Digital Europe programme structure

ACCELERATING THE BEST USE OF DIGITAL TECHNOLOGIES

- European Digital Innovation Hubs
- High impact deployments
- High Performance Computing
- Artificial Intelligence
- Cybersecurity
- Advanced Digital Skills
Artificial intelligence, data and cloud

Most of the actions will be managed directly by CNECT
Data Spaces in DIGITAL

- Green Deal
- Smart communities
- Agriculture
- Mobility
- Health - Genomics
- Health - Cancer Images
- Skills
- Manufacturing
- Public Procurements
- Security data space for innovation
- Financial
- Tourism
- Language
- Cultural Heritage
- Media
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 legislative, administrative and contractual nature that determine the rights to access, process, use and share data in a trustful and transparent manner.

- Natural and legal persons participating in the dataspace (the data holders) will be in control of the data they generate, of who can have access to it, for which purposes and under what 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 and Infrastructure in DIGITAL

Bring together stakeholders. Identify the data infrastructure needs

Build the data spaces

Edge and cloud services

Middleware solutions

European Data Spaces Technical Framework

Marketplace

Data Spaces Support Centre

Sectoral Data Spaces
Data Spaces technical infrastructure in DIGITAL

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
- Identify common requirements and assure interoperability
- Create a network of stakeholders
- Create a platform for knowledge exchange
- Support the work of the envisaged European Data Innovation Board
- Support the deployment of data spaces
Data spaces deployment

**Sectoral Data Space**

*Users: Individual, company, public bodies, or complete ecosystems of organisations (e.g. data hub, data marketplaces)*

**Specific Services, Market Specific Solutions**

**Data Sharing Common Elements**

**Edge and Cloud Infrastructure**

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**Federation of Cloud-to-Edge Infrastructure and Services**

**Marketplace**
- Interoperable Services, Portability

**SAAS**
- Software, ERP, CRM, data analytics

**PAAS**
- Smart Interoperability Middleware

**IAAS**
- Servers, computing, OS, storage, network

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**Data Spaces Support Centre**

**Governance**
- Cooperation agreement

**Interoperability**
- Data models and formats
- Data exchange API
- Provenance and traceability

**Trust**
- Identity management
- Access and usage control
- Trusted exchange

**Data Value**
- Metadata and discovery
- Publication & marketplace services
- Data usage accounting

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**SMART INTEROPERABILITY**

**Data usage accounting**
DIGITAL approach for the deployment of sectoral data spaces

I. Establishing a stakeholders network

II. Support the creation of initial data infrastructures

III. Federation of projects in large data spaces

Roles:
- Participant (Data Provider | Data User);
- Data intermediary.
- Technology provider.