



## 6.2 Funding: Digital Europe

Saila RINNE, Head of Sector for policy  
CNECT.H.3 - eHealth, Well-Being and Ageing  
European Commission

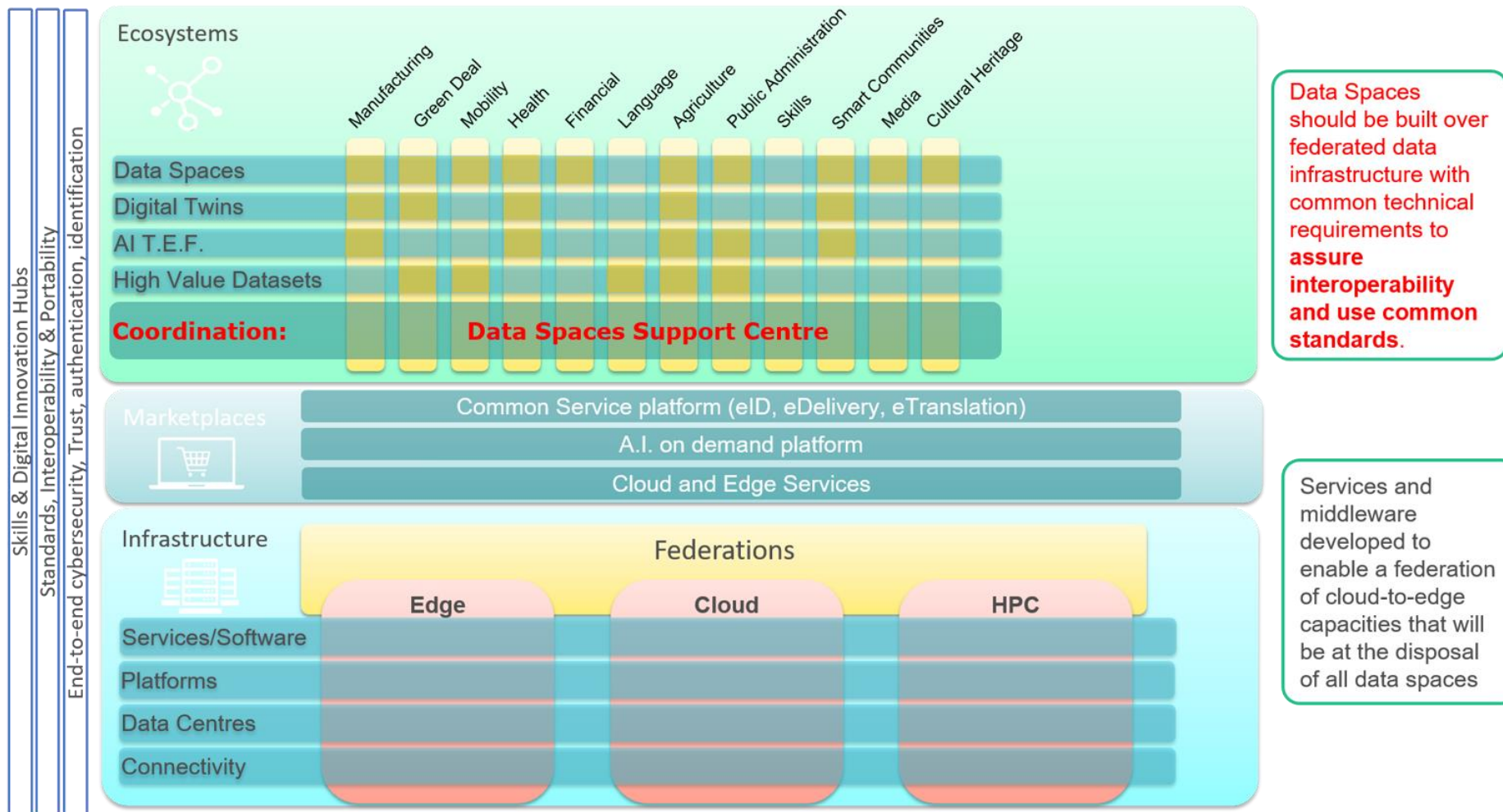


# Update on health related actions under Digital Europe

- Data spaces
- Support for patients' access to their health data
- Testing and uptake of digital technologies in health
- Cybersecurity in health
- Large-scale pilots for cloud-to-edge based service solutions

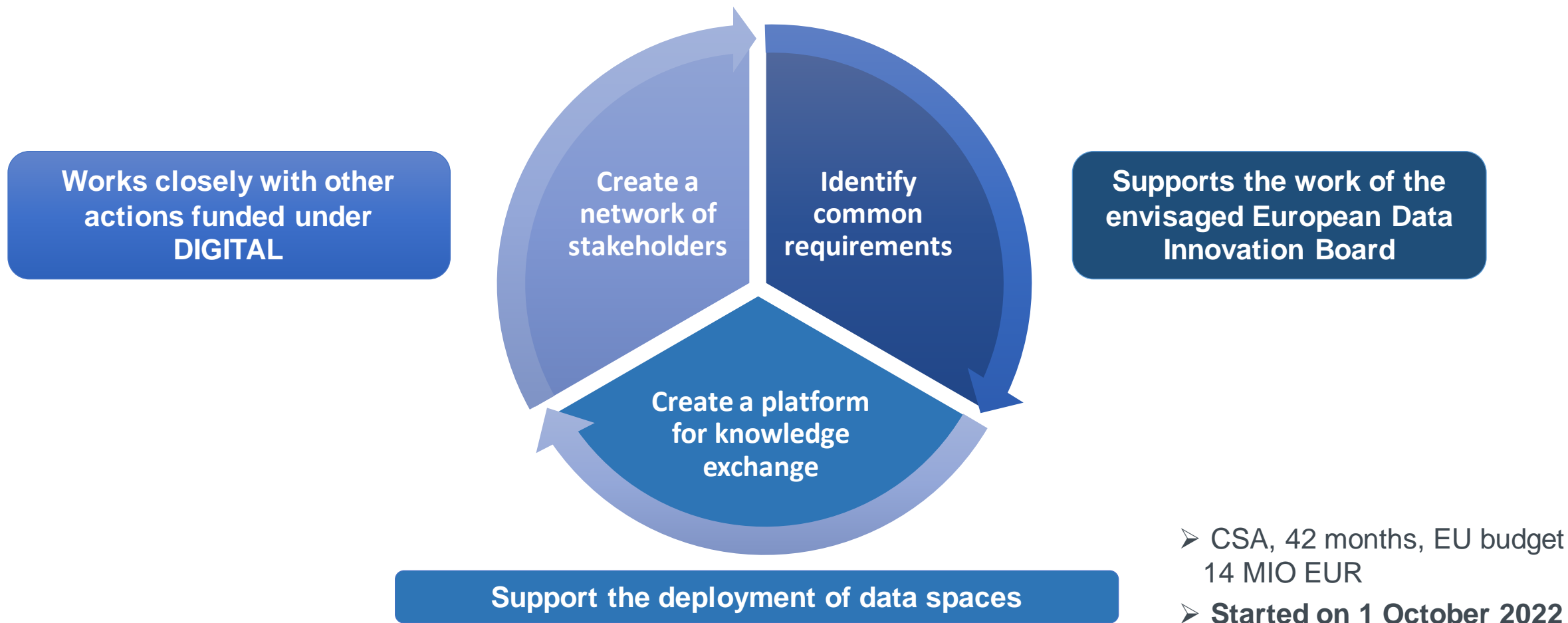


# Data spaces in DIGITAL – overview





# Data spaces support centre





# Health data space

## Federated European infrastructure for genomics data

to deploy sustainable and secure cross-border linkage of and access to a multitude of genomic and related phenotypic, clinical and other datasets across Europe based on the progress achieved in the context of the 1+ Million Genomes initiative

- Simple grant, co-funding rate 50%, indicative duration 48 months, EU budget 20 MIO EUR
- **Genomic Data Infrastructure (GDI) project started on 1 November 2022**



## Federated European infrastructure for cancer images data

to establish and deploy a pan-European digital infrastructure facilitating access to cancer images and related patient data in full compliance with the applicable data protection requirements [...] to be used by clinicians, researchers and innovators, with the aim of more precise and faster clinical decision making, diagnostics, treatments and predictive medicine

- Simple grant, co-funding rate 50%, indicative duration 36-48 months, EU budget 18 MIO EUR
- **Grant Agreement under preparation**



# Implementation of the European Digital Identity Framework

- to support the piloting of the European Digital Identity Wallets by Member States and relevant stakeholders in compliance with the common Union Toolbox and reference implementation of EUDI Wallet; and
  - to promote the development and deployment of use cases for the EUDI Wallet in different areas involving both public and private sector stakeholders.
  - Large-scale use case pilots in areas of Mobile Driving License, **eHealth**, Education/Professional Qualifications, Payments.
- Simple grants, co-funding rate 50%, indicative duration 24 months, EU budget 37 MIO EUR, indicative project budget (maximum grant amount) 10-12 MIO EUR
- **Proposals under evaluation**



# Testing, validation and uptake of digital technologies

## Testing and Experimentation Facility for Health

to support full testing and validation of advanced AI-based technologies and robotics technologies for health and care in real-world scenarios, to foster trust and acceptance by the user community and boost the roll-out from the lab to the market; the aim is to increase the effectiveness, resilience and sustainability of European health and care systems and reduce healthcare delivery inequalities in Europe while ensuring compliance with relevant legal, ethical, quality and interoperability standards and requirements

- Simple grant, co-funding rate 50%, indicative duration 48-60 months, EU budget 30 MIO EUR
- **Grant Agreement under preparation**

## Uptake of digital solutions in Health and Care

to foster knowledge sharing and multi-stakeholder engagement in the uptake and integration of digital solutions along the continuum of health and care

- Coordination and support action, indicative duration 18-30 months, EU budget 1 MIO EUR
- **DigitalHealthUptake project started on 1 November 2022**

## An ecosystem for digital twins in healthcare

to support the roll-out of digital twins for health by mapping and structuring the ecosystem in order to identify and pool existing resources, and to foster collaboration of stakeholders while ensuring adequate clinical representation

- Coordination and support action, 24 months, EU budget 5 MIO EUR
- **EDITH project started on 1 October 2022**





# Cybersecurity in health

## Support to cybersecurity in the health sector

to support cybersecurity resilience in healthcare and health institutions, in view of limiting damage of safety-critical cybersecurity incidents affecting hospitals and health services providers

- SME support action (co-funding rate 50%, 75% for SMEs), indicative duration up to 24 months, EU budget 10 MIO EUR, indicative project budget (maximum grant amount) 3 MIO EUR
- **Grant Agreements under preparation**

## **complemented by...**

a number of cybersecurity topics also in the next call, which may further benefit the health sector





# Large-scale pilots for cloud-to-edge based service solutions

- deployment at scale of innovative, sustainable, secure and cross-border cloud-to-edge based services applied in a set of well-chosen **application sectors**
  - deploy additional cloud-to-edge services that are particularly innovative
  - possible features:
    - Edge cybersecurity services, notably for shared edge resources;
    - Highly secured, low latency local edge services running on green infrastructures that enable federated Artificial Intelligence
    - Ultra-secure and ethical standards compliant data management such as through scalable blockchain based services
    - Predictive analytics and data visualisation services
  - the retained project portfolio should ideally address the **health sector**, public administrations, and smart cities and communities
- Simple grant, co-funding rate 50%, indicative duration 24-36 months, EU budget 40m€, indicative project budget (maximum grant amount) 8-10m€
  - TOPIC ID: DIGITAL-2021-CLOUD-AI-03-PILOTS-CLOUD-SERVICES
  - **The Call is currently open, with deadline on 24 January 2023**



## 6.2 Funding: Connecting Europe Facility

Manuel MATEO GOYET, deputy Head of Unit  
CNECT.E.2 Cloud & Software  
European Commission

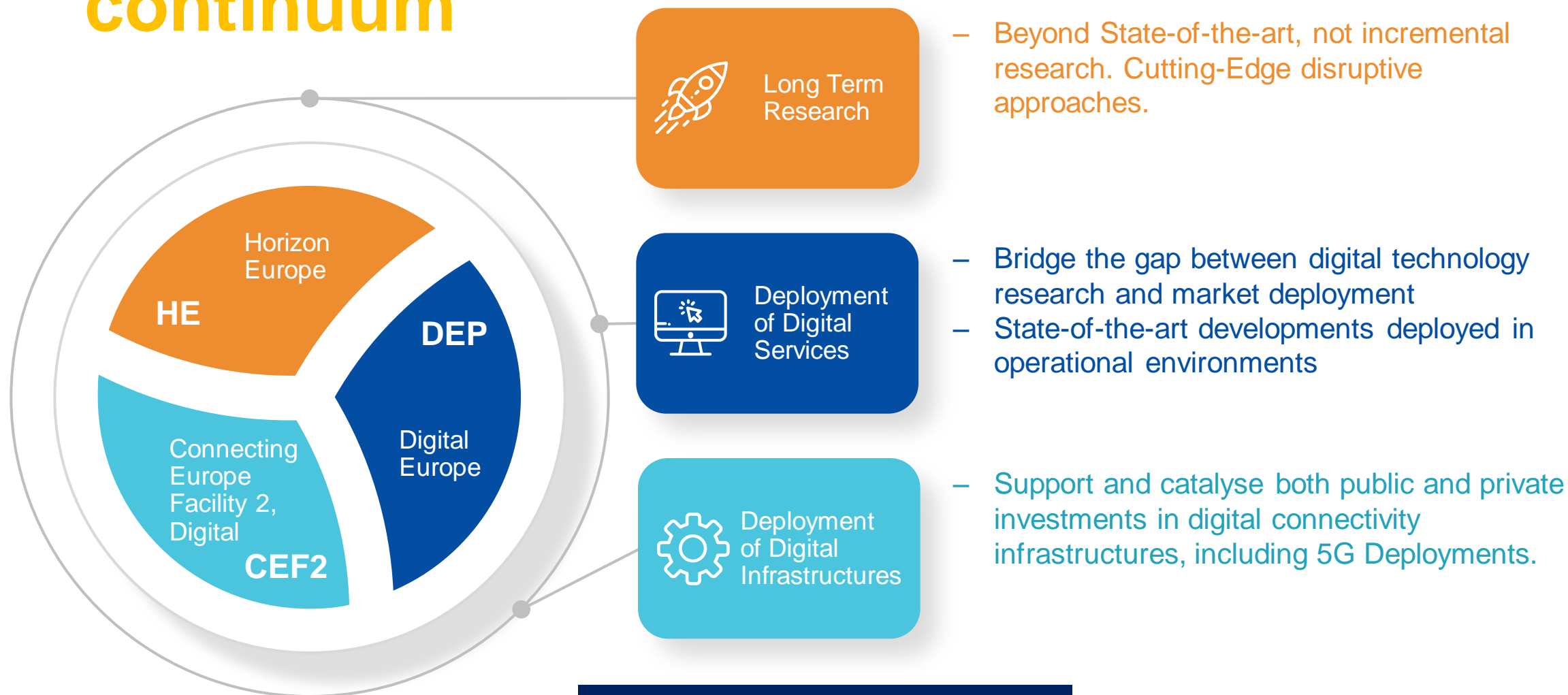


# Agenda

- EU actions & programmes on **Edge-Cloud continuum**
- **Connecting Europe Facility (CEF 2) – Digital**
- **Backbone networks for pan-European cloud federations**
- CEF 2 – Digital **Call 2**

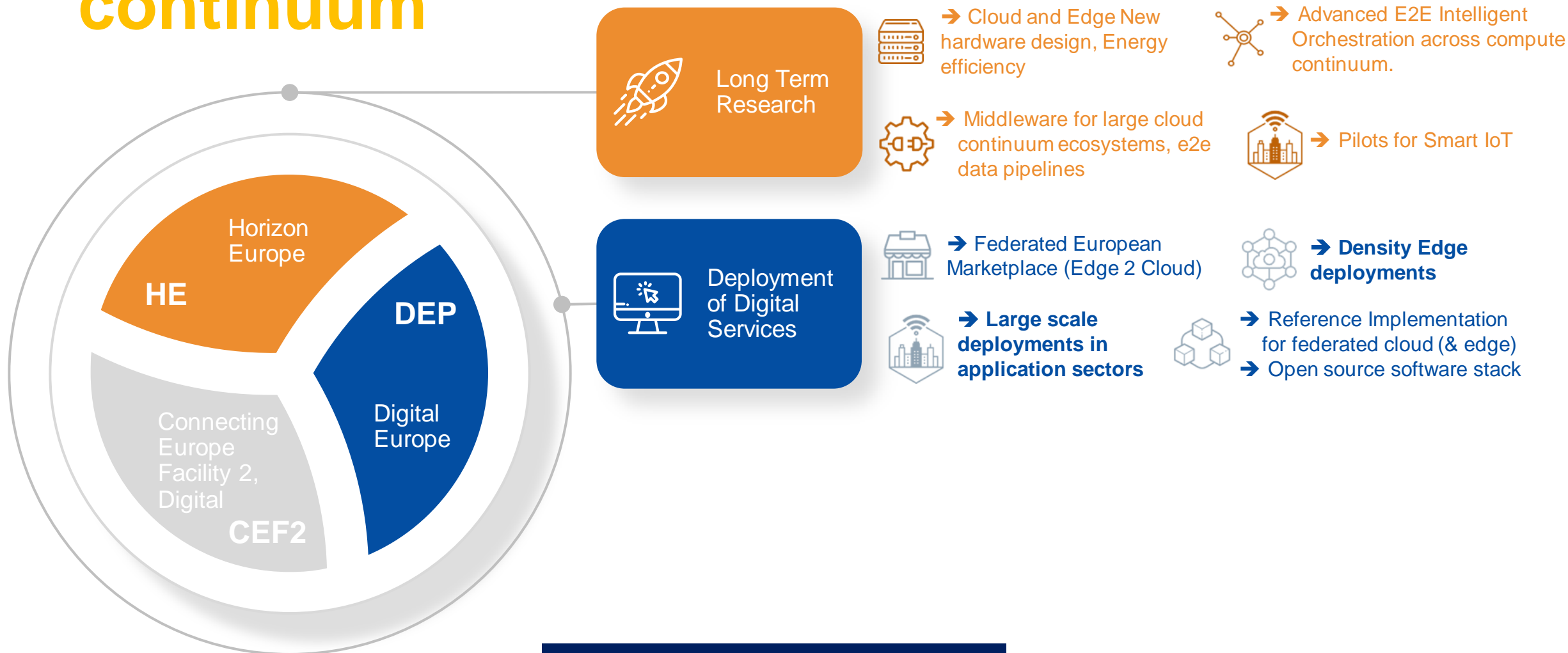


# EU actions & programmes on **Edge-Cloud continuum**





# EU actions & programmes on **Edge-Cloud continuum**





# CEF2 Digital (CEF-DIG)



# CEF-DIG & EU digital policy objectives

- Direct contributor towards **Digital Compass 2030 Connectivity Targets**
- Instrumental for **Multi-Country-Projects & strategic autonomy** (5G Corridors/Cloud/HPC/QCI)
- **Digital Decade** Communication and its **International Connectivity** angle (submarine, satellite)
- Complementing, **leveraging RRF/Private funds** (Blending Facility/Equity Fund)
- Fostering offer/demand and **innovation-driven connectivity** (5G Corridors/Communities)



# CEF-DIG 2021-2027 **in figures**

€3  
billion

2  
WPs

3 key  
objectives

- **75%** for 5G infrastructure deployments
- **25%** for EU cross-border data infrastructures
- Strategic Priorities for funding in **2 Work Programmes** (period **2021-23 & 2024-27**)
- Developing and making available **very high-capacity networks, including 5G systems**, across Europe
- Increased **security, resilience and capacity of the digital backbone networks** in the EU

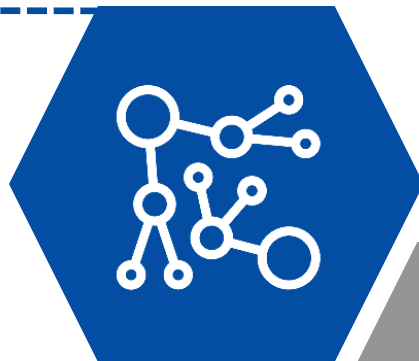




# Key actions under CEF-DIG 2021-2023

€140 million

Backbone networks  
for pan-European  
cloud federations



€130 million

Backbone connectivity for  
Digital Global Gateways



€90 million

Quantum communication  
infrastructure (EuroQCI)



€89.5 million

5G for Smart Communities

5G

5G

€346 million

5G coverage along transport corridors

€4 million

Digitalisation of transport  
and energy networks





# CEF-DIG-CLOUD

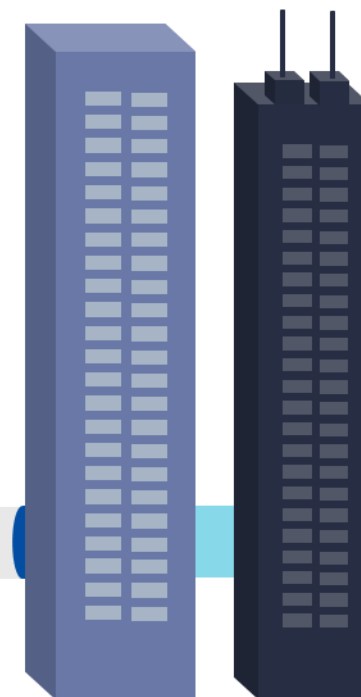
## Backbone networks for pan-European cloud federations



# Backbone networks **deep dive**



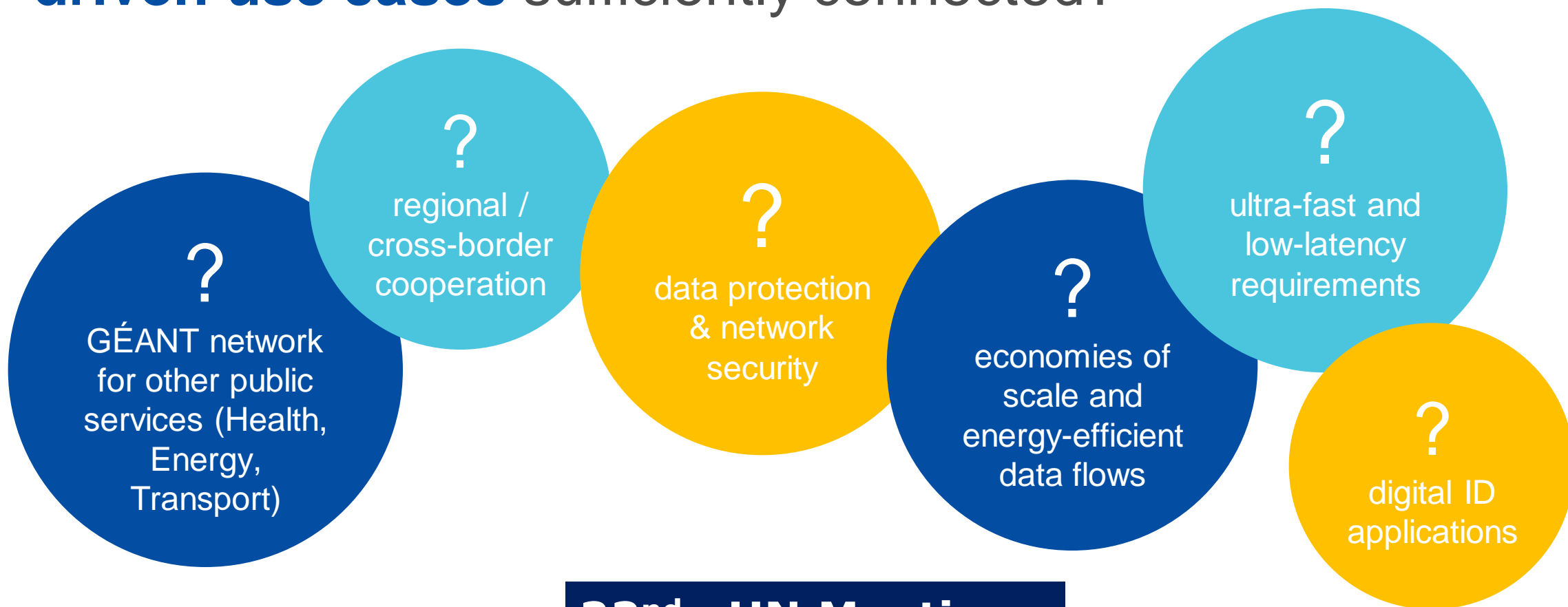
- **Dedicated interconnections** between geographically distributed cloud infrastructure (data centers, sub-networks...)
- **Network requirements** are established according to the applications deployed on the network
- Compared to public internet, cloud backbones provide **consistent performance** for bandwidth, latency...
- Essential **building block** for new types of cloud infrastructure and applications





# CEF-DIG **future-proof cloud infrastructure**

Is your **underlying infrastructure** for **emerging cloud-driven use cases** sufficiently connected?





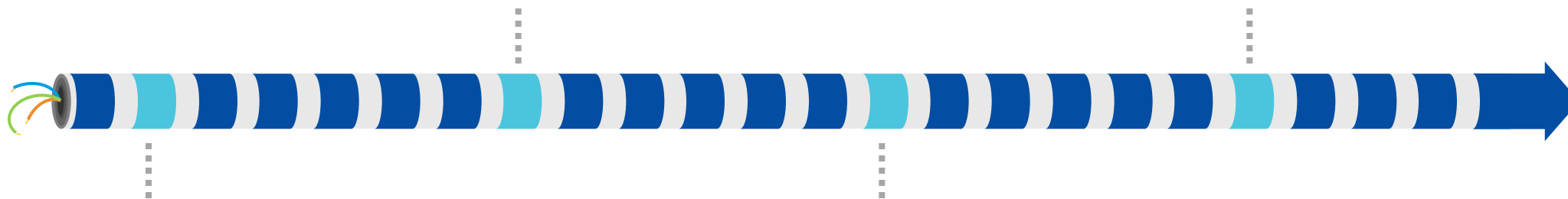
# CEF-DIG-CLOUD **rationale**

## Necessary response to sectoral users' needs

- **High-speed, low-latency data processing** capacities across the EU
- **Ultra-fast backbone** connectivity
- **Data-protection, security, energy-efficiency**

## CEF 2 Digital contribution

- Strategic co-investment in cloud interconnections among:
- **Socio-economic drivers** (universities, hospitals...)
- **operators provisioning cloud infrastructures** (cloud providers, telecoms operators...)



## Demand for a new type of cloud infrastructure

- Industrial processing of **large amounts of data** in HPCs
- Swift **uptake of AI** applications
- Operationalisation of **data spaces**

## Market failure

- Market **fails to supply** cloud infrastructure with these characteristics
- **Public administrations and SMEs** not able to leverage the potential of interconnected cloud infrastructures
- **New demand is largely unmet**, limiting users' choices across the market



# CEF-DIG-CLOUD **closer look**

## Backbone networks for...

- **Cloud infrastructure interconnections**
- Both **physical** (i.e. very high capacity networks) and **functional levels** (i.e. management systems, software-defined infrastructures)
- To ensure **distributed, secure, energy-efficient and high-speed connectivity**

## ...cloud federations

- **Federations of interconnected cloud infrastructures** across the EU
- Creating **economies of scale** and **energy-efficient data flows**
- To ensure **access to cloud services** for users across the internal market



## ...pan-European...

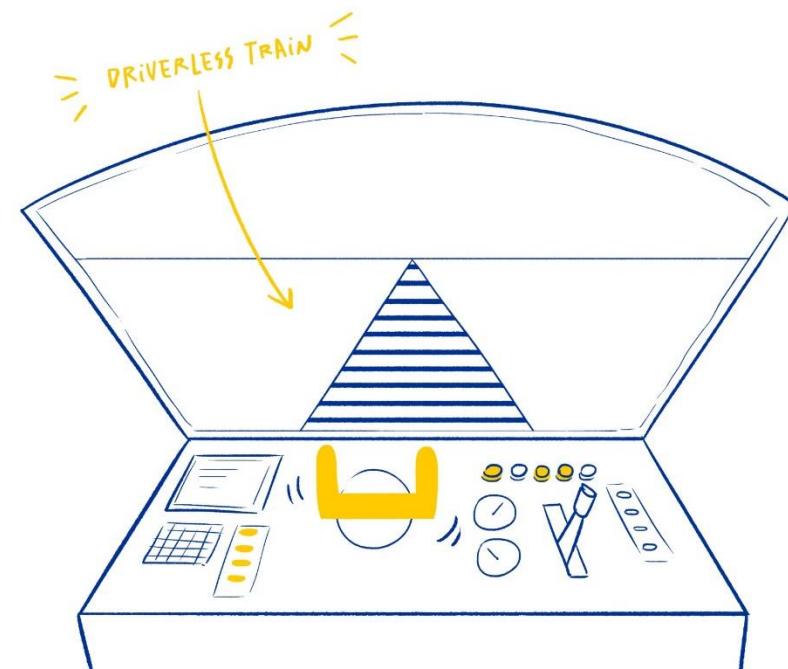
- **Large-scale deployments of cross-border cloud-based services** for socio-economic drivers
- **Current cross-border networks**, in particular for ultra-fast backbone connectivity, **do not satisfy cross-border operators' needs**, in particular as regards latency

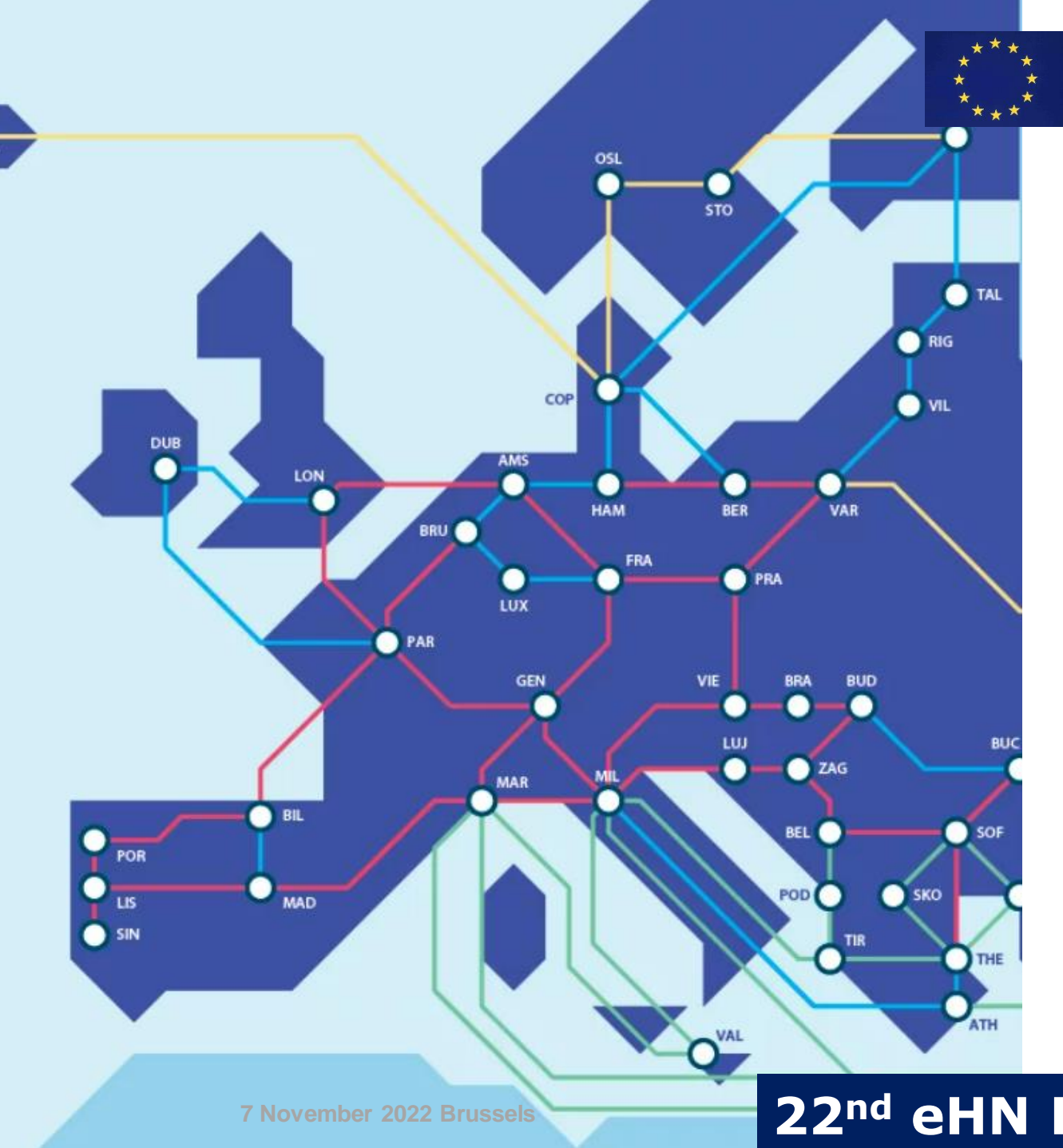


# CEF-DIG-2021-CLOUD Call 1 outcomes

## 21-EU-DIG-RailDataFactory

- **Feasibility study** on a possible **pan-European Railway Data Factory** as a prerequisite to the development of a fully digitalised and automated railway system, with an emphasis on the required **underlying backbone network and data platform to be established**.
- **Railway operators and suppliers** across Europe would contribute sensor data into a rich common pool of data that can be jointly used for **AI training for automated train operation**.





# CEF-DIG-CLOUD related I.

GÉANT research backbone

- **pan-European data network** for research and education community funded under **H2020**
- Interconnects national **research and education networks**
- Cloud network infrastructure for the **European Open Science Cloud** (EOSC)





## CEF-DIG-CLOUD **related II.**

### Project SUNFISH

- **H2020** funded project “**SecU**re **iN**formation **SH**aring in federated heterogeneous private clouds”
- **6 MS** collaborated on a pilot interconnection of government cloud to **run sensitive data processing on cloud of another MS.**
- **Dynamic cloud management function:** dynamic federation of clouds cloud in sectors where privacy and control of information propagation are essential (e.g., **e-government**, **e-health** etc.)



# CEF-DIG-2022-CLOUD

## Backbone networks for pan-European cloud federations

### CALL 2



# CEF-DIG-2022-CLOUD **focus**

**3 vertical sectors** with strong connectivity needs

**& 1 horizontal enabler**

## Health Data Space

Primary & Secondary data use cases

## Energy Data Space

Secure and strong infrastructure for energy management applications

## Mobility Data Space

Emerging mobility data applications (traffic planning, predictive maintenance of infrastructure...)



## Digital ID & Wallets

European Digital Identity framework and future EUDI Wallet applications



# CEF-DIG-2022-CLOUD **Call 2 expectations**

## CEF-DIG-2022-CLOUD-STUDIES

- **Feasibility studies** to pave the way for full deployment projects under Call 3
- **Funding** of 3 x €1 million
- **Public sector entities are the final beneficiaries** of the call, this can include consortia of public administrations at national or regional level, **private sector actors** (CSPs etc.) are eligible as **implementing entities**
- Focus on **new and significant upgrade of cloud interconnections** in relevant **vertical sectors** (e.g. health cloud data infrastructures),
- **Cross-border** and/or **national**



# CEF-DIG-2022-CLOUD **funding**

- **Co-financing rate:** 50% for feasibility studies
- For works under Call 3, this can be **increased to a maximum of 75 %** for actions implementing the Gigabit connectivity of socioeconomic drivers.
- Possible **co-financing from RRF funds** (State aid rules apply)

*DIGITAL*

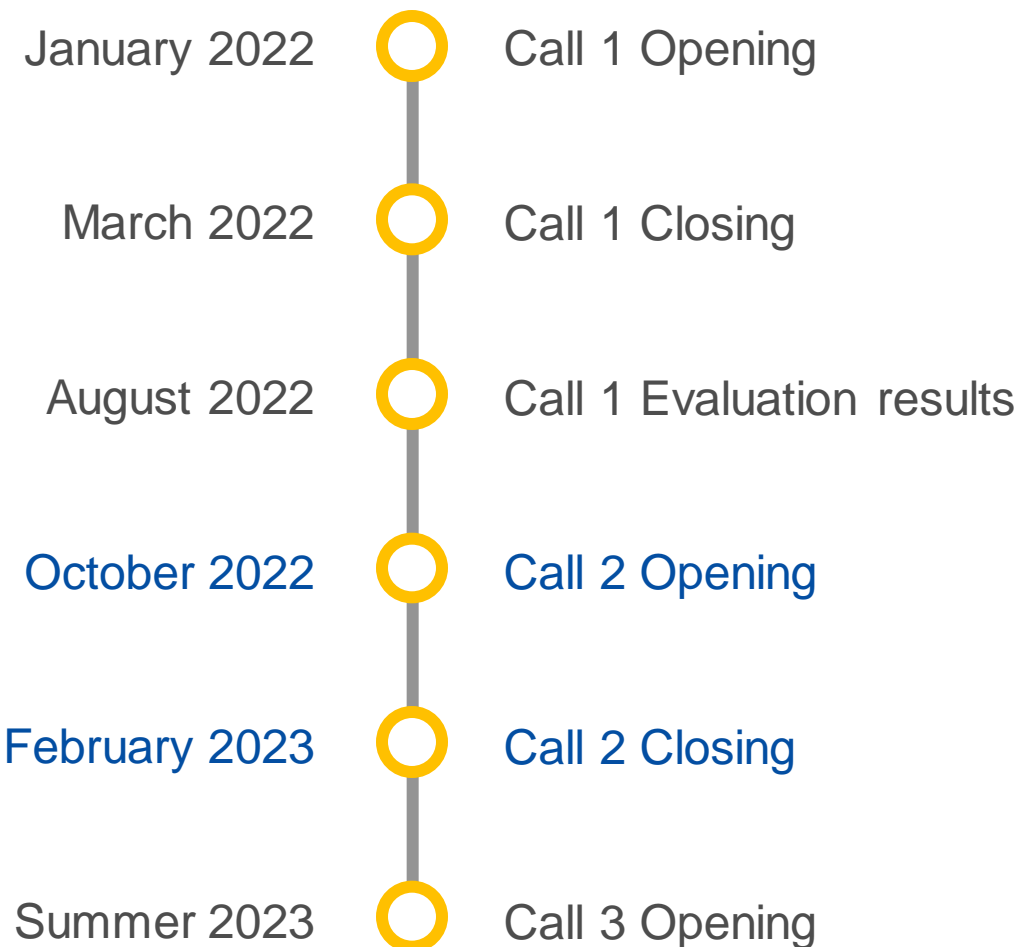
**FIRST CALLS  
ARE OPEN!**



#DigitalEU #CEFDigital



## CEF-DIG timeline



**22<sup>nd</sup> eHN Meeting**



# CEF-DIG-2022 Links

- CEF homepage: [CEF Digital | Shaping Europe's digital future \(europa.eu\)](https://europea.eu/cef-digital)
- CEF workprogramme: [Multiannual work programme for 2021-2025 - Connecting Europe Facility - Digital | Shaping Europe's digital future \(europa.eu\)](https://europea.eu/cef-digital)
- CEF Calls: [Search Funding & Tenders \(europa.eu\)](https://europea.eu/cef-digital)
- CEF Cloud Call: [Funding & tenders \(europa.eu\)](https://europea.eu/cef-digital)



# Thank you





# Questions?

## Further information

**eHealth Network**

[https://ec.europa.eu/health/ehealth/policy/network\\_en](https://ec.europa.eu/health/ehealth/policy/network_en)

**All events**

[https://ec.europa.eu/health/ehealth/events\\_en#anchor0](https://ec.europa.eu/health/ehealth/events_en#anchor0)