AllData4GreenDeal

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CREAF

AD4GD

CREAF SEVERO OCHOA EXCELLENCE

Learn more here:

https://www.ad4gd.eu/

HELLENIC REPUBLIC MINISTRY OF DEVELOPMENT AND INVESTMENTS | GSRI GENERAL SECRETARIAT FOR RESEARCH AND INNOVATION

European Commission

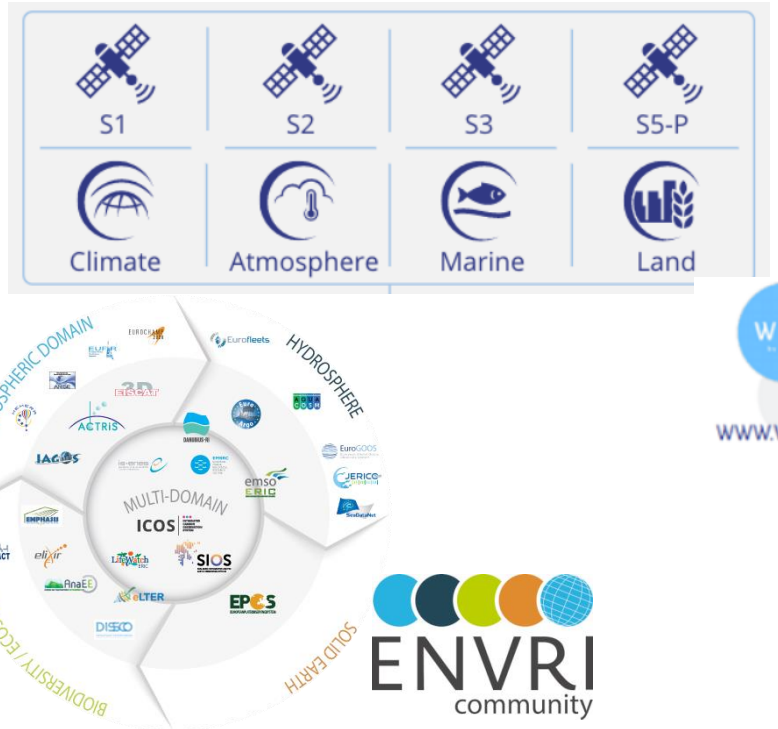
EUROGEO WORKSHOP 2022

ATHENS 7-9 DECEMBER 2022

Our view:
The data space was started many years ago

- Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) was published in the official Journal on the 25th April 2007. The INSPIRE Directive entered into force on the 15th May 2007

Widening the space

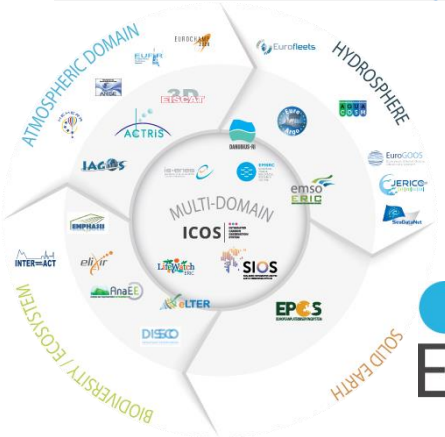


Even wider

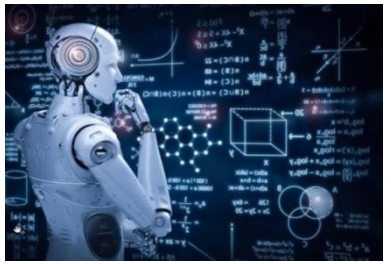
INSPIRE · Infrastructure for Spatial Information in Europe

EIONET

WEKEO
WWW.WEKEO.EU



ENVRI community



We do not have to create a new cyberinfrastructure

Bring together relevant *data infrastructures* and *governance frameworks* in order to facilitate data pooling and sharing.

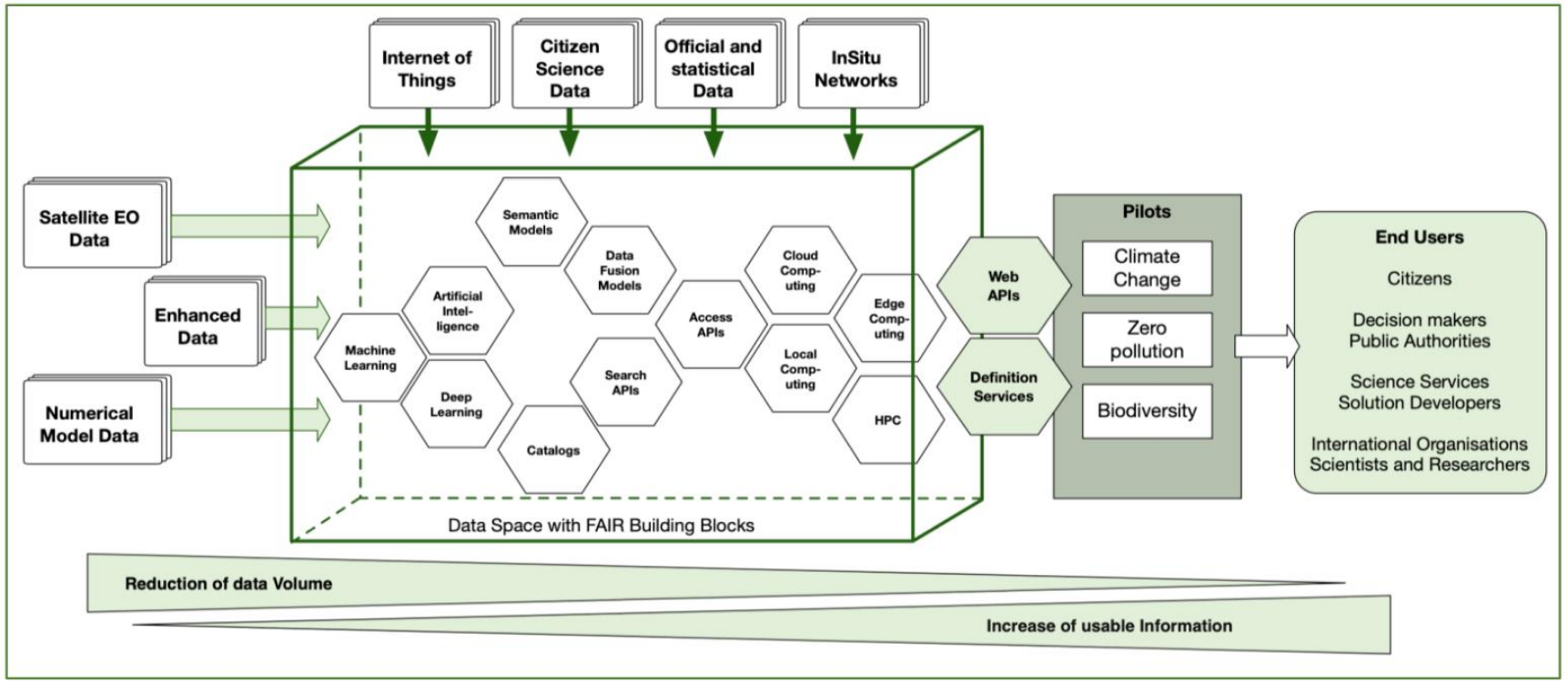
They:

(i) **deploy** data-sharing tools and services for the pooling, processing and sharing of data by an open number of organisations, as well as federate energy-efficient and trustworthy cloud capacities and related services;
(ii) **include** data **governance structures**, compatible with relevant EU legislation, which determine, in a transparent and FAIR way, the rights concerning access to and processing of the data;
(iii) **improve** the *availability, quality* and *interoperability* of data – both in domain-specific settings and across sectors.

https://digital-strategy.ec.europa.eu/en/library/staff-working-document-data-spaces

Instead

- We are proposing a very open approach based on
  - building blocks
  - standard approach based on APIs
- Integration, integration, integration
- Focused on end users



Our solution

- Interoperability
  - Encourage implementation of the new OGC APIs including STA
  - Improve semantic interoperability by means of Essential Variables
  - Improve data quality descriptions
- Defragmentation
  - By applying Data sharing and FAIR principles
  - Reusing existing cyberinfrastructures such as EOSC and GAIA-X
- Demonstrations

Demostrations

- In Water quality lakes (In the city of Berlin)
- In Biodiversity Corridors (In the Metropolitan Area of Barcelona)
- In Air Quality (with low cost sensors)

Among the sister projects

- We are not about data cubes
  - So they will provide the datacube component to the data space.
- Complemented by Remote Sensing
- We are not about OGC API Coverages and datacubes
- We should collaborate in a common defragmentation strategy

- We are focus on “other sources”
  - Observations
  - IoT
  - Citizen Science
- Complemented by Socioeconomic and AI
- We are about OGC API Features and SensorThings API…
- We need a common defragmentation strategy

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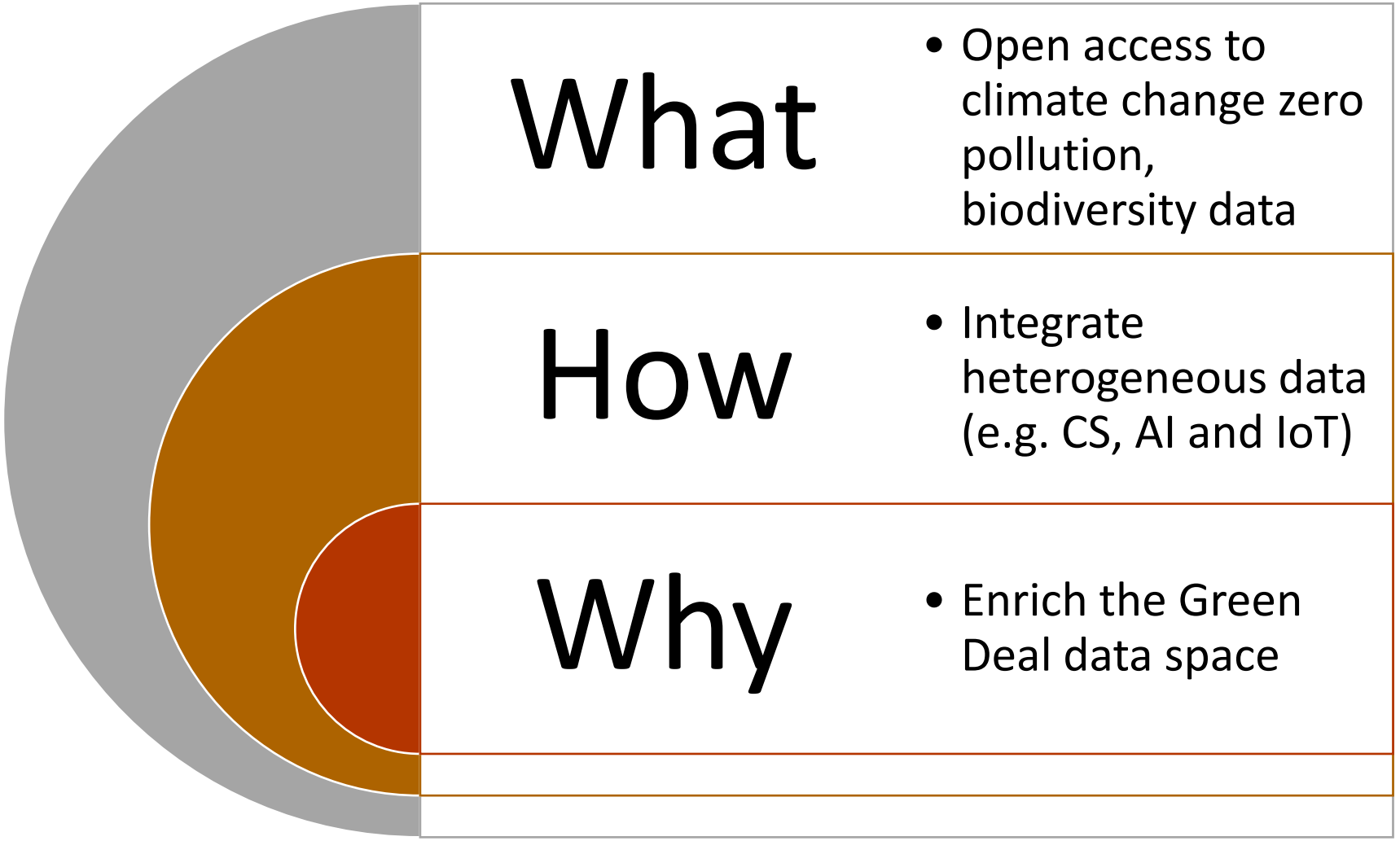
Grant agreement ID: 101061001
EU contribution: € 4 136 964,75
Partners: 9+2+1=12
Start date: 1 September 2022
End date: 31 August 2025
Duration: 36 months
Workpackages: 9
Person Months: 477+120+51=648

This project is co-funded by the European Union, Switzerland and the United Kingdom.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the funding authorizes. Neither the European Union nor the granting authority can be held responsible for them.

Backup

- Contribution
  - Standards, best practices, technology demonstration (applied in pilots)
- Impact
  - Enable digital economy (create services based on existing open data),
  - Capacity to create Knowledge to find solutions to mitigate and cope to the global change effects that decisions makers (EC, UN) can apply



WP8: Management and Coordination

GDDS Concept

WP1: Semantic Interoperability Space

PSNC

Data integration and Processing Blocks

WP2: In situ networks, Cit Sci data integration

CitSci

CREAF

WP3: Heteriogeneous IoT data integration

IoT Lab

ITL

WP4: Satellite, Socio and GDDS integration

WEKEO

WWW.WEKEO.EU

ECMWF

WP5: AI, Data Certainty and Quality

Atos

Demonstrations

WP6: Pilots, Tests Validation

AU

Aston University

BIRMINGHAM UK

Zero pollution

Biodiversity

Climate Change

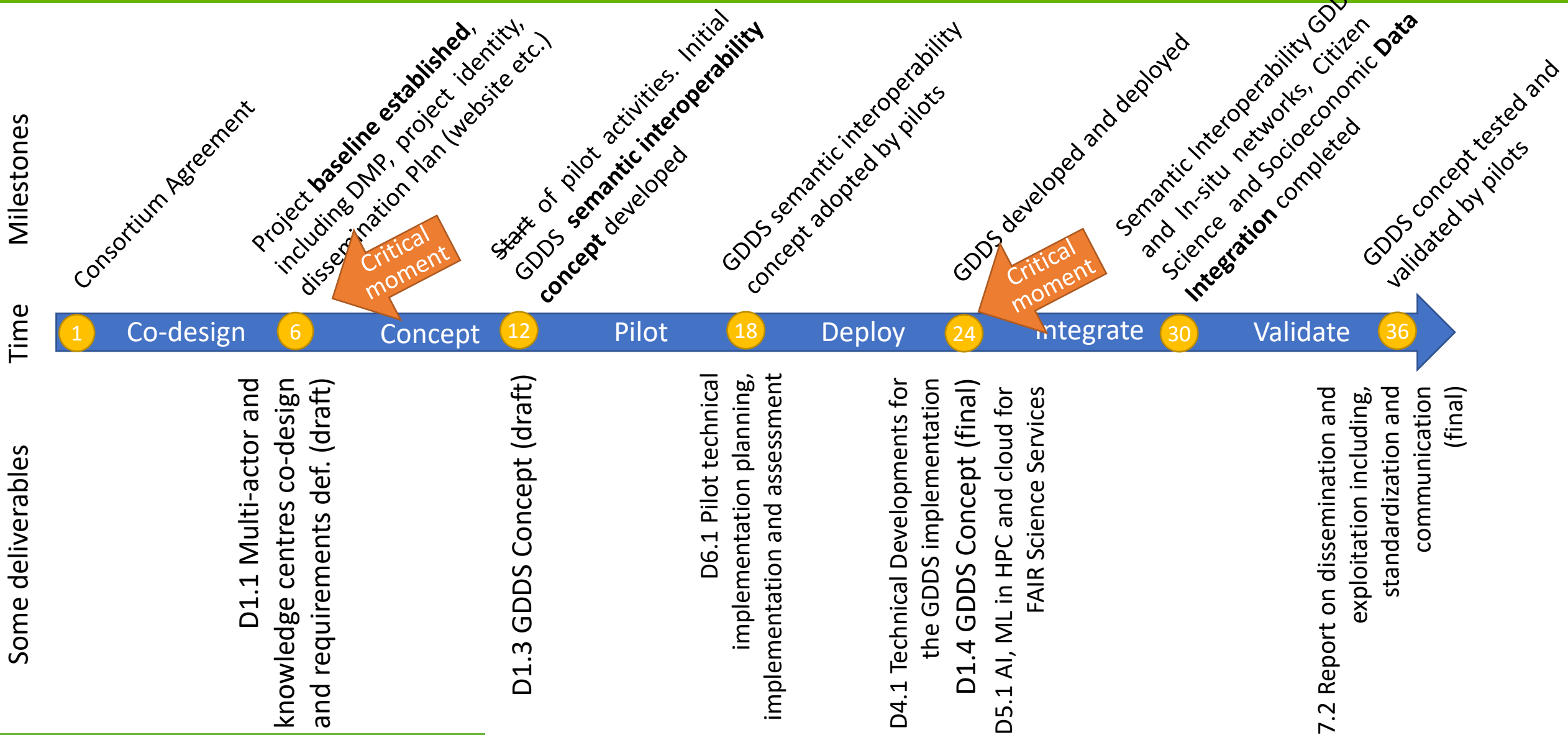
WP7: Standardization, Outreach, Exploitation

MANDAT INTERNATIONAL

MI

ECCP

Task 8.3: Data management, ethics

Timeline of the project (only some Ds are shown)

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