

FEDeRATED Leading principles

The template hereunder provides the leading principles enabling a FEDeRATED infrastructure provision to function.¹

FEDeRATED Leading Principles		
No	Principle	Description
1	Level Playing Field	All supply chain operators and public authorities involved in freight transport and logistics have to be able to participate.
2	Electronic/digital format	The information is to be encoded digitally, using a revisable structured format.
3	Compliance with existing rules	Data sharing must be compliant to existing legislation (e.g., GDPR) and privately agreed rules.
4	Business service	Each participant has to formulate the business service(s) it provides (service provider) or requires (customer).
5	Business relations	Trust between enterprises is primarily driven by their real work relationships.
6	Supply and logistics chains	The business relations between participants are shown according their outsourcing hierarchy from the perspective of for instance a shipper and/or consignee.
7	Data requirements of enterprises	Business services and commercial mechanisms supporting negotiation between a customer and service provider specify the data that they will share.
8	Data requirements established by an authority	Data requirements set by an authority are related to the legislative basis afforded to that authority.
9	Data processing	Any organization can specify its internal processing.
10	Fit for purpose	Public authorities that access enterprise data require a legal basis to refer to.
11	Publication of data requirements	Public authorities publish their data requirements in a machine-readable form.
12	Business Service Discovery	Business services of all enterprises are discoverable according harmonized search criteria
13	Data as proof	A public authority or enterprise must be able to proof compliance or non-compliance with data.
14	Authorities providing data (authority services)	Public authorities can share their data with enterprises for policy reasons within a legal framework

¹ Source: FEDeRATED Milestone 2 report, Interim MasterPlan, page 38, paragraph 6.1

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15	Push/pull	A legally allowed data sharing mechanism allow in case of: <ul style="list-style-type: none"> • a push, data to be duplicated by enterprises to authorities. • a pull, data being made accessible to authorities.
16	Publish/subscribe	An organization must have the ability to subscribe to any relevant new data in accordance with fit for purpose (public authority) or a commercial relationship (enterprise).
17	Combining data requirements	Whenever a public authority is responsible for governance of more than one regulation, the data requirements of those regulations will be combined into one data set.
18	Identification of organizations	Each organization is able to identify itself uniquely according to agreed attestations with transparent validation processes of these attestations (e.g. Chamber of Commerce Registration, AEO certificate)
19	Identification of users	Persons that act on behalf of an organization are able to identify themselves as such and should be known and employed or delegated by that organization
20	User capabilities	The capabilities. i.e. the actions that may be performed, of an identified user are transparent to all other relevant users/organizations
21	Data sensitivity	Sensitive data should not be accessible or changed by unauthorized users or organizations.
22	Metadata of data sharing	Any metadata specifying which data is accessed or shared between any two enterprises is not accessible by unauthorised users or organizations.
23	Identification of systems	IT systems of an organization that support the roles data provider and -receiver, are uniquely identifiable
24	Data sharing policy	A common policy or agreement specifies the use and reuse of data as well as the manner in which it is stored or removed.
25	Data sovereignty	A data owner determines the data it will share and retains full rights and controls over this data
26	Data at source	Single sharing of links, multiple (controlled) access to data
27	Data sets	The data sets of which links can be shared
28	Baseline standards	Use of baseline standard(s) that provide all common terminology, data formats, code values, etc. that can be

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		re-used for implementation of the FEDeRATED models.
29	Data timestamps	An event for sharing milestones has its own timestamp that can differ from the timestamp of a milestone.
30	Unique identifier(s) of data (sets)	Unique identifiers are used to create and share links of relevant data sets between any two enterprises.
31	Data sharing solution	Organizations select a solution of choice for data sharing with others (platform, peer-to-peer)
32	Federation	Organizations are able to share or access data with others
33	Data validation	Data is either validated by a data provider or a – receiver against data sharing specifications (e.g. XSD).
34	Data Exchange integrity	Accuracy and consistency of data over its entire lifecycle is required
35	Historical data	Historical data sets are stored for optimizing business processes (public authorities and enterprises), based on legal requirements (e.g. archiving),
36	Logging and audit trail	Organizations store a (shared) immutable log and audit trail of the data they have shared.
37	Monitoring	Each organization is able to trace with whom and at what time particular data has been accessed/shared with any other organization.