OPEN DATA
& OPEN KNOWLEDGE
Workshop
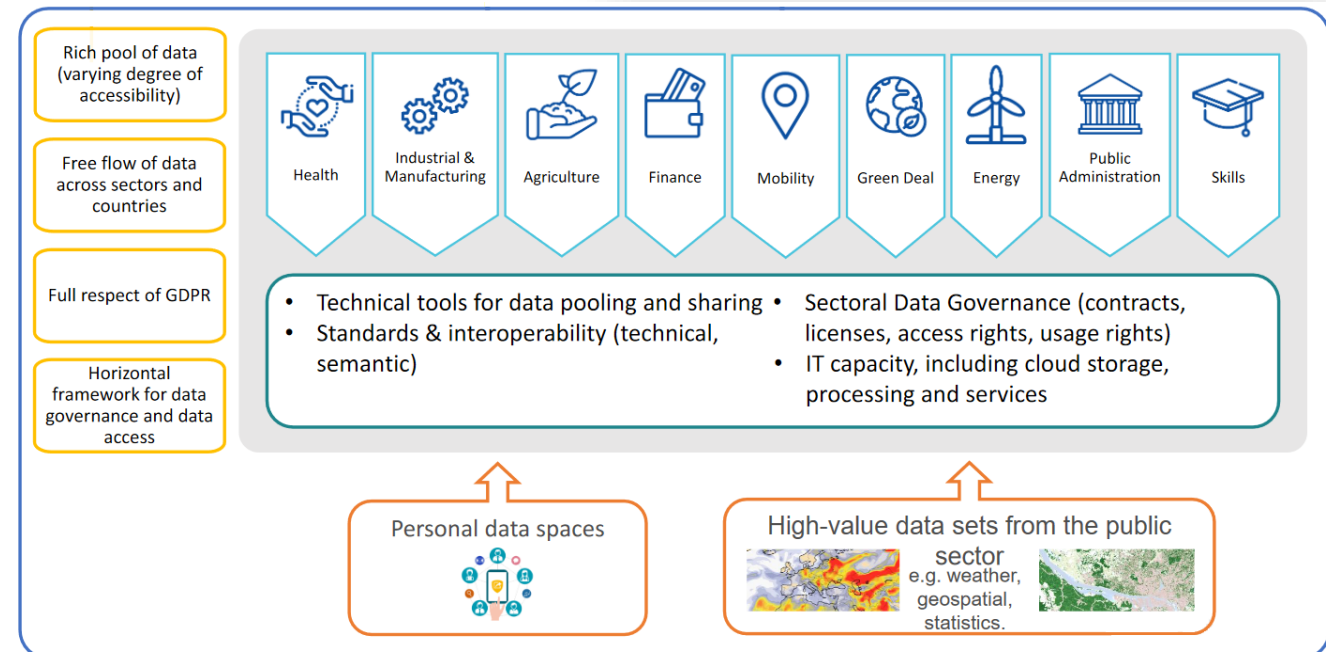
GEO
GROUP ON
EARTH OBSERVATIONS

04/07/2023

EUROPEAN HIGH-VALUE DATASETS FROM THE PUBLIC SECTOR
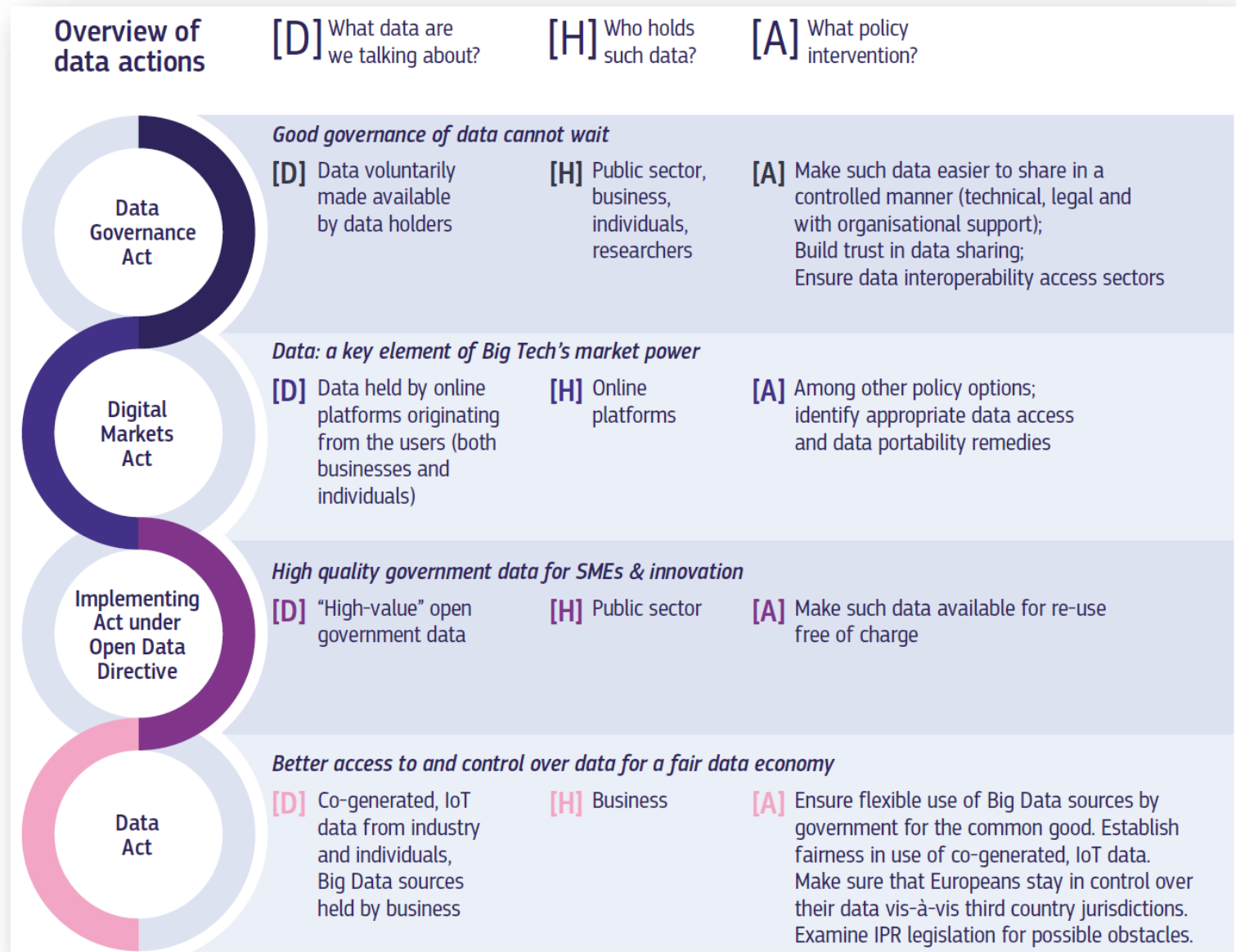
Marco Minghini

European Commission – Joint Research Centre (JRC)

European strategy for data

- Aims to create a European single market for data

- Highlights the problems to address

  - data availability, interoperability, quality

  - governance & infrastructures

  - skills & data literacy

  - cybersecurity

- Envisages the establishment of

  - a common European data space

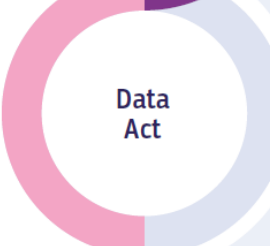 - sectoral data spaces

https://digital-strategy.ec.europa.eu/en/policies/strategy-data

04/07/2023

Horizontal data sharing legislation

Overview of data actions

	[D] What data are we talking about?	**[H]** Who holds such data?	**[A]** What policy intervention?
	Good governance of data cannot wait		
Data Governance Act	**[D]** Data voluntarily made available by data holders	**[H]** Public sector, business, individuals, researchers	**[A]** Make such data easier to share in a controlled manner (technical, legal and with organisational support); Build trust in data sharing; Ensure data interoperability access sectors
	Data: a key element of Big Tech's market power		
Digital Markets Act	**[D]** Data held by online platforms originating from the users (both businesses and individuals)	**[H]** Online platforms	**[A]** Among other policy options; identify appropriate data access and data portability remedies
	High quality government data for SMEs & innovation		
Implementing Act under Open Data Directive	**[D]** "High-value" open government data	**[H]** Public sector	**[A]** Make such data available for re-use free of charge
	Better access to and control over data for a fair data economy		
Data Act	**[D]** Co-generated, IoT data from industry and individuals, Big Data sources held by business	**[H]** Business	**[A]** Ensure flexible use of Big Data sources by government for the common good. Establish fairness in use of co-generated, IoT data. Make sure that Europeans stay in control over their data vis-à-vis third country jurisdictions. Examine IPR legislation for possible obstacles.

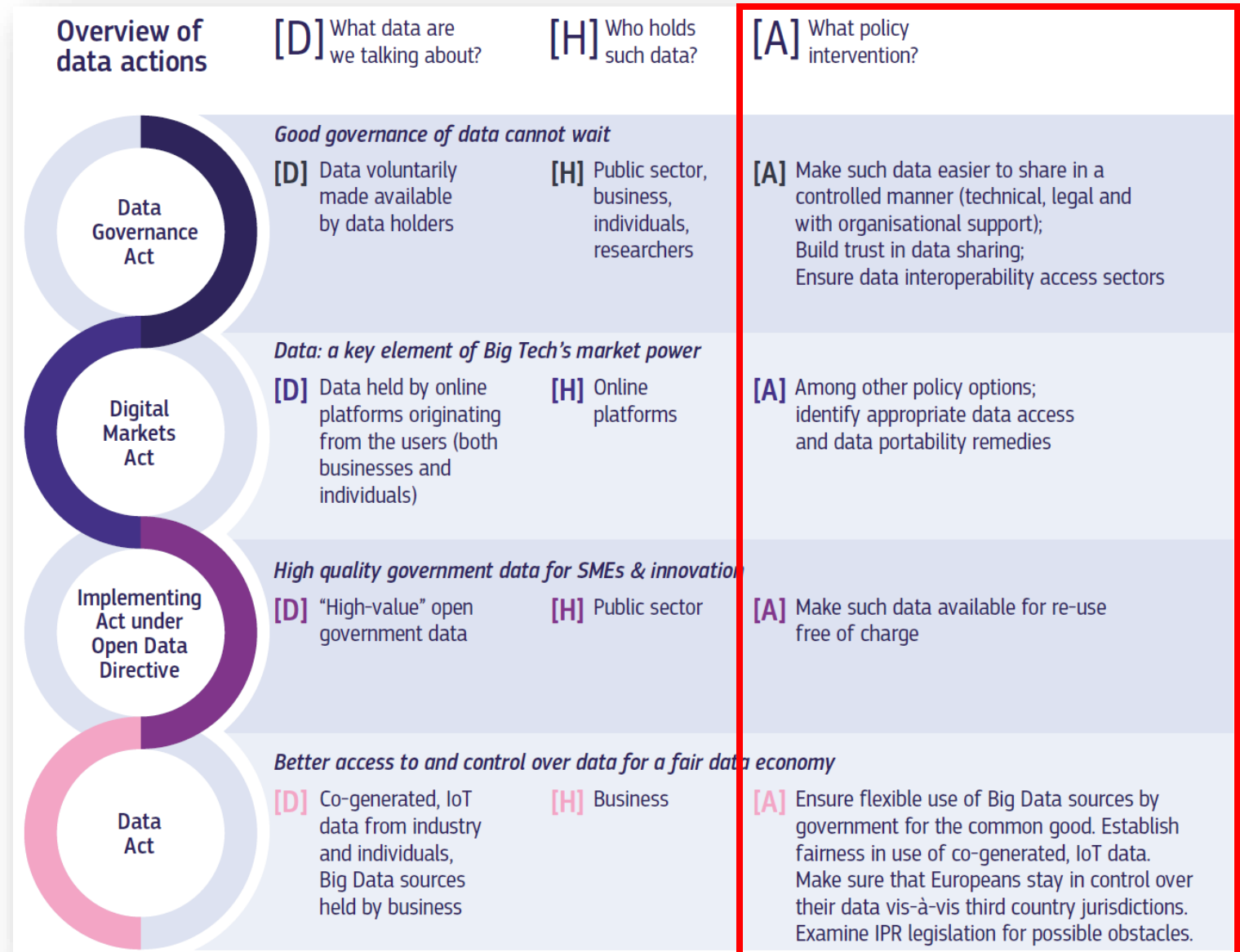# Horizontal data sharing legislation

- Data in scope
  - from public sector, businesses, researchers and individuals

Overview of data actions

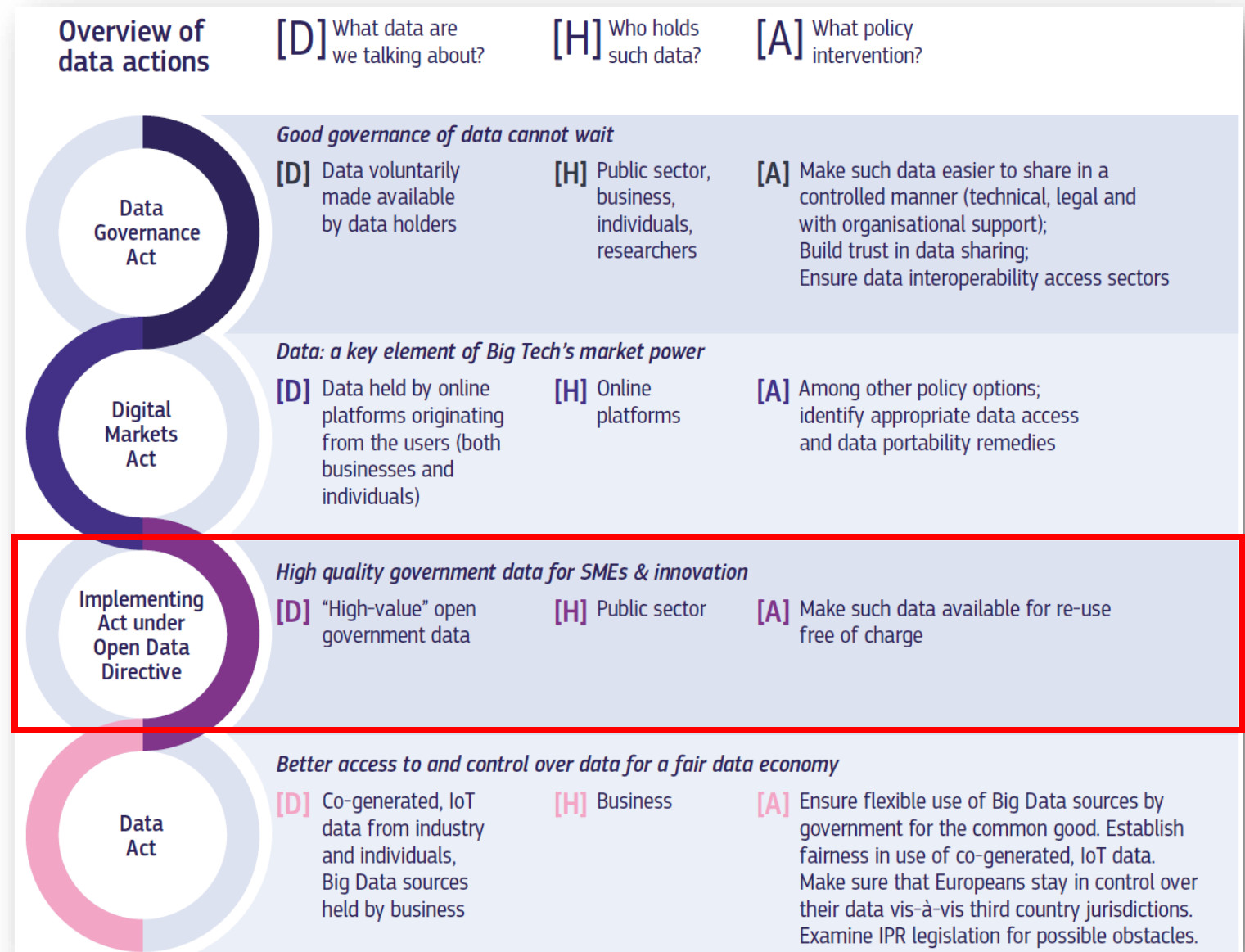|	[D] What data are we talking about?	[H] Who holds such data?	[A] What policy intervention?
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Horizontal data sharing legislation

- Data in scope

    - from public sector, businesses, researchers and individuals

- Data sharing flows

    - G2B, B2G, C2G, etc.

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Horizontal data sharing legislation

- Data in scope
  - from public sector, businesses, researchers and individuals
- Data sharing flows
  - G2B, B2G, C2G, etc.
- Focus
  - Implementing Act on high-value datasets under the Open Data Directive

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Open Data Directive

http://data.europa.eu/eli/dir/2019/1024/oj

- Defines high-value datasets as public sector datasets, the re-use of which is associated with important socio-economic benefits

- Requires that high-value datasets are published

    - for free, under an open license

    - in machine-readable formats, via APIs and (when relevant) as bulk downloads

- establishes 6 categories of high-value datasets

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

Implementing Act

20.1.2023   EN   Official Journal of the European Union   L 19/43

COMMISSION IMPLEMENTING REGULATION (EU) 2023/138

of 21 December 2022

laying down a list of specific high-value datasets and the arrangements for their publication and re-use

(Text with EEA relevance)

https://eur-lex.europa.eu/eli/reg_impl/2023/138/oj

- Defines the list of high-value datasets for each category & the requirements for their publication:

  - license: CC BY 4.0, CC0 or any equivalent or less restrictive license

  - key attributes

  - formats

  - metadata

  - (for geospatial datasets) granularity

List of high-value datasets (relevant to GEO)

GROUP ON EARTH OBSERVATIONS

Geospatial

INSPIRE data themes

- Administrative units
- Geographical names
- Addresses
- Buildings
- Cadastral parcels

Reference & Agricultural parcels (IACS)

Earth observation and environment

INSPIRE data themes

- Hydrography
- Protected sites
- Elevation
- Geology
- Land cover
- Orthoimagery
- Area management / restriction / regulation zones & reporting units
- Bio-geographical regions
- Energy resources
- Environmental monitoring facilities
- Habitats and biotopes
- Land use
- Mineral resources
- Natural risk zones
- Oceanographic geographical features
- Production and industrial facilities
- Sea regions
- Soil
- Species distribution

Meteorological

- Observations data measured by weather stations
- Climate data: validated observations
- Weather alerts
- Radar data
- Numerical weather prediction model data

Statistics

Companies and company ownership

Mobility

INSPIRE data themes

- Transport networks

Benefits of high-value datasets

PRESS RELEASE | Publication 20 January 2023

Commission defines high-value datasets to be made available for re-use

Today, the Commission has published a list of high-value datasets that public sector bodies will have to make available for re-use, free of charge, within 16 months.

Certain public sector data, such as meteorological or air quality data are particularly interesting for creators of value-added services and applications and have **important benefits** for society, the environment and the economy – which is why they should be made available to the public.

Margrethe **Vestager,** Executive Vice-President for a Europe Fit for the Digital Age, said:

> Making high-value datasets available will benefit both the economy and society, for example by helping to combat climate change, reducing urban air pollution and improving transport infrastructure. This is a practical step towards achieving a successful Digital Decade and building a more prosperous digital future.

Thierry **Breton**, Commissioner for Internal Market, said:
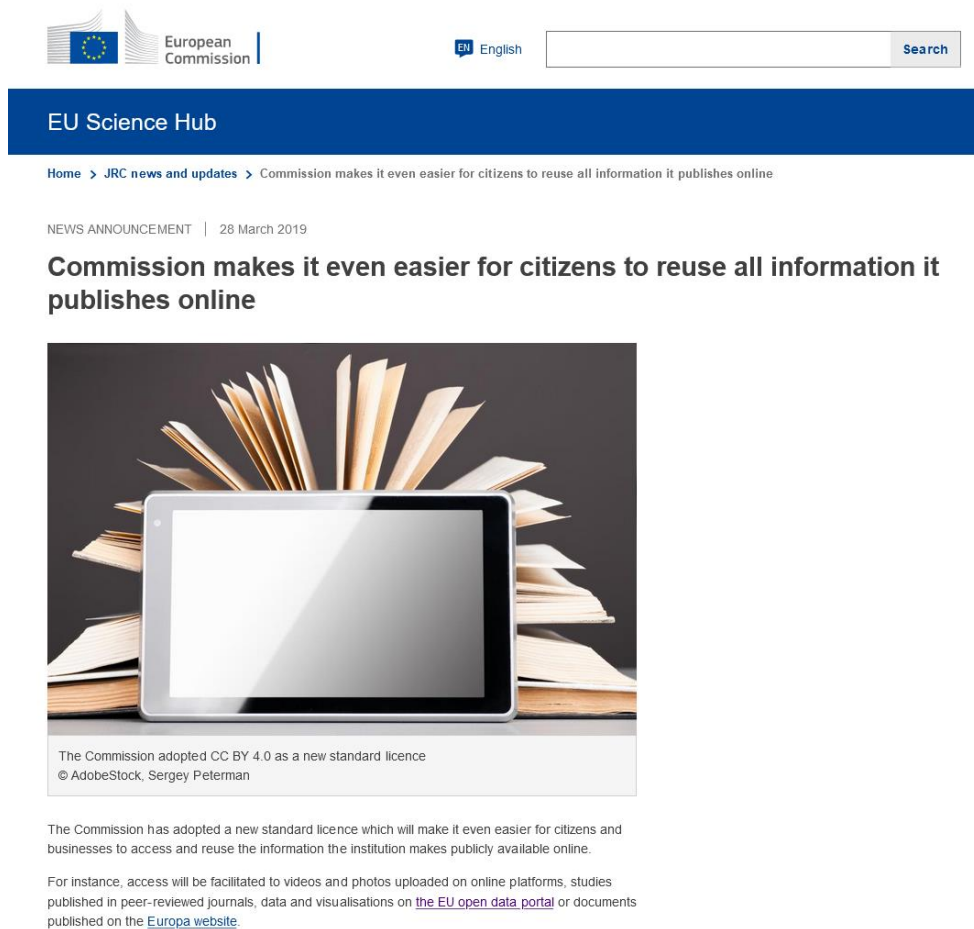
> Data is a cornerstone of our EU industrial competitiveness. With the new list of high-value datasets, published today, we are unlocking a large amount of public data for the benefit of all. Start-ups and SMEs will be able to use this data to develop new products and innovative solutions that improve the lives of citizens in the EU and around the world.

Related topics

Big data   Data   Data value chain

Open data

I. Overview of Benefits (total for all provisions) – Preferred Option (policy package 3)		
Description	**Amount**	**Comments**
Direct benefits (range per annum 2024-2028)		
Economic impact	982 - 5734 million EUR	Incremental direct economic impact (GVA/GDP) is estimated as differential to baseline. Annual values for the years 2024 and 2028 are presented.
Employment	10 - 61 thousand persons employed	Incremental employment impact for the preferred policy package. Total number of persons employed, estimated based on the employment coefficient/ratio to GVA for the EU27 ICT sector.
Governmental revenues	452 - 2638 million EUR	According to the definition of Eurostat, the governmental revenue is the sum market output, of taxes, net social contributions, sales, other current revenues and capital transfer revenues. Combining these categories of governmental revenue, a weighted coefficient of EU27 by GDP is obtained. Following the calculations of Eurostat, this coefficient has and approximately value of 46% of GDP for the EU27. Ratio is applied to the direct economic impact. Hence it should be noted, that the indicator presented reflects the statistical revenues for governments in general, induced by the stimulation of GDP due to the policy interventions.
Indirect benefits (range 2024-2028)		
Economic impact	2633 - 15225 million EUR	The analysis focuses on the indirect (forward) impact on downstream industries, which is considered to be the major indirect impact. To measure these impacts with regard to the PSI/HVD economic activity, results of the EU Data Monitoring have been analysed. As a result, for the indirect (forward) impact a magnitude between ca. 2.5 and 3.0 has been identified. To estimate the indirect (forward) economic impact, multipliers at the lower bound between 2.6 and 2.8 have been applied to the direct impacts.
Employment	28 - 161 thousand persons employed	
Governmental revenues	1211 - 7004 million EUR	

source: RSB opinion, 2021 – table extracted from the draft impact assessment report:
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:SEC(2022)450&from=EN
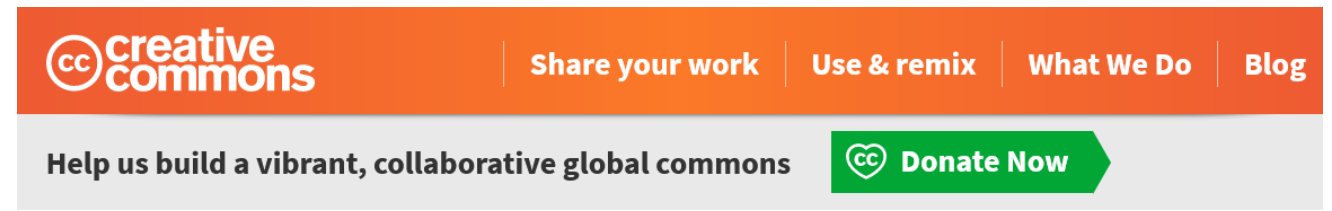
CC licenses at the Commission

- A default choice since 2019

https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/commission-makes-it-even-easier-citizens-reuse-all-information-it-publishes-online-2019-03-28_en

https://creativecommons.org/2019/04/02/european-commission-adopts-cc-by-and-cc0-for-sharing-information

Lessons learnt

- **Legal interoperability** is as important as technical, organisational and semantic interoperability.

- In most data ecosystems (e.g. the European data spaces), the aim would not be to have all data being open:

    - public sector data whose access would affect public national security/defence, private sector data, personal data, etc.

- It is not enough that datasets are open, if their licenses are not compatible — custom licenses should be avoided!

- **Legal interventions** may help use open data licenses.

- What is ultimately needed is a culture of openness.
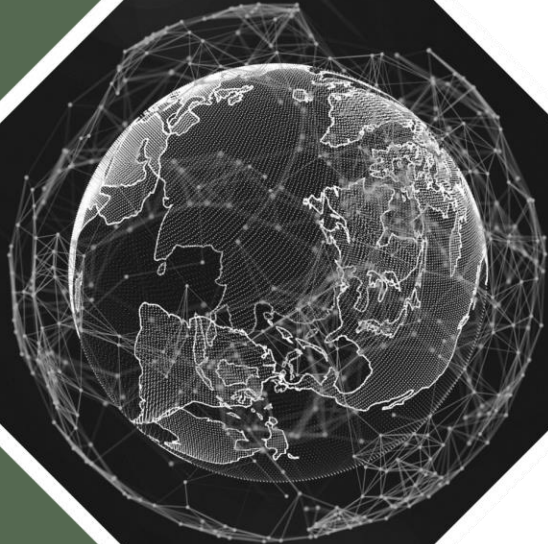
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