Digitalization of consignment notes: CMR Convention and eCMR

SPECA Digitalization Mini Workshop Astana, 17 November 2023 UNECE Sustainable Transport Division





This presentation will cover...

- Introduction/recap of CMR and eCMR
- Contracting Parties
- Benefits and Costs of acceding to eCMR
- Group of Experts on the Operationalization of eCMR
- Latest activities concerning the operationalization of eCMR



CMR

- CMR: Convention on the Contract for the International Carriage of Goods by Road
- To facilitate international road transport through a commonly agreed transport contract (consignment note)
- CMR sets the framework for claims and actions against a carrier in the event of the loss of the goods or if there is a delay.
- A consignment note is proof of the carriage contract between sender and carrier and is valid in a court of law.
- Concerns private law.
- There are 11 mandatory particulars that determine the status of a consignment note (article 6 of CMR)
- 58 contracting parties.



1956 CMR Key Provisions

- Defines contract conditions
 - The contract document: the Consignment Note
 - The conclusion and performance of the contract of carriage
- Fixes carrier's liability limits in case of total or partial loss of goods or delay
- Sets the framework for claims and actions



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Users of CMR



Trade/ Shipping Economy

Forwarders/ Carriers

- Gain in security through clear identification of the participants
- Simplification in the document run
- Highest evidence in court
- Gain in security through clear identification of the participants
- Safety gain through clear identification of all carriers (subcontractors)
- Fast documentation and preservation of evidence in case of damage to the cargo
- Simplification in the document run

Source: Bundesverband Güterkraftverkehr Logistik und Entsorgung (BGL) e.V.

Users of CMR (cont'd)



States Authorities	 CMR is a customs document: proof of actual export and domestic delivery ("Customs Entry Certificate") Halting the practice of illegal VAT refunds Police
Banks / Insurances	 Use as a documentary letter of credit Effective protection against fake documentary credits Gain in security through clear identification of the participants Simplification in the document run

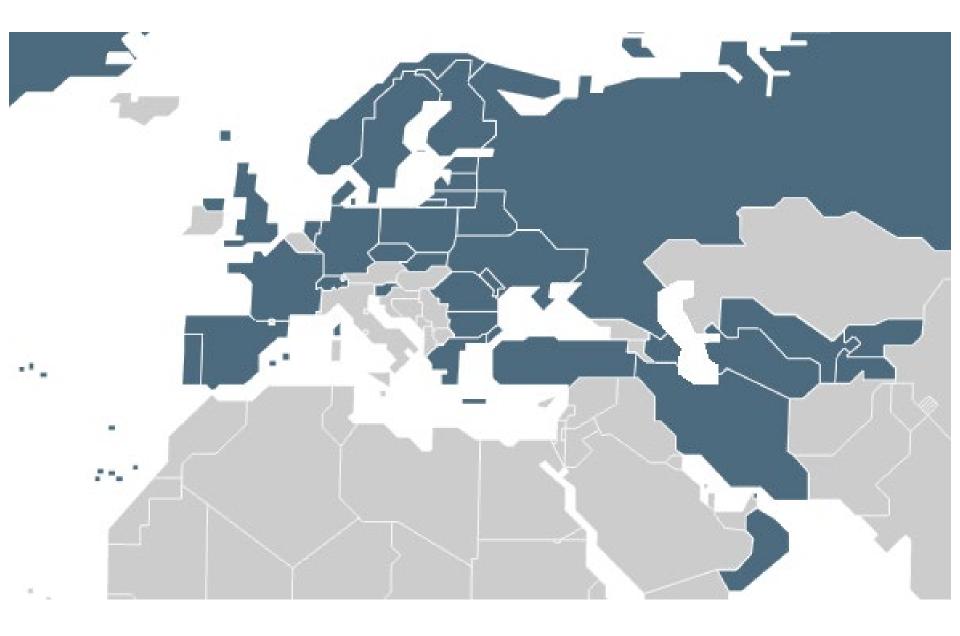
• Highest evidence in court when using qeS



e-CMR

- e-CMR: Additional Protocol to the CMR concerning the electronic consignment note
- e-CMR facilitates/legitimises the use of electronic consignment notes in place of paper ones.
- Accession only possible for countries that are already contracting parties to CMR
- (1) Data integrity/trust and (2) Agreement on procedures and implementation between the parties are the two core elements needed to operationalize e-CMR
- 34 contracting parties.







Explanatory memorandum to the e-CMR

The object of the additional Protocol to the CMR is therefore to authorise, for road transport, in the model of other existing conventions in the field of transport, the electronic consignment note by means of processes used for the recording and electronic processing of data.

However, it is essential that in legally contractual relations the best conditions for the protection and security of documents are offered to operators:

- the inalterability of the message, without the agreement of the parties, but also the possibility to change if there is agreement;
- understanding and acceptance of the message by the consignee;
- identification of the parties and security of the authentification of their signatures.

Source: ECE/TRANS/SC.1/2007/2

Operationalizing the eCMR



(1) Data integrity/trust (2) Agreement by the contracting parties on procedures and implementation

•Authentication of the eCMR (art.3)

- 'Reliable electronic signature'

- •Conditions for the establishment of the eCMR (art.4)
 - 'procedure... shall ensure integrity of the particulars... from the time when it was first generated...make it possible to detect ..any supplement or amendment..."
- •Implementation of the eCMR (art.5)
 - 'parties interested in the performance of the contract of carriage shall agree on the procedures and their implementation...'



Implementation of the eCMR

Per art. 5 para 1 of the e-CMR, "parties interested in the performance of the contract of carriage" shall agree on the following items:

- 1. Method for the issuance and delivery of the e-CMR to the entitled party
- 2. Assurance that the e-CMR retains its integrity
- 3. Manner in which the party entitled to the rights arising out of the e-CMR is able to demonstrate that entitlement
- 4. Way in which confirmation is given that delivery to the consignee has been effected
- 5. Procedures for supplementing or amending the e-CMR
- 6. Procedures for the possible replacement of the e-CMR by a consignment note issued by different means



Article 5 (cont'd)

Paragraph 2 requires that "[t]he procedures in para 1 must be referred to in the electronic consignment note and shall be readily ascertainable." Accordingly, the agreed procedures and their implementation per para 1 must be referred to in the electronic consignment note.

The eCMR is silent on specifications related to technology and technical matters, as well as in relation to a recommended form and format of the electronic consignment note. Given this, the parties have the flexibility to choose appropriate procedures and methods of implementation as long as they comply with the requirements of para 1.

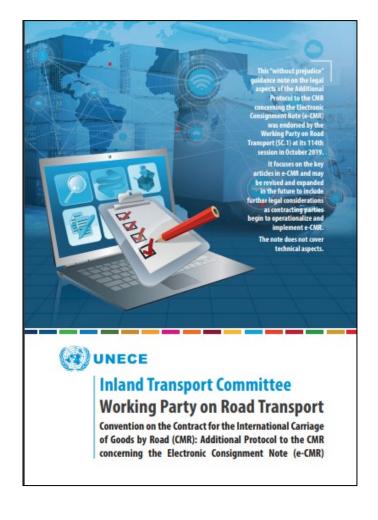
However, this flexibility in relation to technology and technical matters should be distinguished from stipulations which are not permitted by CMR (per art 41 of CMR).

Guidance note on the legal aspects of eCMR



https://unece.org/fileadmin/DAM/trans/main/sc1/eCMR_Brochure_EN.pdf

https://unece.org/transport/road-transport (in EN, FR and RU)





Benefits of accession

- 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



Costs of accession

- For businesses/industry: design, implementation and maintenance costs
- (Potentially for authorities: design, implementation and maintenance costs)

Observations thus far regarding eCMR implementation



- There are no operations of eCMR so far agreed by CPs. That is, no harmonized approach for eCMR implementation yet.
- Existing pilots have been very helpful to test pilot designs and concepts, and also revealed areas for improvement or further refinement.
- As pilots have tended to focus on senders, carriers and consignees, the needs of all relevant actors such as State authorities such as Customs and Courts, successive carriers and the insurance/banking sector should also be taken into account as eCMR systems are refined and improved for operationalization and mass adoption.
- TRUST will be central to the success of the mass adoption of electronic consignment notes and the operationalization of eCMR.

Operationalization challenges (1/3)



- Authentication/the integrity of the data. How does the system(s) ensure the integrity of data and inalterability of messages? The ability to change/amend details on the electronic consignment note, who, what, how? How and where/who will keep the amendment history, and ensure integrity/security of all of the data related to a particular electronic consignment note? How long is the data is stored? Who is entitled to access the data?
- The Additional Protocol refers to electronic signatures but also to other means. Experience from the digitalization of other UN Conventions (eTIR) saw that the lack of harmonization / international agreement on electronic signatures prevented its use as a commonly agreed method accepted by all contracting parties. A commonly agreed and feasible way must be identified for eCMR system.
- Access to the system(s): Who should have access to the system(s) and how are they granted access/authenticated?

Operationalization challenges (2/3)

- Practical considerations: Who initiates the electronic consignment note/ demand (consignor / carrier / both)? How the system(s) develops / produces the electronic consignment note, the data sets that are being included based on the convention (mandatory / optional)? What the output should be? A QR code, a pdf file, electronic messages, others)? How are the three copies of the consignment note reflected electronically (sender, accompany the goods, carrier)
- Proof of delivery: How does the system ensure that the consignee has truly received the goods?
- Changing/amending instructions: Who has the right to change/ amend the electronic consignment note, when and how? How will the other stakeholders be informed about these changes? Is their confirmation/agreement needed to authorize the changes? If yes, how is this going to be achieved while en route?
- Accompanying documents: should there be limitations or requirements?

Operationalization challenges (3/3)



- Fallback procedures when technology fails or is down.
- General issue of cyber-security/storage of data/access to the data: what international and/or regional laws/standards on privacy and use of information should be observed/complied with?
- Improvements/technological upgrades to the system(s)

Group of Experts on the Operationalization of eCMR (SC.1/GE.22)

To discuss and if possible agree on the requirements of article 5 of the Additional Protocol to CMR including the objective/scope, the high level architecture, and the conceptual specifications for a future environment that would support the conclusion and exchange of electronic consignment notes in accordance with the provisions of CMR and its Additional Protocol. Such work should also include an impact assessment of possible implementation scenarios of a future eCMR environment.



Latest on GE.22 status and activities

- GE.22 met 6 times from July 2022 to July 2023.
- It prepared an extensive report based on documents ECE/TRANS/SC.1/2023/2 to 5.
- However there were some points in the analysis contained in the documents that require further elaboration for GE.22 to give concrete recommendations to SC.1, and to finalize the conceptual and functional specifications.
- At its 118th session in October 2023, SC.1 agreed to a 2 year extension of GE.22 for the completion of its work, including the preparation of technical specifications if time permits. GE.22 will report back to SC.1 at its 120th session in October 2025.



Thank you

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