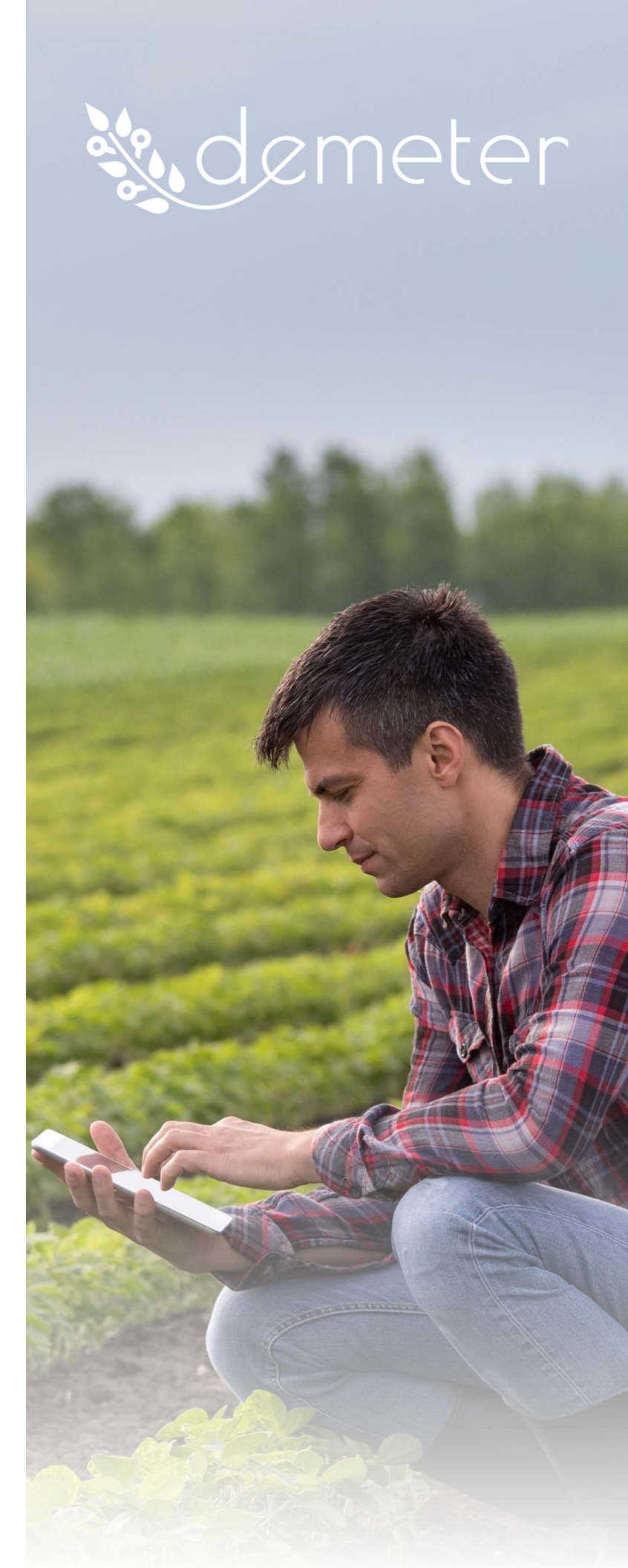
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# Thank you

## Kevin Doolin

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