

Group of Experts on Operationalization of eCMR (GE.22)

1st session

Geneva, 4-5 July 2022

UNECE Sustainable Transport Division



UNECE

This presentation will cover...

- Objectives of GE.22
- An introduction to CMR and eCMR
- Contracting Parties
- Benefits and Costs of acceding to eCMR
- Key challenges/questions to be answered in implementing eCMR

Mandate of 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.

Tasks of GE.22

GE.22 should define/describe in particular (non exhaustive list):

- Scope / Objectives of a future eCMR environment;
- Stakeholders of the eCMR environment;
- High level architecture of the eCMR environment;
- The method for the issuance and the delivery of the electronic consignment note to the entitled party;
- An assurance that the electronic consignment note retains its integrity;
- The manner in which the party entitled to the rights arising out of the electronic consignment note is able to demonstrate that entitlement;
- The way in which confirmation is given that delivery to the consignee has been effected;
- The procedures for supplementing or amending the electronic consignment note;

Tasks of GE.22 (cont'd)

- The procedures for the possible replacement of the electronic consignment note by a consignment note issued by different means;
- Conceptual specifications;
- Impact assessment.

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.



Eleven mandatory particulars of a consignment note



1. Date of the consignment note and the place at which it is made out
2. Name and address of the sender
3. Name and address of the carrier
4. Place and date of taking over of the goods and the place designated for delivery
5. Name and address of the consignee
6. Description in common use of the nature of the goods and the method of packing, and in case of dangerous goods, their generally recognized description
7. Number of packages and their special marks and numbers
8. Gross weight of the goods or their quantity otherwise expressed
9. Charges relating to the carriage (carriage charges, supplementary charges, customs duties and other charges incurred from the making of the contract to the time of delivery)
10. Requisite instructions for Customs and other formalities
11. A statement that the carriage is subject, notwithstanding any clause to the contrary, to the provisions of this Convention

Seven optional particulars of a consignment note

1. Statement that transshipment is not allowed
2. Charges which the sender undertakes to pay
3. Amount of “cash on delivery” charges
4. **Declaration of the value of the goods**
5. Sender’s instructions to the carrier regarding insurance of the goods
6. Agreed time limit within which the carriage is to be carried out
7. List of documents handed to the carrier.

Plus any other particulars which the parties deem useful.

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

Photo credit: IRU

Lettre de transport international		LETTRE DE ROUTE INTERNATIONALE		INTERNATIONAL CONSIGNMENT NOTE	
City for sender		CMR		No 240302	
1. Expéditeur (nom, adresse, pays) Sender (name, address, country)	6. Transporteur (nom, adresse, pays, adresse postale) Carrier (name, address, country, other addresses)			7. Transporteur successeur / Successive carriers	
2. Destinataire (nom, adresse, pays) Consignee (name, address, country)	3. Prix en charge de la marchandise / Freight over the goods Libra / Pèse Pays / Country			4. Adresse et observations du transporteur sur le prix en charge de la marchandise Carrier's observations on freight over the goods	
4. Libération de la responsabilité / Delivery of the goods Libra / Pèse Pays / Country Heures d'ouverture de l'algèbre / Warehouse opening hours	5. Instructions de l'expéditeur Sender's instructions			8. Documents remis au transporteur par l'expéditeur Documents handed to the carrier by the sender	
10. Poids et nombre Mass and piece	11. Nombre de colis Number of packages	12. Poids et emballage Weight and packing	13. Nature de la marchandise Nature of the goods	14. Poids brut, kg Gross weight in kg	15. Coûtage en \$ Tare in \$
16. Numéro ONU UN Number		17. Non toxique Non toxic	18. Nombre d'écoules Label number	19. Groupe d'emballage Packaging Group	
18. Autres indications Other useful particulars		19. Retenu au départ Cash on-delivery		20. Ce transport est soumis, notwithstanding any clause to the contrary, to the 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. DATES / DATES		22. MARCHANDISES / GOODS		23. MARCHANDISES / GOODS	
21. DATES / DATES		22. MARCHANDISES / GOODS		23. MARCHANDISES / GOODS	
24. Signature de l'expéditeur Signature of sender		25. Signature de l'expéditeur Signature of sender		26. Signature et tampon du destinataire Signature and stamp of consignee	
Partie non contractuelle réservée au transporteur / Non-contractual part reserved for the carrier					

Users of CMR

Trade/ Shipping Economy

- Gain in security through clear identification of the participants
- Simplification in the document run
- Highest evidence in court

Forwarders/ Carriers

- Gain in security through clear identification of the participants
- Safety gain through clear identification of all carriers (sub-contractors)
- 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
- 30 contracting parties.



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)

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 authentication of their signatures.

Authentication of the electronic consignment note: article 3



Article 3 lists the methods to authenticate electronic consignment notes.

Paragraph 1 specifies that “the electronic consignment note shall be authenticated by the parties to the contract of carriage by means of a reliable electronic signature that ensures its link with the electronic consignment note. The reliability of an electronic signature method is presumed, unless otherwise proved, if the electronic signature:

- (a) is uniquely linked to the signatory;
- (b) is capable of identifying the signatory;
- (c) is created using means that the signatory can maintain under his sole control; and
- (d) is linked to the data to which it relates in such a manner that any subsequent change of the data is detectable.”

Article 3 (cont'd)

Paragraph 2 gives the contracting parties the **option** to **authenticate** an electronic consignment note “by any other electronic authentication method permitted by the law of the country in which the electronic consignment note has been made out”. In this regard, **regional legislation on electronic identification and electronic transactions** may be applicable and should be considered.

Paragraph 3 specifies that “the particulars contained in the electronic consignment note shall be **accessible** to any party entitled thereto”.

In general the protocol is **technology neutral**.

Conditions for the establishment of the electronic consignment note: article 4

Article 4 para 1 specifies that “[t]he electronic consignment note shall contain the same particulars as the consignment note referred to in [CMR]”.

Paras 2 and 3 relate to the integrity of the original particulars and any subsequent amendments to the electronic consignment note.

Per para 2, “[t]he procedure used to issue the electronic consignment note shall ensure the integrity of the particulars contained therein from the time when it was first generated in its final form. There is integrity when the particulars have remained complete and unaltered, apart from any addition or change which arises in the normal course of communication, storage and display.”

Para 3 specifies that “[t]he procedure used for supplementing or amending the electronic consignment note shall make it possible to detect as such any supplement or amendment to the electronic consignment note and shall preserve the particulars originally contained therein.”

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).

Documents supplementing the electronic consignment note: article 6



Article 6 para 1 states that “[t]he carrier shall hand over to the sender, at the latter’s request, a receipt for the goods and all information necessary for identifying the shipment and for access to the electronic consignment note to which this Protocol refers.”

Para 2 provides that the sender may furnish the carrier with “[t]he documents referred to in Article 6, para 2(g) and Article 11 of [CMR]... in the form of an electronic communication if the documents exist in this form and if the parties have agreed to procedures enabling a link to be established between these documents and the electronic consignment note to which this Protocol refers in a manner that assures their integrity.”

Article 6, para 2(g) of CMR refers to “a list of the documents handed to the carrier” while Art 11 of CMR refers to documents “[f]or the purposes of the customs or other formalities which have to be completed before delivery of the goods.”

Operationalizing the eCMR

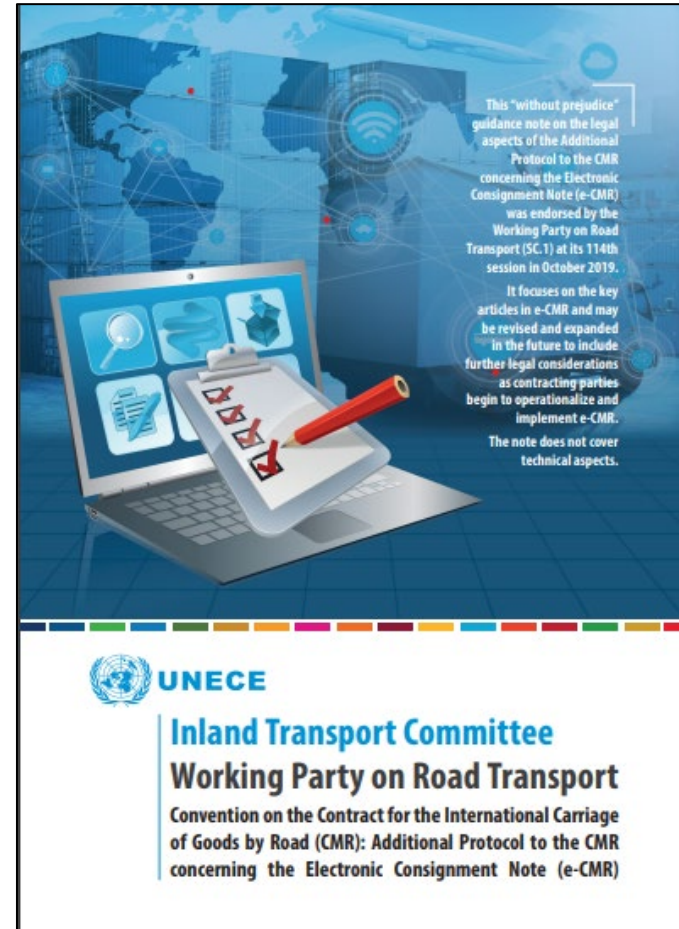
(1) Data integrity/trust (2) Agreement by the contracting parties on procedures and implementation

- **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...’

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)



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 (1/4)

- 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 (2/4)

- 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 (3/4)

- 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)

Operationalization challenges (4/4)

Procedures described in Article 5 of the Additional Protocol to be agreed upon by the “parties interested in the performance of the contract of carriage”

- Authentication
- Mutual recognition
- Method for the issuance and delivery of the electronic consignment note to the entitled party
- Assurance that the electronic consignment note retains its integrity
- Manner in which the party entitled to the rights arising out of the electronic consignment note is able to demonstrate that entitlement
- Way in which confirmation is given that delivery to the consignee has been effected
- Procedures for supplementing or amending the electronic consignment note
- Procedures for the possible replacement of the electronic consignment note by a consignment note issued by different means

Thank you

Rebecca Huang
Economic Affairs Officer
SC.1 Secretary
UNECE
Sustainable Transport Division
8-14, Avenue de la Paix
CH-1211 Geneva 10
Switzerland
Email: rebecca.huang@un.org