



CCAM Data Sharing Framework & Test Data Space

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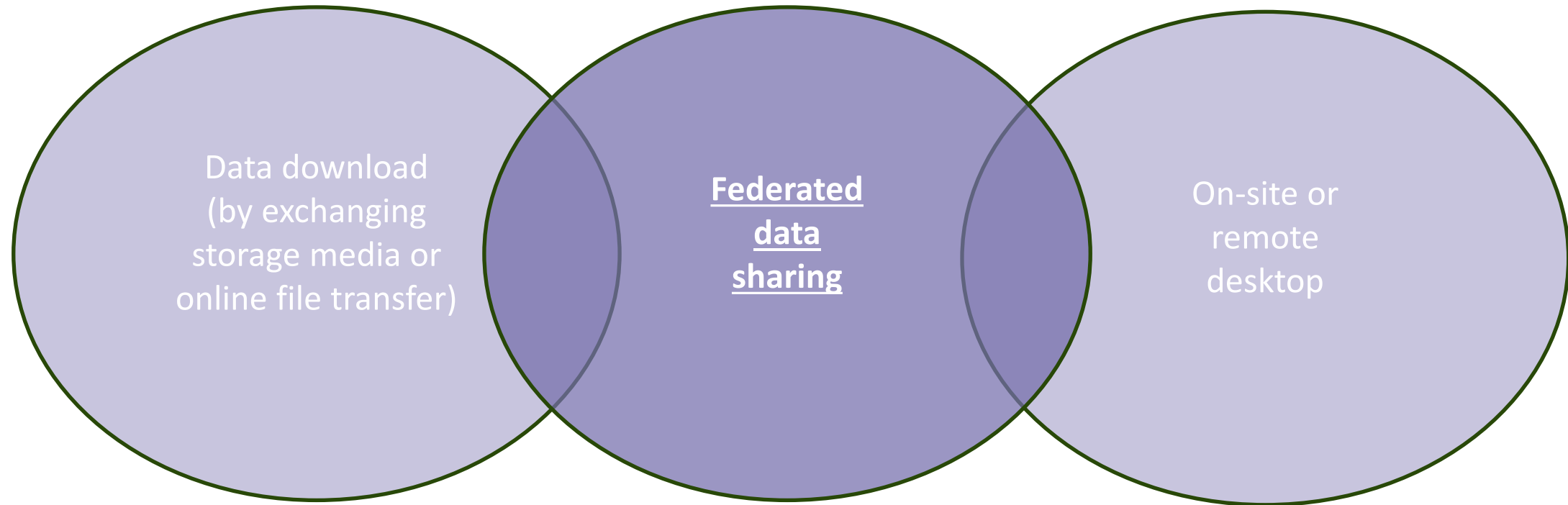
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Data Sharing - rationale

- Insufficient test data sharing, due to...
 - Absence of proper data description.
 - Use of non-standardised data formats.
 - Lack of financial support or fair remuneration.
 - Lack of trust
 - In quality and description of data (data consumer perspective)
 - in analyst interpreting data correctly (data provider/owner perspective)
 - in handling personal data correctly (data subject and data provider/owner)
 - in KPI:s presented by projects (principles and data bias)

Similar topics
are described in
European Data
Strategy (2020)

Data sharing approaches



Federated Data Sharing

- A number of actors providing access to data assets, and the interest of others to use this data.
- A **Data Provider** is in full control in which data is available to which **Data Consumer**.
- The complete dataset is not shared, but only the product of a computation.

Possibilities

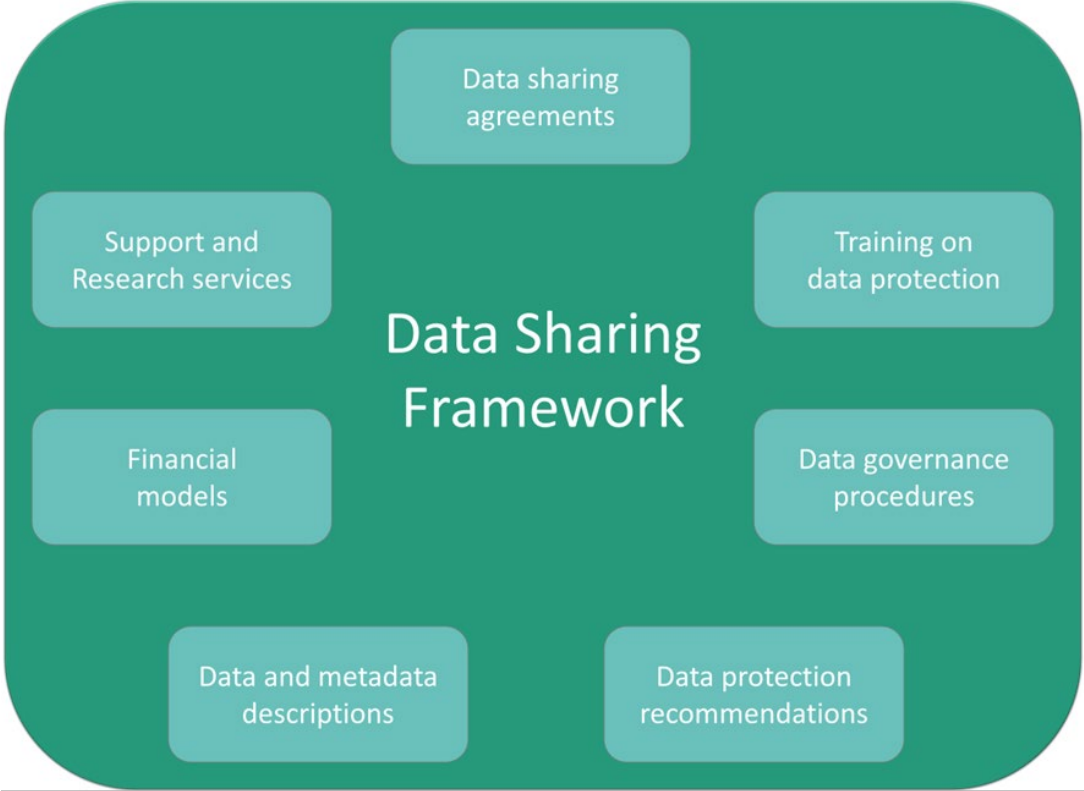
- Data sovereignty and control
- New data made available
- Flexibility

Challenges

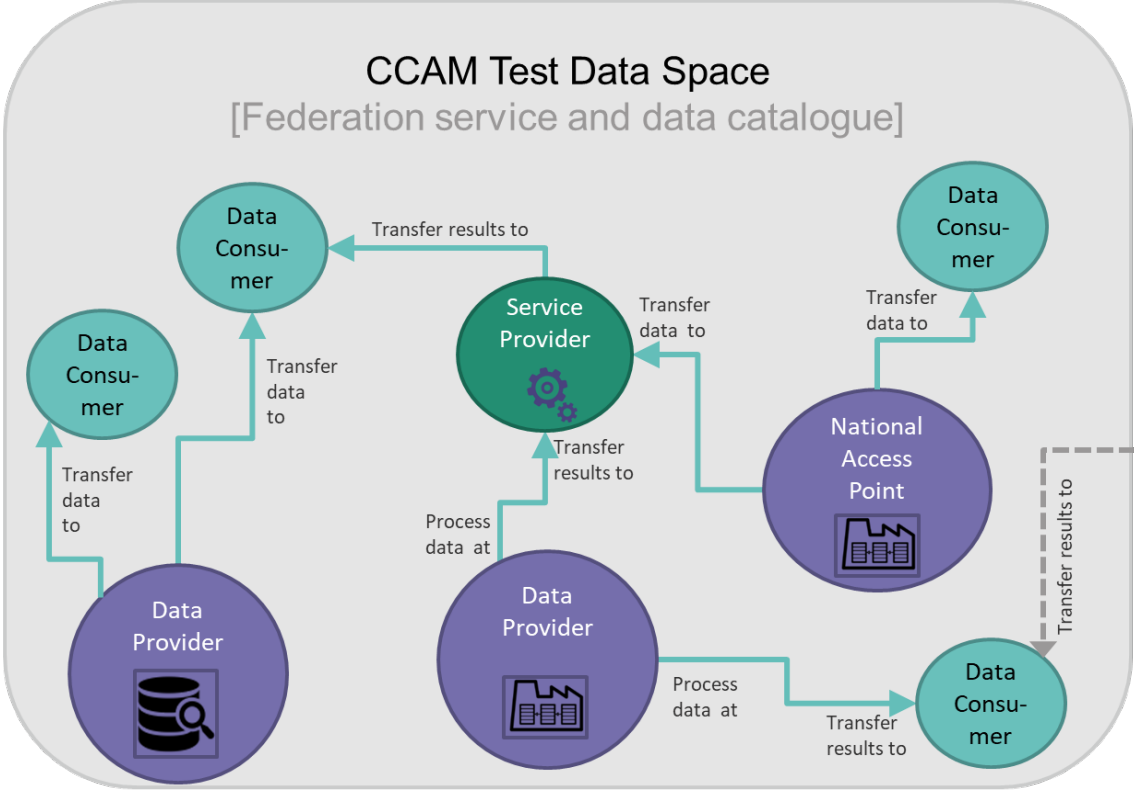
- Can you trust the data (not having access to the complete dataset)?
- New technology (and concept)
- Data representation (and its description)
- Compensation mechanisms



Data Sharing Framework



CCAM Test Data Space

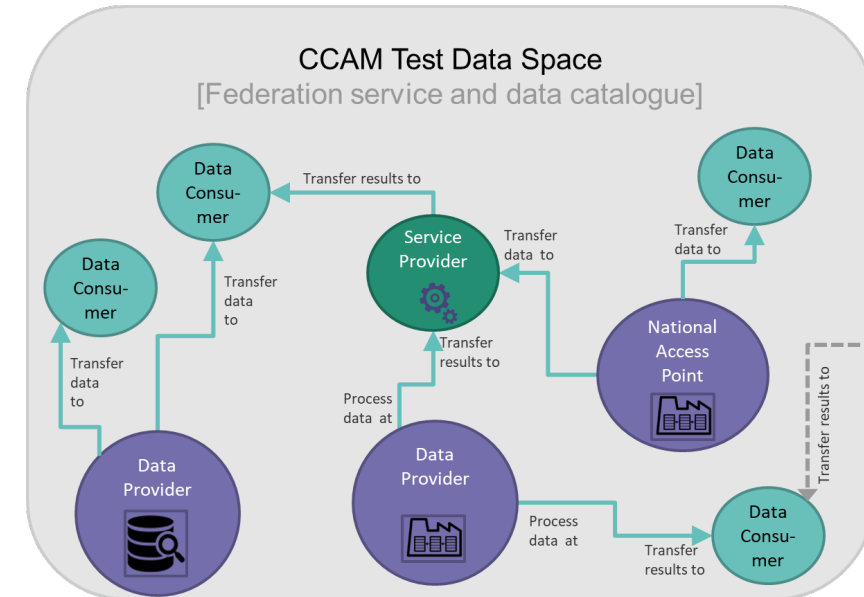


[Link to the recently published CCAM DSF v2](#)



CCAM Test Data Space

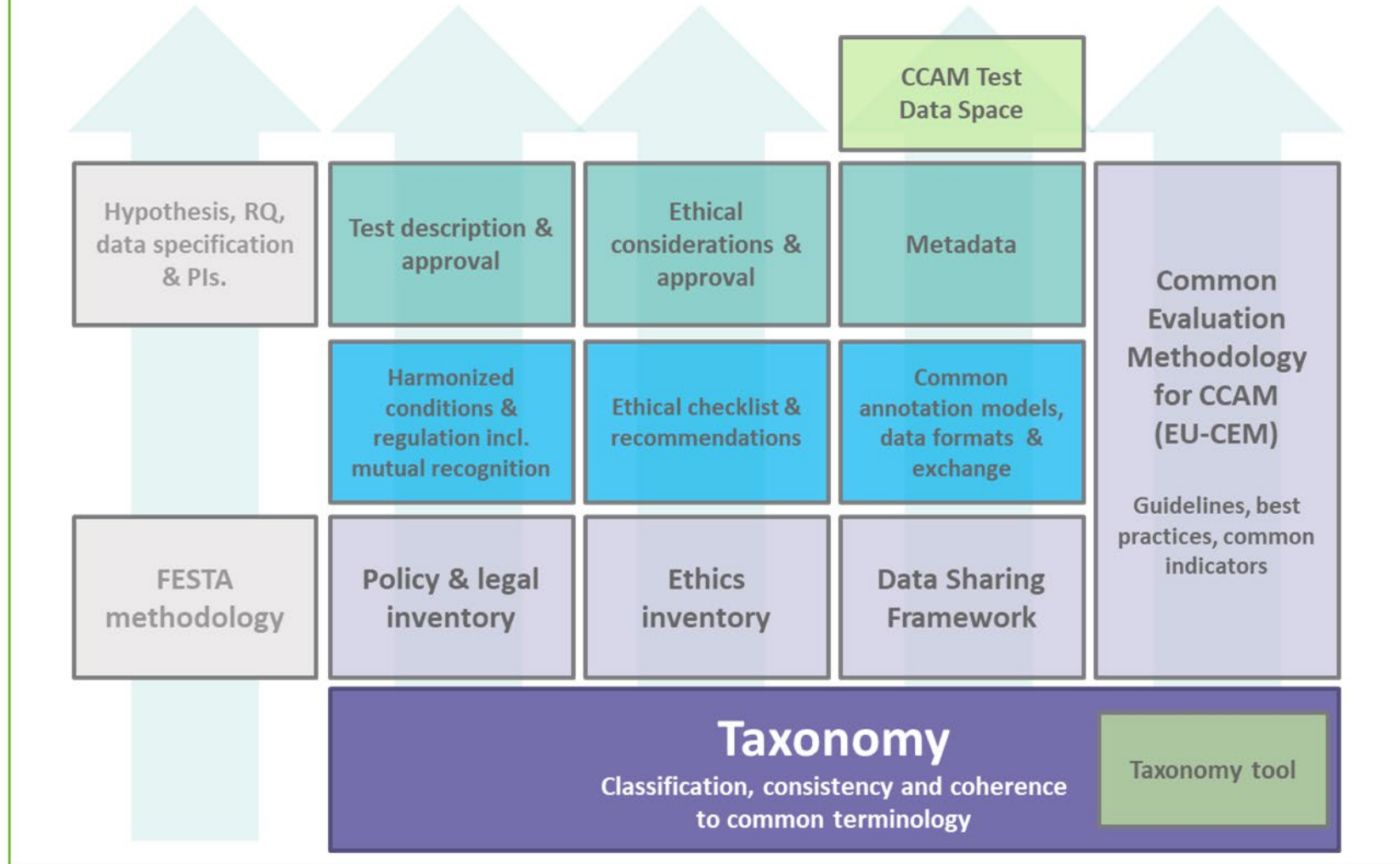
- Is a *federated* digital infrastructure where stakeholders agree on **common terms and principles** for data access, interfaces, formats, description, taxonomy, that have the potential in unlocking relevant data for CCAM R&D.
- **Trust** is established by a set of rules when **onboarding** the data space and governance mechanisms.
- Assets are described in a **Data Catalogue**.
- A **Data Provider** define data access and rules per **Data Consumer** in a **Connector**, with full control on who has access to what data. This small component servers as an interface to the internal databases / infrastructure.
- Terms and conditions are defined in an **agreement** between the actors.



CCAM Test Data Space – use cases

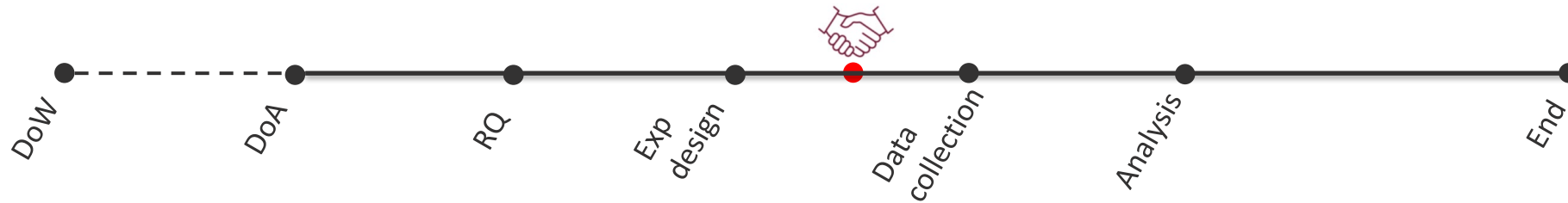
- Digital twin representation of driving scenarios or edge cases for development or validation, and performance and safety assessment.
- ADS monitoring (accident and/or incidents).
- AI model training, using large databases of images or video.
- Sharing high level KPIs from projects or countries.
- Large project consortias or initiatives, collecting harmonized data, and applying common scripts.

European Framework for Testing on public roads



Research project execution challenges

- Still, there are many pitfalls, and a failure in any phase might have negative impact.
- Usually the execution of the project, happen years after the project description and negotiation were done, why a checkpoint within the project could be a tool to ensure that all partners are aligned.



- We call this the „Handshake“

Framework for testing on public roads

- The „**Handshake**“ is a checklist including
 - Taxonomy
 - Research questions -> Evaluation plan
 - Test site
 - Vehicles
 - Study participants
 - Legal and ethical approval
 - Data
 - Data sharing agreement
 - Data format, description, governance, management & protection
 - GDPR





Thank you!



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