



Project Overview – May 2027

51Biz Luxembourg

- Route Economics and Profitability Planning
- multimodal data model compliant with WCO, IATA, UN/CEFACT
- e-Cargo Manifest
- Flowers from Colombia
- customs goods accounting
- pre-arrival notification
- AS4 message integration
- Fine art from New York
- EU-Gate e-CMR / eFTI access Point
- OneAPP for Authorities
- FEDeRATED, OneRecord by design
- Trusted network of e-CMR and eFTI Platforms
- Focus on SME Shippers, Forwarders and carriers
- e-CMR 2.0

Cargolux
PwC

Single Window
for Logistics

Luxembourg
Security Hub

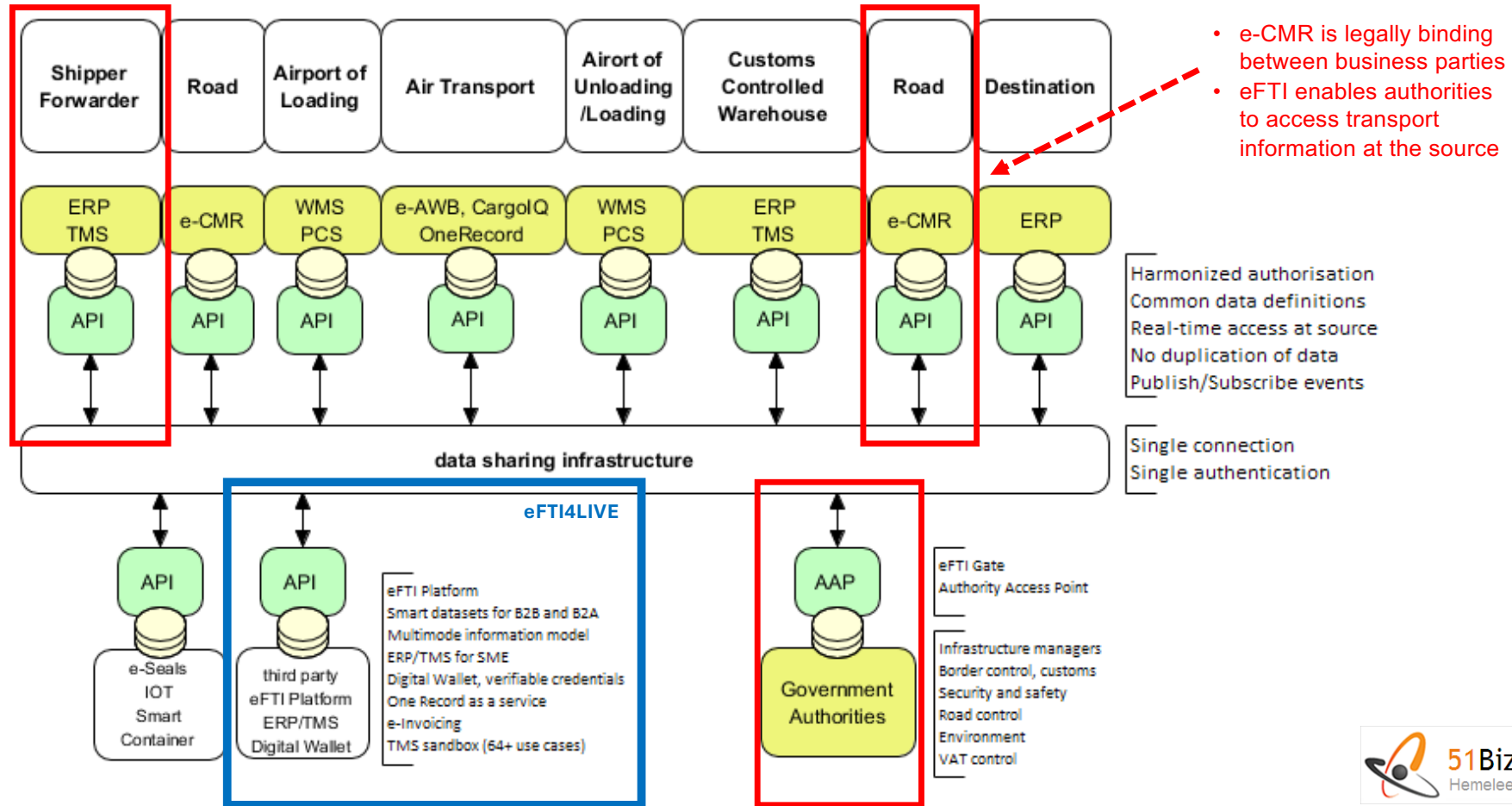
FEDeRATED
EU-Gate LL17

eFTI4EU
eFTI4ALL
eFTI4Live

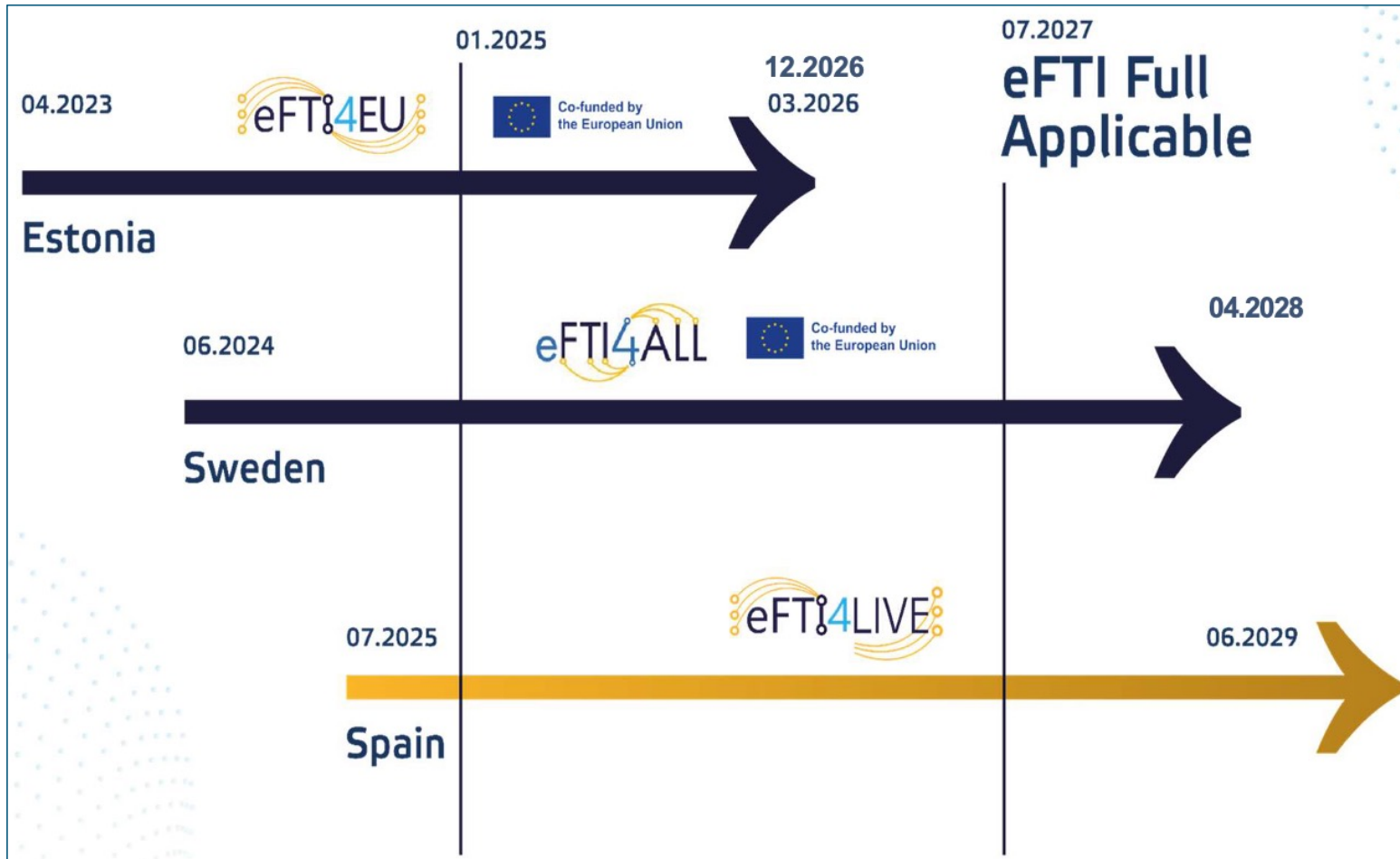


- 64+ multimodal use cases
- Sandbox, then go Live

Enter once, Use Many Times



Timeline



The 3 eFTI4xx consortiums



2025-2029:
+18 MS & Industry Organizations
Focus areas: eFTI production phase
certification, training

- ✘ Go Live
- ✘ Certification
- ✘ Production and interoperability validation
- ✘ Support to go production deployment
- ✘ Updates for data and reference implementation
- ✘ Governance model
- ✘ Training



2024-2028:
+5 MS & eFTI service providers
Focus areas: end-to-end eFTI
process and system integration

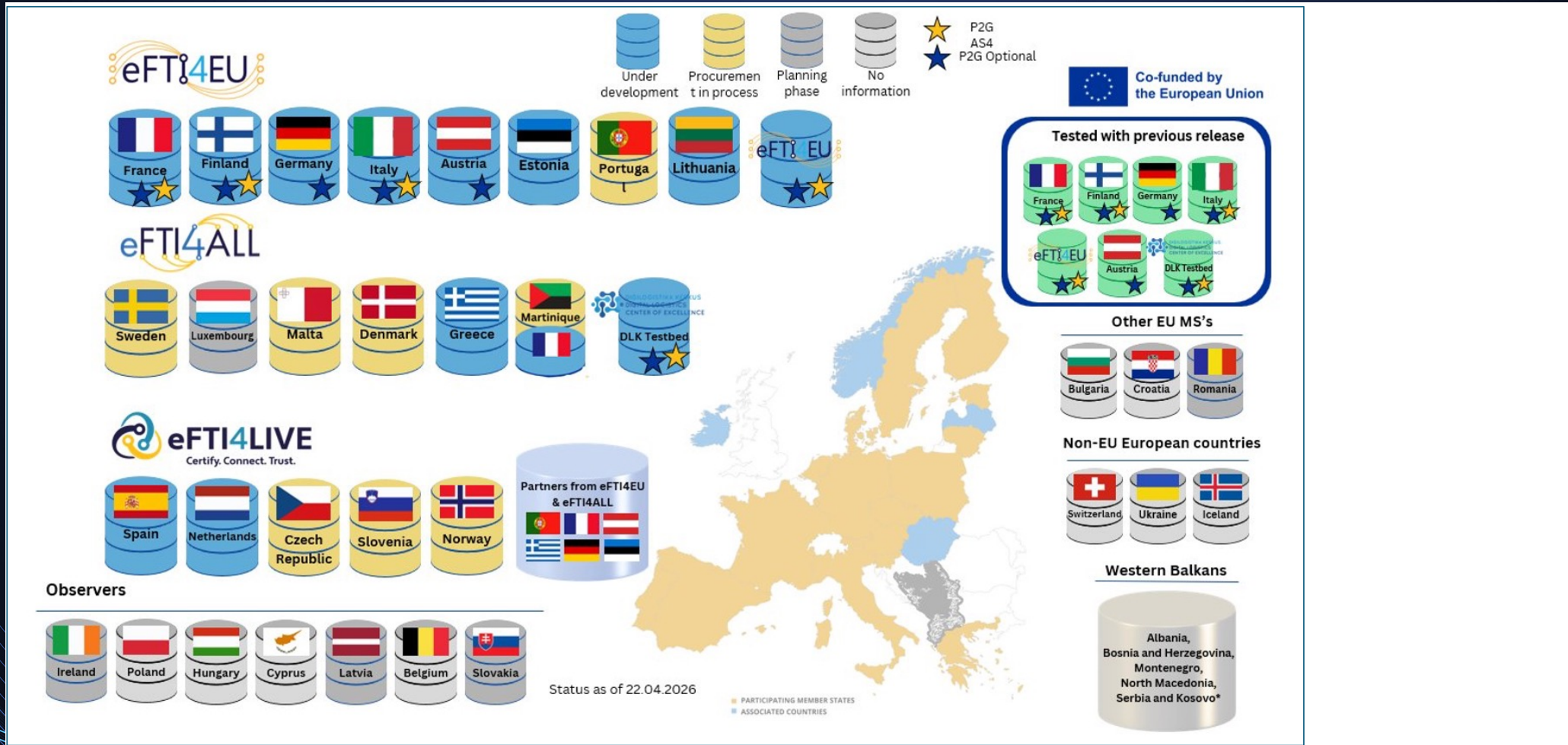
- ✘ eFTI platforms
- ✘ eFTI life cycle governance
- ✘ eFTI test bed
- ✘ Non-EU country adaptation
- ✘ End-to-end cross-border pilots
- ✘ Stakeholder engagement



2023-2026: 9 MS
Focus areas: eFTI Gates,
processes and interfaces

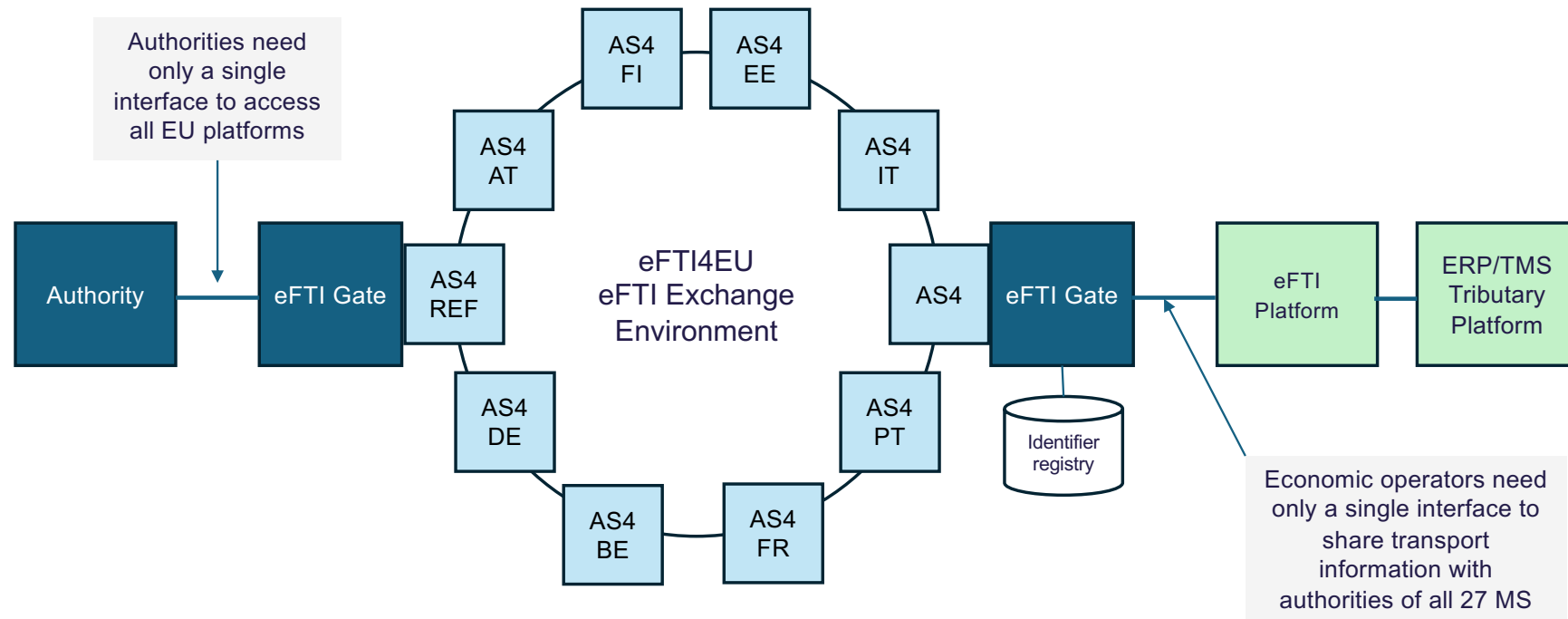
- ✘ eFTI regulation support
- ✘ eFTI Gate Reference implementation
- ✘ First level pilots with focus on eFTI Gates
- ✘ Technical requirements
- ✘ Knowledge building

EU eFTI Regulation 2020/1056 – 9 July 2027



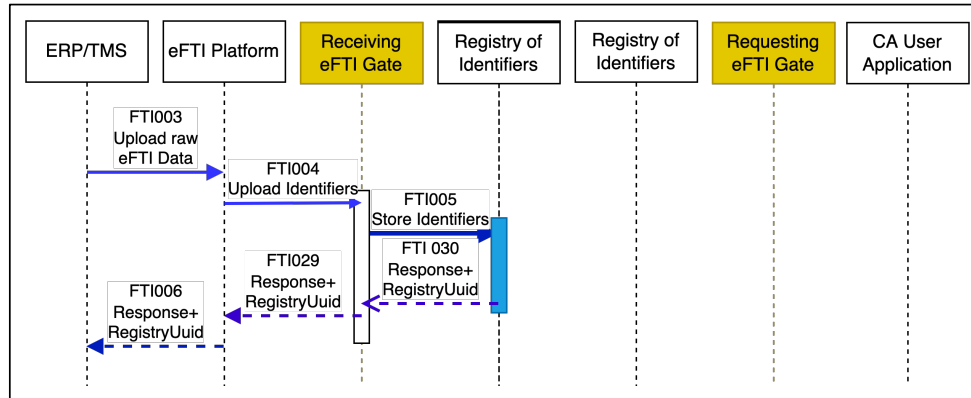
Architecture

The EU eFTI Exchange Environment must allow EU Competent Authorities and Economic Operators to trust that EU harmonized datasets of transport information can be shared at the source through a trusted network of eFTI Gates and eFTI Platforms

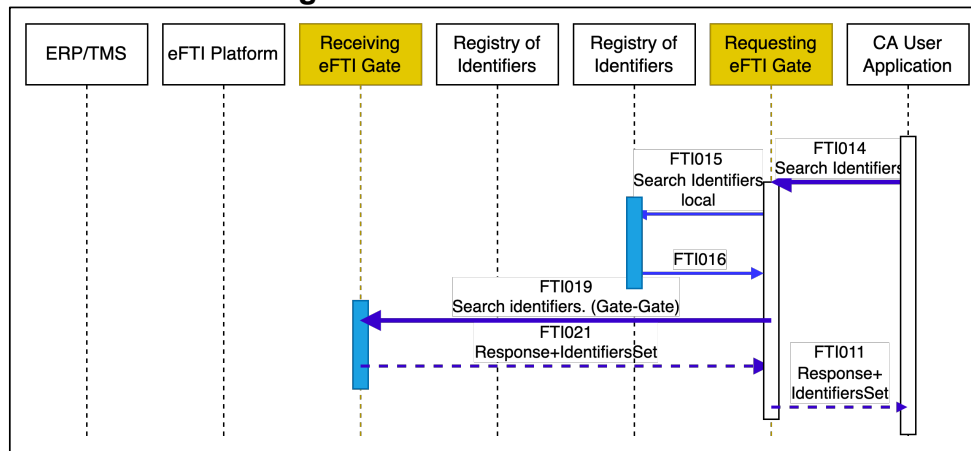


The EU eFTI Exchange Environment

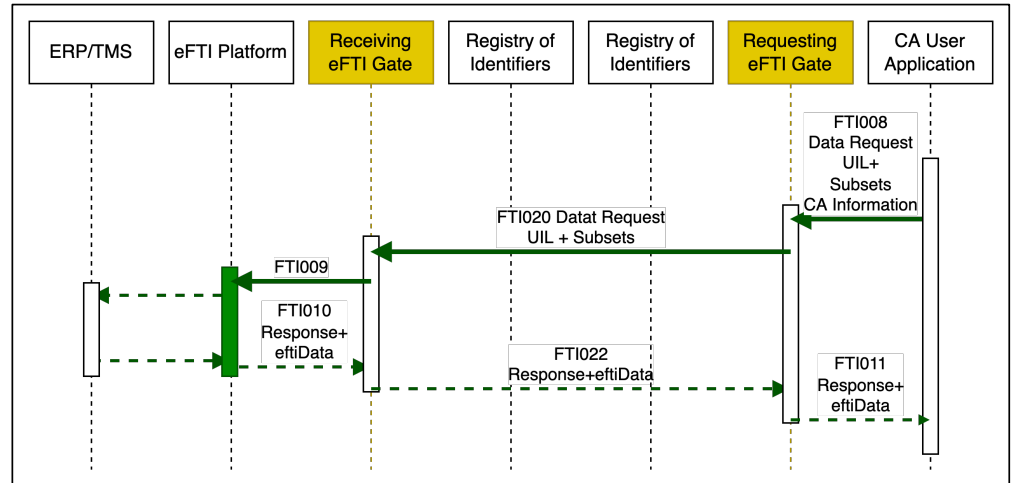
Upload eFTI dataset and identifiers



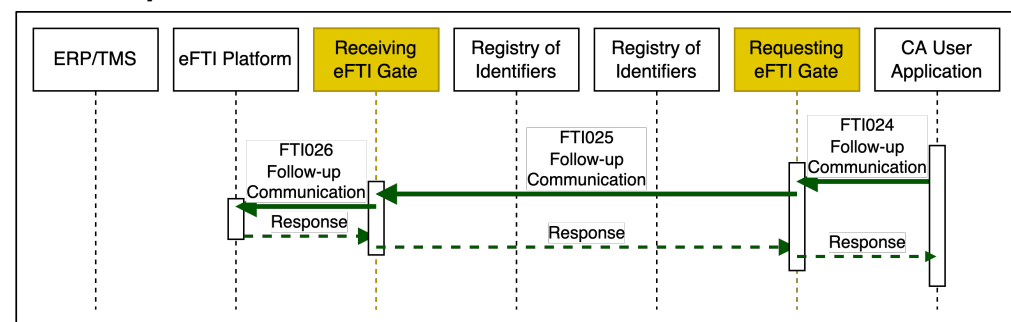
Search identifier registries



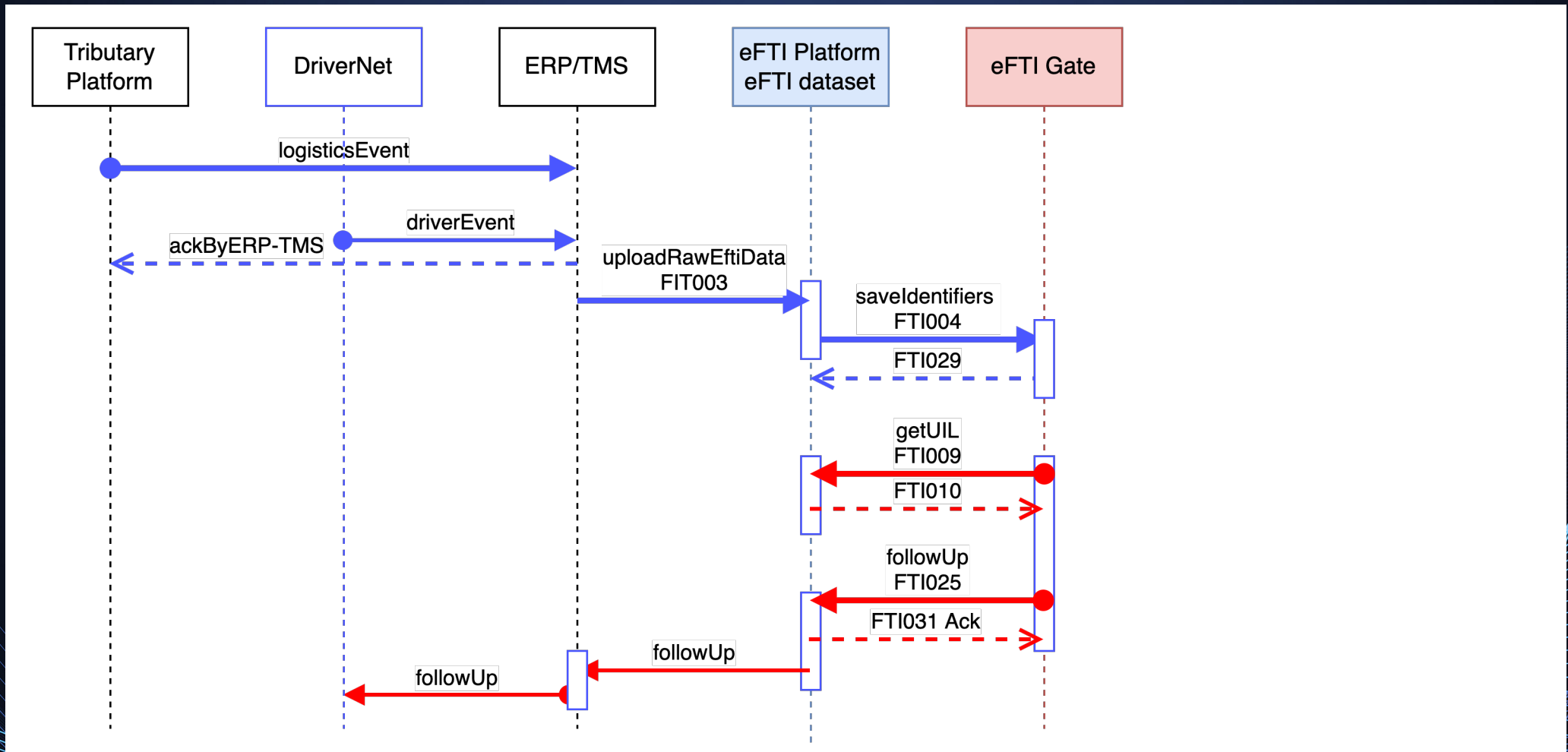
Get eFTI data for UIL



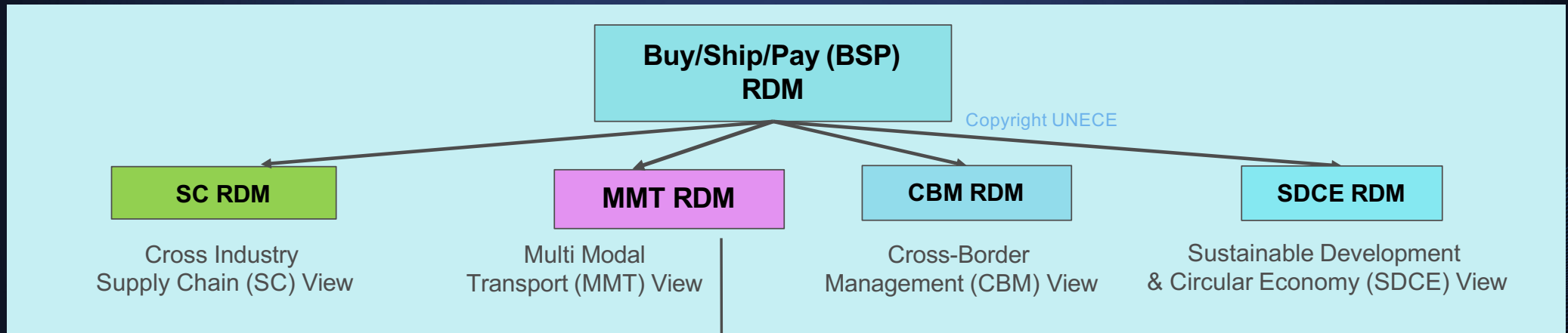
Follow-up communication



The interfaces between gates and platforms are simple



e-CMR and eFTI are based on the UN/CEFACT reference data models (RDM)



- road consignment note (e-CMR)
- eFTI common data set
- pipeline data exchange standard
- smart container (IOT) device notification
- ...
- ...
- ...

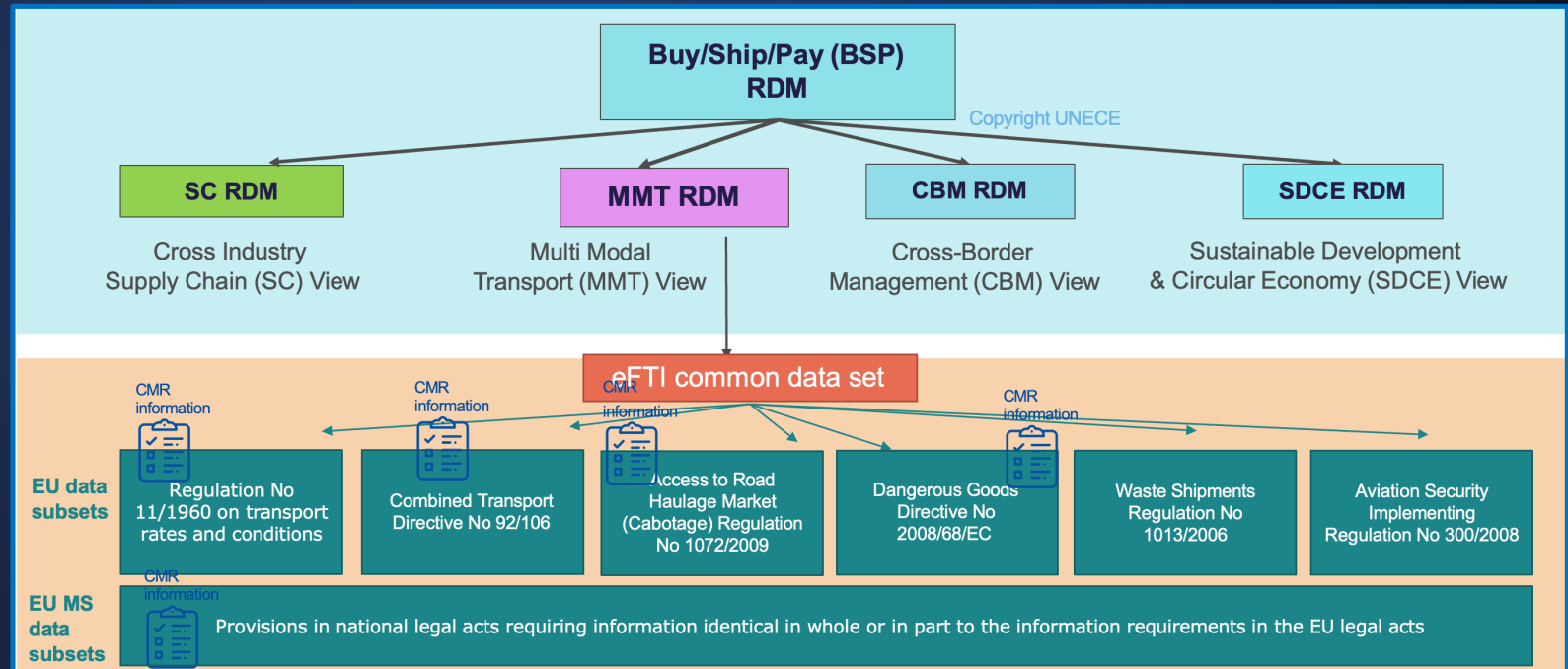
e-CMR and eFTI are based on the UN/CEFACT reference data models (RDM)

EU legislation

- On tariffs - Regulation No 11/1960
- Combined Transport - Directive No 92/106
- Road Cabotage - Regulation No 1072/2009
- Waste Shipments - Regulation No 1013/2006
- **Dangerous Goods Directive 2008/68/EC** (chapter 5.4 of the Annexes to RID, ADR and AND)
- Aviation Security Regulation No 300/2008*
- Rail Interoperability Directive No 2016/797*

National legislation

- Requiring information that is identical, in whole or in part, to that in EU legislation above mentioned (based on notifications by Member States to the Commission, cf. Art 2(2) eFTI Regulation).



UNCEFACT BuyShipPay > eFTI Common dataset > 185 eFTI subsets

eFTI common dataset

aggregates 185 "eFTI subsets" = EU or MS legislations

185 eFTI Subsets

OBS				MS														
sequence	eftid	xmlName	XMLName	EU	AT	BE	BG	CY	CZ	DE	DK	EE	FI	ES	FR	HR	HU	IE
477	ASBIE1098	mainCarriageTransportMovement	MainCarriageLogisticsTransportMovement	7	12	11	11	3	5	4	6	7	4	5	7	7	7	6
478	eFTI581	modeCode	ModeCode	7	12	11	11	3	5	4	6	7	4	5	7	7	7	6
479	eFTI582	id	ID	1	1	1	1		1	1	2	1	1	1		1	2	1
480	eFTI1451	(blank)	(blank)															
481	eFTI1022	sequenceNumber	SequenceNumeric	1	2	1	1	1		1		1	1	1	1	1	1	1
482	ASBIE1394	master	MasterResponsibleTransportPerson									1					1	
483	eFTI1346	id	ID									1						
485	eFTI1348	birthDateTime	BirthDateTime									1						
486	eFTI1350	givenName	GivenName									1					1	
487	eFTI1353	familyName	FamilyName									1					1	
488	ASBIE1099	loadingEvent	LoadingTransportEvent	1	4	2	2	1	1	1	1	1	1	1	6	3	2	1
489	eFTI583	actualOccurrenceDateTime	ActualOccurrenceDateTime	1	3	1	1	1	1			1			4	2	1	
491	eFTI585	scheduledOccurrenceDateTime	ScheduledOccurrenceDateTime	1	2	1	1		1								1	
493	eFTI1252	requestedOccurrenceDateTime	RequestedOccurrenceDateTime						1					1				
495	ASBIE1100	occurrenceLocation	OccurrenceLogisticsLocation	1	4	2	2	1	1	1	1	1	1	1	6	3	2	1
496	eFTI587	id	ID	1	4	2	1	1	1	1	1		1	1	5	3	2	1
498	eFTI589	name	Name	1	4	2	2	1	1	1	1	1	1	1	6	3	2	1
499	ASBIE1141	postalAddress	PostalTradeAddress	1	3	2	2	1	1			1			4	2	1	
500	eFTI904	postcode	PostcodeCode	1	3	2	2	1	1			1			4	2	1	
501	eFTI905	postOfficeBox	PostOfficeBox	1	3	2	2	1	1			1			4	2	1	
502	eFTI906	streetName	StreetName	1	3	2	2	1	1			1			4	2	1	
503	eFTI907	cityName	CityName	1	3	2	2	1	1			1			4	2	1	
504	eFTI908	countryCode	CountryID	1	3	2	2	1	1			1			4	2	1	

691 data elements

The importance of real-time transport information within end-to-end digital supply chains

Shipment/Consignment	Transport Itinerary	Departure Loading	Arrival Unloading	Week 15							Week 16
				Mon 06 (Apr)	Tue 07	Wed 08	Thu 09	Fri 10	Sat 11	Sun 12	Mon 13
✓ CO51000004-765-51040051 LU51000028-741-999-51040051 LU51000025-730-LU6723TFY	XS4513/06APR2026 TL2433/08APR2026	07/04 07:51 08/04 06:30	08/04 12:42 08/04 05:09 08/04 12:42			FLOWER1.BOG to FLOWER1.BRU XS4513/06APR2026 COBOG-LULUX TL2433/08APR2026 LULUX-BEBRU					
✓ DE51000120-765-24100901 LU51000025-730-24100901 LU51000025-730-24100901 LU51000028-741-999-24100901	TL4513/06APR2026 TL2433/08APR2026 XS7441/09APR2026	07/04 15:06 07/04 15:06 08/04 06:30 09/04 15:51	10/04 02:27 07/04 22:42 09/04 03:42 10/04 02:27			CARPARTS.STR to CARPARTS.ORD TL4513/06APR2026 DES TR-LULUX TL2433/08APR2026 LULUX-UKLHR XS7441/09APR2026 UKLHR-USORD					
✓ US51000010-765-51004561 LU51000028-741-999-51004561 LU51000025-730-LU6723TFY	XS4513/06APR2026 TL2433/08APR2026	07/04 19:21 07/04 19:21 08/04 06:30	08/04 12:42 08/04 05:09 08/04 12:42			GALLERY.NYC to FINEART1.BRU XS4513/06APR2026 USJFK-LULUX TL2433/08APR2026 LULUX-BEBRU					

consignment movement

The importance of the road consignment note

Exemplaire pour l'expéditeur • Exemplaar voor afzender • Exemplar für Absender

LETTRE DE VOITURE • VRACHTBRIEF • FRACHTBRIEF **CMR** BE000240466PIO

Ce transport est soumis, nonobstant toute clause contraire, à la Convention CMR.
Dit vervoer is, ongeacht enig tegenstrijdig beding, onderworpen aan het CMR-Verdrag.
Trotz gegenteiliger Abmachung unterliegt diese Beförderung den Bestimmungen des CMR-Übereinkommens.

Pionira NV - www.pionira.be - 04/2022



<p>1 Expéditeur ou commissionnaire (nom, adresse, Etat) • Afzender of commissieair (naam, adres, Staat) • Absender oder Spediteur (Name, Anschrift, Staat)</p> <p>Pionira Consignor Gerard Mercatorstraat 85 Lommel 3920 BE</p>	<p>5 Transporteur principal (nom, adresse, Etat, n° de licence, plaque(s) d'immatriculation) Hoofdvervoerder (naam, adres, Staat, vergunningsnr., plaatnummer(s)) Hauptfrachtführer (Name, Anschrift, Staat, Genehmigungsnummer, Kennzeichen)</p> <p>Pionira Main carrier Transporteurstraat 14 BE-8000 Brugge V985</p>						
<p>2 Destinataire (nom, adresse, Etat) • Geadresseerde (naam, adres, Staat) Empfänger (Name, Anschrift, Staat)</p> <p>Pionira Recipient Kappelstraat 154 BE-8020 Oostkamp</p>	<p>6 Transporteur sous-traitant (nom, adresse, Etat, n° de licence, plaque(s) d'immatriculation) Ondervervoerder (naam, adres, Staat, vergunningsnr., plaatnummer(s)) Unterfrachtführer (Name, Anschrift, Staat, Genehmigungsnummer, Kennzeichen)</p>						
<p>3 Prise en charge de la marchandise (lieu, Etat, date, heure) • Inontvangstneming van de goederen (plaats, Staat, datum, uur) • Warenabnahme (Ort, Staat, Datum, Uhr)</p> <p>Pionira Producer 30/09/2022 13:03 Karrekietlaan 3 L-154 BE-8210 Loppem</p>	<p>7 Transporteur successif (nom, adresse, Etat, n° de licence, plaque(s) d'immatriculation) Opvolgende vervoerder (naam, adres, Staat, vergunningsnr., plaatnummer(s)) Nachfolgender Frachtführer (Name, Anschrift, Staat, Genehmigungsnummer, Kennzeichen)</p>						
<p>4 Livraison (lieu, Etat, date, heure) • Aflivering (plaats, Staat, datum, uur) • Lieferung (Ort, Staat, Datum, Uhr)</p> <p>Pionira Treatment operator 30/09/2022 13:06 Slagstraat 45 D-853 BE-1000 Brussel</p>	<p>9 Réserves du transporteur lors de la prise en charge de la marchandise (lieu, Etat, date, heure) Vervoerder bij de inontvangstneming van de goederen (plaats, Staat, datum, uur) • Warenabnahme</p>						
<p>8 Frais afférents au transport • Transportgebonden kosten • Transportgebundene Kosten</p>							
	<table border="1"> <tr> <td></td> <td>Uur aankomst Heure arrivée Uhr aankomst</td> <td>Uur vertrek Heure départ Uhr vertrek</td> </tr> <tr> <td>Laden Prise en charge Warenabnahme</td> <td>30/09/2022 13:03</td> <td>13:03</td> </tr> </table>		Uur aankomst Heure arrivée Uhr aankomst	Uur vertrek Heure départ Uhr vertrek	Laden Prise en charge Warenabnahme	30/09/2022 13:03	13:03
	Uur aankomst Heure arrivée Uhr aankomst	Uur vertrek Heure départ Uhr vertrek					
Laden Prise en charge Warenabnahme	30/09/2022 13:03	13:03					

- Agreement between the sender and the transport service provider
- Record receipt of goods by carrier, proof of delivery
- Basis for invoicing
- Demonstrate compliance of transport to national and EU regulations
- Supporting document Customs & other border control regulations
- Demonstrate intra-community deliveries (VAT)
- ...

The convention on the contract for international carriage of goods by road (CMR)

- UN Convention 19 May 1956
- International transport of goods by road for reward
- 58 countries are CMR contracting parties

Exemplar pour l'expéditeur • Exemplar voor afzender • Exemplar für Absender

LETRE DE VOITURE • VRACHTBRIEF • FRACHTBRIEF   BE000240466PIO

CE transport est soumis, indépendamment de toute convention, à la Convention CMR.
Dit vervoer is, ongeacht enig tegenstrijdig handtekening, onderworpen aan het CMR-Verdrag.
Dieser güterbeförderungsvertrag unterliegt ohne Befreiung von den Bestimmungen des CMR-Übereinkommens.

1 Destinataire / Bestemmingsadres / Bestimmungsort (nom, adresse, pays)
Pignia Consignee
Gerard Mercatorstraat 85
Linnel 3920
BE

2 Destinataire / Bestemmingsadres / Bestimmungsort (nom, adresse, pays)
Pignia Producer
Koppositaat 154
BE-8020 Oostkamp

3 Destinataire / Bestemmingsadres / Bestimmungsort (nom, adresse, pays)
Pignia Producer
Koppositaat 154
BE-8020 Oostkamp

4 Destinataire / Bestemmingsadres / Bestimmungsort (nom, adresse, pays)
Pignia Producer
Koppositaat 154
BE-8020 Oostkamp

5 Expéditeur / Afzender / Absender (nom, adresse, pays)
Pignia Main carrier
Tijnsborchtstraat 14
BE-4000 Brugge
V985

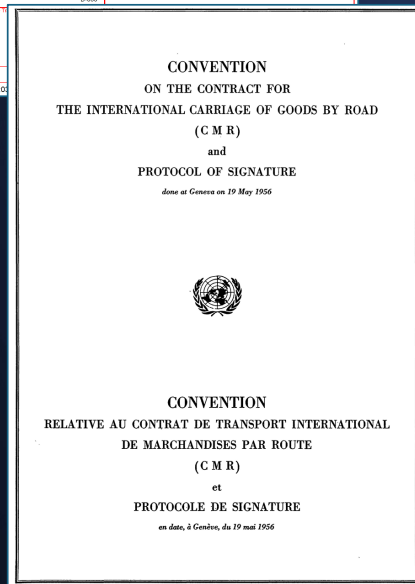
6 Destinataire / Bestemmingsadres / Bestimmungsort (nom, adresse, pays)
Pignia Producer
Koppositaat 154
BE-8020 Oostkamp

7 Destinataire / Bestemmingsadres / Bestimmungsort (nom, adresse, pays)
Pignia Producer
Koppositaat 154
BE-8020 Oostkamp

8 Destinataire / Bestemmingsadres / Bestimmungsort (nom, adresse, pays)
Pignia Producer
Koppositaat 154
BE-8020 Oostkamp

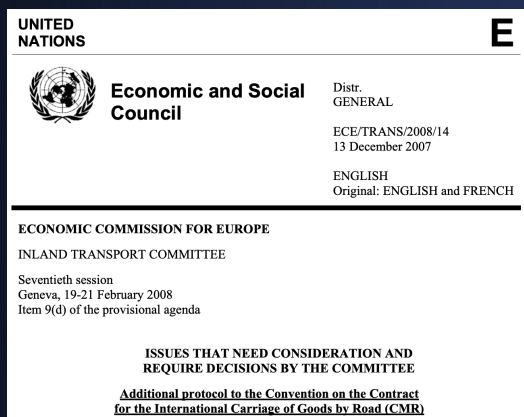
Vrachtwagen: 1-W9X-902

30/09/2022 13:03



1. Harmonize procedures and documents for the international transport of goods by road.
2. Limit the liabilities of the carriers

The e-CMR additional protocol of 20 February 2008



May 2026:42 Countries

- The CMR Convention (1956) also makes it mandatory to use a paper consignment note, unless countries have joined the convention's e-protocol (2008).
- The e-protocol stipulates that it is possible to use an electronic consignment note for international road haulage.
- If two bordering countries have ratified the e-protocol, road haulage is possible between them by carrying an accompanying electronic consignment note. As soon as the electronic consignment note meets the requirements of the e-protocol, it is regarded as equivalent to the paper version and has the same evidentiary value and the same effects.

e-CMR and eFTI fit together

e-CMR	eFTI
Transport Contract/Document	Regulatory access framework
Commercial logistics process	Authority inspection
B2B oriented	B2A oriented
Digital consignment note	Structural regulatory datasets
Document-centric	Data-centric
Focus on transport execution	Focus on compliance inspection
UNECE legal framework	EU Regulatory framework
<ul style="list-style-type: none">• CMR is mandatory for international transport of goods by road for reward• e-CMR has same evidentiary value as paper version	<ul style="list-style-type: none">• EU MS must be able to accept transport information by 9 July 2027• EU Economic operators must use certified eFTI Platforms

Conceptual and functional specifications of future eCMR applications


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Conceptual and functional specifications of future eCMR applications

This document is associated with the following:

Event

- (ITC) Inland Transport Committee (88th session)

Downloads

English

- [ECE-TRANS-2026-8e.docx](#)
- [ECE-TRANS-2026-8e.pdf](#)

French

- [ECE-TRANS-2026-8f.docx](#)
- [ECE-TRANS-2026-8f.pdf](#)

Russian

- [ECE-TRANS-2026-8r.docx](#)
- [ECE-TRANS-2026-8r.pdf](#)

Document Information

Published:
12/02/2026

[Link to specifications](#)

e-CMR Conceptual and Functional Specifications and UN/CEFACT Standards

Source: eCMR Ecosystem - Sustainable Transport Division UNECE (April 2026)

Article 5

Implementation of the electronic consignment note

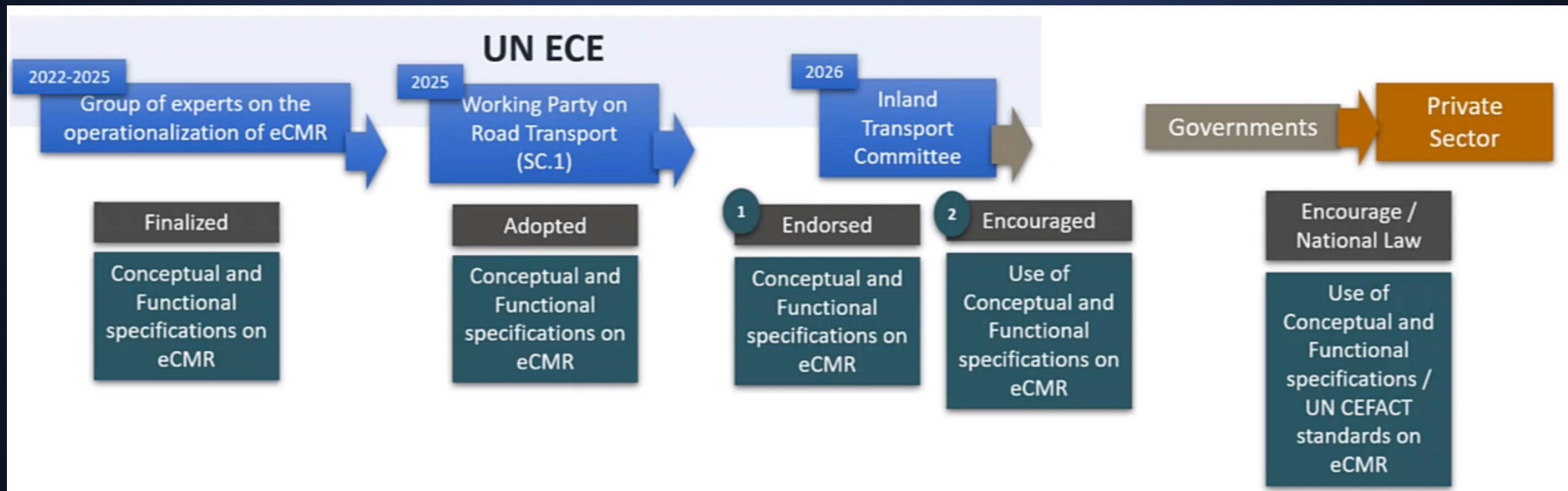
1. The parties interested in the performance of the contract of carriage shall agree on the procedures and their implementation in order to comply with the requirements of this Protocol and the Convention, in particular as regards:

- (a) The method for the issuance and the delivery of the electronic consignment note to the entitled party;
- (b) An assurance that the electronic consignment note retains its integrity;
- (c) The manner in which the party entitled to the rights arising out of the electronic consignment note is able to demonstrate that entitlement;
- (d) The way in which confirmation is given that delivery to the consignee has been effected;
- (e) The procedures for supplementing or amending the electronic consignment note; and
- (f) The procedures for the possible replacement of the electronic consignment note by a consignment note issued by different means.

2. The procedures in paragraph 1 must be referred to in the electronic consignment note and shall be readily ascertainable.

Right of Disposal of the goods

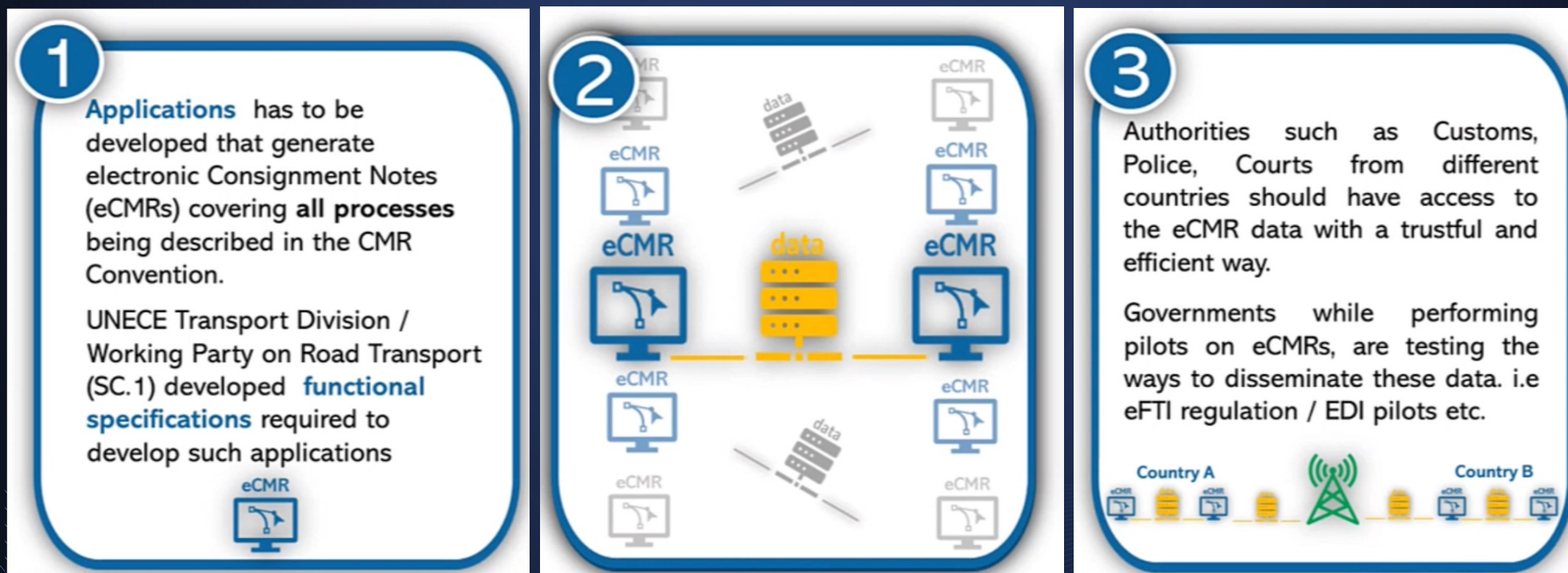
e-CMR Conceptual and Functional Specifications and UN/CEFACT Standards



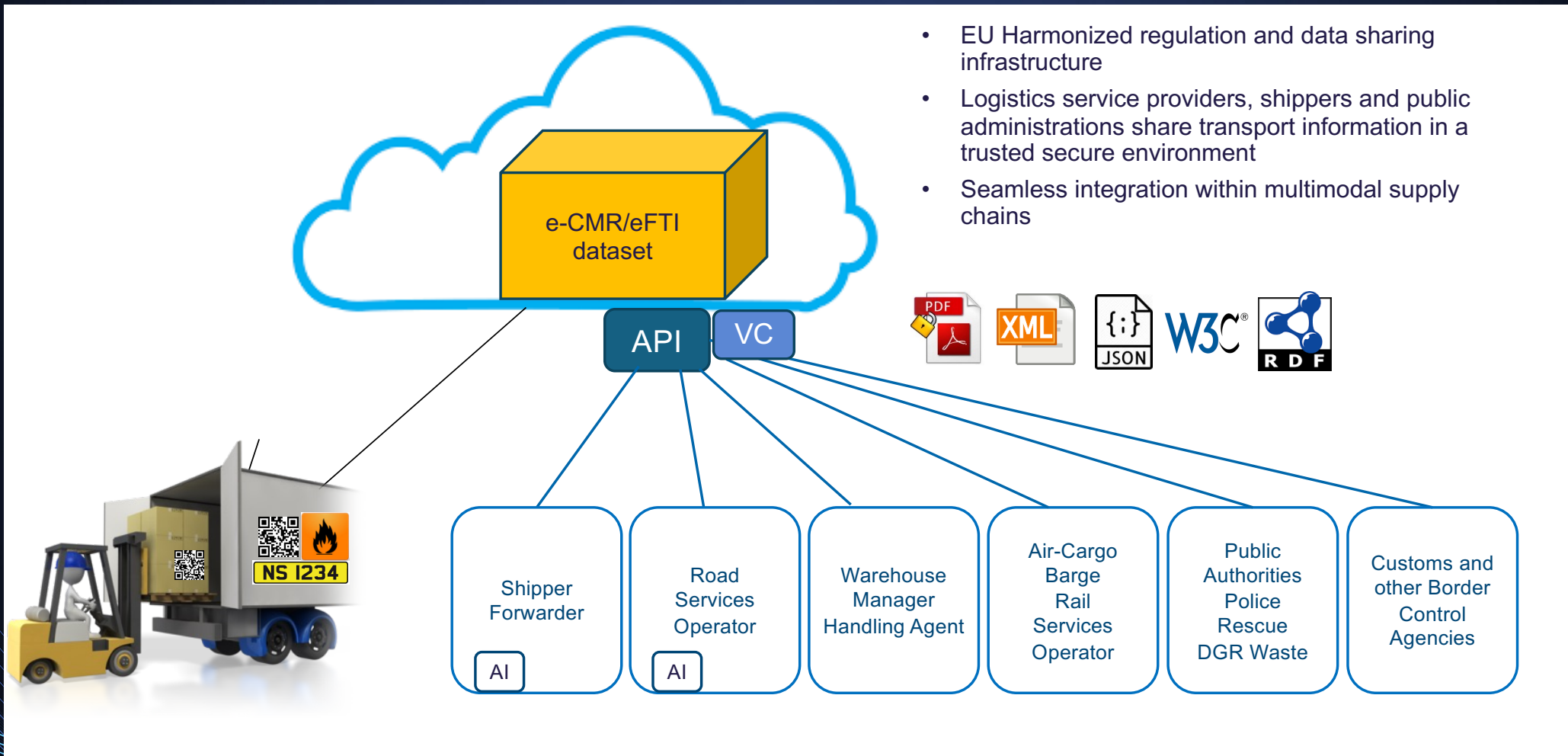
<https://unece.org/sites/default/files/2026-02/ECE-TRANS-2026-8e.pdf>

e-CMR must follow the CMR convention

Source: eCMR Ecosystem - Sustainable Transport Division UNECE (April 2026)

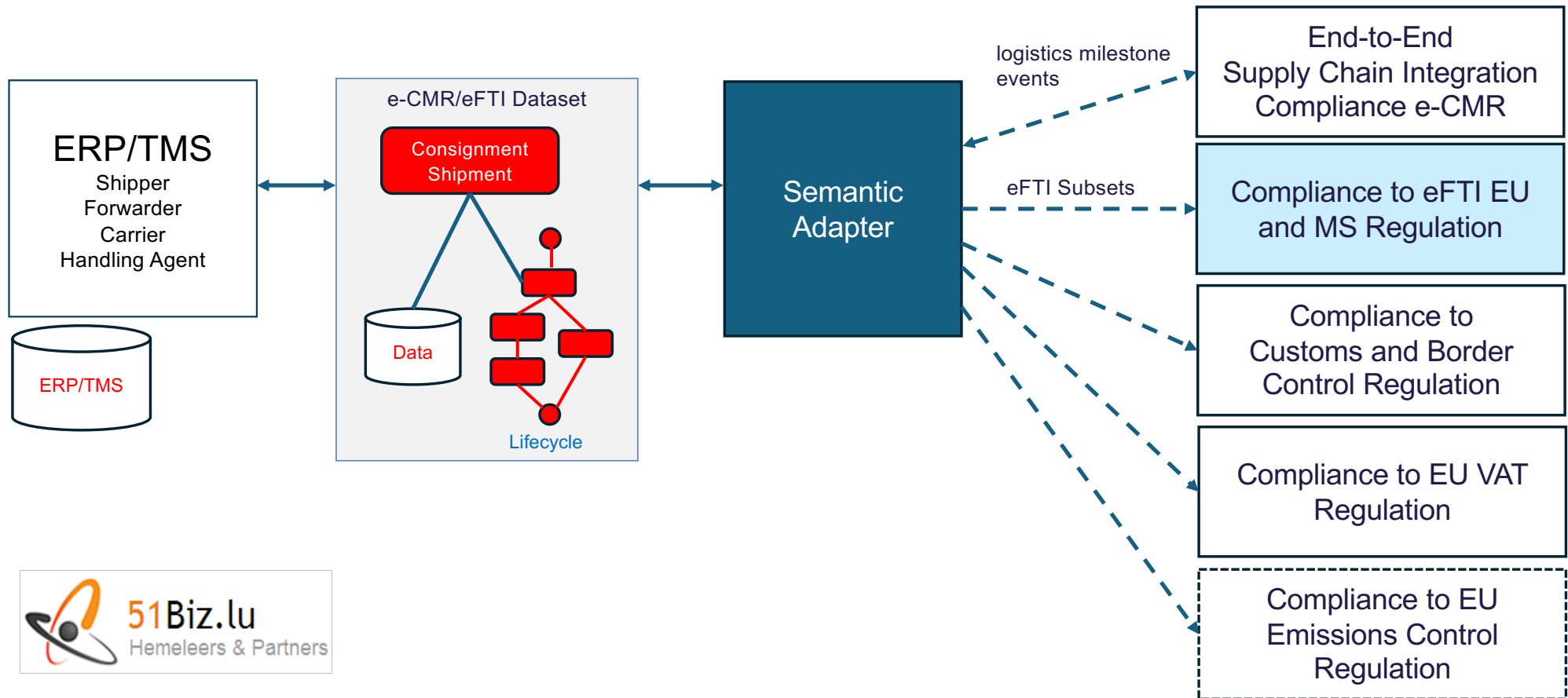


All parties have access to latest information



- EU Harmonized regulation and data sharing infrastructure
- Logistics service providers, shippers and public administrations share transport information in a trusted secure environment
- Seamless integration within multimodal supply chains

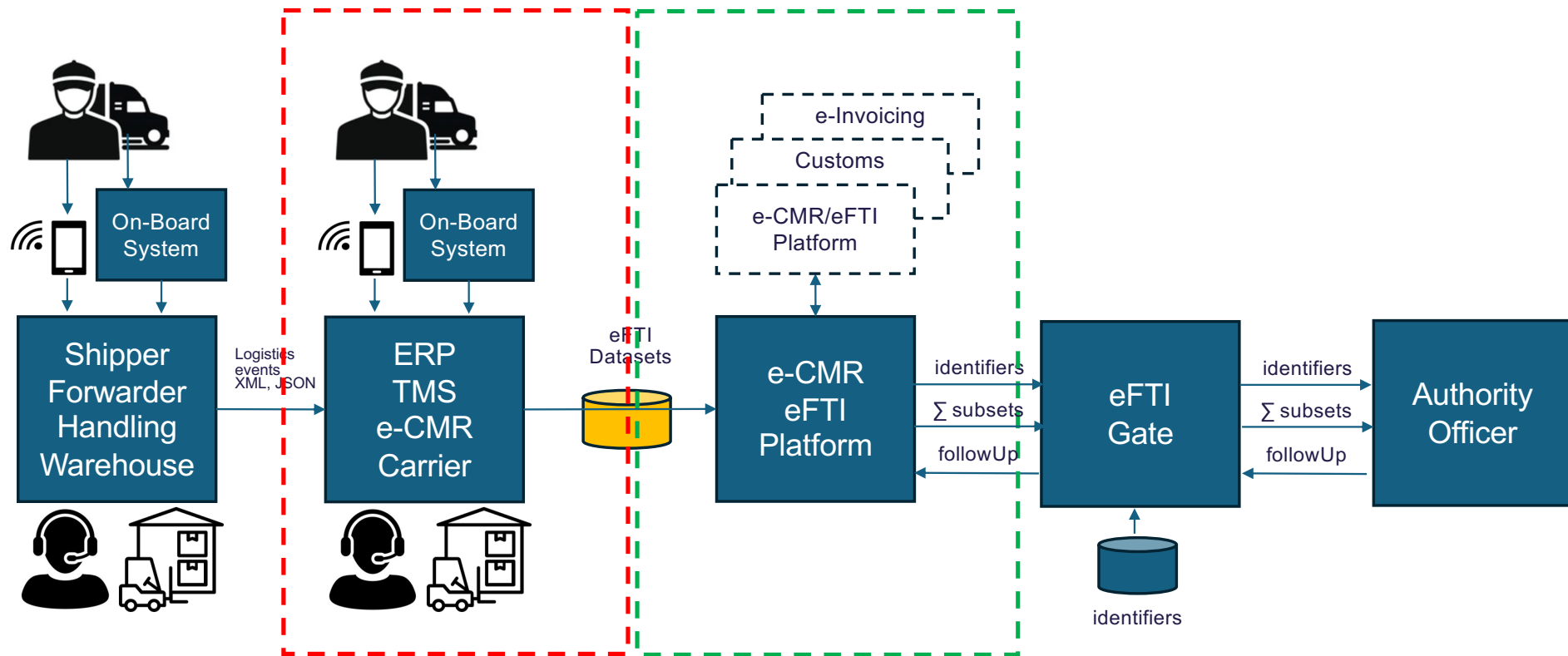
Interoperable semantics are a first priority



A practical implementation of e-CMR and eFTI

1. Booking + provide order/shipment data
2. Driver confirms receipt goods + transport data on mobile application
3. ERP/TMS consolidates data
4. ERP/TMS creates eFTI dataset on on eFTI Platform
5. eFTI Platform posts search identifiers on national eFTI Gate
6. Authority uses identifiers to access eFTI Platform

A practical implementation of e-CMR and eFTI





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the European Union