A European Strategy for Data & European Health Data Space

EHTEL/ELO webinar
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DG CNECT, eHealth, Wellbeing and Ageing unit
Ceri Thompson, Deputy Head of Unit
“I want European businesses and our many SMEs to access high quality data and create value for Europeans – including by developing Artificial Intelligence applications.”

Thierry Breton, Commissioner for the Internal Market
Europe has everything to play for

- Data can transform all sectors of the economy and is crucial for AI
- Personal and non-personal data can be a source of innovation for new products and services
- Data can contribute to tackle societal challenges such as climate change, health, mobility, etc.
- Data can make our lives and work easier and better
European Strategy for Data

A common European data space, a single market for data

Data can flow within the EU and across sectors

Availability of high quality data to create and innovate

European rules and values are fully respected

Rules for access and use of data are fair, practical and clear & clear data governance mechanisms are in place
What are the problems?

Not enough data available for reuse
- More public sector data can be made available
- Low uptake of voluntary data sharing among companies
- No clarity on the use of private sector data for the common good

Lack of European data processing & storage solutions

Absence of comprehensive data governance approaches
- To address legal and technical barriers within and across sectors (e.g. standardisation & interoperability)

No real user empowerment
- Imperfect data portability mechanisms

Skills shortage and low data literacy

Fragmentation of the single market
Deploying the strategy through 4 Pillars

**A cross-sectoral governance framework for data access and use**
including a legislative framework for the governance of European data spaces and other cross-sectoral measures for data access and use

**Enablers**
Total investments of €4-6 billion in a High Impact Project on European data spaces and federated cloud infrastructures

**Competences**
Empowering individuals, investing in digital skills & data literacy and in dedicated capacity building for SMEs.

**Rollout of common European data spaces**
in crucial economic sectors and domains of public interest, looking at data governance and practical arrangements.

**International Aspects**
Common European data spaces

- Rich pool of data (varying degree of accessibility)
- Free flow of data across sectors and countries
- Full respect of GDPR
- Horizontal framework for data governance and data access

- Technical tools for data pooling and sharing
- Standards & interoperability (technical, semantic)
- Sectoral Data Governance (contracts, licenses, access rights, usage rights)
- IT capacity, including cloud storage, processing and services

Sectors:
- Health
- Industrial & Manufacturing
- Agriculture
- Finance
- Mobility
- Green Deal
- Energy
- Public Administration
- Skills
Public Online Consultation
open until 31 May 2020

## Artificial intelligence and healthcare | Testing & Experimentation Facilities

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<tbody>
<tr>
<td>1.</td>
<td>Support to doctor’s decision-making (e.g. what is best choice of treatments for particular patient)</td>
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<td>2.</td>
<td>Management of flows within care processes</td>
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<td>3.</td>
<td>Logistics in hospitals</td>
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<td>4.</td>
<td>Robotics surgery</td>
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<td>5.</td>
<td>Detection of tumors from imaging</td>
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<td>6.</td>
<td>Support to elderly or disabled persons</td>
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The cyberspace is a backbone of digital society & economic growth, but cybersecurity incidents are increasing at an alarming pace.

**Cybersecurity incidents may**

- **Disrupt the supply of essential services** such as water, healthcare, electricity or mobile services.
- **Undermine trust in digital services & products**
  - Only 22% of Europeans have full trust in companies such as search engines, social networking sites & e-mail services.
  - Only 38% of Europeans feel confident about online purchasing from another EU Member State.
New generation of technology

- Blockchain
- Supercomputing
- Quantum technologies
- Algorithms
Why invest in HPC? HPC is at the core of major advances and innovations in the digital age

Strategic value for science
HPC enables breakthrough science
disease treatment; new therapies;
brain; climate; chemistry;
new materials; cosmology,
astrophysics; high-energy physics;
environment; transportation,
earthquakes, etc.

Strategic value for industry
Market potential:
new products, design
and production cycles,
decision processes, costs, resource
efficiency, etc.

National security and defence
Complex encryption technologies,
terrorism, forensics, cyberattacks,
nuclear simulations
“We need to make the most of the potential of e-health to provide high-quality healthcare and reduce inequalities. I want you to work on the creation of a European Health Data Space to promote health-data exchange and support research on new preventive strategies, as well as on treatments, medicines, medical devices and outcomes. As part of this, you should ensure citizens have control over their own personal data.”

Mission letter of Stella Kyrriakides
Commissioner for Health
 Infrastructure: My Health@EU/eHDSI

MyHealth@EU enables exchange of patient data across borders

- **Patient Summary** provides access to health professionals to verified key health data of a patient during an unplanned care encounter while abroad

- **ePrescription** enables patients to receive equivalent medication while abroad to what they would receive in their home country

- New services to be added: *images*, results, *laboratory discharge* reports
2018 Declaration "Towards access to at least 1 million sequenced genomes in the EU by 2020"

- cross-border access to genomic databases in the EU
- for a sufficient scale for clinically impactful research
  - in full compliance with data protection rules
- Member States driven initiative
  - EC facilitating the progress
## Matrix of the EHDS

<table>
<thead>
<tr>
<th>Better Healthcare</th>
<th>Governance</th>
<th>Quality of Data</th>
<th>Infrastructure</th>
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<tbody>
<tr>
<td>Better Policy Making</td>
<td>Legislative and non-legislative measures on governance and rules for primary and secondary use of data, respecting GDPR</td>
<td>Uptake and develop the EEHRxF</td>
<td>MyHealth@EU ERN-CPMS 1+mil genomes</td>
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<td>Better Research and Innovation</td>
<td>AI framework (incl AI&amp;liability)</td>
<td>FAIR-ification of health data for primary and secondary use</td>
<td>Darwin (regulators) Link different repositories (eg registries: cancer, ERN, transplantation) Images database Research infrastructures</td>
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Thank you for your attention!

Any questions?