



European
Commission

JRC PORTFOLIO 17

EXPLOITING DATA AS A STRATEGIC RESOURCE FOR SCIENCE AND POLICY

Data, and the ability to use it effectively, legally, and ethically is essential for policy support, innovation, and growth. Several recent Commission documents, such as the 2020 Commission Data Strategy or the Artificial Intelligence Initiative emphasise the importance of data sharing, enhanced data management, and analytic capabilities for better policymaking. Moreover, emerging technologies in data science and artificial intelligence (AI) often rely on datasets from trusted sources, while considering any bias/inaccuracy and outliers. High quality data and robust statistical methodologies to analyse them are critical for the construction of new knowledge and the provision of explanatory, anticipatory, or prescriptive science advice. The JRC has a data strategy to achieve just that. The portfolio contributes to the implementation of the data strategy.

The portfolio aims to:

Facilitate the work of scientists to produce, find, acquire, curate, reuse, share, integrate, analyse and visualise data

Implement a fit-for-purpose Information and Communication Technologies data infrastructure and support data services

Develop cutting-edge scientific methods and analytics tools for data-driven knowledge creation

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Delivering on anticipation, integration and impact of EU policies

- ▶ enabling strategic use of data, allowing portfolios and scientists to draw on and connect cross-cutting data and knowledge from across the JRC, the rest of the Commission and external sources,
- ▶ developing new innovative scientific methods and analytics tools for data-driven knowledge creation in various fields (for example, Customs Union, anti-fraud, disinformation, media monitoring, innovation monitoring and anticipation, European Green Deal, political intelligence),
- ▶ designing an Information and Communication Technologies data infrastructure based on a consolidated set of user requirements and further advancing data services based on common JRC needs (for example, the JRC Research Data Repository, data search capabilities, media analysis capability),
- ▶ improving JRC data management, analysis, and sharing by consolidating and strengthening data and analytics services as envisaged in the JRC data strategy.

Time frame

The data portfolio operates with a **long-term horizon**, as the need for the strategic use of data, both at the JRC and in the European Commission, is here to stay. In the **short term**, in addition to continuing the development of analytic techniques and tools applied to specific data-informed policy problems, the work will focus on a new data architecture blueprint for the JRC and on establishing data support services.

Main partners

Partner DGs

AGRI, BUDG, COMM, DIGIT, EAC, ECFIN, EEAS, ENER, ESTAT, FPI, JUST, NEAR, OLAF, OP, RTD, TAXUD

Selected stakeholders

ACER, CERN, Clean H2, EDPS, EEA, EFSA, EISMEA, EOSC, ESA, ISO, MS Customs

Data

Data analytics

ICT and data infrastructure

Data services

Blue Economy

Data governance

Data management

Knowledge management

AI

Robust statistics

Text mining

Emerging technologies

Natural language processing

Open and FAIR data analytics

Find out more



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<https://joint-research-centre.ec.europa.eu/jrc-research-portfolios/data-science-and-policy>

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