



## Horizon Europe partnership **Agriculture of Data**

### **SRIA of the Horizon Europe candidate partnership Agriculture of Data**

*Co-Chairs:*

**Nicola Pirrone**, Jesper Stendal Sørensen, Jose F. Aldana Montes,  
On behalf of the Core Drafting Group



## Agriculture of Data – general objectives and domains

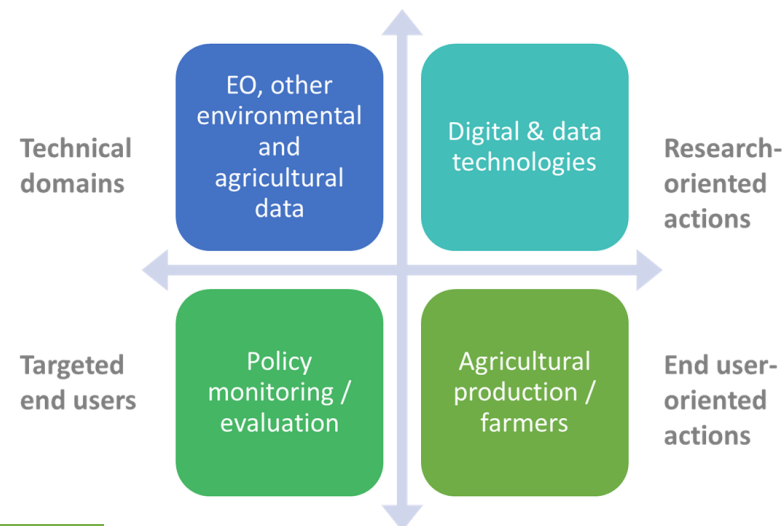
### What?

Support to **sustainable agriculture** in Europe as well as **policy monitoring and implementation** by using the possibilities that **digital and data technologies** in combination with **environmental observation and other data** offer.

### How?

- Development of **innovative data-based solutions and services** for the private and public domain them up (geographically and from innovation to deployment) through the capitalization of data

### Domains covered:





## Agriculture of Data – EU added value

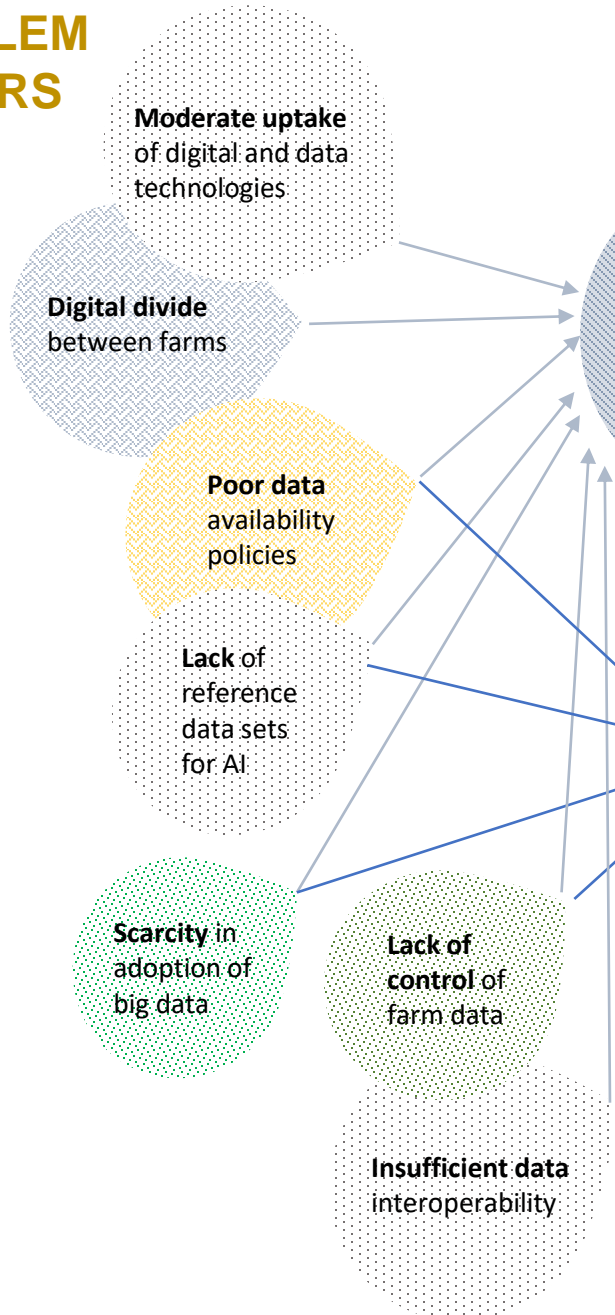
### Why a partnership?

- **Increased demand for** sustainability, adaptation to climate change, and performance orientation
- **Avoiding digital divides** and closing of market gaps
- Achieving an **"umbrella effect"** and **contribute to "defragmentation"** in the field of the development of data-based solutions for the agriculture sector and policy monitoring and evaluation following a common approach
- Achieving a **"critical mass" of the provision of reference data sets** needed for the effective application of **"Big data"** technologies
- Covering several biogeographic zones to allow for the development of **climate adaptation approaches** for the sector.
- **Covering whole Europe** to create data sets for policy monitoring and evaluation and avoiding "white spots" in the provision of independent data services to the sector and stakeholders

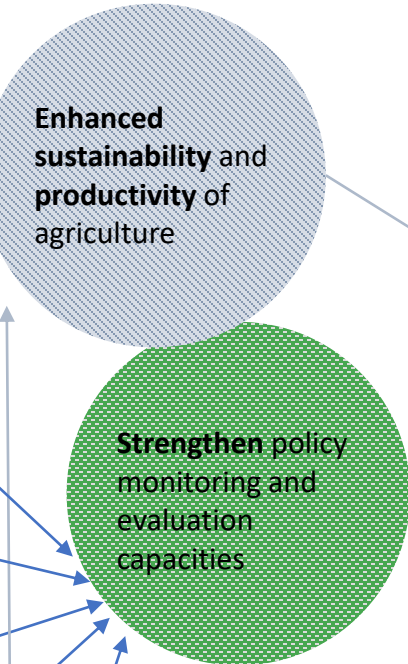


# Vision / Intervention Logic → from Drivers to Expected Impacts

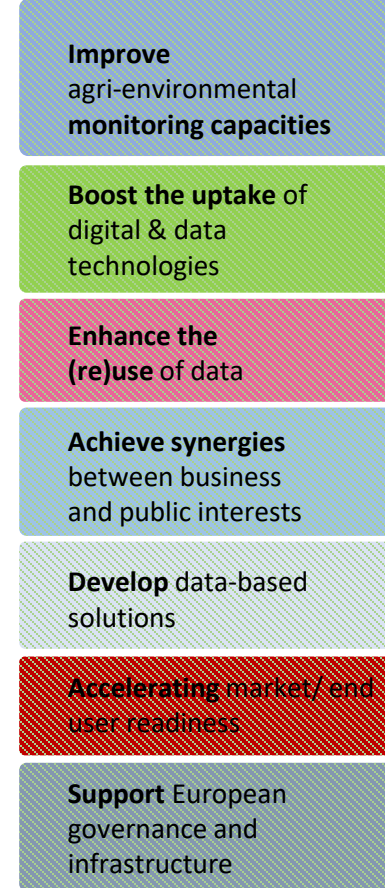
## PROBLEM DRIVERS



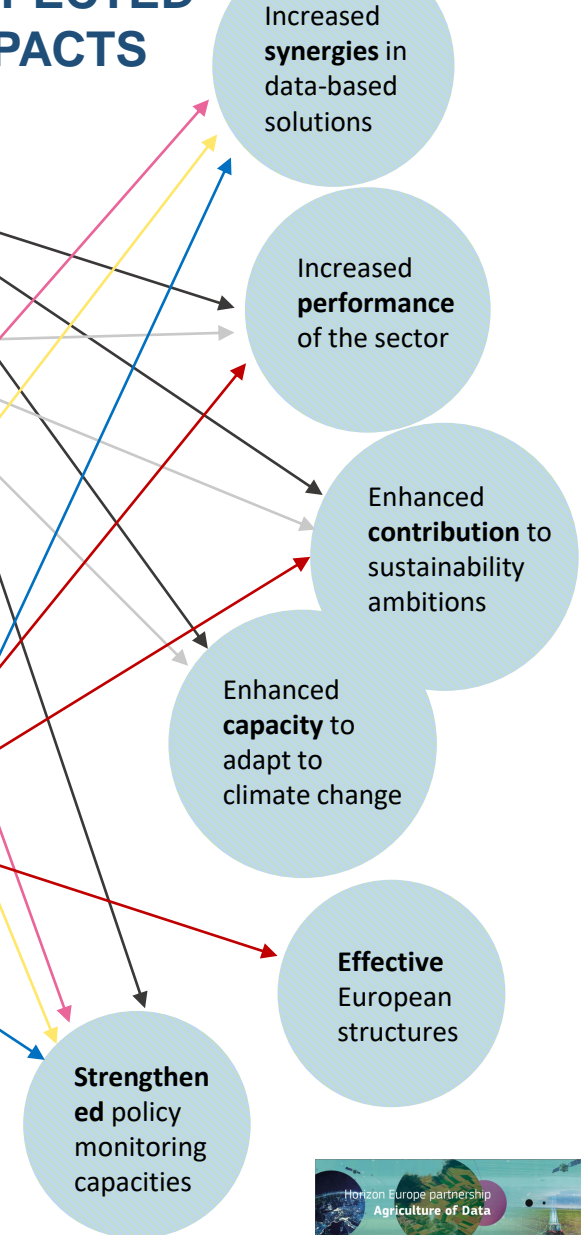
## GENERAL OBJECTIVES



## SPECIFIC OBJECTIVES



## EXPECTED IMPACTS







## Agriculture of Data – Actions/activities

Two main types of actions:

- a) Core actions** (R&I actions, upscaling and delivering end-user tailored innovative data-based solutions), *can include*:
  - Development of novel reference data sets;
  - innovative data-based solutions;
  - techniques in EO-based mapping and monitoring,
  - capitalisation of sensor data
- b) Strategic framing actions** (essential to ensure/increase effectiveness of the Core actions, *can include*:
  - Identification of policy monitoring needs,
  - data provision,
  - ensure consistency in approaches,
  - umbrella function in bringing together initiatives,
  - alignment of data formats





## Overview of Activities envisaged by the partnership (1)

The main types of core actions identified in the **Strategic Research and Innovation Agenda (SRIA)** can be broadly summed up as:

- **Mapping of available data sets** (at different geographical levels);
- **Mapping of data and knowledge gaps** (e.g. for impact assessment, reducing administrative burdens, climate adaptation data for production);
- **Identifying priority actions in generating data sets and data-based solutions achieving synergies between different interest groups;**
- **Enhancing the availability reference data sets for the application of AI at European level** (e.g. through achieving interoperable data sets across countries);
- **Development of innovative data-based solutions** for farmers and for policy monitoring;
- **Development and use of novel techniques** in applying AI EO-based mapping and monitoring;
- **Capitalisation of (sensor) data generated on farms** for the benefit of the wider farmer community;
- **Development of innovative business and governance models** for sustainable management of data flows.





## Overview of Activities envisaged by the partnership (1)

Main R&I actions are supplemented by actions aiming at **sustaining the partnership on the medium- and long-term by:**

- **Upscaling of promising pilots/building on earlier results** within the partnership, including for instance, geographically (from use case level to EU-level) or from innovation to deployment;
- **Providing data services** (e.g. farmers, administration, start-ups).
- **Building capacities to ensure end user uptake** by making data sets and data-based solutions easily available, strengthen data literacy and linking up to other initiatives, such as the Common European Agriculture Data Space





## Overview of activities foreseen by subcategory (draft)

### Data technologies and data management

- Data integration and quality
- Input to and solutions for Data hubs and marketplaces
- Applications of AI techniques

### Data driven sustainable agriculture

- Further development and generating input to decision support systems including FMIS
- Strengthening capacities of farm modelling systems
- Assessment of farm performance
- Data-based solutions for addressing environmental challenges, incl. climate change mitigation, biodiversity, water, soil
- Data-based solutions for climate change adaptation by the agricultural sector







## Overview of activities foreseen by subcategory (draft, *cont'd*)

### Data-driven Policy (monitoring)

- Data-based solutions for policy-makers and administration (including strengthening capacities for long-term and short-term monitoring)

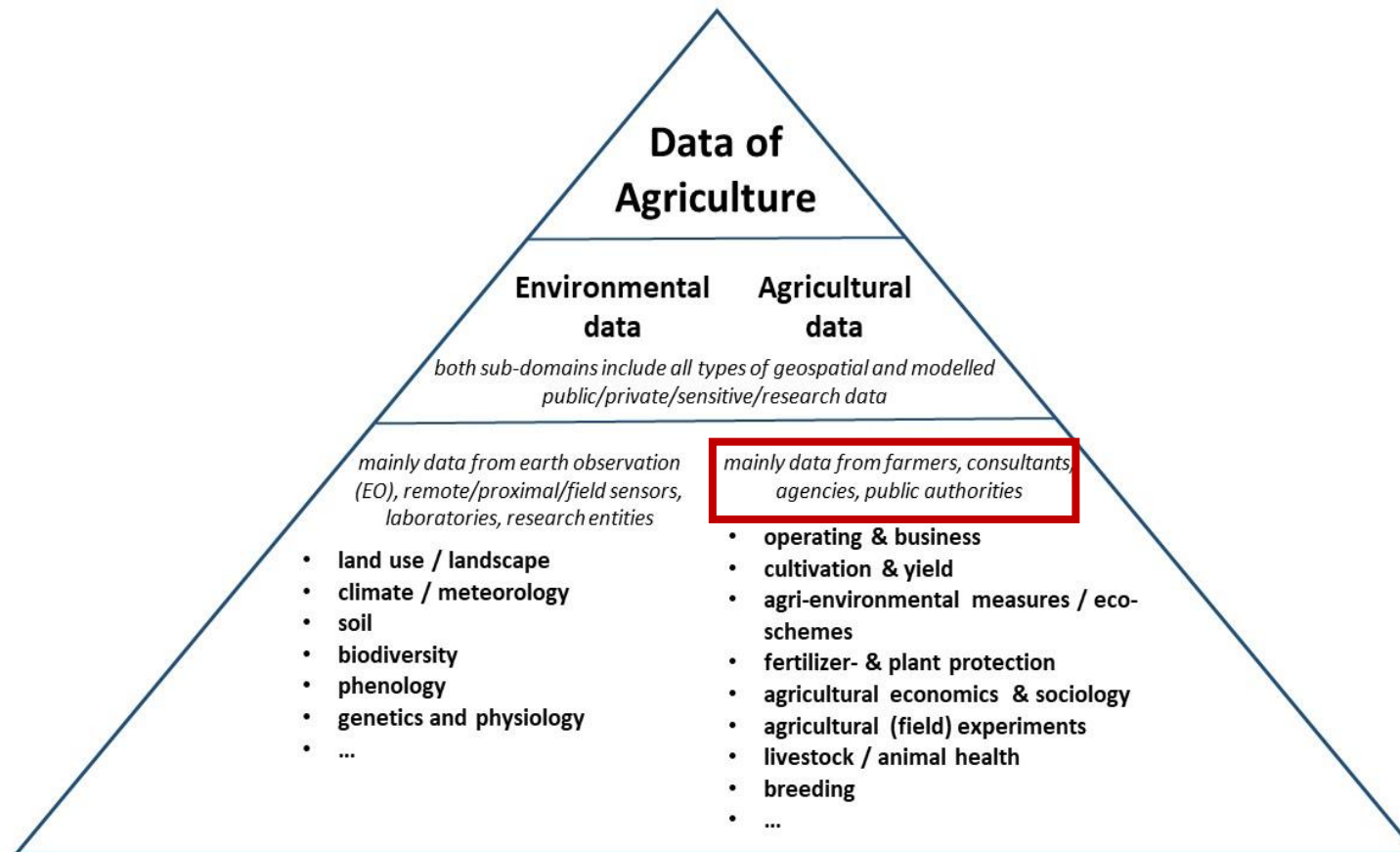
### Horizontal/crosscutting activities

- Synergies between public and private sectors
- Ensuring uptake of tools and solutions developed in the partnership
- Data governance
- Data and processing standards and good practices
- Innovation management of the results of the partnership





## Which data?



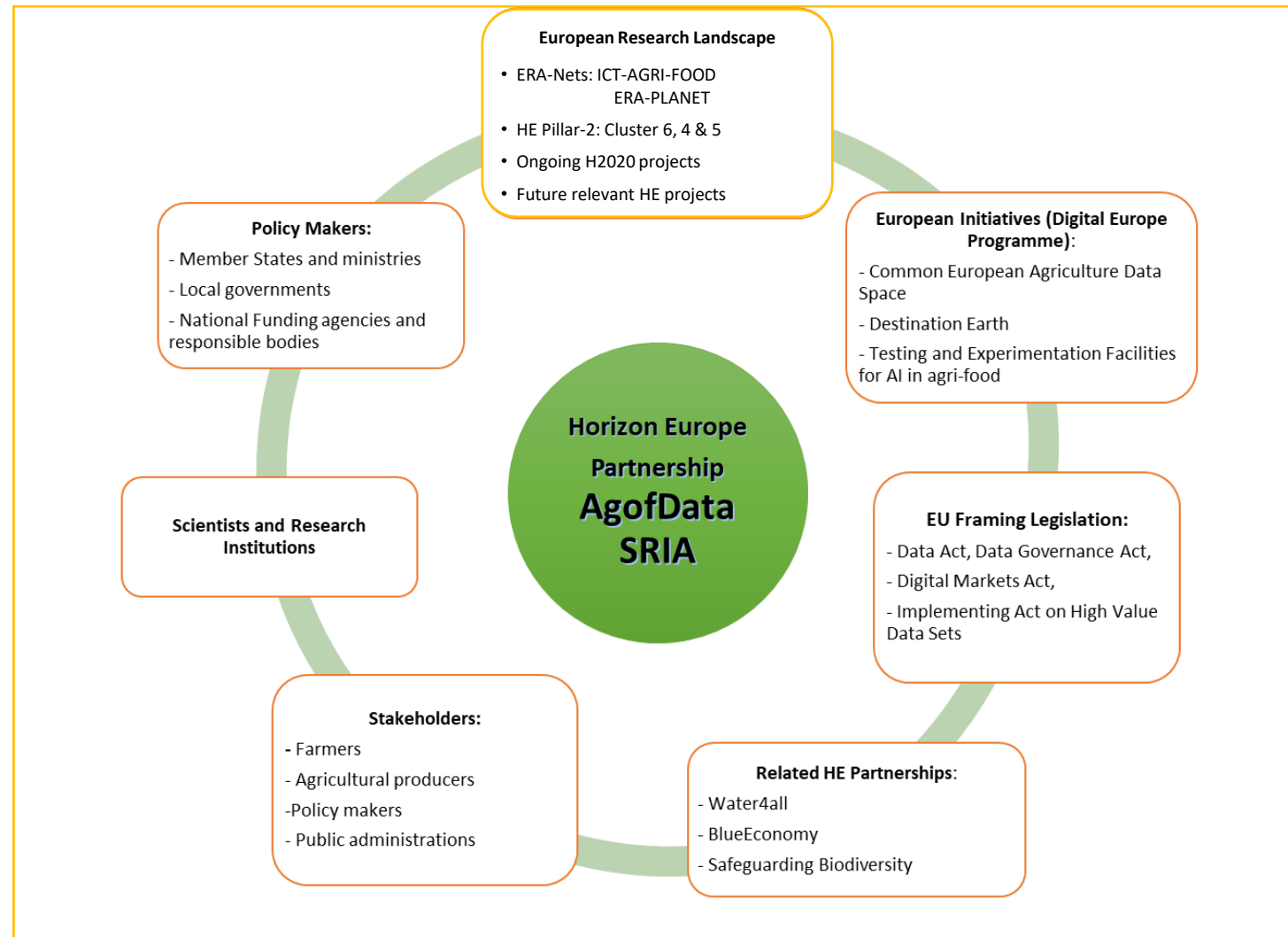
**Data**  
+  
**Data technologies**



**Data based solutions**



## Stocktaking and initiatives expected to run in parallel, “umbrella effect”





## Links to other (EU level) initiatives

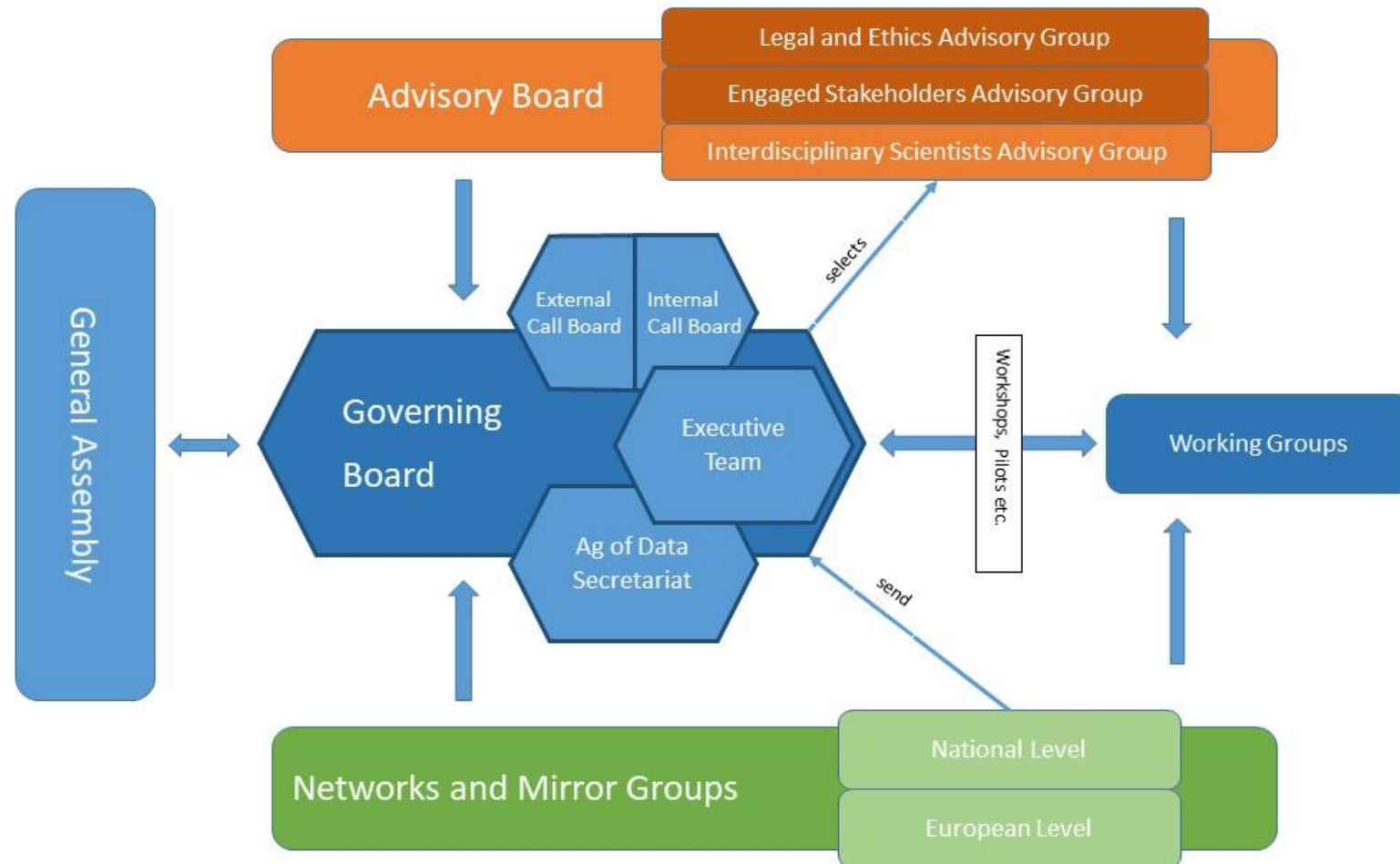
- Umbrella for and building upon relevant R&I initiatives
- Supplementary to data collection initiatives and data spaces
  - adding an “additional layer”
  - showing how data can be capitalised (*main focus of partnerships is not on data collection, but reuse and generation of data sets and data-based solutions*).
- Support to policy implementation (Monitoring & Evaluation Data, Adding up to FaST)
- Closing market gaps in the provision of data-based solutions (e.g. in the field of climate mitigation and adaptation).
- Ongoing programming (“active steering”) allowing for responsiveness to policy developments.





## AgriData Governance Structure

- preliminary draft -

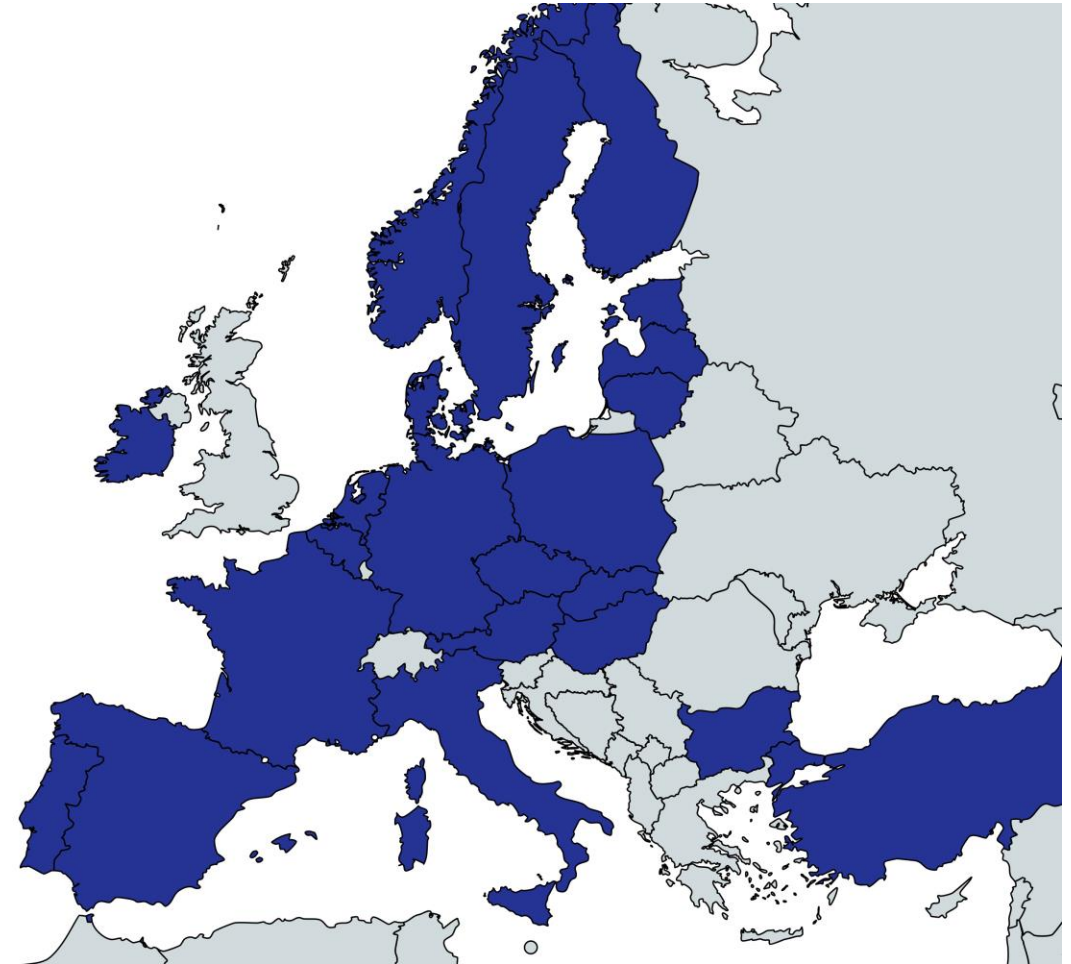






## Who is already actively involved?

- **Composition drafting Core group:**  
*Austria, Belgium, Bulgaria, Czech Republic, Denmark (co-chair), Estonia, Finland, France, Germany, Hungary, Ireland, Italy (co-chair), Latvia, Lithuania, Norway, Poland, Portugal, Slovakia, Spain (co-chair), Sweden, The Netherlands, and Turkey.*
- **Also involved:** *ICT-AGRI-FOOD ERA-Net and ERA-PLANET ERA-Net*





## Partnership Agriculture of Data: state of play

- Preparing the **SRIA** (team of Core group members under the lead of the co-chairs (DK, IT, ES):
  - Webinars before the summer break to identify R&I needs (with R&I community, stakeholders and potential data providers)
  - Workshop with R&I community on 17 November based on list of planned R&I activities
  - Open consultation on revised draft planned by end of 2022
  - Final draft SRIA : by the end of the year
- **20 countries** are active in the Core Group
- **Supported by** ERA-Nets ICT-AGRI-Food and ERA-Planet
- **No SCAR working group or CSA**
- **Commitments by** 17 countries, and some countries still undecided (68.5 Mio in-kind and 91 Mio in-cash, Total: 159.5 Mio Euro)





## Partnership Agriculture of Data: state of play

### Open issues:

- Formation of the consortium (on-going preparation of the proposal)
- Compilation of types of in-kind contribution (e.g. cloud capacities, manpower, data)
- Achieving synergies with parallel evolving initiatives, such as the Common European Agriculture Data Space





## Agriculture of Data – Timeline

Rest of November + early December	Late November / early December	December 6	December 13	January 13	January 13 - 27	February 5
Revision and editing of SRIA	HE WP 23/24 publication	SRIA circulated to CG	1. CG-meeting, approve first draft of SRIA 2. Public consultation on SRIA starts	Public consultatio n on SRIA ends	Updating SRIA based on public consultation (+one week for CG to review)	1. CG-meeting – approval of Final draft of SRIA 2. Publication of SRIA

CG = Core Group of Country representatives





## Horizon Europe partnership **Agriculture of Data**

**Questions and Feedbacks?**