

EU digitalisation policies and rural areas – a snapshot in light of the development of the DESIRA project

Policy Round table

"What role for digitalisation in the future of rural areas? Objectives and policy tools for a strategy"

26 January 2022

Dr. Doris Marquardt, European Commission DG AGRI – Unit F2, Research and Innovation

Selected framing conditions for the digital transformations in rural areas in the EU

Long-term vision for rural areas (2021)

Digital Declaration (2019) Digital Age & Strategy for Data (2020)*

Common
Agricultural
Policy post 2020

Green Deal & Farm to Fork











^{*}Further strategic documents under the headline ambition "A Europe fit for the Digital Age", include e.g. The Communication for a Digital Compass

Exploiting the potential of digital technologies

- Strengthening broadband capacities
- Supporting the development of digital skills
- Enabling the exchange of information and experiences
- Providing advisory services
- Facilitating investments
- Promoting targeted Research & Innovation
- Providing data and facilitating data sharing

Additional challenges

- Avoiding a digital divide between regions and types of farms.
- Prepare rural communities for changes in employment structures
- Strengthening monitoring capacities

→ A comprehensive approach is needed to boos digitalisation



Objectives of the Common Agricultural Policy post-2020



Cross-cutting / horizontal objective:

Modernising the sector by fostering and sharing of knowledge, innovation and **digitalisation** in agriculture and rural areas, and encouraging their uptake



Digitalisation in the CAP SP – first observations of possible interest for DESIRA

- Challenges of gathering data bases for SWOT analyses, especially for cross-country comparison
- References to DESIRA could be found
- Often digitalisation in agriculture is more elaborated than digitalisation in rural areas



Selected policy instruments beyond the CAP

Horizon Europe

- Tailored Horizon Europe themes
- Horizon Europe Candidate Partnership "Agriculture of Data"

Digital Europe Programme

- Common European Agriculture Data Space/ Data Space for Smart Communities
- Testing and Experimentation facilities for AI in agri-food/ for smart communities
- Digital Innovation Hubs
- Support to advanced Digital Skills

Recovery and Resilience Facility

Digital and Data infrastructure



Digital and data technologies as enablers for sustainability transition in agriculture and food systems



Selected calls from the Cluster 6 Work programme 2021/22

2021

- Smart XG, last-mile and edge solutions for remote farming, forestry and rural areas
- Research & innovation roadmap for blockchain technologies in the agri-food sector
- Potential of drones as multi-purpose vehicle risks and added values
- Assessing the impacts of digital technologies in agriculture cost, benefits and potential for sustainability gains
- Development of the markets and use of digital technologies and infrastructure in agriculture state of play and foresight: digital and data technologies for the agricultural sector in a fast changing regulatory, trade and technical environment
- Data economy in the field of agriculture effects of data sharing and big data

2022

- Smart solutions for the use of digital technologies for small- and medium-sized, farms and farm structures
- Upscaling (real-time) sensor data for EU-wide monitoring of production and agrienvironmental conditions

Supporting the digital transformation of agriculture, rural communities and policy systems



Digital Europe Programme

- "New programme"
- First work programme published in November 2021
- Measures particularly relevant to boost digitalization in agriculture and rural areas:
 - Testing and Experimentation facilities for AI in agri-food
 - Testing and Experimentation Facilities for AI for Smart Communities
 - Common European Agriculture Data Space
 - Common European Data Space for Smart Communities
 - Digital Innovation Hubs
 - Support to advanced digital skills



DEP: Artificial intelligence, data and cloud



European Commission

Data spaces

Green Deal

Manufacturing

Health

Agriculture

Mobility

Security (law enforcement)

Cultural Heritage

Media

Horizontal actions in support to data spaces

support centre

open data portal

high value data sets

Cloud federation

Market place

Cloud to Edge based services

Middleware platforms, building blocks, cross cutting software...

Al on demand platform

Central access point to Al resources

/ Testing & Experimentation Facilities

Manufacturing

Health

Agriculture

Smart Communit<u>ies</u>

Edge AI HW

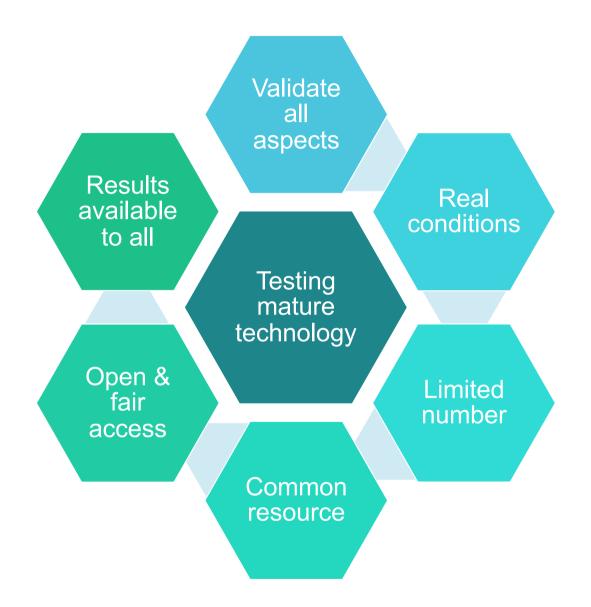
Actions will be managed directly by DG CNECT

TEF for AI in agri-food and smart communities

- Testing and Experimentation Facilities (TEF) for Artificial Intelligence (AI) in agri-food are planned for the first Work Programme of the DEP;
- to pave the way for deployment of AI and to boost up-take;
- greater efficiency and uniformity of testing, experimentation and validation;
- large-scale, world-class technology infrastructure for testing and experimentation;
- a kind of "Trial farms" or "Trial fields";
- exchange of experiences, visits by experts;
- links to Digital Innovation Hubs, and eventually to Common Agriculture Data Space.
- → Capitalization of data.



Concept





The concept of Digital Innovation Hubs

Digital Innovation Hubs (DIHs)

- operate at region level
- serve the upscaling of innovation
- Link "innovators" and "end users"
- build the capacities and networks in a region to effectively deploy digital solutions, including e.g. financial modelling, and legal advice.

Concept of DIHs has been piloted in the agri-food sector.

DIHs and a network of DIHs (including in agri-food will be supported the Digital Europe Programme and link up to EIP-AGRI.

Possible aspects for DESIRA to look at

- Links between different "innovators" within one region
- Spill-over effects to the regions



Complementarity of EU programmes – <u>Examples</u> related to Innovation in Digital and Data technologies

Policy instrument/ Programme	Scope	Examples	Comments
Horizon Europe	Research & Innovation	Dedicated calls Partnership "Agriculture of Data"	Under Horizon Europe Cluster 6 (and Cluster 4)
Digital Europe Programme	Innovation & Deployment Capacity building	Digital Innovation Hubs Advanced digital skills Testing and Experimentation Facilities for Al Common European Data Spaces	Network of Digital Innovation Hubs in agri- food expected to establish links to network of EIP OGs
Common Agricultural Policy	Application Capacity building Innovation	Advisory services Training Investment support Smart villages LEADER AKIS EIP AGRI	Link to Horizon 2020/ Horizon Europe through EIP-AGRI

What to come in near future?

• Declaration on Digital Rights and Principles (published today)

Data Act

• Further calls under the Digital Europe Programme



Thank you



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the <u>CC BY 4.0 license</u>. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

