



A European Strategy for Data & European Health Data Space

EHTEL/ELO webinar

20 March 2020

DG CNECT, eHealth,
Wellbeing and Ageing unit

Ceri Thompson, Deputy Head
of Unit

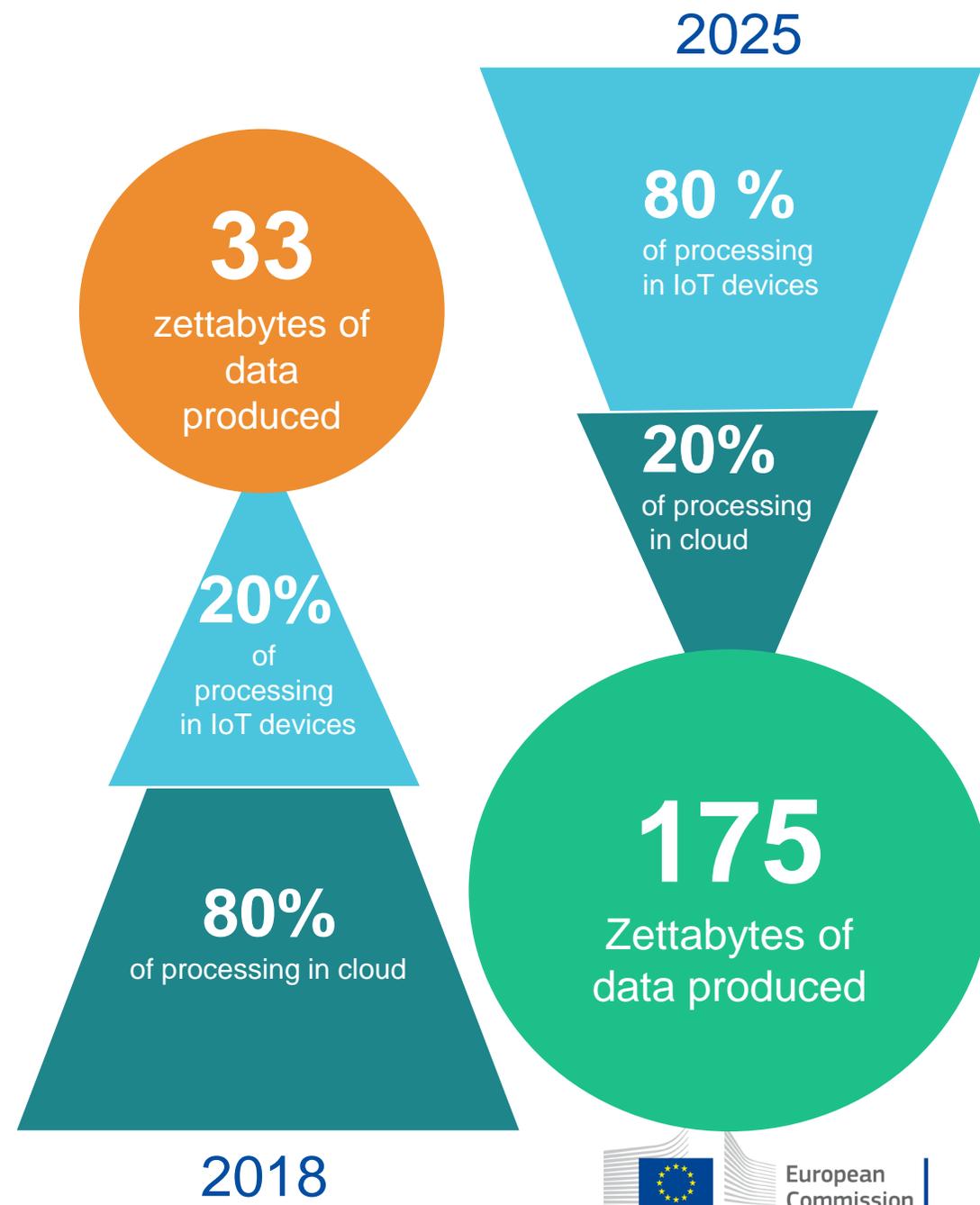


“I want European businesses and our many SMEs to access high quality data and create value for Europeans – including by developing Artificial Intelligence applications.”

*Thierry Breton,
Commissioner for the Internal Market*

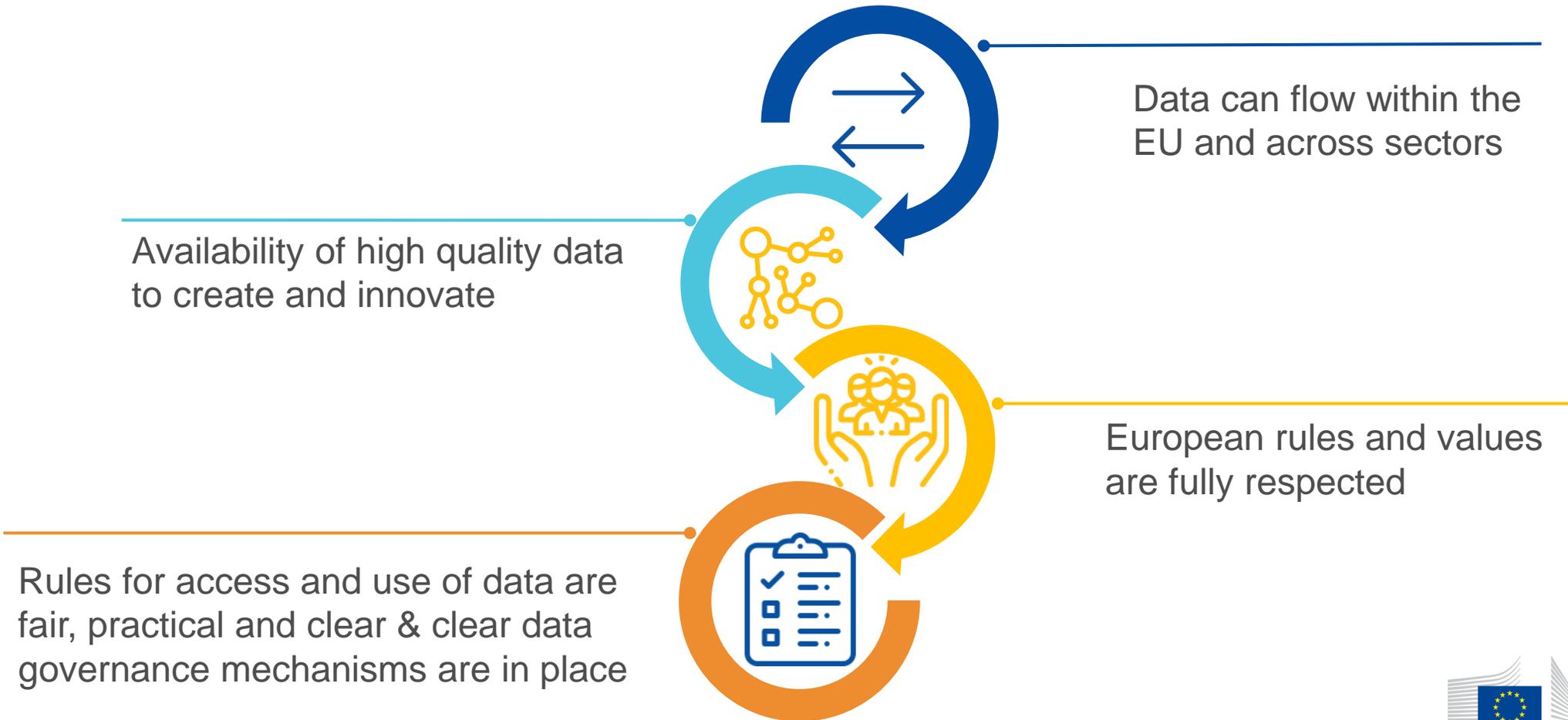
Europe has everything to play for

- 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

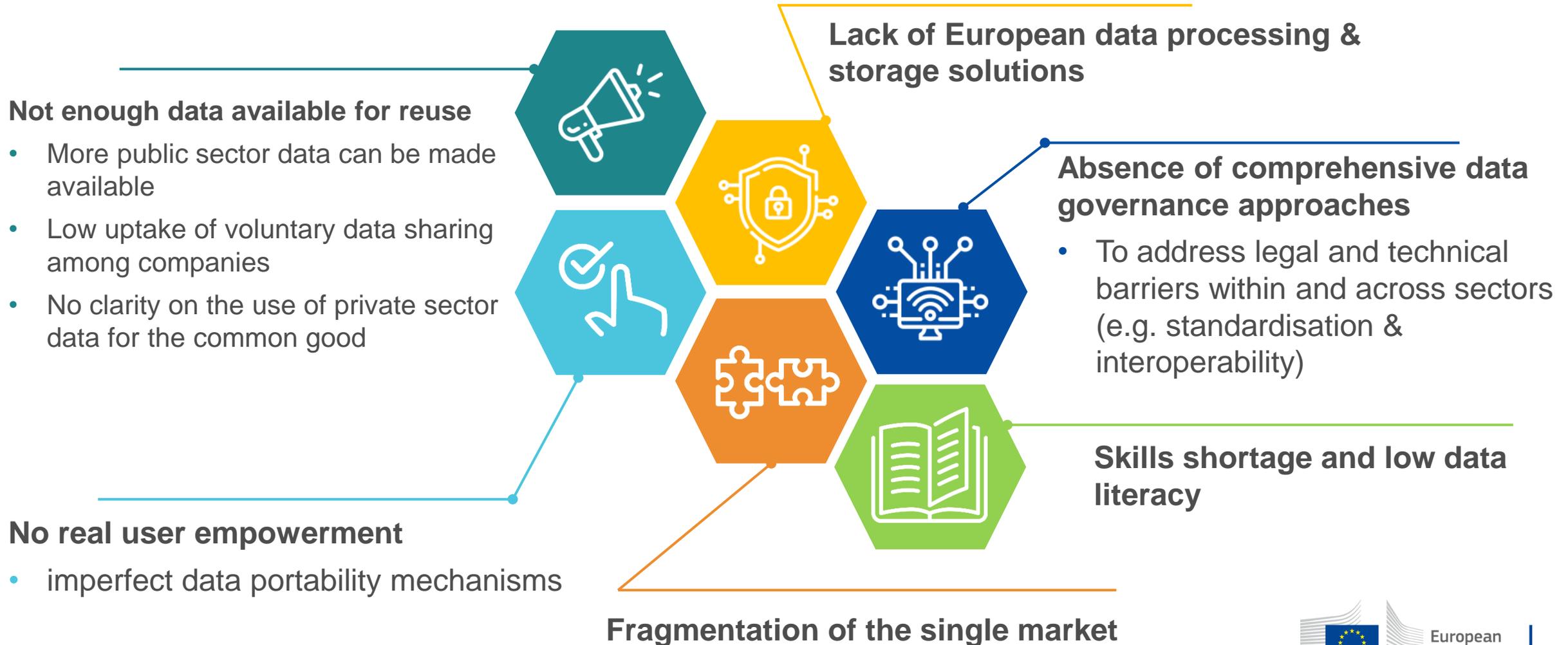


European Strategy for Data

A common European data space, a single market for data



What are the problems?



Deploying the strategy through 4 Pillars



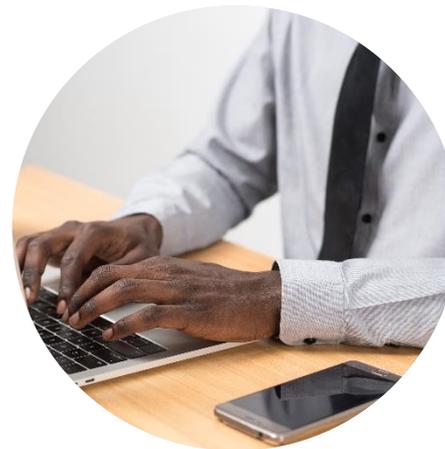
A cross-sectoral governance framework for data access and use

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



Health



Industrial &
Manufacturing



Agriculture



Finance



Mobility



Green Deal



Energy



Public
Administration



Skills

- 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

Public Online Consultation

open until 31 May 2020

<https://ec.europa.eu/digital-single-market/en/news/online-consultation-european-strategy-data>

Artificial intelligence and healthcare | Testing & Experimentation Facilities



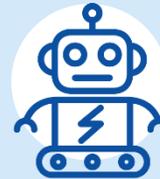
1. Support to doctor's decision-making (e.g. what is best choice of treatments for particular patient)



2. Management of flows within care processes



3. Logistics in hospitals



4. Robotics surgery



5. Detection of tumors from imaging



6. Support to elderly or disabled persons

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

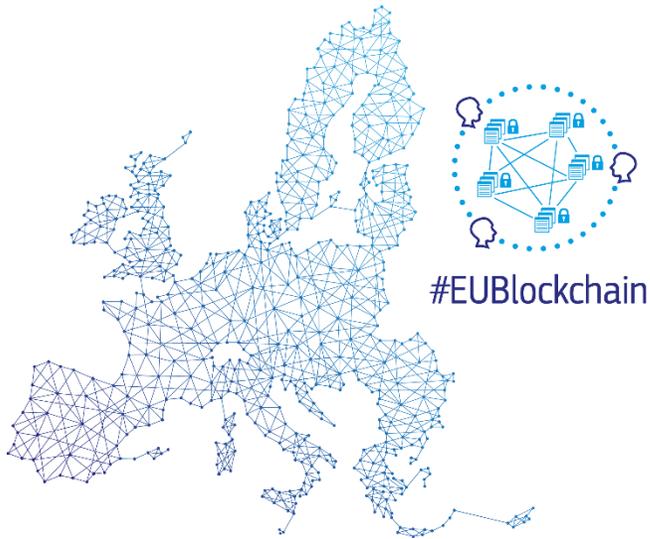


have **full trust** in companies such as **search engines, social networking sites & e-mail services**

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



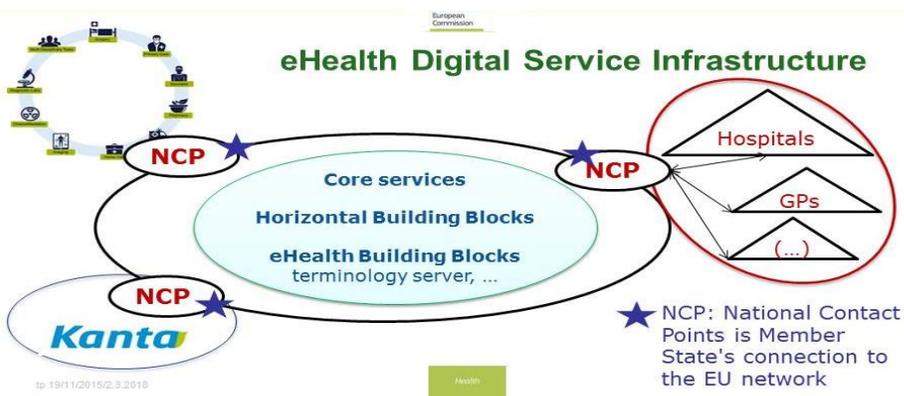
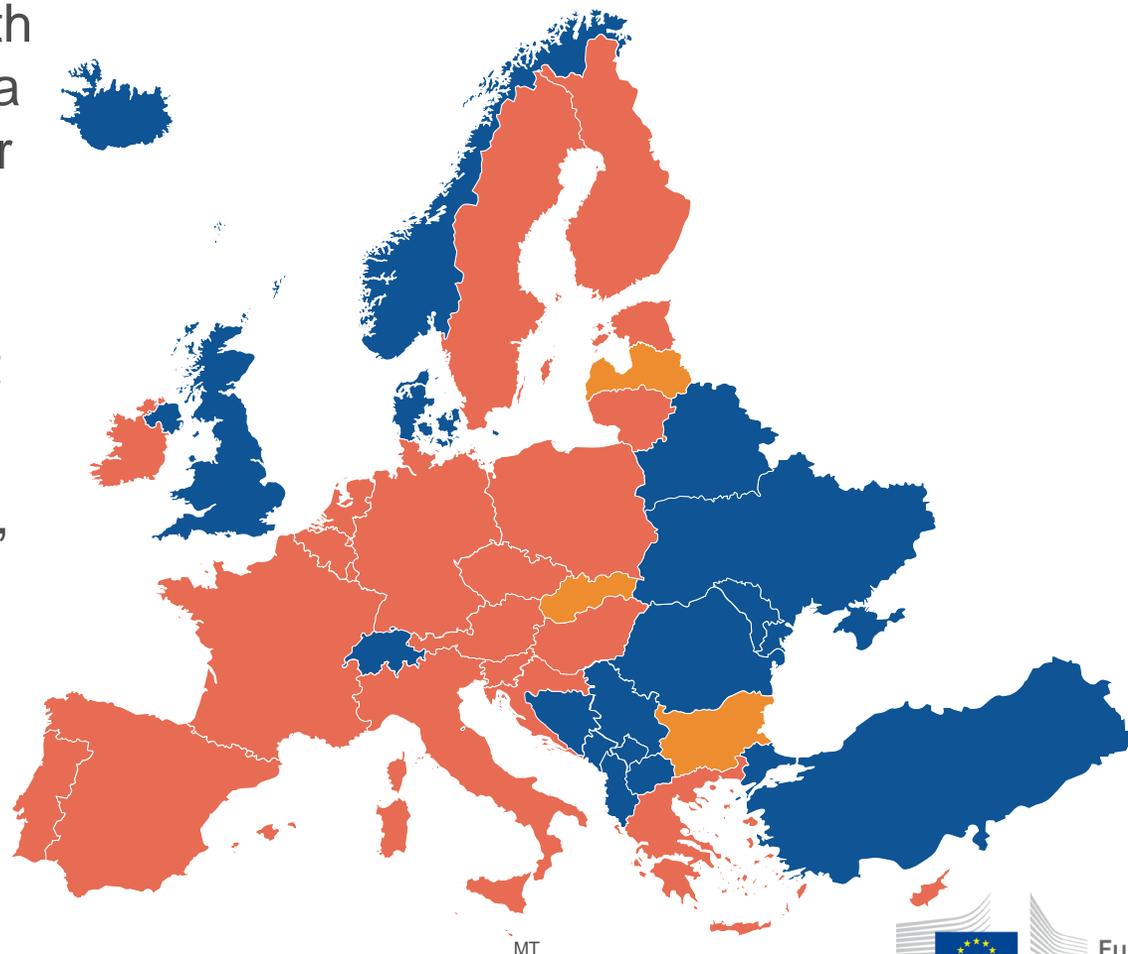
*“We need to make the most of the potential of e-health to provide high-quality healthcare and reduce inequalities. I want you to work on the creation of a **European Health Data Space** to **promote health-data exchange** and **support research on new preventive strategies**, as well as on **treatments,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

*Mission letter of Stella Kiyriakides
Commissioner for Health*

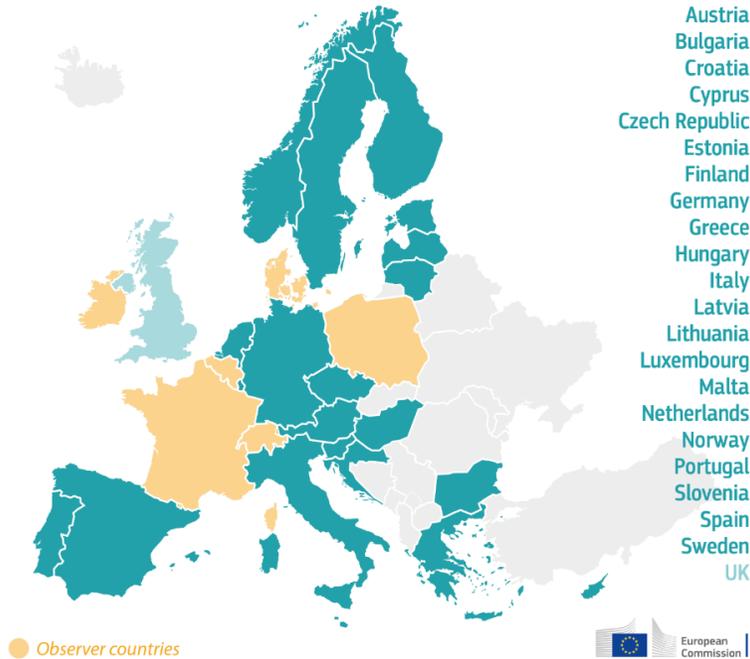
Infrastructure: My Health@EU/eHDSI

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



EU countries agreed to cooperate in linking genomic data across borders



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

| | Governance | Quality of Data | Infrastructure |
|--------------------------------|---|---|--|
| Better Healthcare | Legislative and non-legislative measures on governance and rules for primary and secondary use of data, respecting GDPR | Uptake and develop the EEHRxF | MyHealth@EU ERN-CPMS 1+mil genomes |
| Better Policy Making | | FAIR-ification of health data for primary and secondary use | Darwin (regulators) Link different repositories (eg registries: cancer, ERN, transplantation) |
| Better Research and Innovation | AI framework (incl AI&liability) | | Images database Research infrastructures |



Thank you for your attention!

Any questions?

