EU initiatives in support of data for the agricultural sector and policies

NIVA Webinar – Data sharing and IACS Data

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Outline

- *« Digital Package » and a European Strategy for Data*
- *Common Agriculture Data Space*
- *High Value Data Sets*
- *Digital Europe Programme – selected measures*
- *Digital Declaration*
- *Horizon Europe*
  - *Overview of the portfolio of relevant measures*
  - *Candidate partnership « Agriculture of Data »*

« Digital package »

- *Adopted in February 2020*
- *Reflects on Commission priority - A Europe fit for the digital age*
- *Includes:*
  - *Communication "Shaping Europe's digital future" ,*
  - *European Data strategy,*
  - *White Paper on Artificial Intelligence: a European approach to excellence and trust.*

→ *Announcement of strategic approaches, legislation, and investment initiatives.*

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COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

A European strategy for data

A European Strategy for Data

Creation of a single market for data, where

- *Data can flow within the EU and across sectors, for the benefit of all;*
- *European rules, in particular privacy and data protection, as well as competition law, are fully respected;*
- *The rules for access and use of data are fair, practical and clear.*

A European Strategy for Data

Becoming an attractive, secure and dynamic data economy by

- *Setting clear and fair rules on **access and re-use of data**;*
- *Investing in next generation standards, tools and infrastructures to **store and process data**;*
- *Joining forces in European cloud capacity;*
- *Pooling **European data in key sectors, with EU-wide common and interoperable data spaces**;*
- *Giving users rights, tools and skills to stay in full control of their data.*

Common Agricultural Data Space

- *One data space in a set of data spaces;*
- *To facilitate the **sharing and pooling of data*** **for the sector**;
- *Building on experiences with the **Code of conduct** of agricultural data sharing;*
- *Design of data space still to be defined, e.g. the role of **public data** and contribution to "common good", e.g. R&I or policy monitoring;*
- *Potential to well supplement Horizon Europe Partnership Agriculture of Data;*
- *Accompanied by **act on data governance**.*

Digital Europe Programme

Digital Europe Programme (DEP) will

- *foster building strategic digital capacities and facilitating the wide deployment of digital technologies;*
- *supplement Horizon Europe and CEF.*

Elements relevant in the context of agricultural data

- ***Common Data Spaces**, incl. an Agriculture Data Space;*
- *Testing and Experimentation Facilities for AI, including in the agri-food sector;*
- *Support to the preparation of **High Value Data Sets**.*

DEP Strategic Orientations under discussion; and DEP Work programme under preparation.

High Value Data Sets

High Value Data Sets

- *with important benefits for economy and society will be identified*
- *are subject of a forthcoming implementing act as follow-up of the Open Data Directive;*
- *should be available free of charge, in machine readable formats, provided via APIs and, where relevant, as bulk download.*

High Value Data Sets

Thematic scope (as defined in the Annex of the ODD)

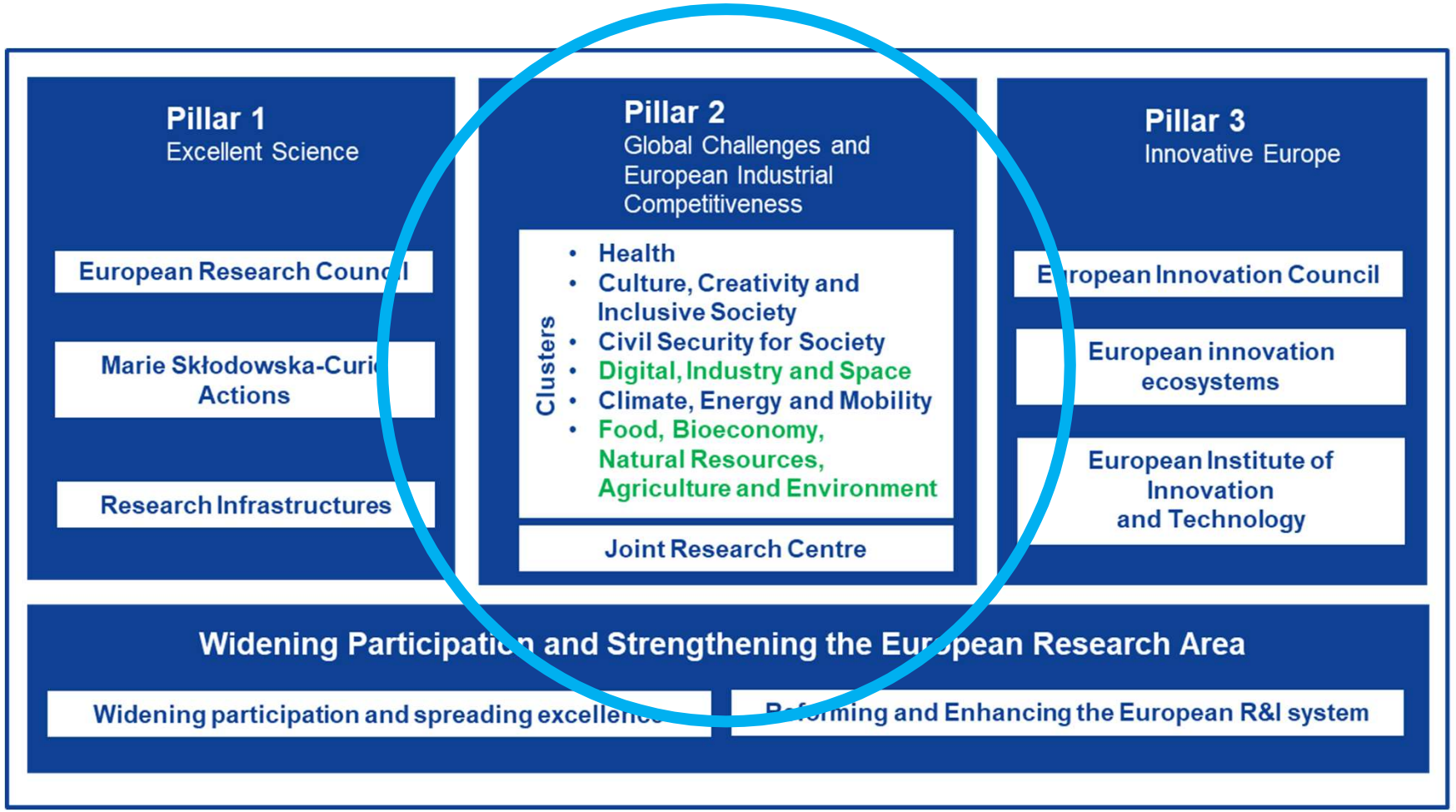
- *Geospatial*
- *Earth observation and environment*
- *Meteorological*
- *Statistics*
- *Companies and company ownership*
- *Mobility*

The Digital Declaration

Declaration on "A smart and sustainable digital future for European agriculture and rural areas"

- *signed by 25 Member States since April 2019;*
- *fosters a comprehensive approach towards digitalisation and synergies between policy programmes and instruments;*
- *referred to in the "European Strategy for Data";*
- *includes concrete actions, related to e.g. a common agriculture data space, High Value Data Sets, Testing and Experimentation Facilities foe AI, and Digital Innovation Hubs.*

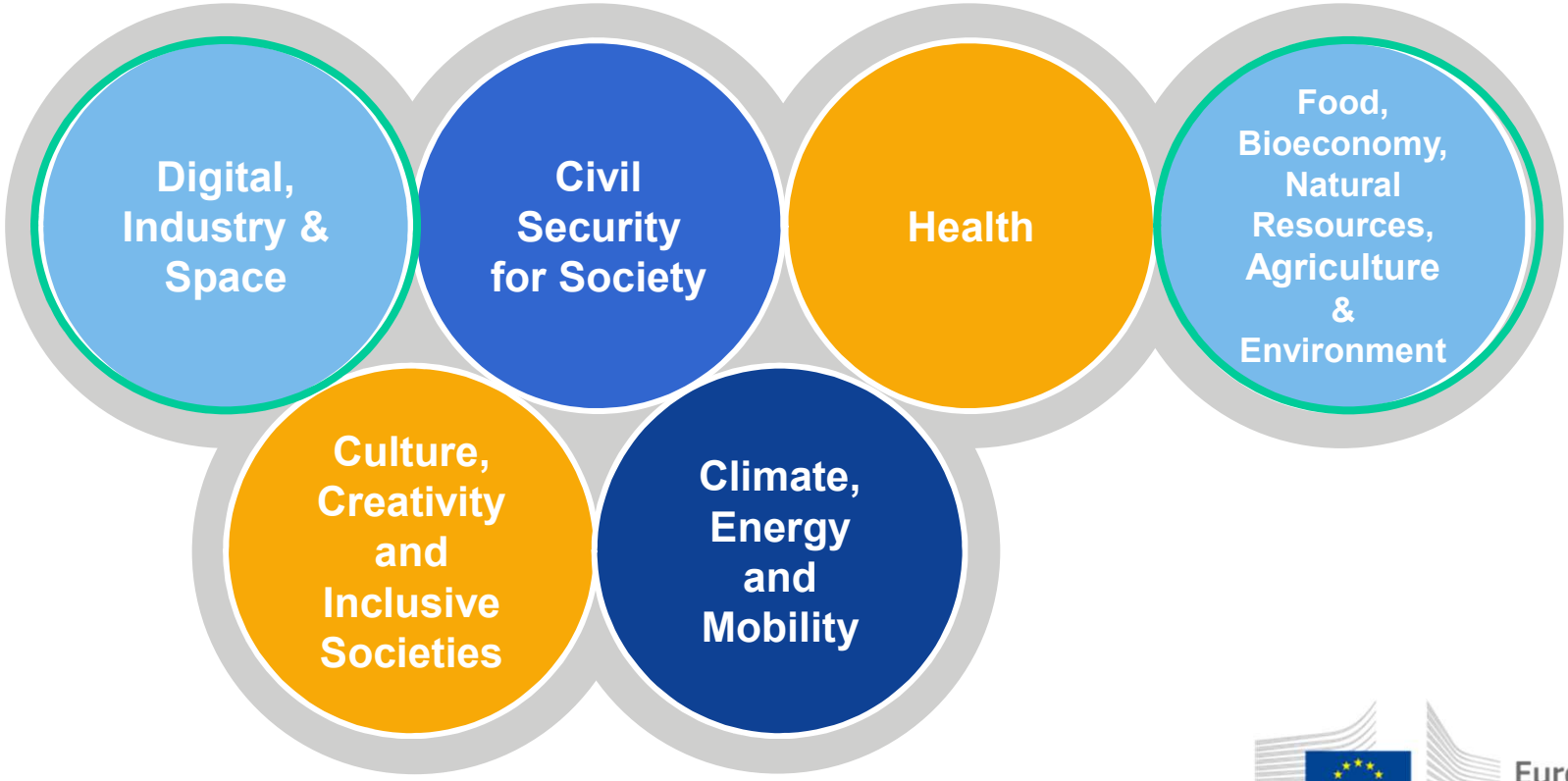
Horizon Europe



Pillar 2 - Clusters

Global Challenges & European Industrial Competitiveness: boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals

Commission proposal for budget: € 52.7 billion



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Examples of post-2020 elements linked to Digital and Data Technologies

Cluster 4

Destinations on e.g.

Robotics and AI,

Space,

Future generation Internet

Cluster 6

Some roadmaps across IAs foster Digital and Data technologies

Partnerships on Agriculture of Data and agro-ecology

DEP

e.g. Testing and Experimentation Facilities for AI, Common Agriculture Data Space, Block-chain,

Capacity building (Digital infrastructure also for R&I)

Examples of possible supplementarity

Cluster 4

Horizontal research on digital and data technologies relevant for all sectors/ several fields of application

Cluster 6

Addressing sector-/area specific needs with digital- and data technologies

Possible: Uptake of Cluster 4 results to be adapted to specific context

DEP

Pick up of research and innovation results close to market/ end-user-uptake (high level of maturity)

Example: Research **on** AI in Cluster 4, Research **with** AI in Cluster 6, Testing and/ or certification **of AI-based** innovation under DEP

Horizon Europe Partnership

"Agriculture of Data"

(Environmental Observations for sustainable EU agriculture)

Context

- Need of more information for supporting sustainable agricultural practices and the long-term competitiveness of the sector.
- Need for more data as basis for policy monitoring and evaluation.
- Agriculture already benefits from the use of earth observation; potential of earth observation data has not been fully harvested.
- More sharing and integration of data and data collection approaches are still needed.
- Big data technologies and Artificial Intelligence (AI) can add to providing solutions.
- Declaration on 'A smart and sustainable digital future for European agriculture and Rural areas' *(9 April 2019).*
- Ongoing work of EuroGEO/GEO.

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Principal Objectives

Using the possibilities offered by data technologies in the field of Environmental Observation to

- provide support to improve the sustainability performance of agricultural production;

- improve the capacities for policy monitoring and evaluation.

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Expected impacts

- Contribute to transitioning to a more sustainable and long-term competitive farming sector.
- Develop **digital solutions improving efficiency, environmentally and socio-economically sustainable food productio**n, including a basis to **climate adaptation**.
- Improvement of forecasting/modelling capabilities for governmental decision making.
- Supportive role in the delivery of the CAP and environmental and climate policy objectives and to monitoring and evaluation in general.
- Defragmenting the Environmental observation landscape.

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Possible synergies and supplementarity

- AI applications foreseen to be supported under the **Digital Europe Programme** (e.g. Common Agriculture Data Space).
- EU Space Programme, including Copernicus.
- Work of EuroGEO/GEO.
- MS' efforts in the context of LULUCF implementation and policy monitoring efforts in general.
- Several Horizon 2020 and other projects, such as NIVA or SEN4CAP, and forthcoming Horizon Europe projects.
- Identification of High value data sets following the Open Data Directive (ODD).

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Why a partnership?

- Key data sets are managed by public authorities.
- Many monitoring and policy evaluation tasks are in the responsibility of the Member States.
- Ensuring wide outreach of benefits from the results to be channeled to individuals (e.g. farmers) as well as to organisations and businesses.
- Achieving a critical mass of geographical outreach is essential to establish a sound reference data base; EU-wide approaches would be ideal.

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Thank you