

# 14<sup>th</sup> International Capacity-Building Seminar on Trade and Transport Facilitation

# TRADE FACILITATION AND DIGITAL TRANSFORMATION OF MULTIMODAL INFORMATION EXCHANGE IN EASTERN EUROPE AND SPECA, USING UNITED NATIONS STANDARDS

Hybrid capacity-building seminar, Baku, Azerbaijan, 22-23 May 2023

# Implementing the eFTI Regulation: eFTI Architecture for eFTI Platforms and eFTI Gates

14th International Capacity-Building Seminar on Trade and Transport Facilitation UNECE

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22 May 2023, Baku/online



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### eFTI REGULATION

## eFTI REGULATION AND WORK OF DIGITAL TRANSPORT AND LOGISTICS FORUM





## eFTI REGULATION

- From 20th of August 2025 all European Union Member States competent authorities will be accepting the electronic freight transport information from the economic operators. (note: application date to be slightly extended)
- It will not become mandatory for the economic operators to operate on electronic documentation, but will organise the scene for doing so. Yet.
- The Regulation establishes a legal framework for the electronic communication
  of regulatory information between the economic operators concerned and
  competent authorities in relation to the transport of goods on the territory of the
  Union.
- Lays down the conditions based on which competent authorities are required to accept regulatory information when that information is made available electronically by the economic operators concerned.
- Lays down rules on the provision of services related to making regulatory information available electronically by the economic operators concerned to competent authorities.









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## eFTI Regulation & Requirements

eFTI applies to **regulatory information requirements** on the transport of goods set out in the EU <u>legal acts</u> listed in points 1-5 below, and to regulatory information requirements laid down in <u>delegated</u> or <u>implementing</u> acts adopted by the <u>European Commission</u> in accordance with the legal acts listed under points 1-7 below (listed in Part A of Annex I)

- 1. EEC Council Regulation No 11 on inland navigation (see summary);
- 2. Council Directive <u>92/106/EEC</u> on intermodal transport (see <u>summary</u>);
- 3. Regulation (EC) No 1072/2009 on international road haulage (see summary);
- 4. Regulation (EC) No 1013/2006 on waste shipments (see summary);
- 5. Directive 2008/68/EC on inland transport of dangerous goods (see summary);
- 6. Directive (EU) 2016/797 on the interoperability of the rail system (see summary);
- 7. Regulation (EC) No 300/2008 on civil aviation security (see summary).

The regulation also applies to similar information requirements in relevant national laws (listed in Part B of Annex I).





# eFTI Regulation implementation Indicative timeline (renewed Feb 2023)

Aug 2020
Entry into force
Reg EU 2020/1056

2020 - 2023

#### Preparatorý work

- DTLF /
- DA expert group
- IA committee

Aug Nov 2023

### Adoption

IA on eFTI platforms
 & service providers
 specifications

Aug Dec 2025

### **Full application**

(start of obligation of MS authorities to accept eFTI data)

Aug 2021

#### **Notification**

by MS of national legislation Feb June/July 2023

### Adoption

- DA on eFTI data set
   & national
   requirements
- IA on common rules for authorities

March 2024

### Adoption

- DA on rules for certification of eFTI platforms & service providers Aug 2024

### Application start date

(except for the obligation of MS authorities to accept eFTI data)

Feb 2029

#### Review

- Need of obligation for economic operators
- Interoperability with other e-enforcement systems





# eFTI ARCHITECTURE and COMPONENTS

### eFTI Architecture Principles

### **Architectural Principles**

P1 - Data is Shared at Source

P2 - Data Sovereignty

P3 - Decentralized Approach, Common Rules of Interaction

P4 - Trust, Non-Repudiation by Default

P5 - Security, Appropriate Authentication

P6 - Access and Rights

P7 - Once-Only

P8 - Open Specifications and Standards, Interoperability

P9 - Technology Independence

P10 - Easy Deployment, Integration and Transition

P11 - Support a Transition Period

### **General Architectural Principles**

**GP1** - Holistic Thinking

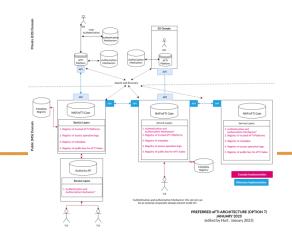
GP2 - KISS

**GP3** - Scalability

GP4 - Modularity

GP5 - Maintenance and Development

**GP6** - Sustainability











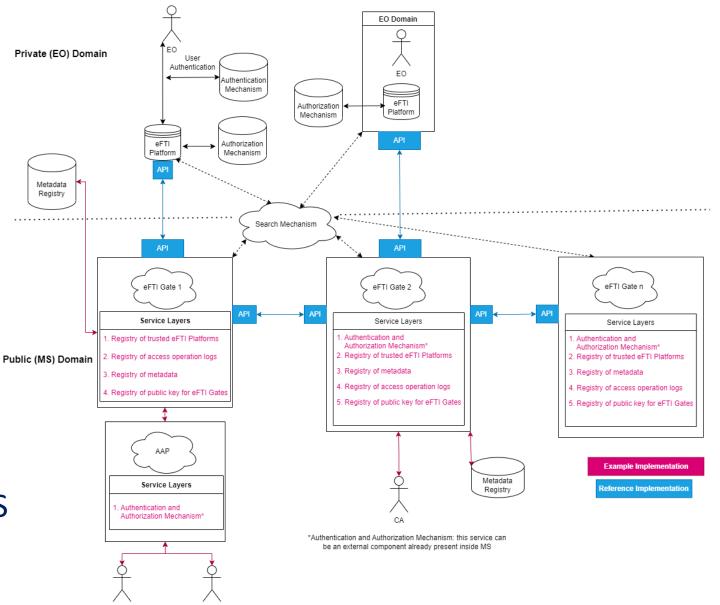
### European Commission

# THE ARCHITECTURE HOLDS among all:

- eFTI PLATFORMS
- eFTI GATES
- AUTHORITY ACCESS POINTS

### Supported by:

- METADATA REGISTRIES
- IAA solutions

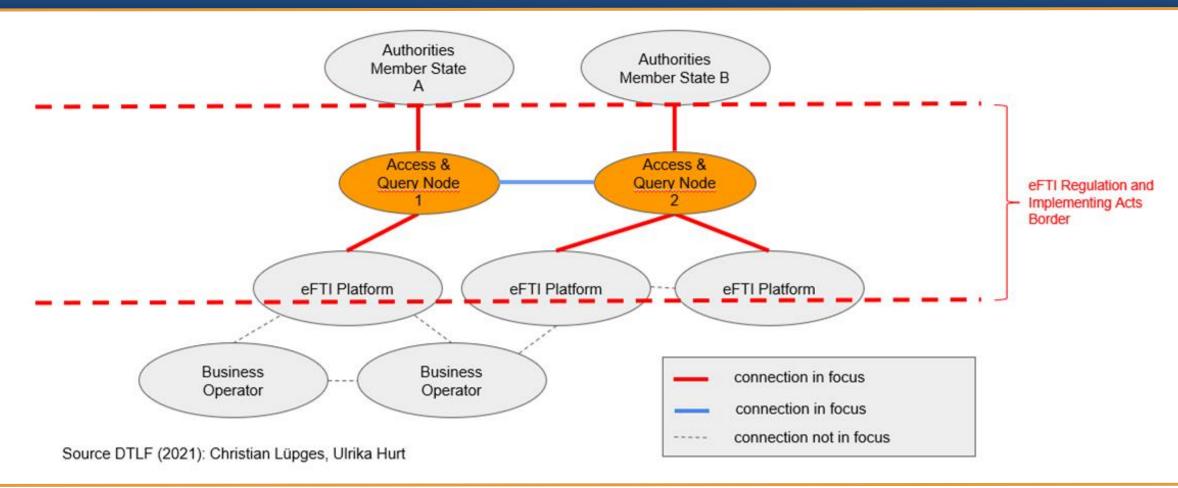








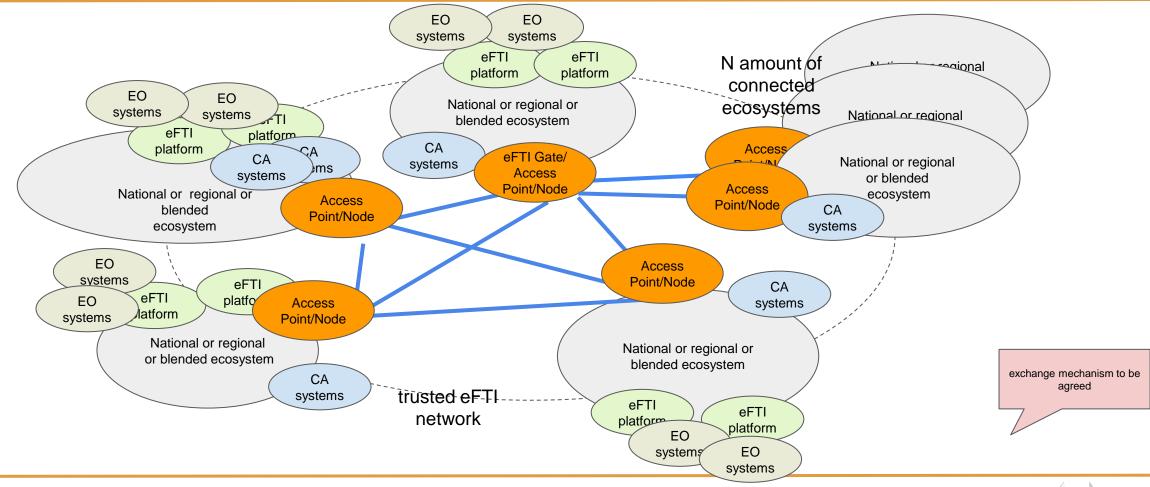
## eFTI LAYERED APPROACH







# HYBRID MULTI-PLATFORMED ECOSYSTEM







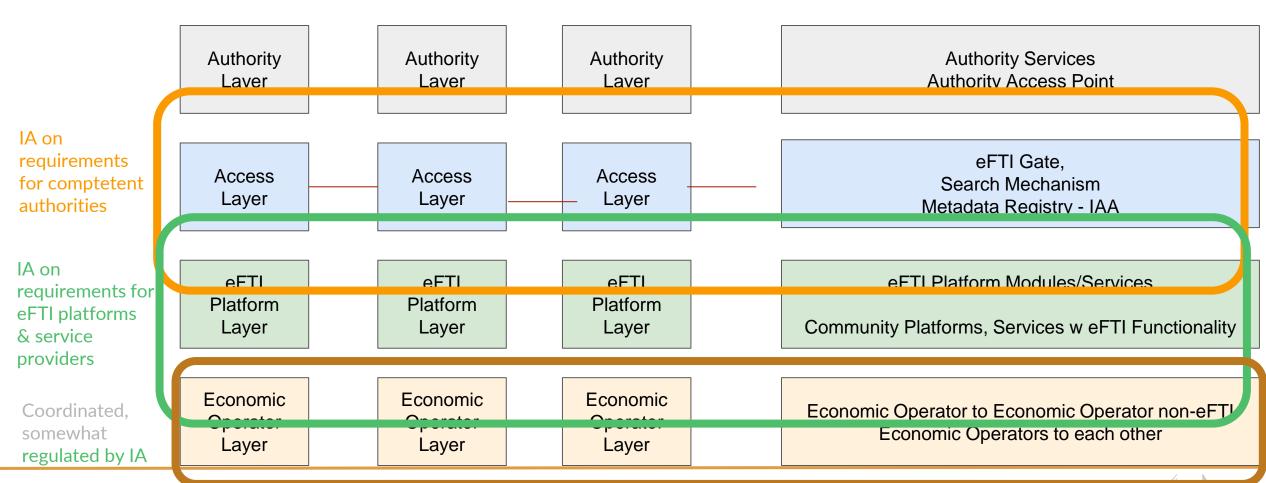
### LAYERED & REGULATED

**Authority Authority Authority Authority Services Authority Access Point** Layer Layer Layer **Implementing** Act (IA) on eFTI Gate, Access Access Access requirements Search Mechanism Layer Layer Layer for competent Metadata Registry - IAA authorities eFTI eFTI eFTI eFTI Platform Modules/Services **Platform Platform Platform** Community Platforms, Services w eFTI Functionality Layer Layer Layer **Economic Economic Economic** Economic Operator to Economic Operator non-eFTI Operator Operator Operator Economic Operators to each other Layer Layer Layer





### LAYERED & REGULATED







# RULES FOR eFTI Gates and eFTI Platforms









### eFTI Technical Implementation Specifications

Circle	Circle SpA Piazza Borgo Pila 40, A/46, 16129 Genoa, Italy www.circletouch.eu
DIGILOGISTINA RESKUS DIGITAL LOGISTICS CENTER OF EXCELLENCE	Digilogistika Keskus OÜ Teaduspargi 6/1, Tallinn, Estonia www.dlk.ee

Contract No.	MOVE/D1/SER/2022-331/SI2.882058 (MOVE/2022/OP/0009)
Author(s)	Frank Janssens, Antonio Molinari, Matteo Tebaldi, Ulrika Hurt
Client	DG MOVE European Commission
Document Type	Technical Specifications
Document ID	eFTI2-TS01
Document Name	eFTI Technical Implementation Specifications

#### Revision Histor

Revision	Date	Description / Summary of changes
1.0	28/11/2022	First issue
2.0	12/01/2023	Incorporation of comments from DG MOVE
2.1	08/02/2023	Review and finalization for submission to MSs

Distribution - This Document should be distributed to Name

Proposed technical solutions are worked out and further elaborated by the Commission, DTLF and consultant teams for the following among others:

- Components and explanatories of eFTI Architecture
- Requirements and instructions for eFTI Gates, Authority Access Points and eFTI Platforms
- Information exchange within the eFTI environment and between components
- Composition of the Unique Identifiers (UUID)
- Functioning of metadata in the eFTI environment
- Functioning of the search mechanism
- Possible use of eDelivery
- BPMN process flows
- Messages



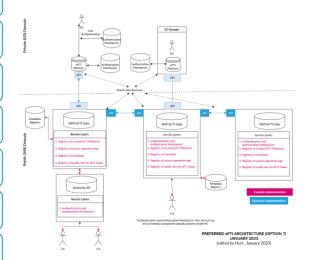






# Technical and Functional Requirements Categories: Design Decision Categories

- 1 Functional Structure/Architectural Structure
- 2 Data Distribution/sharing and Data Attributes
- 3 Data Access/Delivery
- 4 Interoperability, Compatibility, Integration
- 5 Authentication and Identification of Users
- 6 Access Control
- 7 Evidences and Logs
- 8 Data Security, Cybersecurity
- 9 Data Models, Semantics
- 10 General IT aspects
- 11 General Non-Functional Aspects











### **GUIDELINES FOR Gates and Platforms**

### REQUIREMENTS COMING UP IN GREAT DETAIL

- Rules based upon the fact that PLATFORMS ARE TO BE BUILT IN A TRUSTED WAY to lessen the burden of COLLECTING information to single (government) database for reporting.
- Gates arrange a data request. Platforms hold data and respond when a request is made.
- Rules and requirements for eFTI Platforms: functional and technical to endorse trust.
- Rules based upon the business-centricity.
- Platforms connect Economic Operators and their information systems.

# NEXT STEPS FOR THE EU NEIGHBOURHOOD & MIDDLE CORRIDOR

### COORDINATED OBSERVATION, ALIGNMENT AND PILOTS

- UNDERSTANDING OF THE SCOPE AND SCALE OF eFTI GLOBALLY
- ALIGNMENT AND MAPPING OF WHERE ARE THE CROSS-BORDER INTERSECTIONS
- ALIGNMENT AND ALTERNATIVES FOR CROSS-BORDER ARCHITECTURE

ALIGNMENT OF GLOBAL STREAMS OF STANDARD ALIGNMENT

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# THANK YOU



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