

e-CMR – implementation path



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Matjaž Auflič, Technical Director
Trinet Informatika d.o.o.

CMR Convention (Convention on the Contract for the International Carriage of Goods by Road) is an international treaty that governs the transportation of goods by road between countries that are party to the agreement:

- **CMR Convention** was signed on **May 19, 1956**, in **Geneva** and came into force on **July 2, 1961**
- Standardizes legal responsibilities and liabilities for carriers and shippers in cross-border road transport, which facilitates trade between countries
- Applies to the transport of goods between countries when at least one country is a signatory to the convention
- Adopted as of 2025 by 58 countries, primarily in Europe, but also in parts of Asia and the Middle East

Changes and development:

- **1978:** Protocol added on the use of currencies and limitation of liability
- **2008:** e-CMR protocol adopted for the use of electronic consignment notes



Key Features of the CMR Document:

- 1. Proof of Contract** – Confirms the agreement between the sender, carrier and recipient.
- 2. Standardized Information** – Includes details about the consignor, carrier, consignee, cargo, weight, transport route, and special instructions.
- 3. Liability Reference** – Defines the carrier's liability in case of loss, damage, or delay of goods.
- 4. Non-Negotiable** – Unlike a bill of lading in sea freight, a CMR document **does not transfer ownership** of goods.
- 5. Triplicate Copies** – Typically issued in three copies:
 - 1. Red** (consignor's copy)
 - 2. Blue** (carrier's copy)
 - 3. Green** (consignee's copy)

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LETTRÉ DE VOITURE INTERNATIONALE CMR INTERNATIONAL CONSIGNMENT NOTE

1 Expéditeur (nom, adresse, pays)
Sender (name, address, country)

2 Destinataire (nom, adresse, pays)
Consignee (name, address, country)

3 Prise en charge de la marchandise / Taking over the goods:
Lieu / Place
Pays / Country
Date
Heure d'arrivée / Time of arrival
Heure de départ / Time of departure

4 Livraison de la marchandise / Delivery of the goods:
Lieu / Place
Pays / Country
Heures d'ouverture du dépôt / Warehouse opening hours

5 Instructions de l'expéditeur
Sender's instructions

6 Transporteur (nom, adresse, pays, autres références)
Carrier (name, address, country, other references)

7 Transporteurs successifs / Successive carriers
Nom / Name
Adresse / Address
Pays / Country
Reçu et acceptation
Date
Signature

8 Réserves et observations du transporteur lors de la prise en charge de la marchandise
Carrier's reservations and observations on taking over the goods

9 Documents remis au transporteur par l'expéditeur
Documents handed to the carrier by the sender

10 Marques et numéros
Marks and Nos

11 Nombre de colis
Number of packages

12 Mode d'emballage
Method of packing

13 Nature de la marchandise
Nature of the goods

14 Poids brut kg
Gross weight in kg

15 Cubage m³
Volume in m³

16 Conventions particulières entre l'expéditeur et le transporteur
Special agreements between the sender and the carrier

17 À payer par
To be paid by
Prix de transport
Carriage charges
Frais accessoires
Accessories charges
Droits de douane
Customs duties
Autres frais
Other charges

18 Autres indications utiles
Other useful particulars

19 Remise en livraison
Cash on delivery

20 Ce transport est soumis, nonobstant toute clause contraire, à la Convention relative au contrat de transport international de marchandises par route (CMR)
This carriage is subject, notwithstanding any clause to the contrary, to the Convention on the Contract for the International Carriage of Goods by Road (CMR)

21 Établi à / Established in
le / on
22
Signature ou timbre de l'expéditeur
Signature or stamp of the sender

23
Signature ou timbre du transporteur
Signature or stamp of the carrier

24 Marchandises reçues / Goods received
Heure d'arrivée / Time of arrival
Lieu / Place
Heure de départ / Time of departure

25
Signature et timbre du destinataire
Signature and stamp of the consignee

Partie non contractuelle réservée au transporteur / Non-contractual part reserved for the carrier

Provisions of the Protocol – “Functionalities” of e-CMR:

Article 1: Definitions

- Convention, electronic communication, electronic consignment note, electronic signature

Article 2: Scope and Effect of the Electronic Consignment Note

- The electronic consignment note = the consignment note as defined in the convention

Article 3: Authentication of the Electronic Consignment Note

- The electronic signature ensures a connection with the signatory and identifies the signatory
- Data is accessible to entitled parties

Article 4: Conditions for Establishment of the Electronic Consignment Note

- Must contain the same particulars as the consignment note under the convention
- Ensures data integrity
- Possible amendments/supplements in accordance with the convention

Article 5: Implementation of the Electronic Consignment Note

- Interested parties must agree to the implementation of the electronic consignment note

Article 6: Documents Supplementing the Electronic Consignment Note

- Accompanying documents may also be in electronic form



Ratification of the protocol:

- 2017 Slovenia
- October 2023 **33 countries**
- October 2024 **39 countries**
- Among latest countries that accesed the protocol in 2024:
 - Austria
 - Hungary
 - Italy
- https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-B-11-b&chapter=11&clang=en

Stran 114 / Št. 6 / 9. 6. 2017

Uradni list Republike Slovenije – Mednarodne pogodbe

36. Zakon o ratifikaciji Dodatnega protokola h Konvenciji o pogodbi za mednarodni cestni prevoz blaga (CMR) v zvezi z elektronskim tovornim listom (MDPMCPB)

Na podlagi druge alineje prvega odstavka 107. člena in prvega odstavka 91. člena Ustave Republike Slovenije izdajam

U K A Z

o razglasitvi Zakona o ratifikaciji Dodatnega protokola h Konvenciji o pogodbi za mednarodni cestni prevoz blaga (CMR) v zvezi z elektronskim tovornim listom (MDPMCPB)

Razglasjam Zakon o ratifikaciji Dodatnega protokola h Konvenciji o pogodbi za mednarodni cestni prevoz blaga (CMR) v zvezi z elektronskim tovornim listom (MDPMCPB), ki ga je sprejel Državni zbor Republike Slovenije na seji dne 24. maja 2017.

Št. 003-02-5/2017-18
Ljubljana, dne 1. junija 2017

Borut Pahor l.r.
Predsednik
Republike Slovenije



e-CMR standard data model UN/CEFACT

- Published February 2018
- Based on Multi Modal Transport Reference Model
- https://unece.org/fileadmin/DAM/cefact/brs/eCMR-BRS-V_01.zip
- Standard revision 2026



Structure - Business Names			
Occurrence	Components	Reference	Comment
0 .. unbounded	Related Observation		
0 .. 1	Sequence Number		
0 .. 1	Description		
0 .. unbounded	Related Binary File		
0 .. 1	ID		
0 .. 1	URI		
0 .. 1	MIME Code		
0 .. 1	Encoding Code		
0 .. 1	Character Set Code		
0 .. 1	Size		
0 .. unbounded	Applicable Note		
0 .. 1	Subject Text		
0 .. 1	Content Code		
0 .. 1	Content Text		
0 .. 1	Subject Code		
0 .. unbounded	Governmental Examination Event		
0 .. 1	Actual Occurrence Date Time		
0 .. 1	Actual Occurrence Location		
0 .. 1	ID		
0 .. 1	Name		
0 .. unbounded	Certifying Party		
0 .. 1	ID		
0 .. 1	Name		
0 .. 1	Role Code		
0 .. unbounded	Additional Particulars Note		
0 .. 1	Subject Text		
0 .. 1	Content Code		
0 .. 1	Content Text		
0 .. 1	Subject Code		
0 .. unbounded	Related Observation		
0 .. 1	ID		
0 .. 1	Description		
0 .. unbounded	Related Binary File		

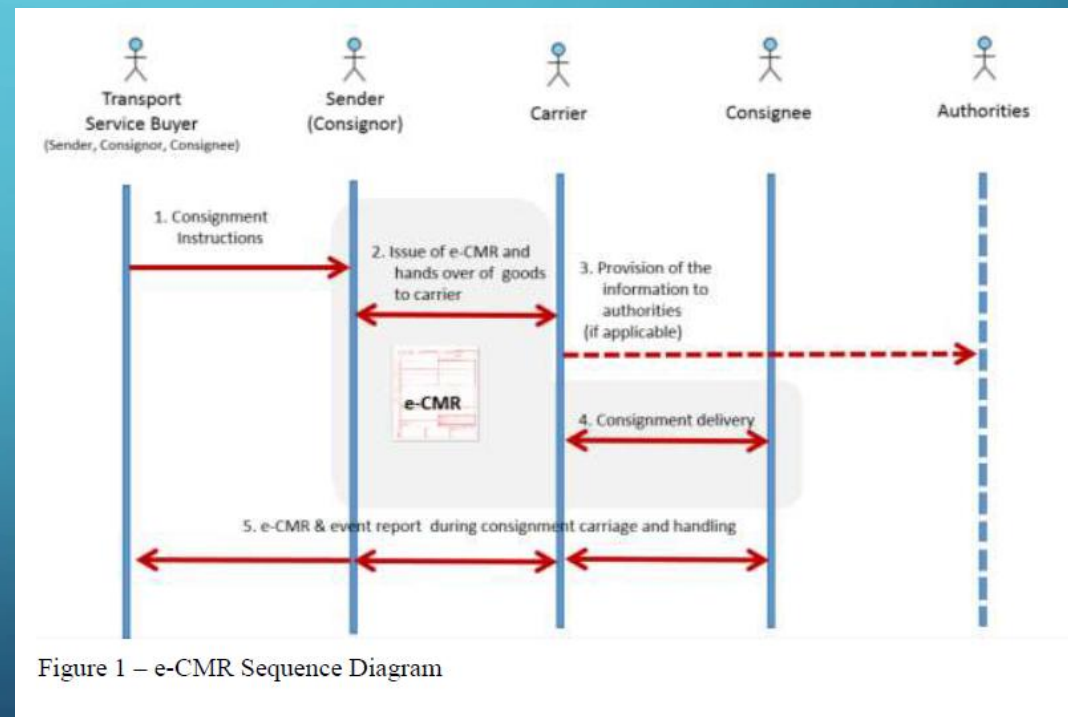
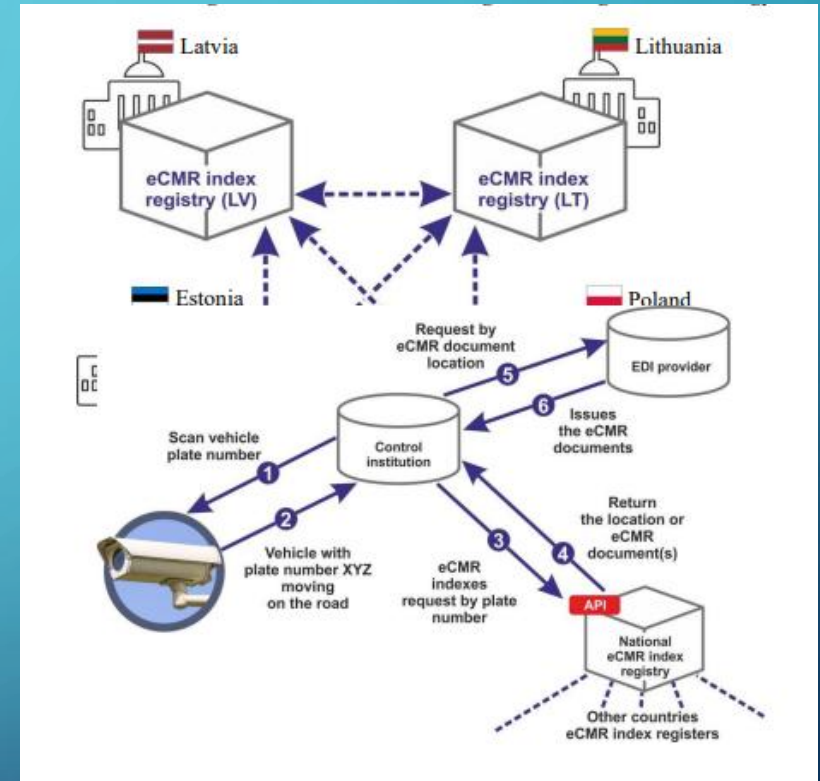


Figure 1 – e-CMR Sequence Diagram

Pilot projects from 2017 to present

- France – Spain January 2017
 - First known pilot project
- Benelux countries 2017 – present
 - Until the introduction of the eFTI regulation
- Diginno project (Baltic states + Poland) 2019 – 2020
 - Blockchain technology
- Aeolix (Czech Republic, Germany, Greece, Romania, Serbia) 2019
- France, Netherlands, United Kingdom 2019
- Slovenia - Türkiye 2019
- Russia – Belarus 2021 - 2023



Custodian of the Convention and Additional Protocol:

- United Nations Economic Commission for Europe (UNECE)
 - **ITC** Inland Transport Committee <https://unece.org/transport/inland-transport-committee>
 - Working Party on Road Transport (**SC.1**) <https://unece.org/transport/road-transport>
 - **April 2018** Need for further clarifications regarding the Additional Protocol
 - **October 2019** “Without prejudice” guidance note on the legal aspects
 - https://unece.org/fileadmin/DAM/trans/main/sc1/eCMR_Brochure_EN.pdf
- **October 2021** Paper on the operationalization of the e-CMR Additional Protocol
 - Informal working group (Slovenia (Chair), Germany, Latvia, IRU, TOBB Türkiye)
 - <https://unece.org/sites/default/files/2021-08/ECE-TRANS-SC1-2021-1e.pdf>
- **June 2022 – May 2025** GE.22 – Expert Group on the Operationalization of the e-CMR Additional Protocol

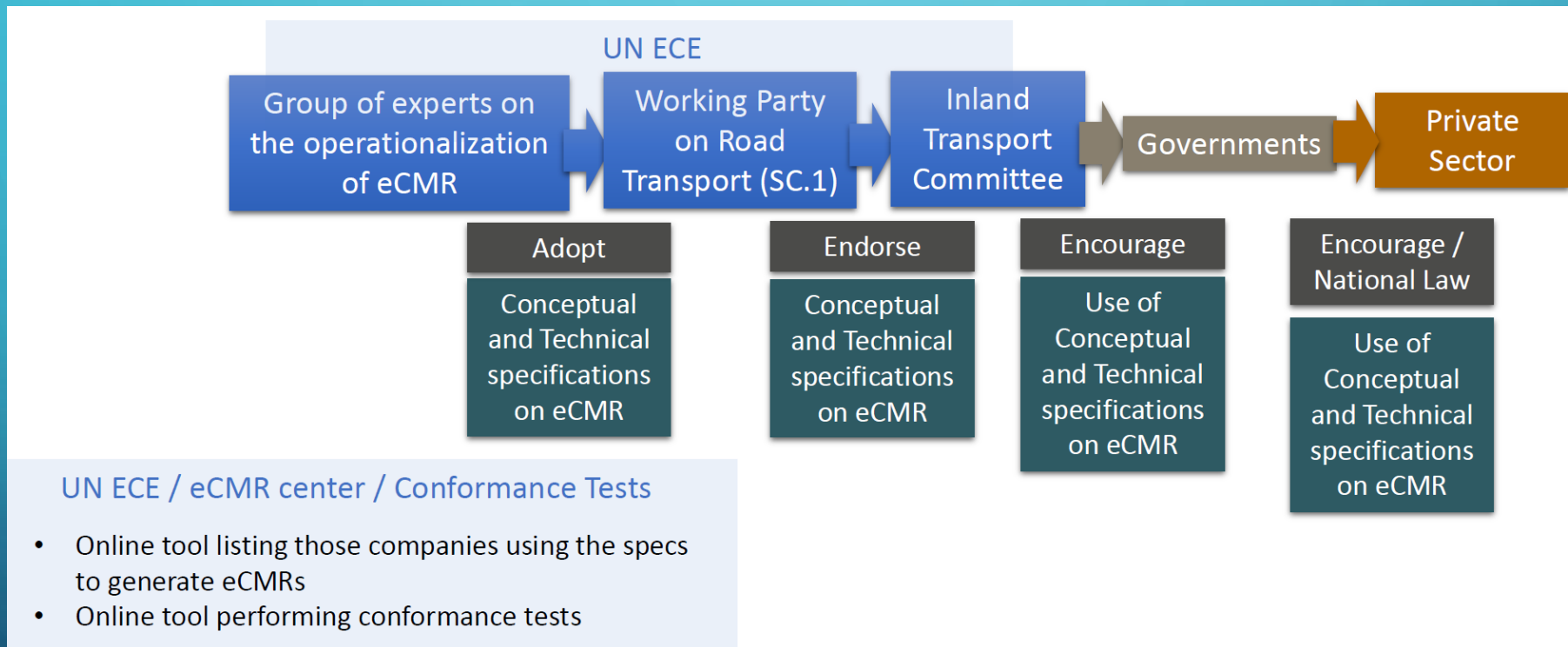
Paper on the operationalization of the Additional Protocol to the CMR concerning the Electronic Consignment Note (eCMR)

- Informal Working Group 2020 - 2021
 - Slovenia (Chair)
 - Germany, Latvia, IRU, TOBB Türkiye
- Key Advantages of e-CMR Implementation
 - Time savings and reductions in administrative costs
 - Facilitation of transport processes
 - Access to information in real time
 - Enhanced health and safety
 - Reduction in paper consumption
 - Trade and innovation spillovers
- Topics covered
 - Costs, e-CMR pilot projects, lessons learned, next steps
- Link to the paper
 - <https://unece.org/sites/default/files/2021-08/ECE-TRANS-SC1-2021-1e.pdf>

GE.22 – expert group for the operationalization of e-CMR additional protocol

- 8 working meetings between 2022 and 2025
- Proposed conceptual and functional specifications => public goods
 - Recommended conceptual and functional specifications of the future eCMR system(s)
 - <https://unece.org/transport/documents/2025/08/working-documents/group-experts-operationalization-ecmr-report-part-i>
 - Revised operational procedures stipulated by the eCMR Additional Protocol – digital environment
 - <https://unece.org/transport/documents/2025/08/working-documents/group-experts-operationalization-ecmr-report-part-ii>
 - Recommended conceptual and functional specifications of the future eCMR system(s) / Use Case Analysis
 - <https://unece.org/transport/documents/2025/08/working-documents/group-experts-operationalization-ecmr-report-part-iii>

The result of the GE.22 group's work serves as the basis for the functional and technical specifications of the future e-CMR environment; a further timeline does not (yet) exist.



ATP vs CMR – Core Comparison

Aspect	ATP	CMR
Legal nature	Technical certification	Transport contract
Object	Vehicle / equipment	Goods shipment
Validity	Multi-year	Single trip
Issued by	Inspection authority	Sender / carrier
Scope	Food safety compliance	Liability & contract
Convention	ATP Agreement	CMR Convention

How CMR mentions vehicle equipment?

- CMR does not regulate vehicles or equipment
- Vehicle suitability is assumed
- Equipment issues affect carrier liability
- ATP compliance comes from separate legal framework

Can ATP be part of eCMR?

- ATP can be attached or referenced in eCMR
- It cannot be legally replaced by eCMR
- ATP remains a separate legal instrument
- What Article 6 actually governs when ATP is attached
 - The **integrity and signature of the eCMR data set**
 - Not the **legal validity of every attached file**
 - Therefore:
 - When the eCMR is authenticated
 - The ATP can be merely **referenced or displayed**
 - The ATP's authenticity must be proven **elsewhere** (authority / registry)

Should ATP Become Electronic?

- **Yes, but not like eCMR**
- ATP should be a digital vehicle status
- Ideal eATP Model
 - Central or federated registry
 - VIN and plate-based lookup
 - Real-time enforcement access
 - Integration with eCMR and fleet systems

eCMR provisions applicable for electronic ATP certificate

Provides a mature legal-technical framework for authenticity, integrity, accessibility and interoperability that can be directly reused to enable a legally valid electronic ATP certificate.

eCMR Protocol Requirement	Applicable to Digital ATP	Purpose
Legal equivalence	Yes	Replace paper ATP
Electronic signatures	Yes	Authenticity
Data integrity	Yes	Prevent alteration
Party identification	Yes	Trust & accountability
Accessibility	Yes	Roadside inspections
Technology neutrality	Yes	Cross-border use
Auditability	Yes	Enforcement

NEXT STEPS

- Legal Framework
 - Define the ATP protocol and its legal scope
- Integration with Existing Electronic Documents
 - Ensure ATP compliance can be accessed and referenced within existing documents (e.g. eCMR)
 - Enable interoperability with current digital document ecosystems
- Existing Electronic Certificates
 - Leverage already established electronic certificates
 - Apply recognized good practices and standards
- Pilot Projects
 - Launch pilot initiatives
 - Develop and validate a proof of concept

Question	ATP Answer	CMR Answer
What is regulated?	Vehicle capability	Transport contract
Who trusts it?	Authorities	Commercial parties
Digital future?	Registry-based status	Transactional document
Can they merge?	No	No – complementary only



Questions, comments, remarks ..



Thank you for your attention

Trinet Informatika - <https://www.trinet.si/>
Matjaž Auflič – matjaz.auflic@trinet.si