



A workshop on a Common European **Mobility Data Space**

DG MOVE and DG CONNECT
European Commission
December 2021



Vision and policy for digital transformation

Dr. Max Lemke, Head of Unit
Unit E4 “Internet of Things”
DG CONNECT, European Commission



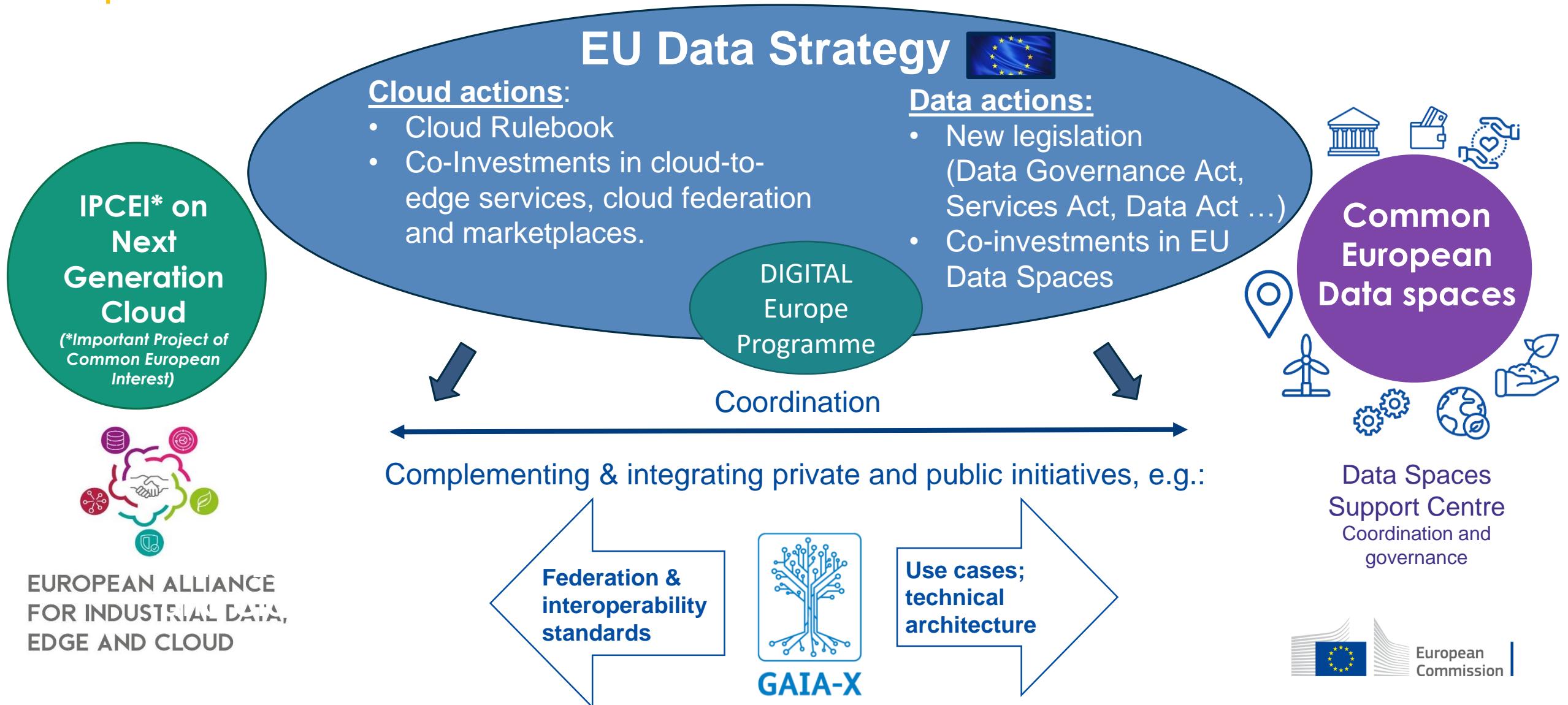
“

“My ambition is that European data will be used for European companies in priority, for us to create value in Europe”

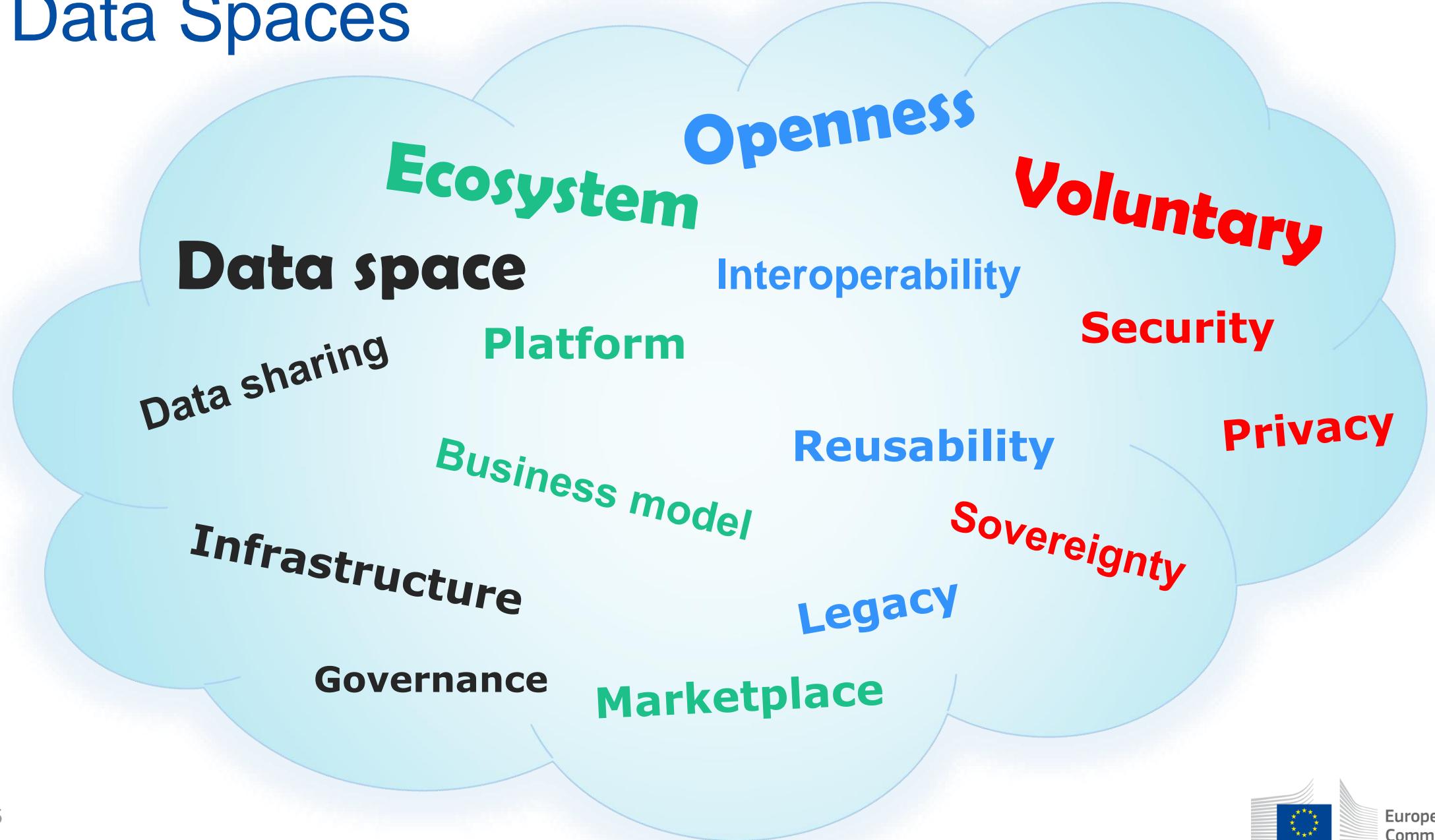
The aim is to make Europe “the most data-empowered continent in the world”

*Thierry Breton,
Commissioner for the Internal Market*

The European Data strategy



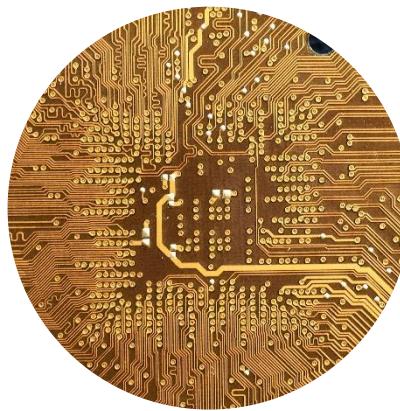
Data Spaces



Mobility part of the European priorities



+



+



European Green Deal

Reduce greenhouse
gas emissions from
transports
by 90% by 2050

Fit for the digital age

Make mobility smarter
and ensure our digital
sovereignty

Industrial leadership

Globally competitive
mobility and transport
ecosystem,
at the edge of innovation

Benefits and challenges of sharing mobility data



Businesses: Staying in control of value creation, new services, optimised processes



Governments: Greener transport, better monitoring, planning and management



Passengers: Improved convenience, seamless multimodal travel, more choice



Reluctance to share data: security, competition concerns, lack of trust



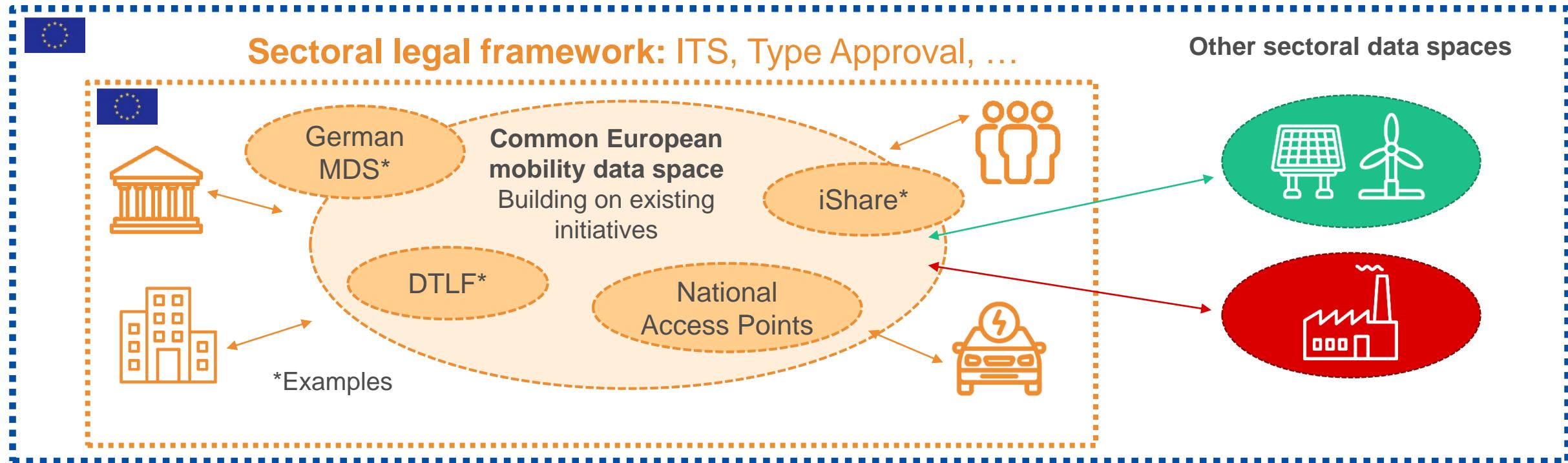
Dominance of large platforms capturing increasing share of value



Fragmentation, lack of access and of interoperability

Enablers for a digitalised mobility

Horizontal legal framework: Digital Markets Act, Data Governance Act, high-value datasets, Data Act, ...



Key enabling digital technologies: Cloud-edge, 5G, AI, electronics

Supported by Horizon Europe, Digital Europe,
Connecting Europe Facility, Recovery and Resilience Facility, ...



Sharing data in mobility

❑ Essential Aspects:

- Transparent control of data access and use – building trust
- Interoperability between existing ecosystems supported by digital platforms
- Governance and business models: balance openness and protections

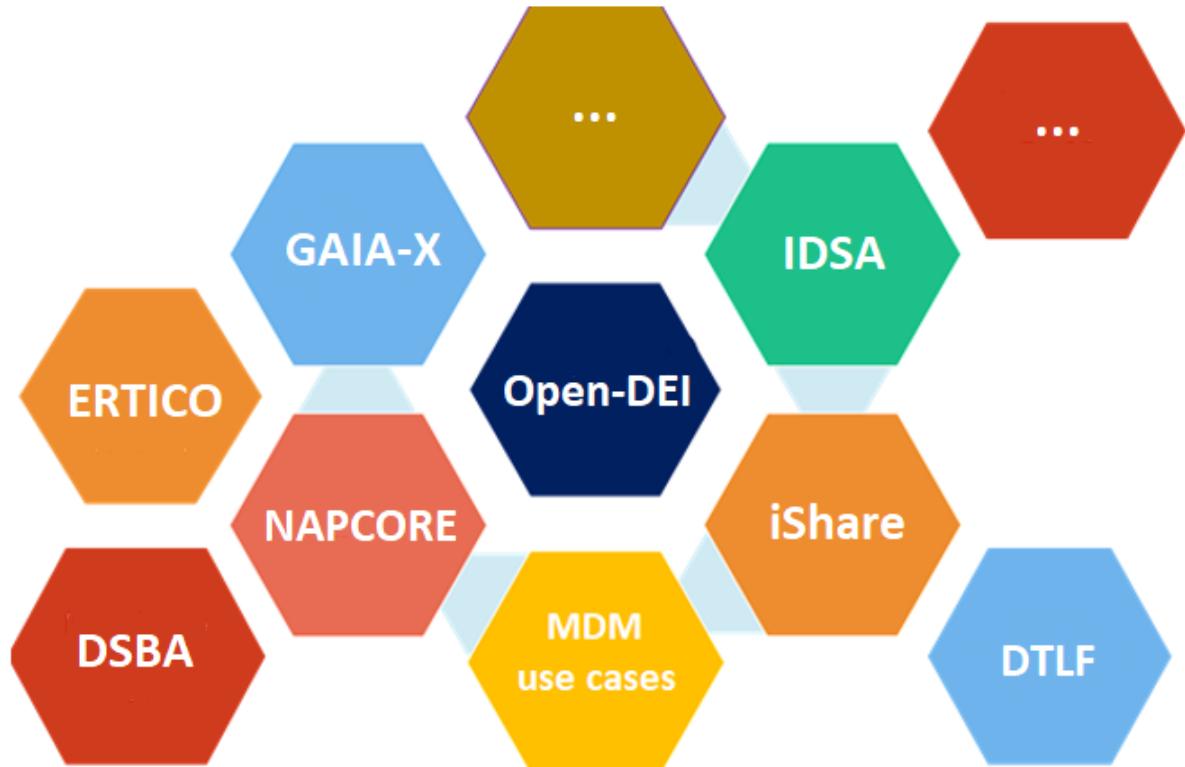
❑ One Co-ordination & Support Action: prepare implementation

- Deeply rooted in the respective constituency – broad networking/consensus
- Identify Data Suppliers and Data Users and Intermediaries
- Propose DS architecture, governance model, and deployment roadmap
- Collaborate with the Data Space Support Centre on x-sector communalities

Leveraging the momentum



Ongoing data spaces initiatives across Europe



Converging guidelines worldwide



Cross-sectoral legislation and support for data sharing

Federico Milani, Deputy Head of Unit
Unit G1 “Data Policy and Innovation”
DG CONNECT, European Commission

The European strategy for Data



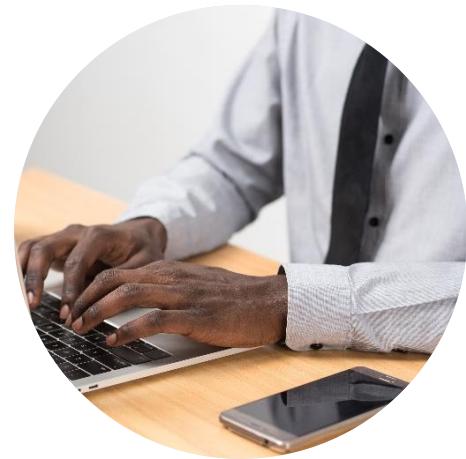
A legislative framework for data

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



Enablers

Investments in a High Impact Project on European data spaces and federated cloud infrastructures



Competences

Investing in digital skills 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.

The European way of sharing data

Objective:

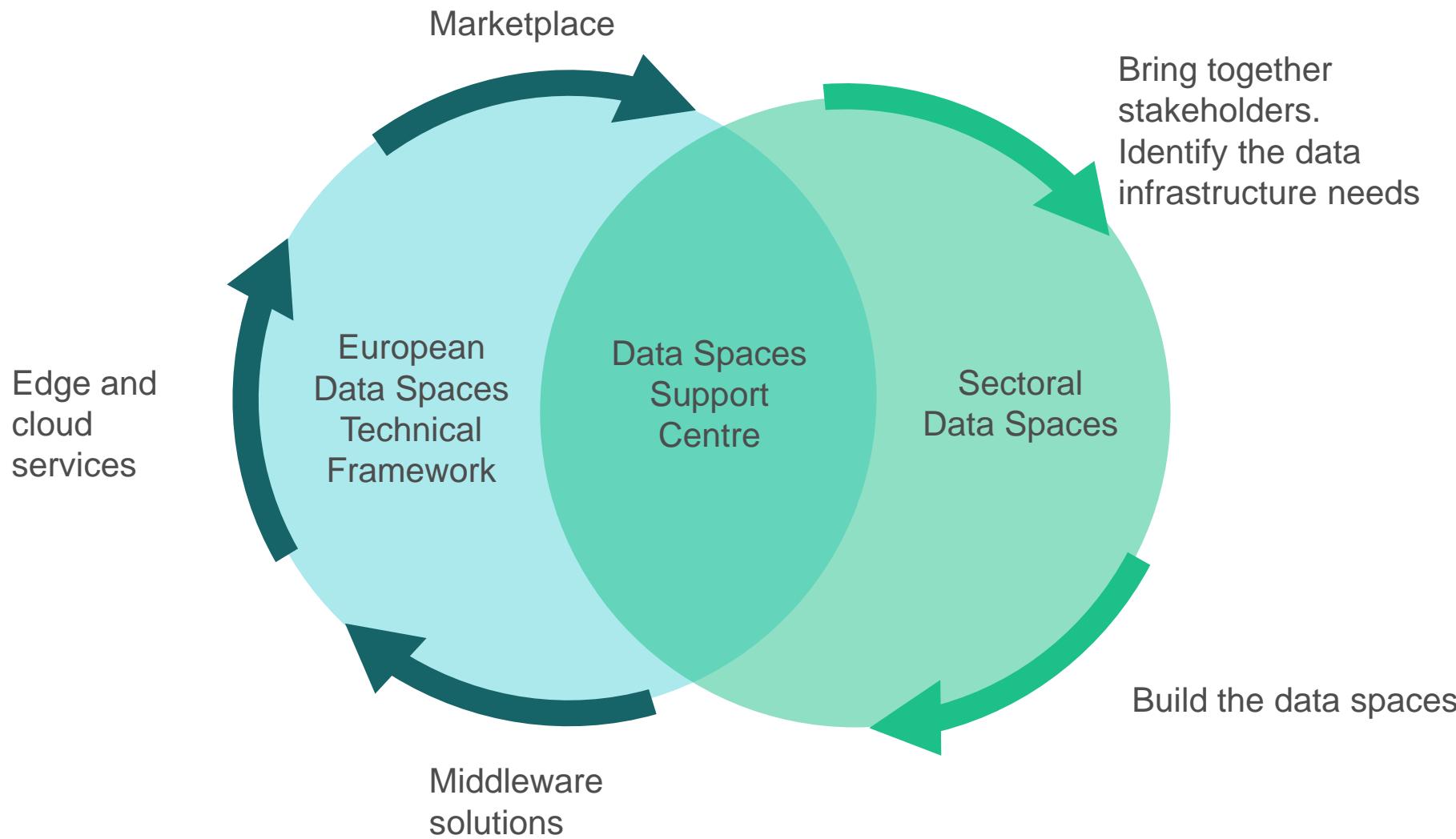
“Create the right conditions for people, companies and authorities to share data in a secure, trust creating manner.”

- Building **trust** in data sharing.
- **Personal** and **non-personal data** in scope.
- **Re-use of public sector information**, also through novel mechanisms that protect information privacy (personal data, confidential business data).
- Ensure **fairness** in the allocation of data value among the actors of the data economy.
- Support the creation of **sectoral common European data spaces** including the necessary infrastructure.
- **European rules and values**, in particular personal data protection, consumer protection legislation and competition law, are fully respected.

Key characteristics of a data space

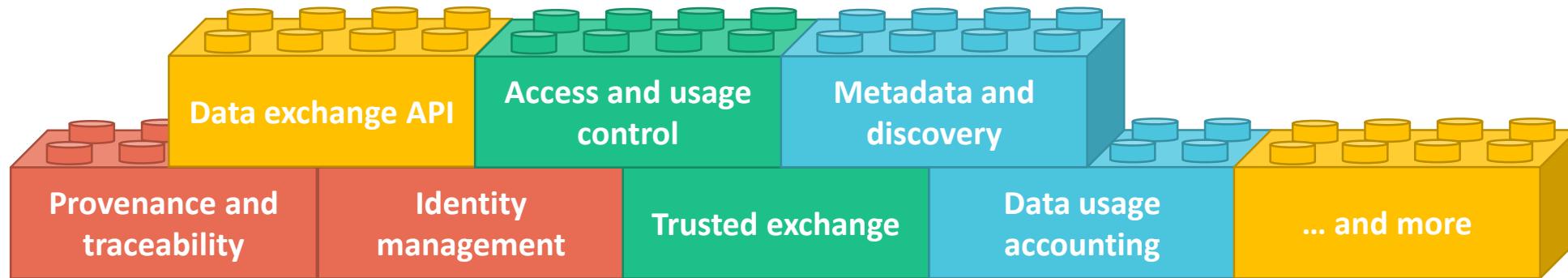
- A **secure and privacy-preserving IT infrastructure** to pool, access, process, use and share data.
- A **data governance mechanism**, comprising a set of rules of administrative and contractual nature that determine the rights to access, process, use and share data in a trustful and transparent manner.
- **Data holders are in control** of who can have access to their data, for which purpose and under which conditions it can be used.
- Presence of vast amounts of data that are **made available on a voluntary basis** and can be reused against remuneration or for free, depending on the data holder's decision.
- Participation by an **open** number of organisations/individuals.

Data Spaces deployment in DIGITAL



Data Spaces technical infrastructure

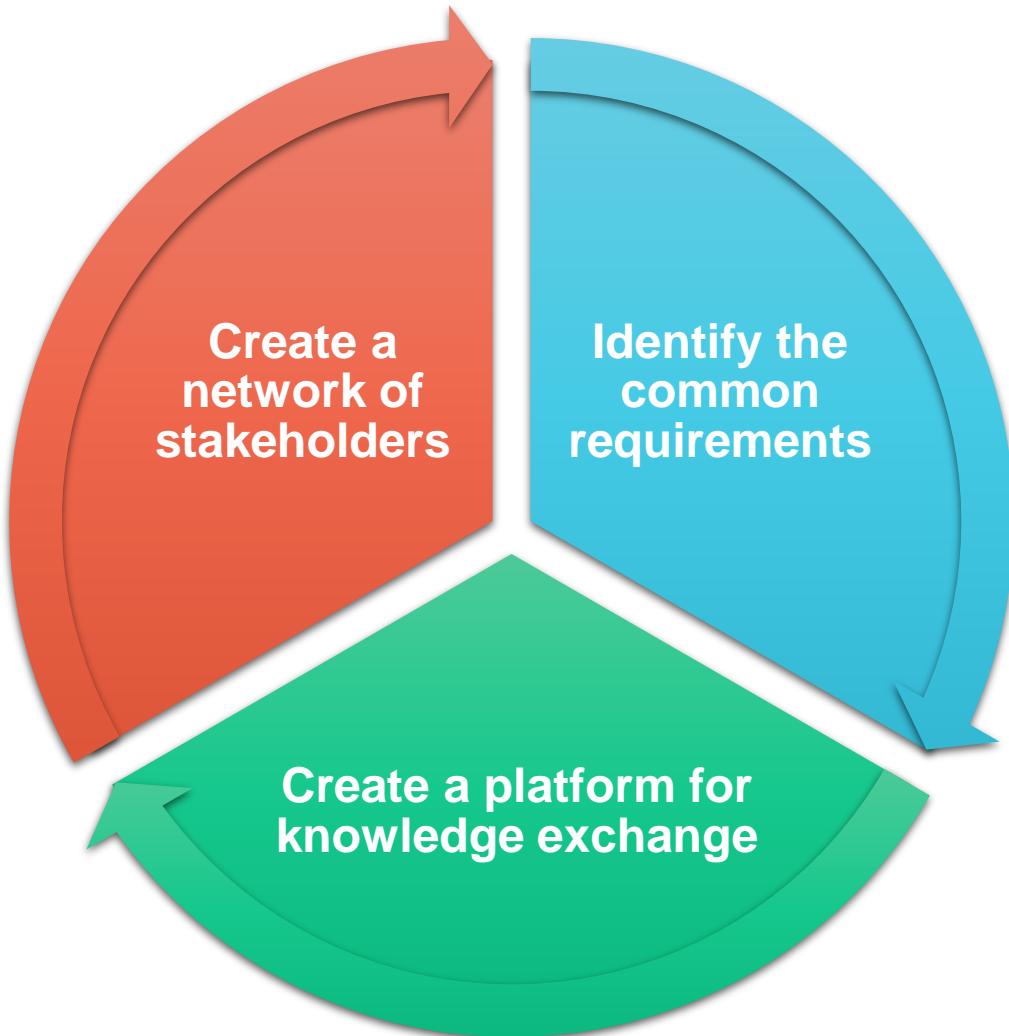
Smart middleware
for
European cloud federation and the European data spaces



Providing a framework that makes it easier and more efficient to build,
customize, and deploy data spaces

Data spaces support centre

Closely work with CSAs
and projects funded under
DIGITAL



Support the deployment of data spaces



Sustainable and smart mobility strategy

**Kristian Hedberg, Head of Unit
Unit B4 “Sustainable and Intelligent Transport”
DG MOVE, European Commission**

Context

- *Sustainability*: Green Deal calls for 90% reduction in GHG emissions from transport by 2050.
- *Digitalisation*: opportunity to make mobility smarter, more efficient and greener.
- *Resilience*: transport sector heavily affected by the COVID-19 pandemic. Need to support the recovery.

→ Vision and pathway: Commission **Strategy for Sustainable and Smart Mobility** (2020).



Mobility Strategy – milestones (selection)

By 2030

- **Paperless freight transport**
- **Automated mobility** deployed at a large scale
- Integrated electronic **ticketing**
- Operational **multimodal Trans-European Transport Network** equipped for sustainable and smart transport with high speed connectivity (**core** network)

By 2050

- Operational **multimodal Trans-European Transport Network** equipped for sustainable and smart transport with high speed connectivity (**comprehensive** network)
- **Death toll** for all modes of transport in the EU close to **zero**

“Smart” in the Strategy



Achieving seamless, safe and efficient connectivity

- offering a seamless multimodal experience
- supporting sustainable choices by taking advantage of digitalization & automation
- shaping the mobility of the future
- ensuring the right framework and enablers are in place

Strategy and the Mobility Data Space

- The digital transformation depends on data availability, access and exchange.
Often hampered by:
 - Unclear regulatory conditions
 - Lack of an EU market for data
 - Absence of obligations to collect and share data
 - Incompatible tools and systems; different standards
- Need to facilitate the access, pooling and sharing of data of existing and future transport databases/platforms.

Many data initiatives are in the pipeline:

Action in the Mobility Strategy	timeline
38. Revision of the Directive on Intelligent Transport Systems	Q4/2021
36. Revise Delegated Regulation 2015/962 on real time traffic information services and Delegated Regulation 2017/1926 on multimodal travel information services	Q4/2021, Q4/2022
37. Initiative on multimodal digital mobility services	Q4/2022
49. A stronger coordination mechanism for the ITS national access points (NAPCORE)	<i>launched</i>
(27). establish a common dataset for reporting formalities in EU ports and a multimodal transport common data set for regulatory freight transport information	Q1/2022, Q1/2023
54. Propose rules on a trusted environment for corridor data exchange to support collaborative logistics	2023

Large acquis of existing (data) ecosystems

>30 existing and upcoming initiatives organising sharing of transport data

Often include own:

- Data governance
- Architecture / infrastructure
- Harmonisation of sharing conditions
- Divergent definitions

→ How to create links between these initiatives?

Road	Rail	Air	Maritime	Inland Water Way
TEN-T geographical network data (TENtec) for EU28 + geographical data for the EEA countries, the Western Balkans, Turkey, Eastern Partnership countries and NDPTL countries. The geo data serves as a reference for any TEN-T related actions.				
Commercial transport data – e.g. consignor/consignee, pick up and delivery place, goods description, transport fare – as required by EU and national legislation regulating the transport of freight within the EU <small>(NB:) Data is made available by the private operators to the authorities so that the latter can control rule compliance; access is given to competent authorities only, re-use of data is possible by authorities only if specified in the respective EU or national law</small>				
Directive on Dangerous Goods Regulation No. 11 concerning the abolition of discrimination in transport rates and conditions			Directive on Dangerous Goods Regulation No. 11	
Cabotage Regulation		Aviation security implement act		
Waste Shipment Regulation				Waste Shipment Regulation
ITS Directive and Delegated Regulations – accessibility of data on National Access Points 1 2 3 4 Multimodal Travel Information services – static data (networks, stops, stations, routes, timetables, fares etc) – all EU transport networks				
Multimodal Travel Information services – dynamic data 5				
ITS Directive and Delegated Regulations – accessibility of data on National Access Points 1 2 3 4			Regulation on European Maritime Single Window environment (EMSSWe) [EU] No 2019/1239 5 (*)	RIS Directive 2005/44/EC and implementing acts 5 10
Traffic information services (static, dynamic and traffic road data). Mainly TEN-T Road	Extension to the local level + additional data types (e.g. UVARS), including vehicle data for road operation needs 6	TAP TSI Passenger Transport Operations- Location data, Timetables, Fare data (static, dynamic through API); Dynamic information on Train delays, Capacity request and allocation – decentralised (except delays) – TEN-T Rail	Data: Any obligatory data required from a ship for executing a port call in EU ports covering the following reporting obligations: A. EU legislations specified in Annex 10 Regulation (EU) 2019/1239 : - Notification for ships arriving in and departing from MS ports - Border checks on persons - Notification of dangerous or polluting goods - Notifications on waste and residues - Notification of security information - Information on persons on board - Customs formalities (including arrival and departure formalities) - Safe loading and unloading of bulk carriers - Port State control - Maritime transport statistics B. International legal instruments (All 7 IMO FAL, Maritime declaration of Health) C. National legislation and requirements Coverage: EU MSs having maritime ports	Fairway information services (static, dynamic); electronic navigational charts, notices to skippers, aids to navigation, data for navigation and planning (RIS Index), infrastructure data. Local level + international level (D4D Portal, Danube FIS Portal, DG MOVE ERDMS (data for navigation and planning, RIS Index))
Road safety traffic information services (safety event data) Mainly TEN-T Road	Local level?	TAF TSI and relevant initiatives Freight Transport Operations - Updated / dynamic data on transport planning and status: Train Status, Train composition, Capacity Request and allocation, Train positioning and ETA... (dynamic data) – Decentralised – TEN-T Rail	Regulation (EC) No 437/2003 Carriage of passengers, freight and mail by air to/from and at EEA airports (annual statistical traffic demand data). Interactive access : https://webgate.ec.europa.eu/atlassoftsky/aos.html	enhanced international level: VisuRIS COMEX Platform 11
Safe and secure truck parking places information services (parking static and possibly dynamic data) Mainly TEN-T Road	Local level?	EU Registers (JINIF, ERATV, EVR) Updated static data of Rail assets: EU Rail network, Rolling stock (systems, technical compatibility – line per line , physical characteristics, energy and signalling systems, etc.) – Centralised / Central access point - EU Rail Network	Information for transport logistics/management: voyage planning (ETA, RTA), transport management, intermodal port and terminal management. Local level + international level, including cargo and voyage information (access only to legitimate users)	enhanced international level: VisuRIS COMEX Platform 11
European road accident database* (CARE) <small>*Council Decision 93/704/EC Information on all road accidents with injuries which occur in the EU. (Some data are not for public use)</small>	Rail Portal Data about rail service facilities, location, prices (static, centralised) - EU Rail Network	Maritime (Tentative) Information on maritime accidents statistics (EMCIP accident stats only)	EQUASIS Ship safety and quality-related information on the entire world merchant fleet	enhanced international level: VisuRIS COMEX Platform 11

Vision for a common European mobility data space

- builds on the horizontal framework of the Data Strategy.
- Interoperable with data “in” other data spaces (e.g. energy, Green Deal, health...)
- Improve data findability and accessibility
- Strong focus on interoperability and role of common (notably horizontal) building blocks.

Vision for a common European mobility data space

- A possible two-phased approach:
 1. Identifying and creating a repository (a dictionary) of existing data ecosystems, supporting the discoverability of data and providing a first common layer (to facilitate access and understanding of what is the data included and how to access/reuse it).
 2. Progressing on harmonisation and cross-sector interoperability, recommending common building blocks to be used in the ecosystems.

→ Commission to present next year a concept and strategy to establish the data space + follow-up actions to be adopted in 2022-2024;

→ Funding for actions envisaged through the DIGITAL –programme and CEF Technical Assistance.



A workshop on a Common European Mobility Data Space

Digital Europe programme
- Practical information on
the CSA

Zoe de Linde, Deputy Head of Unit
Unit E4 “Internet of Things”
DG CONNECT, European Commission

Digital Europe Programme

recap the main objectives

strategic autonomy



Compete globally



Better address Europe's economic and societal challenges



Achieve scale through collective co-investments



Ensure broad take-up of digital technologies across all regions of EU



Regain control over Europe's value chains

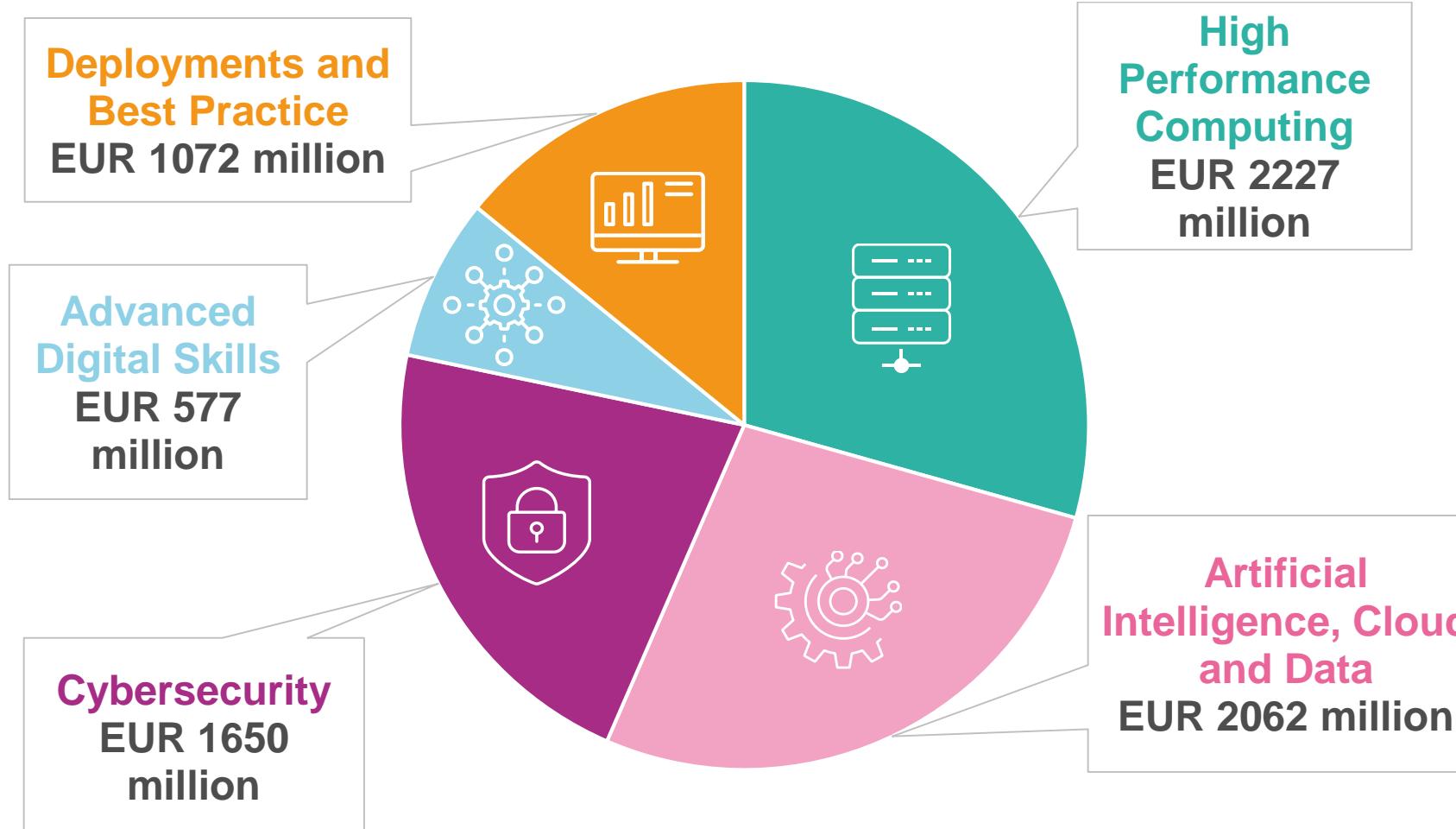


Support SMEs to acquire or access the latest technologies and skills

Digital Europe is complementary to other programmes with investments in digital

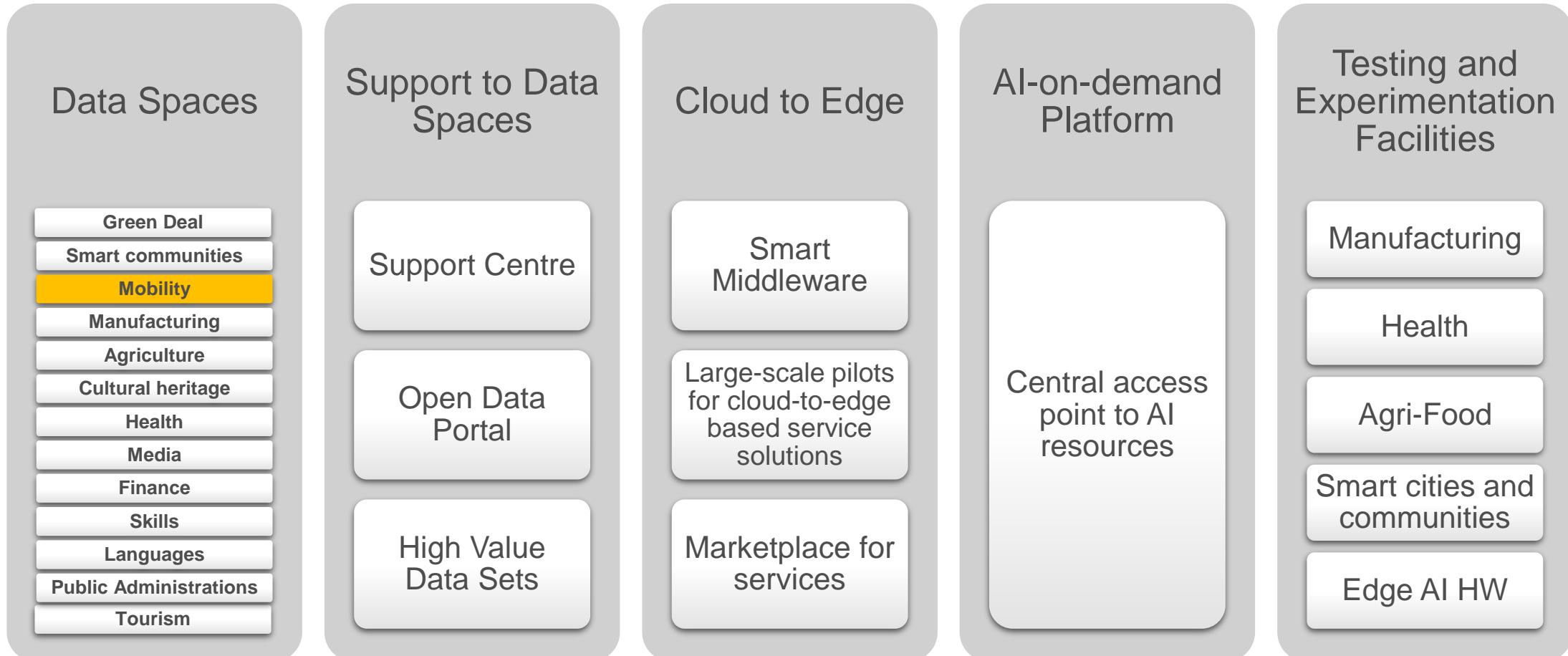
EU-wide collective effort			National regional and local		Financial instrument
Horizon Europe	Digital Europe	CEF	Cohesion	RRF	InvestEU
Research Innovation	Strategic capacities: computing, data spaces , testbeds, etc. Advanced digital skills EU-Wide deployment	CEF DIGITAL: Broadband and 5G roll out Connecting Communities CEF TRANSPORT: Programme Support Action to federate NAPS Technical Assistance	Digital connectivity in white and grey areas Support to enterprises in line with Smart specialisation Digital skills for all citizens	Connect Scale-up Modernise Reskill and Upskill 20% digital	Leverage private capital for investments in SMEs, research, digital, infrastructure, skills...

Budget as in Regulation



Total :
EUR 7588 million
over 7 years

Artificial intelligence, data and cloud



Most of the actions will be managed directly by CNECT

Data space for mobility – Objectives

- To contribute to the development of the common European mobility data space
- To support creation of a technical infrastructure combined with governance mechanisms to facilitate cross-border access to key data resources.
- Built and operated in full compliance with existing EU legislation in the mobility and transport sectors.

Data space for mobility – implementation

Step 1: Preparatory action:

Co-ordination and Support Action (CSA)

→ Call 1

Step 2: Deployment:

Implementation projects

→ Call 3

Data space for mobility CSA – Expected activities

- Make an **inventory of existing data platforms and marketplaces**
- Map and provide a **catalogue of transport data eco-systems**
- **Identify gaps and overlaps of data** currently covered by existing initiatives
- Identify **common building blocks** which could contribute to the long-term convergence of existing and new data-related initiatives in transport
- Explore **options for frameworks for sharing, managing data exchange** across data initiatives in the mobility sector.
- Include **reflections on incentives schemes** to motivate participants to provide data.
- Identify **opportunities for integrating the mobility data space and/or data ecosystems** in the **emerging European data and cloud services infrastructure**.

Data space for mobility CSA – Alignments

The awarded consortium will work in liaison with the:

- **Data Spaces Support Center**
- **The Alliance for Industrial Data, Cloud and Edge**

to ensure alignment with the design of the European data spaces in other sectors with respect to **common tools** such as:

- Data space reference architecture, building blocks, toolboxes
- Common standards, interoperability protocols
- Data governance models, business models, strategy to run the data spaces.

Data space for mobility CSA – Expected outcomes

- **Inventory of existing platforms sharing data relevant for mobility**
- An analysis regarding gaps and overlaps of data, and identifying potential common building blocks, feeding into the Commission preparatory work establishing the mobility data space.

Data space for mobility CSA – KPIs

- **Effectiveness of approach** in terms of **representativeness** of private sector, associations, advisors, third parties, public administration and/or governmental bodies.
- **Quality and credibility of the analysis** for the mobility data space
- **Coherence of the recommended building blocks** with the European Data Spaces Technical Framework and other sectorial data spaces.

Data space for mobility CSA – Call dates

Call dates:

First call: Open **17.11.2021**, Closed **22.2.2022**

Evaluation **Q2 2022**, Contracts signed **Q4 2022**

Budget: EUR 1 million

Funding rate: 100% eligible costs

Duration of action: 12 months

Key information for the CSA

Work programme documents: [\(1\) Main](#), (2) Cybersecurity, (3) EDIH, (4) HPC

Call [DIGITAL-CLOUD-AI-01](#) open until: 22 February 2022 17:00 Brussels time

Applicants must be legal entities established in EU Member States or
[countries associated](#) to the Digital Europe Programme

Consortium of minimum 3 independent entities from 3 different eligible countries

<https://digital-strategy.ec.europa.eu/en/activities/get-funding-digital>

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/digital>

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/digital-2021-cloud-ai-01-prep-ds-mob>

Data space for mobility - deployment

Two projects to make **data available** in machine readable format for:

- EU sustainable urban mobility indicators
(emissions/congestion/travel times/modal split)
- Traffic and travel information at urban level.

Call dates: **Third call:** Open Q3 2022, Closed Q4 2022,
Evaluation Q1 2023, Contracts signed Q3 2023

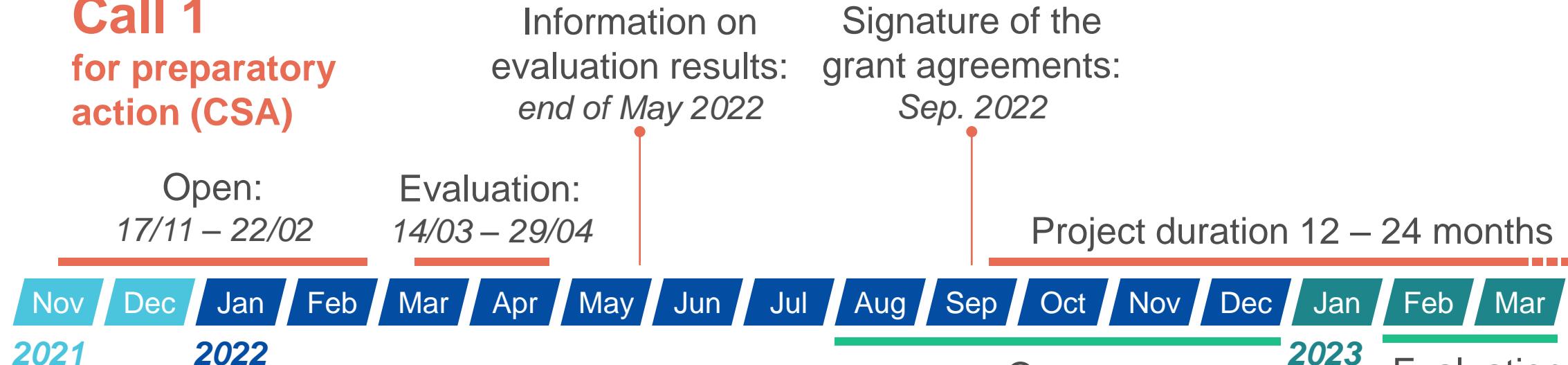
Budget: EUR 8 million

Funding rate: Simple grant, 50% co-funding rate

Duration of action: 24-36 months

Timeline

Call 1 for preparatory action (CSA)



Call 3 Deployment

- Information on evaluation results: Q2 2023
- Signature of the grant agreements: Q3 2023
- Project duration 24 months

Proposal template (or Application Form)

The Application Form is the template for EU grants applications; **it must be submitted via the [EU Funding & Tenders Portal](#) before the call deadline.**

Part A - online form

Generated by IT systems. Based on information entered in the Portal Submission System screens.

- Administrative information
- General information:
title, acronym, keywords, abstract, declarations
- Participants and contacts
(PIC to identify the partner)
- Budget and requested grant

Part B – template

To be uploaded in pdf (+ annexes) in the Submission System. Templates are available in Application Form.

- Project summary
- Relevance
- Implementation
- Impact
- Work plan, packages, timing, subcontracting
- Declarations
- Annexes

Application form - Part B templates download

Template for part B to download

Deadline
22 February 2022 17:00:00 Brussels Local Time

Please submit your proposal at the latest **48 hours** before the deadline (to avoid system congestion or system incompatibility issues). Late proposals will not be accepted. Don't wait until the end because you are worried about confidentiality – we will not open the proposals before the deadline.
You can submit the proposal as many times as you wish up until the deadline. Each new submitted version will replace the previous one.

Call data:

Call: DIGITAL-2021-CLOUD-AI-01
Topic: DIGITAL-2021-CLOUD-AI-01-PREP-DS-MANUFACT
Type of action: DIGITAL-CSA
Type of MGA: DIGITAL-AG

Topic and type of action can only be changed by creating a new proposal.

Download Part B templates

Download part B templates

Support & Helpdesk

Online Manual

IT How To

IT Helpdesk

FAQ

Service Desk:

EC-FUNDING-TENDER-SERVICE-DESK@ec.europa.eu

+32 2 29 92222

Acronym

Short Summary

Enter value

Enter value

SAVE AND GO TO NEXT STEP

Application form - Part B template upload

Proposal forms

Deadline
22 February 2022 17:00:00 Brussels Local Time

Call data:
Call: DIGITAL-2021-CLOUD-AI-01
Topic: DIGITAL-2021-CLOUD-AI-01-PREP-DS-MANUFACT
Type: DIGITAL-CSA

Type of MGA: Direct

Warning: Topic and type of action can only be changed by creating a new proposal.

Proposal data:
Acronym: Test
Draft ID: SEP-210813185

Download Part B templates

Support & Helpdesk

Online Manual

IT How To

IT Helpdesk

FAQ

Service Desk:
EC-FUNDING-TENDER-SERVICE-DESK@ec.europa.eu
+32 2 29 92222

In this step you can edit the Administrative Forms and upload the proposal itself. [?](#)

Your proposal contains changes that have not yet been submitted.

Administrative forms (Part A)

Edit forms [?](#) View history Print preview [?](#)

Part B and Annexes

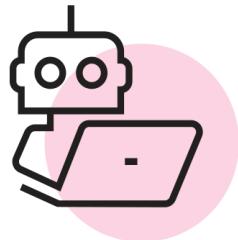
In this section you may upload the technical annex of the proposal (in PDF format only) and any other requested attachments. [?](#)

Part B	? Upload
List of previous projects	? Upload
Ownership control declaration	? Upload
Ethics issues table	? Upload
Security issues table	? Upload
Other annexes	? Upload

[BACK TO PARTICIPANTS LIST](#) [VALIDATE](#) [SUBMIT](#)

50 pages limit for part B

Eligible costs



A. PERSONNEL COSTS

- A.1 Employees
- A.2 Natural persons under direct contract
- A.3 Seconded persons
- A.4 SME owners and natural person beneficiaries



B. SUBCONTRACTING COSTS



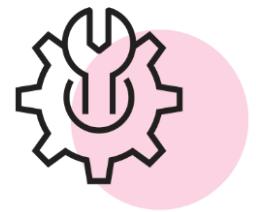
C. PURCHASE COSTS

- C.1 Travel and subsistence 1
- C.2 Equipment 2
- C.3 Other goods, works and services



D. OTHER COST CATEGORIES

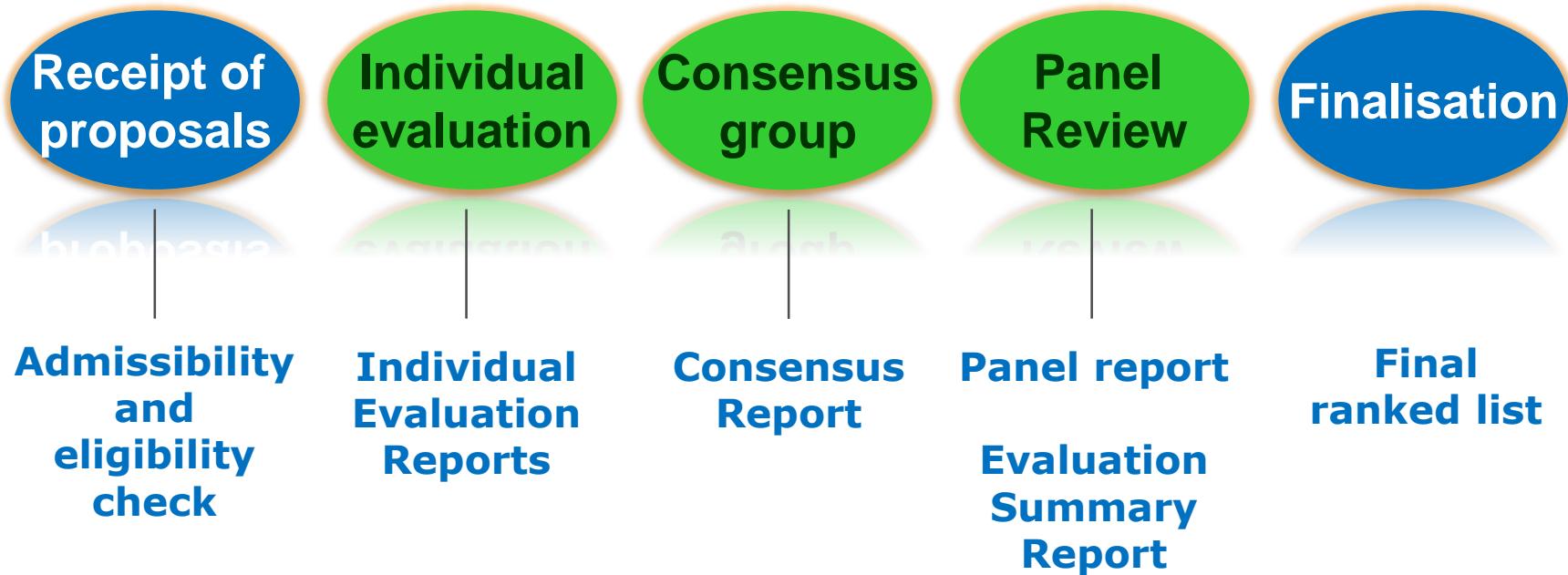
- D.1 Financial support to third parties
- D.2 Internally invoiced goods and services



Indirect costs = 7%

Evaluation process

- Proposals are evaluated with the assistance of independent experts
- Evaluations are monitored by observers, i.e. independent experts

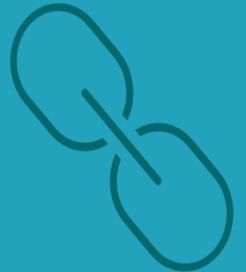


Award criteria

1. RELEVANCE



2. IMPLEMENTATION



3. IMPACT

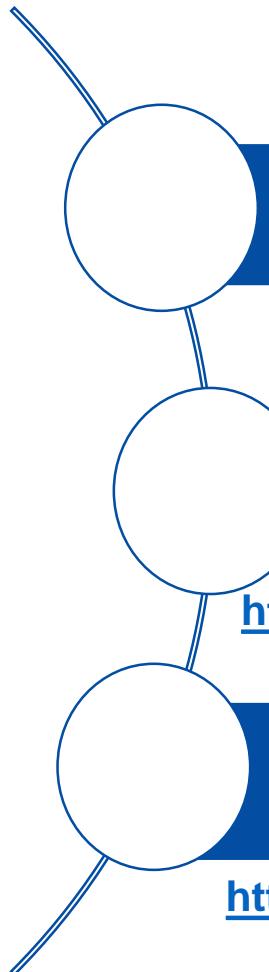


Experts

- Experts are essential for project evaluation and monitoring
- Register in the Funding & tender portal and experience “how it all works”!

The screenshot shows the European Commission's Funding & tender opportunities website. At the top, there is a logo for the European Commission, the text "Funding & tender opportunities", and "Single Electronic Data Interchange Area (SEDIA)". On the right side, there are links for "English EN", "Register", and "Login". The top navigation bar includes links for "SEARCH FUNDING & TENDERS", "HOW TO PARTICIPATE", "PROJECTS & RESULTS", "WORK AS AN EXPERT" (which is highlighted with a red box and a red arrow pointing to it), and "SUPPORT". Below the navigation bar, there is a search bar with the placeholder "Search calls for proposals and tenders by keywords, programmes..." and a "Search" button. To the right of the search bar, there are links for "ERA corona platform", "Brexit info", and "Report fraud". In the main content area, there is a section titled "EU Programmes" with links for "Asylum, Migration and", "Border Management and", "Citizens, Equality, Rights", "Creative Europe (CREA)", "Digital Europe", and "Europe Direct (ED)". To the right, there is a "News" section with two articles: one from 16 Apr, 2021 about OPSYS, and another from 14 Apr, 2021 about a new TV channel.

Useful links



Digital Europe Programme website

<https://digital-strategy.ec.europa.eu/en/activities/digital-programme>

Digital Europe Programme Regulation

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0694&qid=1621344635377>

Funding & tender opportunities portal

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/digital>

Wrap-up and closing

- Thank you all speakers and participants !
- DEP CSA call open, **closes on 22.2.2022.**
- Work programme, call documentation, FAQ available on the **EC funding and tender portal**
- **Workshop report** will follow and be published on the event website.
- We value your **feedback**. Please let us know of any improvements at: https://ec.europa.eu/eusurvey/runner/mobilitydataspace_feedback