DATA SPACES
SUPPORT CENTRE
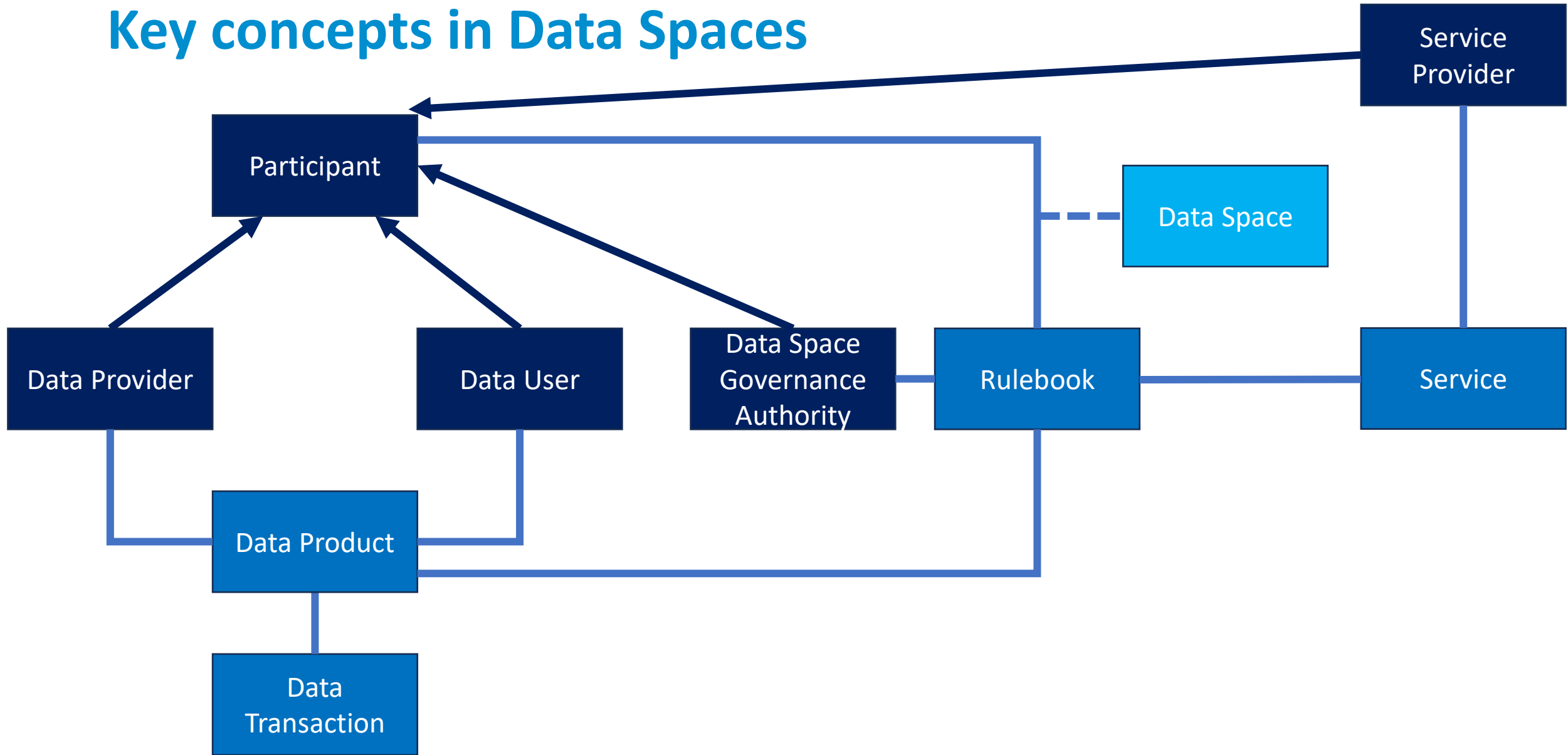
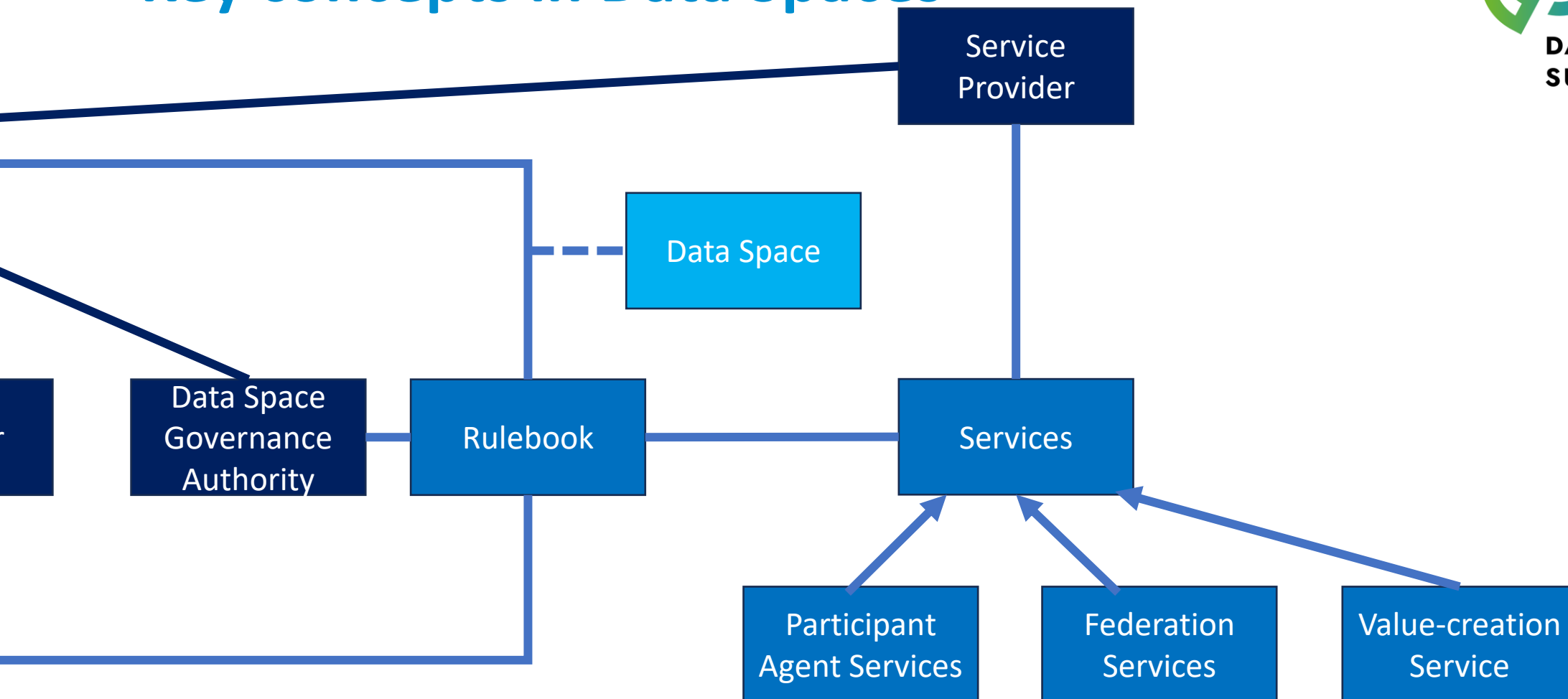# Insights from the DSSC: the European blueprint for building data spaces

Funded by
the European Union

Key concepts in Data Spaces

Key concepts in Data Spaces

Blueprint sneak preview v2.0

Business & organisational building blocks
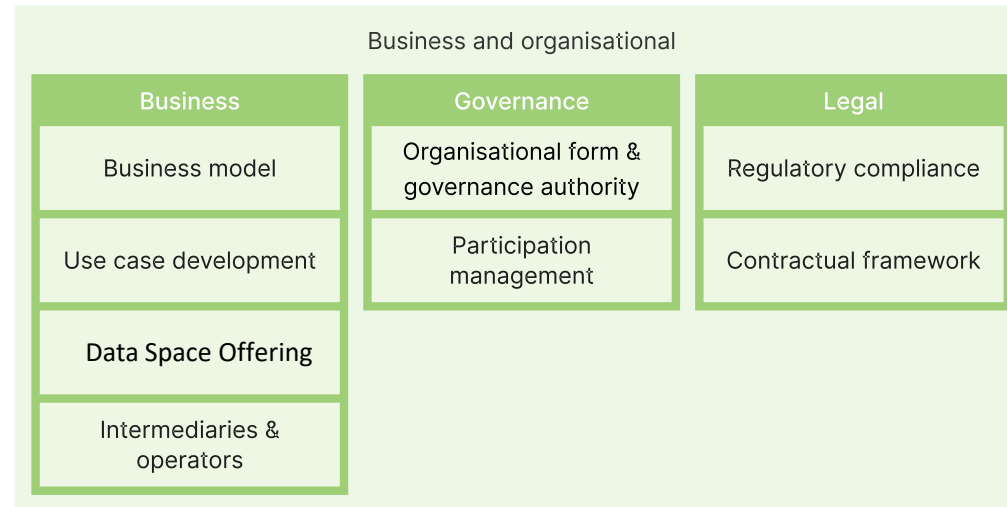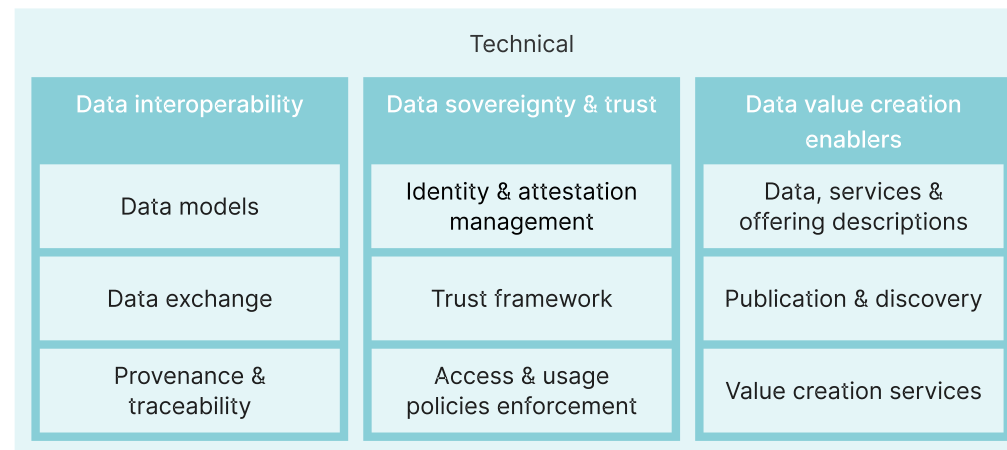
Business and organisational

Business	Governance	Legal
Business model	Organisational form & governance authority	Regulatory compliance
Use case development	Participation management	Contractual framework
Data Space Offering		
Intermediaries & operators		

Technical building blocks

Technical

Data interoperability	Data sovereignty & trust	Data value creation enablers
Data models	Identity & attestation management	Data, services & offering descriptions
Data exchange	Trust framework	Publication & discovery
Provenance & traceability	Access & usage policies enforcement	Value creation services

Business and Organisational

Business and organisational

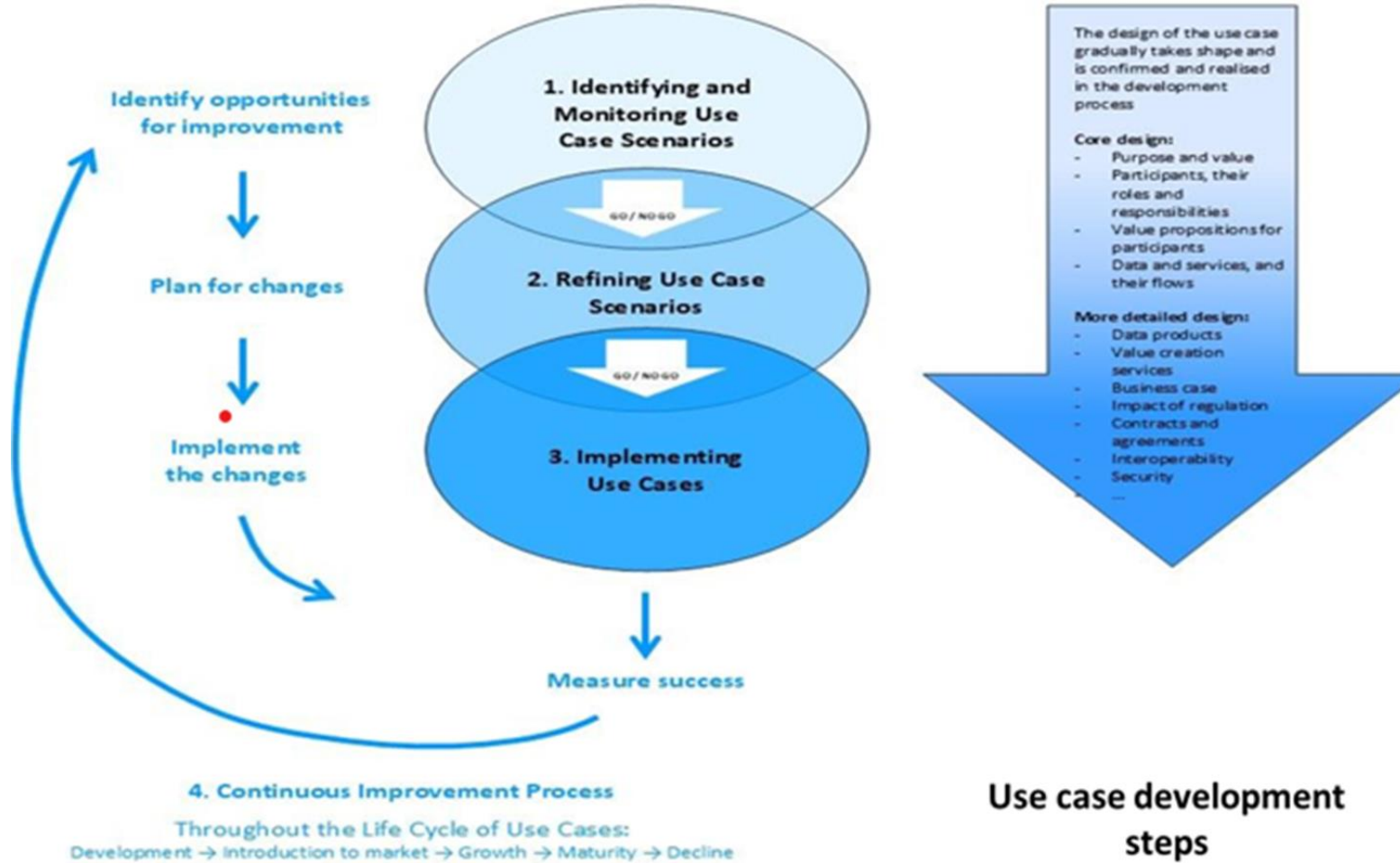| Business	Governance	Legal
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Data Space Offering		
Intermediaries & operators		

New: Business Building Blocks
Business Model
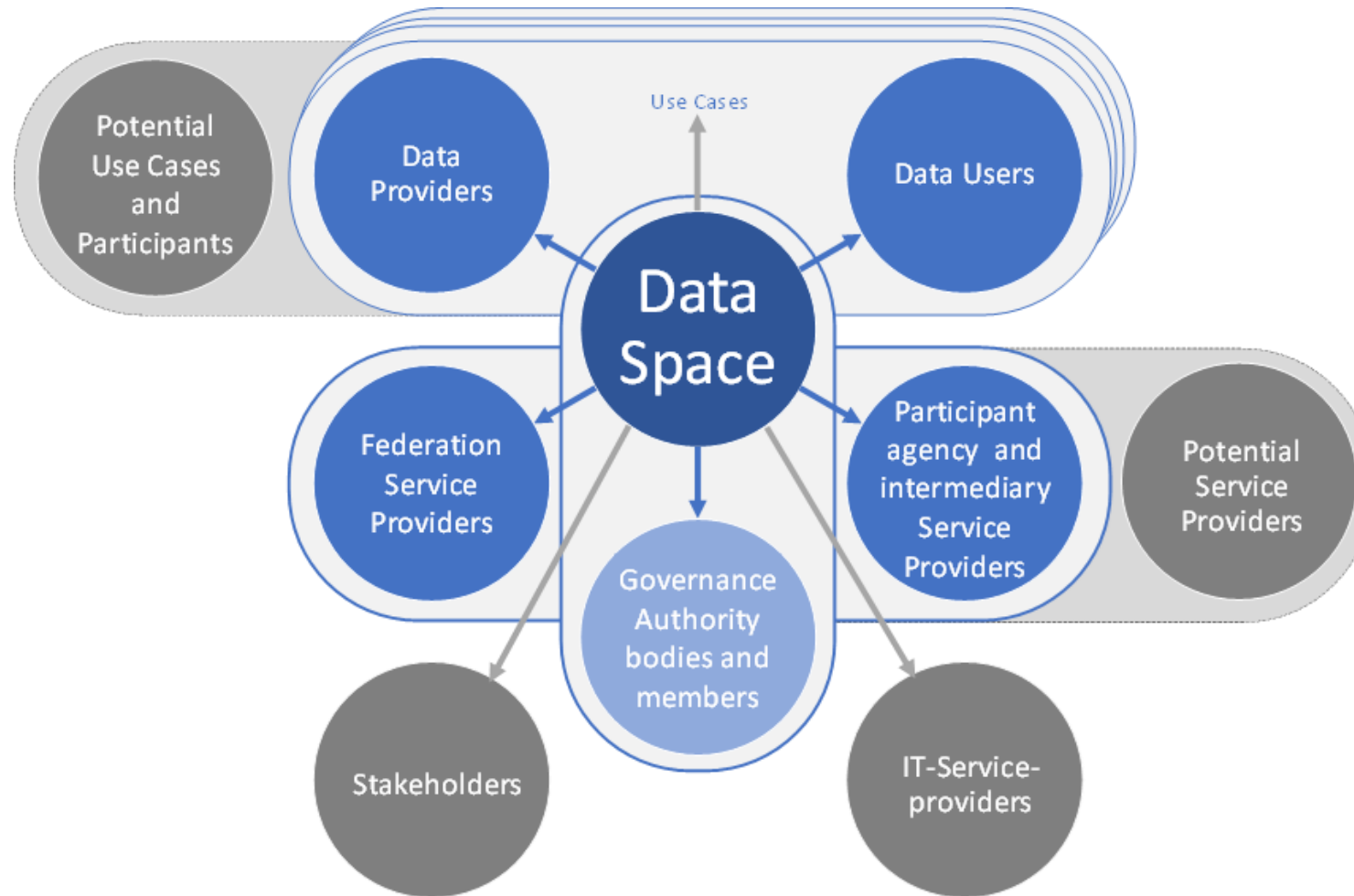
Value network for dataspaces

New: Business Building Blocks
Use case development

Identify opportunities for improvement

Plan for changes

Implement the changes

1. Identifying and Monitoring Use Case Scenarios

GO / NO GO

2. Refining Use Case Scenarios

GO / NO GO

3. Implementing Use Cases

Measure success

4. Continuous Improvement Process

Throughout the Life Cycle of Use Cases:
Development → Introduction to market → Growth → Maturity → Decline

The design of the use case gradually takes shape and is confirmed and realised in the development process

Core design:
- Purpose and value
- Participants, their roles and responsibilities
- Value propositions for participants
- Data and services, and their flows

More detailed design:
- Data products
- Value creation services
- Business case
- Impact of regulation
- Contracts and agreements
- Interoperability
- Security
- ...
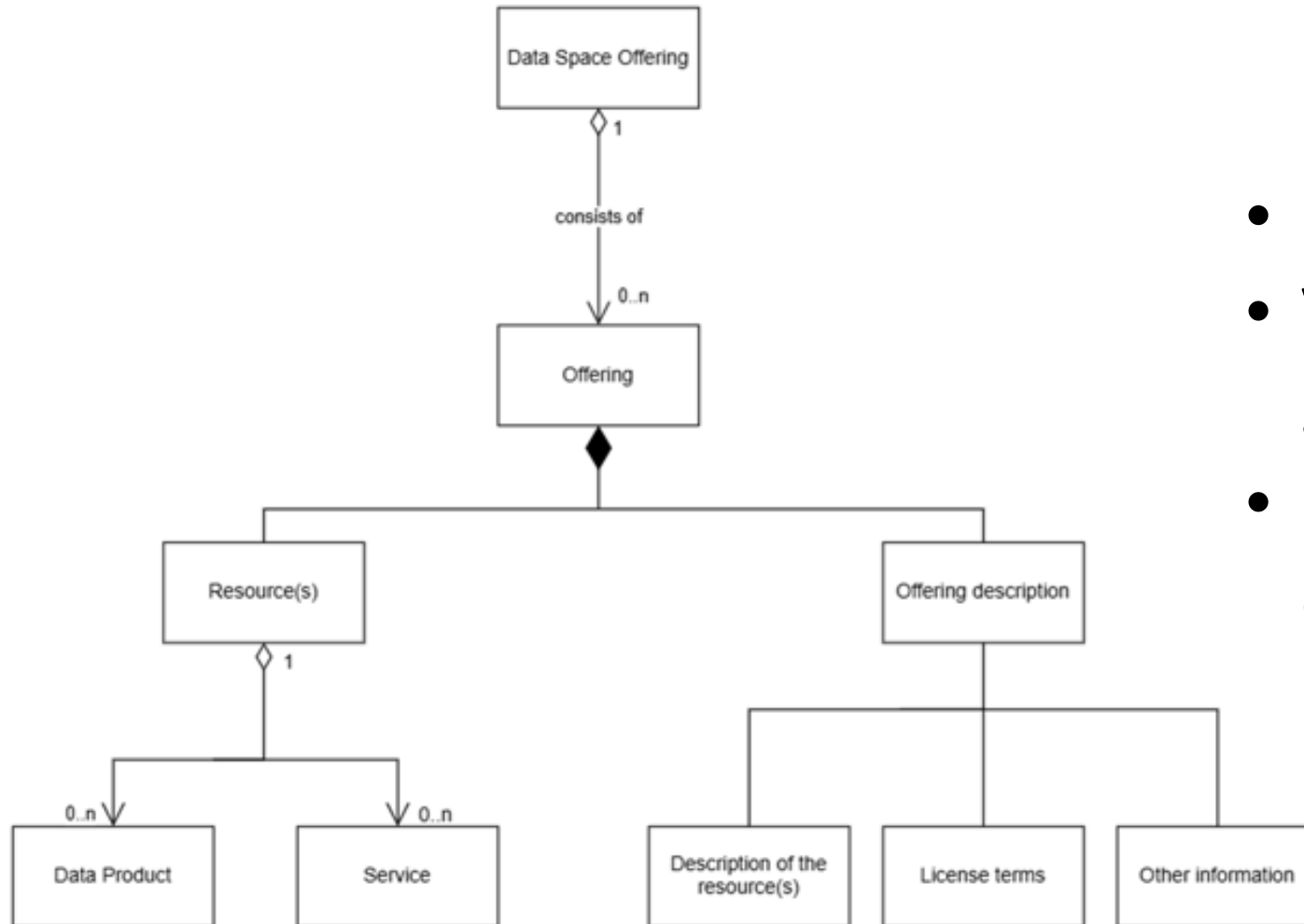
Use case development steps

New: Business Building Blocks
Data space offering

- Data product
- Value creation service
- Information for the consumer

New: Business Building Blocks
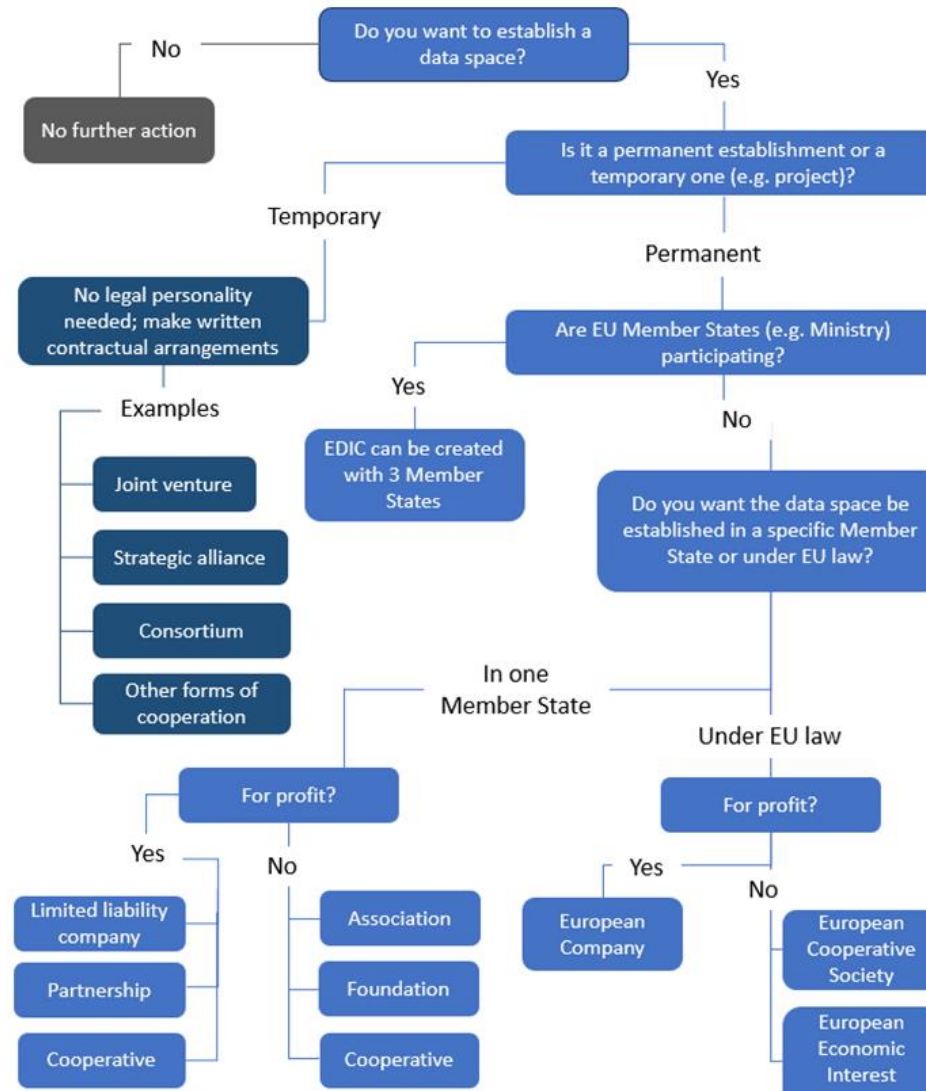
Intermediaries & operators

- Options for Data Spaces Governance Authority on where to operate the services
- Legal insights; Data Governance Act sets mandatory requirements for Data Intermediation Services

EU Recognised
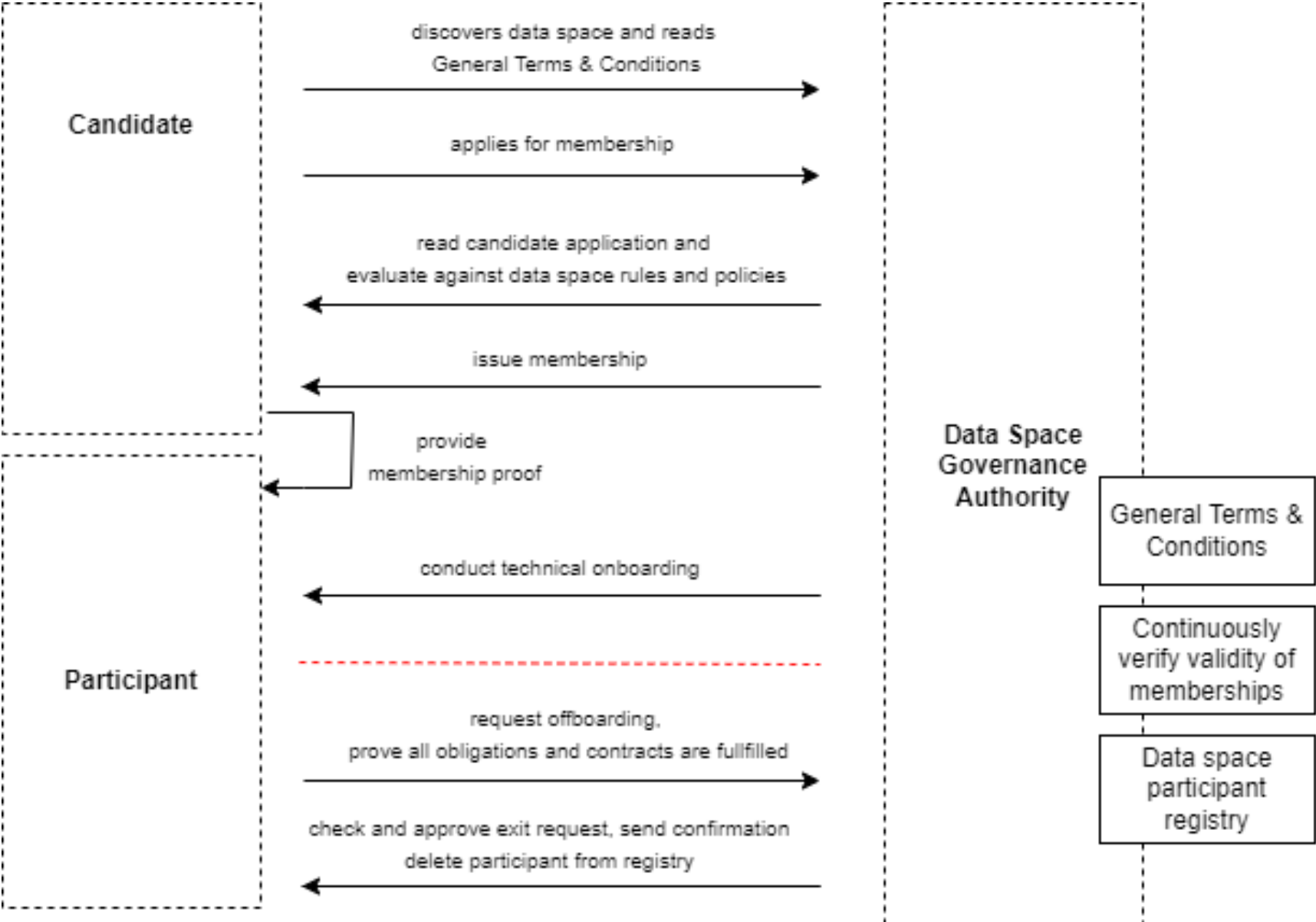Data Intermediary

New: Governance Building Blocks
Organisational form & Governance authority

Decision tree

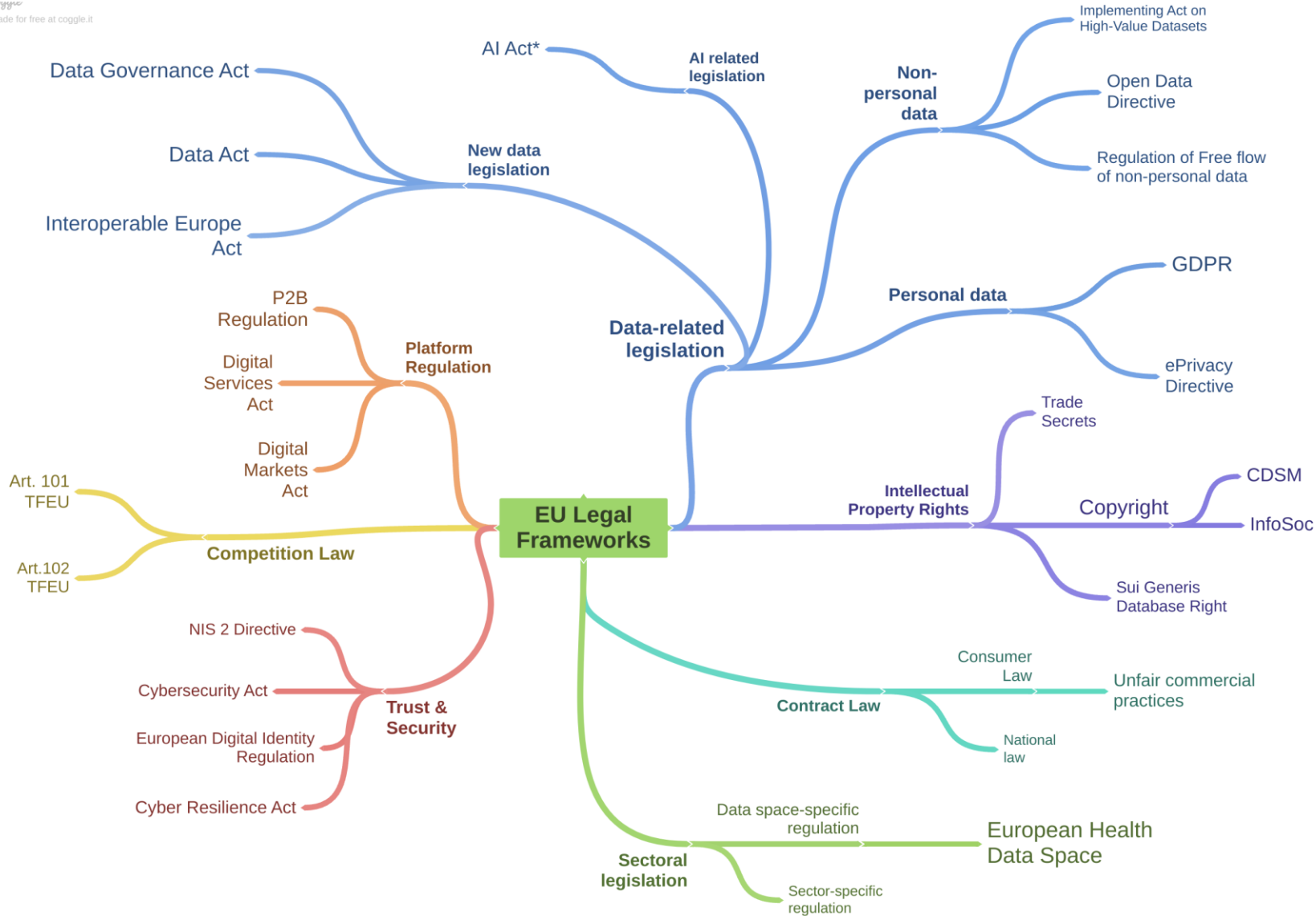# New: Governance Building Blocks
Participation management

On- and offboarding of participants
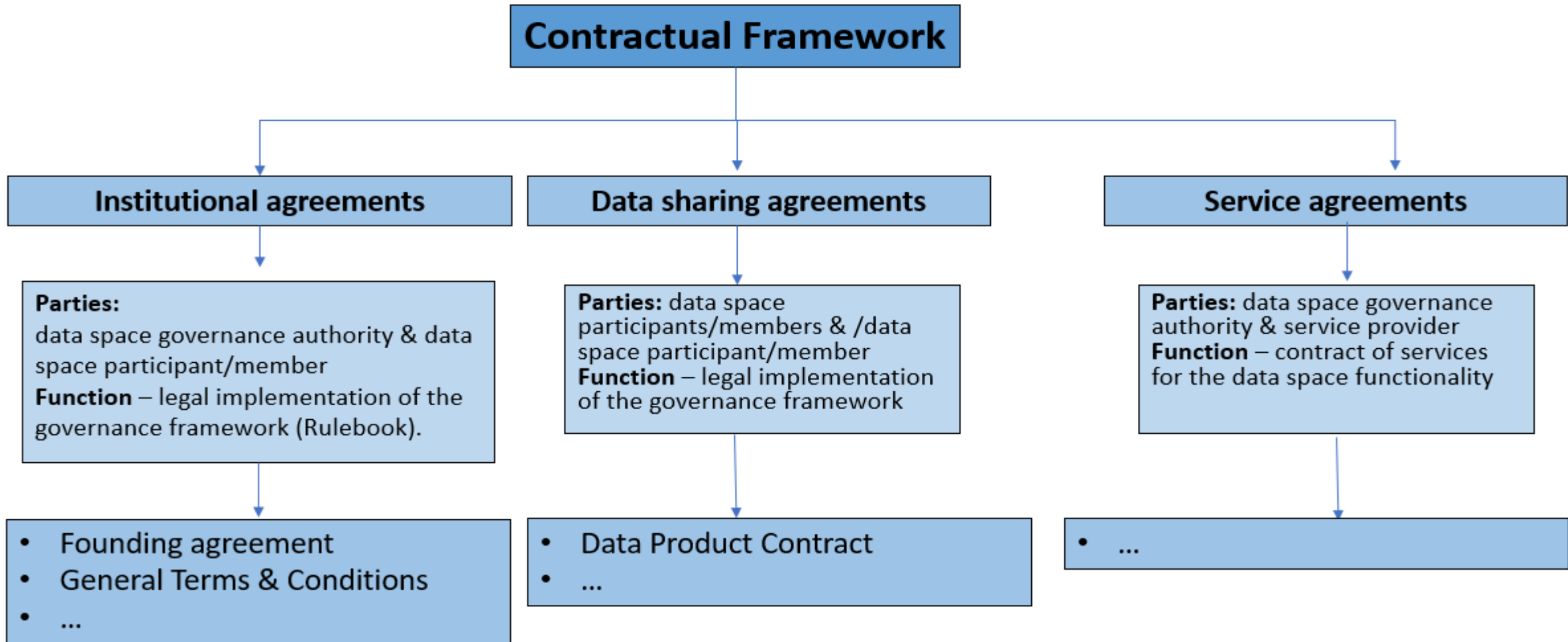
New: Legal building blocks
Regulatory compliance

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made for free at coggle.it

EU Legal Frameworks

New data legislation
- Data Governance Act
- Data Act
- Interoperable Europe Act

AI related legislation
- AI Act*

Non-personal data
- Implementing Act on High-Value Datasets
- Open Data Directive
- Regulation of Free flow of non-personal data

Data-related legislation

Personal data
- GDPR
- ePrivacy Directive

Platform Regulation
- P2B Regulation
- Digital Services Act
- Digital Markets Act

Intellectual Property Rights
- Trade Secrets
- Copyright
  - CDSM
  - InfoSoc
- Sui Generis Database Right

Competition Law
- Art. 101 TFEU
- Art.102 TFEU

Trust & Security
- NIS 2 Directive
- Cybersecurity Act
- European Digital Identity Regulation
- Cyber Resilience Act

Contract Law
- Consumer Law
  - Unfair commercial practices
- National law

Sectoral legislation
- Data space-specific regulation
  - European Health Data Space
- Sector-specific regulation

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New: Legal Building Blocks
Contractual framework

DATA SPACES

Contractual Framework

Institutional agreements	Data sharing agreements	Service agreements

Institutional agreements

Parties:
data space governance authority & data space participant/member
Function – legal implementation of the governance framework (Rulebook).

Data sharing agreements

Parties: data space participants/members & /data space participant/member
Function – legal implementation of the governance framework

Service agreements

Parties: data space governance authority & service provider
Function – contract of services for the data space functionality

- Founding agreement
- General Terms & Conditions
- ...

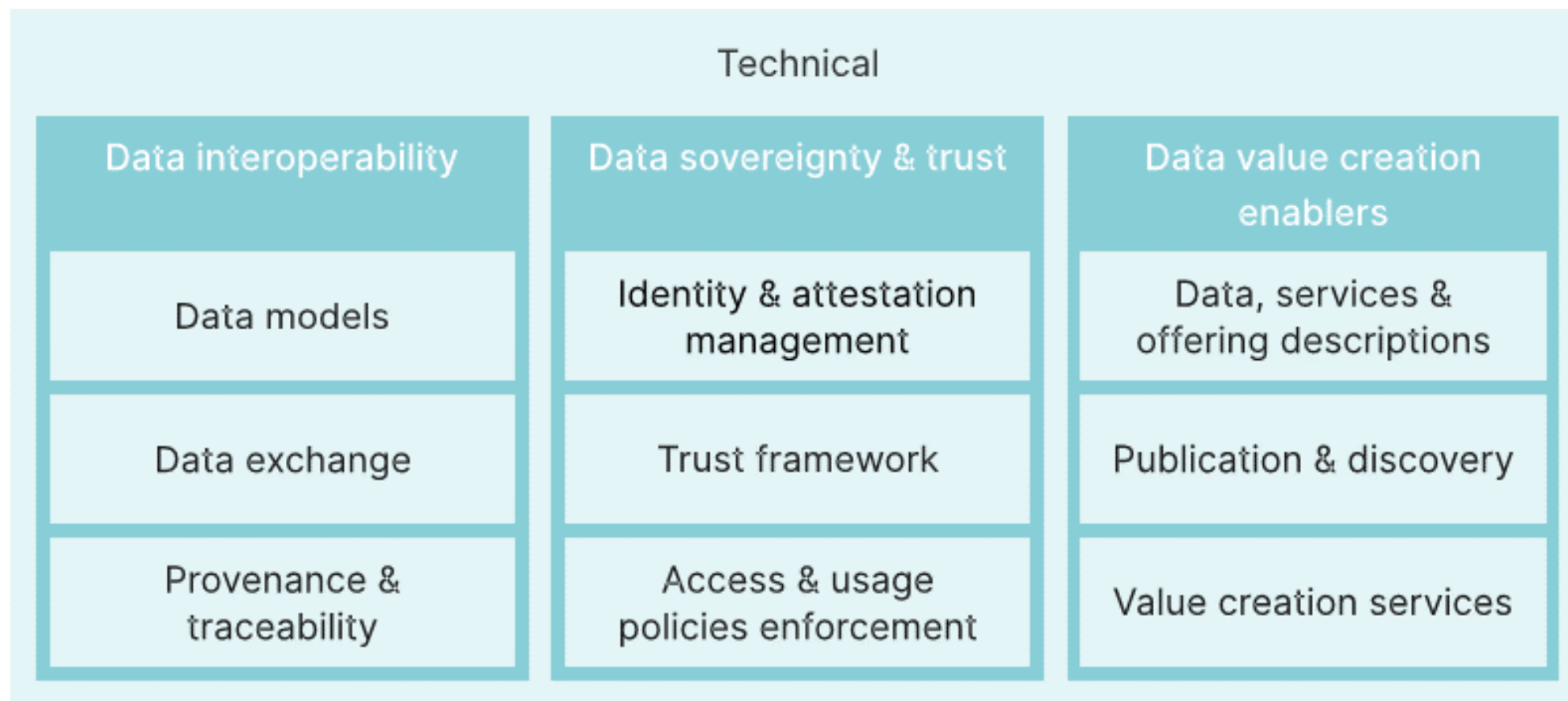- Data Product Contract
- ...

- ...

Rulebook of Business & Organisational BBs

Business & Organisational BBs	Outcomes covered by the rulebook
Business Model	• **Agreement on the business model** • Aligned value propositions on data space and participant level
Use case development	• Overview of use case scenario's • Implemented use cases
Data space offering	• Data products & service offerings "on the shelf'
Intermediary & operators	• Decisions if and which functionalities of the data space could or should be provided by dedicated intermediary service providers • Legal agreements on the responsibilities of operating the services
Organisational form & governance authority	• **Organisational form** • Agreements on temporary organisational structures if that applies • Governance authority
Participation management	• Decisions on offboarding, offboarding • Participants and their roles
Regulatory compliance	• **Regulatory compliance of the data space** • Strategies, procedures and mechanisms to facilitate compliance within the data space
Contractual framework	• Context of written (digital) agreements at the data space and participant (data transaction) level

Technical Building Blocks

Technical

Data interoperability	Data sovereignty & trust	Data value creation enablers
Data models	Identity & attestation management	Data, services & offering descriptions
Data exchange	Trust framework	Publication & discovery
Provenance & traceability	Access & usage policies enforcement	Value creation services

Foundational Technical Standards

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Foundational (global) technical standards

- W3C DCAT   → for describing your datasets and services
- W3C ODRL   → for defining (technical) access and usage policies
- W3C VC/VP   → for the exchange of identities and attestations
- W3C RDF   → for specifying semantic models

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Protocols

- Dataspace Protocol
- Decentralized Claims Protocol / OID4VC
- Conformity Assessment Policy and Credential Profile
- …

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Key technical specifications for data space services

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Legal requirements

- Data Act (e.g. article 33)
- eIDAS
- Data Governance Act

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Domain specific choices

- Policies
- Data Models
- APIs

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Rulebook for your data space initiative

Data Space Services

Participant Agent Services

- Identity wallet

- Local catalogue / metadata

- Access & usage policies enforcement

- Data Plane (domain specific)

Federation Services

- Data Space Registry

- Validation & Verification

- Catalogues

- Provenance & Traceability

- Policy Information Points

- Vocabulary service

Value Creation Services

- Portals

- Marketplaces

- Visibility Services

- AI algorithms

- ...

Generic

Domain specific

Rulebook of Technical BBs

Technical BBs	Outcomes covered by the rulebook
Data Models	• Common data model / ontology for the data space • Identified Vocabulary Hub(s)
Data Exchange	• Technical APIs to be used in the data spaces • Identified Participant Agent Services • Identified Vocabulary Hub(s)
Provenance & Traceability	• Provenance & Traceability requirements & data models • Identified Observability service(s)
Identity & Attestation management	• Requirements regarding identities and attestations • Identified Policy Information Services
Trust Framework	• Identified Trust Anchors and Trust Service Providers / services for Validation & Verification
Access and Usage Policies	• Common/minimum access & usage policies • Identified Policy Information Services
Data, Services & Offerings descriptions	• Common/minimum data, services and/or offerings
Publication & Discovery	• Identified Catalogues
Value Creation Services	• Identified Value Creation Services

Connect, use and contribute

Use the DSSC Blueprint to develop or enhance the rulebook of your own dataspace

"Comply or explain" + Contribute!