



Digital Transport and Logistics Forum

Sub-group 2 – a call for action

Physical Internet Webinar ETP ALICE

30 November 2022

Wout Hofman, TNO, technical support team EC DG Move

**DIGITAL
TRANSPORT
& LOGISTICS
FORUM**

About the DTLF

“ The Digital Transport & Logistics Forum (DTLF) is an expert group aimed at supporting the European Commission in fostering more efficient electronic exchange of information in the EU transport and logistics sector, across all modes of transport. ”

This work will contribute to the *Sustainable and Smart Mobility Strategy* of the European Commission, specifically: Action 54: Propose rules on a trusted environment for corridor data exchange to support collaborative logistics’

About the DTLF

2015

Establishment of the DTLF

The DTLF's first mandate (April 2015 – June 2018) was set up by Commission Decision C(2015)2259. It was renewed for a second mandate (September 2018 – September 2023) by Commission Decision C(2018)5921.

>130

Appointed Forum Members and Observers

The DTLF offers a platform for dialogue between key stakeholders, including companies, associations, NGOs, trade unions, universities and research institutes, subject matter experts, Member States' authorities and other public entities.

>44

Official Meetings since 2015

The DTLF meets on a regular basis, mainly in Brussels. Each year, the Forum holds two Plenary meetings, thereby reuniting all Members and Observers. In addition, several meetings are held for both Subgroups of the DTLF.

3

The Forum is divided into three Subgroups, dealing with the digitalisation and acceptance of transport documents (Subgroup 1), the establishment of digital corridor information and management systems (Subgroup 2) and the eFTI delegated acts Expert Group (Subgroup 3)

DTLF II: second mandate 2018 – 2023

DTLF II

Subgroup 1

Paperless Transport

- ✓ Support for implementation of eFTI initiative
- ✓ Identify measures to support further digitalisation of documents concerning the means of transport and personnel

Subgroup 2

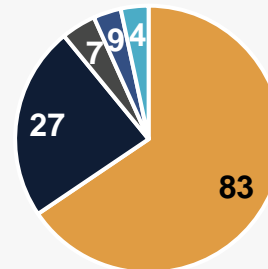
Corridor freight information systems

- ✓ Development of corridor cargo information systems

Subgroup 3

eFTI Delegated Acts

- ✓ Development of Delegated Acts for the implementation of eFTI
- ✓ Synchronisation with the CEF funded projects



- Organisations
- Member States
- Other public entities
- Individuals (personal capacity)
- Individuals (common interest)

SG2 Challenge: fragmented digital infrastructure

transport	road	infrastructure equipment
	rail	infrastructure
	aviation	
	inland waterways	equipment
	maritime	infrastructure equipment
multimodal		
governance	government	
	public institutions	
	private institutions	
	private operators	
multi governance		
technology	Paper processes	standards private
	Client Server	standards private
	EDI	
	API	
	Blockchain	public private
	Semantic web	open private
multi tech		



Solution: cooperation & interoperability

transport	road	infrastructure
		equipment
	rail	infrastructure
		equipment
	aviation	infrastructure
governance	inland waterways	equipment
		infrastructure
	maritime	equipment
		infrastructure
		equipment
technology	government	
	public institutions	
	private institutions	
	private operators	
	Paper processes	standards
	Client Server	private
	EDI	standards
	API	private
	Blockchain	standards
	Semantic web	private

multi platform network

semantic model

Federated
network of
platforms

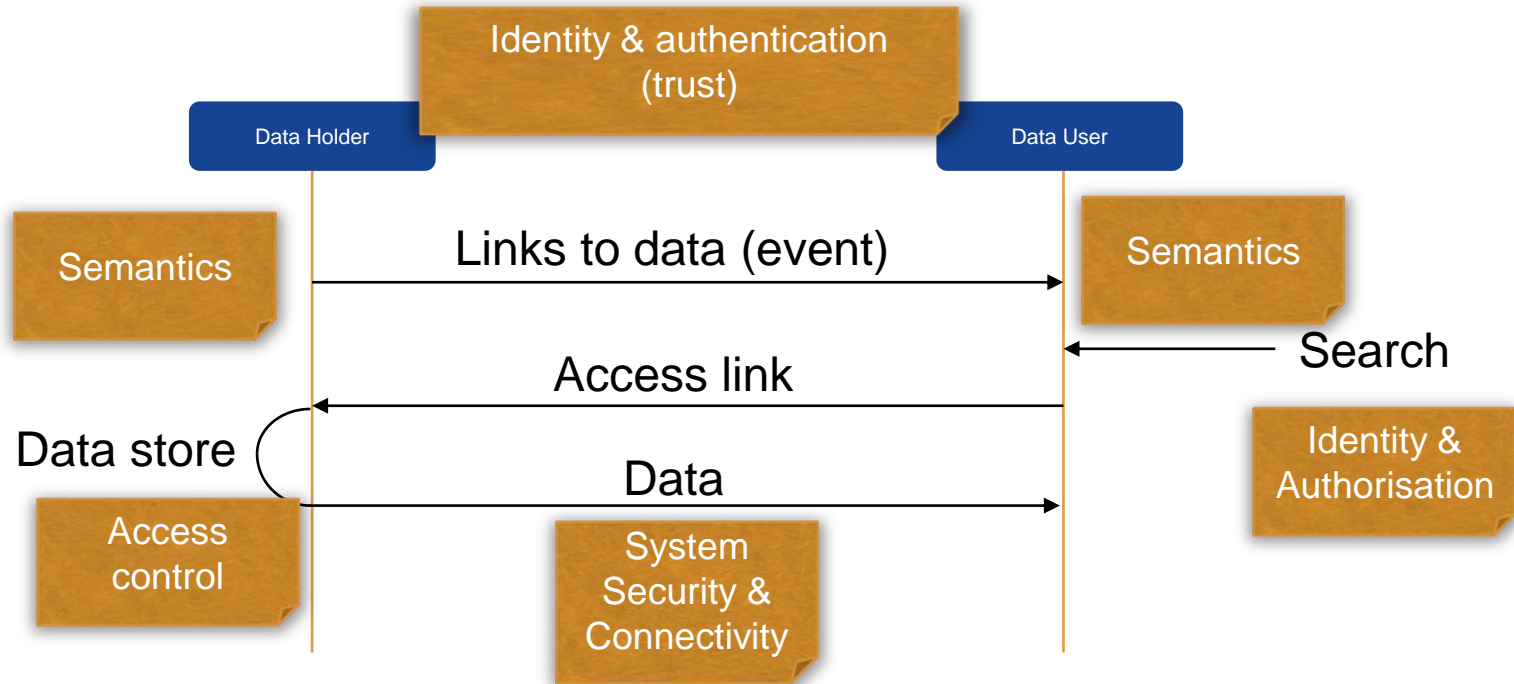
Trusted safe
& secure

Plug & play
architecture

Technology
independent
services

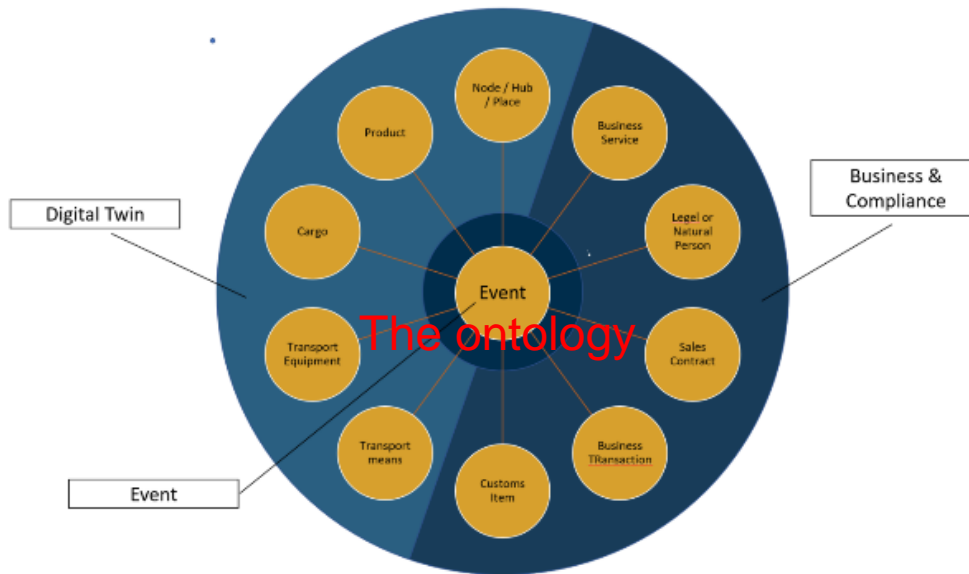


The DTLF data sharing protocol (linked (semantic) data – pull based)



It is about applying the output of team 2 in practice

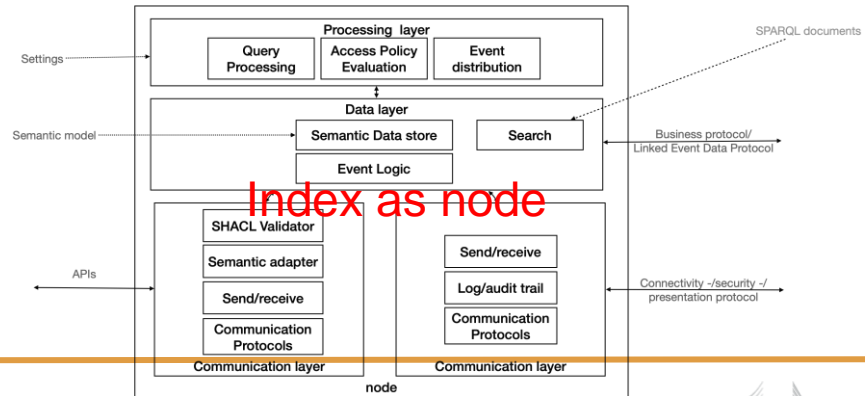
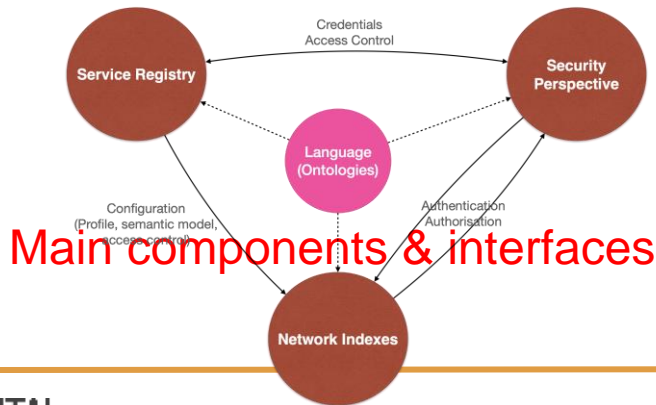
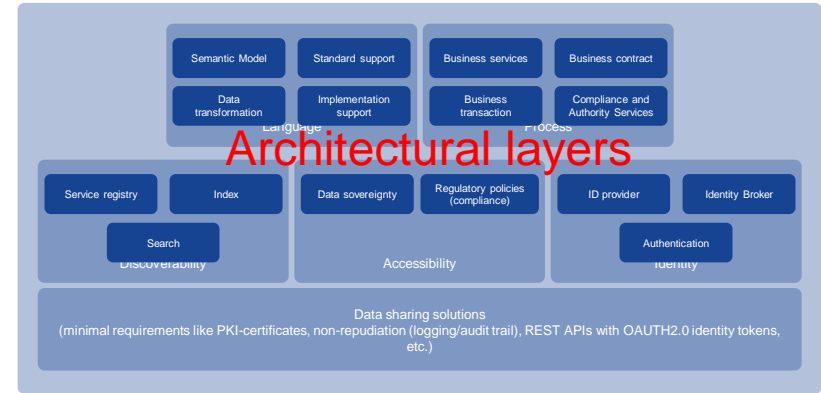
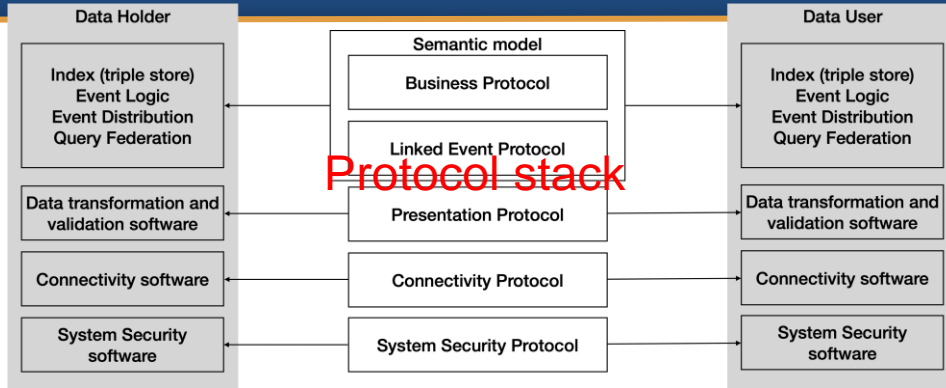
The semantic model and its application



Applying the ontology for

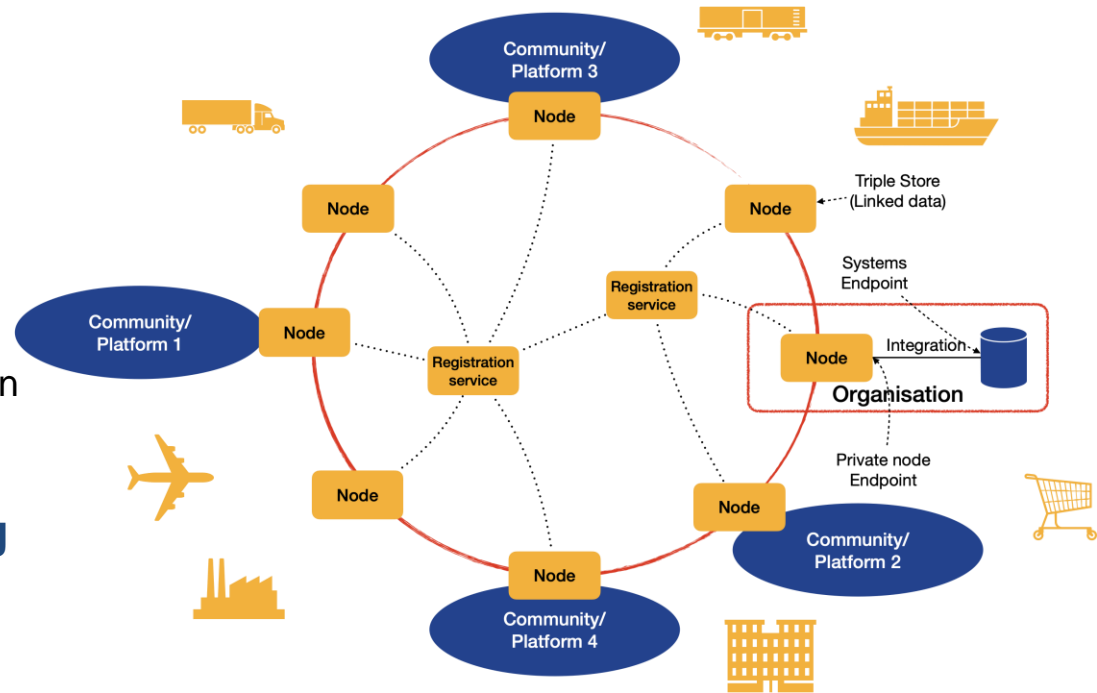
- Data transformation between various **standards**
- To express data requirements in different **settings**
 - ✓ Community
 - ✓ Supply chain
 - ✓ Industry association
- To express various **data requirements**
 - ✓ Business document data sets
 - ✓ Interactions (bookings, orders, etc.)
 - ✓ ...
- To formulate one's own data requirements for business support (**plug and play**)

The foreseen deliverables



This creates a common ground for multi-modal logistics by a federated network of platforms

- One basic cross-modal **data semantics**
- To be adopted (specialized) and implemented by
 - ✓ each mode of transport
 - ✓ logistics customers (supply chain stakeholders)
- Migration path by **supporting existing implementations** ('standards support')



Main deliverables of SG2 till now

- ✓ Semantic model for data sharing
 - Developed and validated in FEDeRATED; adopted by DTLF SG2
 - Going to be applied in other projects and initiatives (see later on the agenda)
- ✓ Architecture – data at the source
 - And initial findings on plug and play (team 1) and governance (team 4)

Initiatives feeding and adopting SG2 results

- ✓ Santana – Hamburg Port Authority and Dakosy
- ✓ Data Infrastructure Logistics – Dutch Ministry of Infrastructure and Water management
- ✓ CEF funded FEDeRATED action (>20 Living Labs)
- ✓ CEF funded FENIX action (>20 Living Labs)
- ✓ Nexus project – Portugal
- ✓ Physical Internet Living Lab (first coordination meeting has taken place)
- ✓ H2020 Green Deal Magpie Project (Rotterdam Port Authority)
- ✓ Datapipe (circular economy funded by EC DG Reform, Dutch Customs/Dutch Ministry of I&W/TU Delft/TNO)
- ✓ Others?

Expected output and next steps

Technical specification (e.g.
registration, architecture,
interoperability principles,
common services, governance)

Implementation guidelines for
the individual organisations on
how to plug and operate in the
federated network of platforms

Adoption and implementation
by the various stakeholders

- 2022/2023

2023 -

Who is willing to adopt and experiment?
What would be required as support?



Thank you!

**DIGITAL
TRANSPORT**
& LOGISTICS
FORUM