Operationalization of the electronic CMR consignment note (eCMR)

Note by the secretariat

Summary

The document reports on the latest developments on the work of the Group of Experts on the operationalization of eCMR.

The Committee may wish to take note of the information provided in this document, invite all relevant parties that are participating in the Group of Experts on the operationalization of the eCMR to finalize this demanding task as soon as possible, and ensure that the future eCMR environment/system will include the needs of all stakeholders involved in today’s daily CMR practice, from all regions, thus creating a sustainable electronic solution, continuing the great success over time of the CMR Convention by leading intermodal transport to a fully digital environment.

The Committee may wish to endorse the decision and request of Working Party on Road Transport (SC.1) to extend for additional two years the mandate of the Group of Experts on the operationalization of the eCMR (GE.22) for the completion of its work based on its current terms of reference including the preparation of technical specifications (if time permits) and reporting back to SC.1 at its 120th session in October 2025.

I. Background and Mandate

1. At its 85th session the Committee welcomed the efforts of the secretariat and the contracting parties to operationalize the eCMR protocol to the Convention on the Contract for the International Carriage of Goods by Road (CMR Convention) and invited all relevant parties to finalize this demanding task as soon as possible, and to ensure that the future eCMR environment/system will include the interests of all stakeholders involved in today’s daily CMR practice and of all regions. This will create a sustainable electronic solution and
continue the great success over time of the CMR Convention by leading intermodal transport to a fully digital environment (ECE/TRANS/328, paragraph 123).

2. This document has been prepared in accordance with the 2023 Programme of Work of the Inland Transport Committee (ITC) (ECE/TRANS/328, paragraph 33 and ECE/TRANS/2023/11, programme activity 4 (g): Working Party on Road Transport and subsidiary groups of experts). It reports on the latest developments on the work of the Group of Experts on the operationalization of eCMR.

II. Historical Review

3. The CMR Convention on the Contract for the International Carriage of Goods by Road (CMR Convention) came into force in 1956 and has currently 58 contracting parties (as of February 2023). As stipulated in Article 1, the CMR Convention applies to every contract for the carriage of goods by road in vehicles for reward if the origin and the destination are situated in two different countries, and at least one of them is a contracting party. It is one of very few conventions at ECE that relates to private law only.

4. The CMR Convention concerns the contract conditions, the consignment note as well as the carrier’s liability limits in the case of total or partial loss of the goods carried, damage to the goods, or in the case of delay of delivery of the goods. The CMR Convention also defines the content of the consignment note (also known as CMR consignment note), which confirms the contract of carriage.

5. The CMR Convention owes its success to its remarkable stability and to the quality of its text which has strongly influenced both national and international legislation.

6. The CMR Consignment note is like a passport for the goods to move from one country to another.

7. If carriers were hampered in their work by uncertainty in the sphere of liability for goods in transit, where a carriage transaction could be followed by a potentially ruinous lawsuit, then, there could be great reluctance on the part of businesspeople to engage in the transport sector at all, while those who would do it, would charge highly for the service in order to cover any eventual legal costs. This would arguably have the equivalent effect blocking the freedom of movement of goods. However, the CMR Convention with its precise conditions of carriage and distribution of liability, plus its upward limitation and prescription of the steps to be taken to claim compensation gives the element of certainty critical to the smooth running of international road transport.

8. In order to legally facilitate the use of electronic consignment notes, the Additional Protocol to the CMR concerning the Electronic Consignment Note (eCMR) was introduced in 2008. As an additional protocol, eCMR does not aim at changing the substantive provisions of CMR, rather it provides a supplementary legal framework for the digitalization of consignment notes.

9. As of February 2023, there were 33 contracting parties to eCMR. It is important to note that only contracting parties to the CMR Convention may become a party to eCMR.

10. There are practical reasons behind the slow uptake of electronic consignment notes to date the most important being the lack of conceptual specifications on the actual implementation of the eCMR which would guide the main users. The absence of contracting parties that are geographically situated next to each other, thereby forming a transport corridor could also be added. Until recently, France and Spain were the only contracting parties to be situated next to each other. At present, there are a number of pilots trialling the use of electronic consignment notes, including France and Spain, and in the Benelux region.

11. The key point of difference between the CMR Convention and eCMR is that while the CMR Convention requires a paper form with mandatory particulars and additional particulars (if applicable), eCMR also requires an agreement on the procedures for its operation and on the implementation of these procedures (per Article 5 of eCMR) including authentication (Article 3).
12. The drafters of eCMR did not intend to modify CMR on any substantive legal point but to supplement CMR in order to facilitate the optional making out of the consignment note by means of procedures used for the electronic recording and handling of data.

13. Even though the eCMR Additional Protocol at its Article 5 paragraph 1 lists six procedures and the methods of their implementation which “parties interested in the performance of the contract of carriage shall agree on in order to comply with the requirements of eCMR and CMR”, it fails to provide concrete and specific guidance on the actual implementation of those procedures leaving them open to interpretation and therefore leaving it up to each of the users who are directly (carrier, consignor and consignee) or indirectly (contracting parties, customs authorities, police, other authorities) interested in the implementation of the eCMR Additional Protocol to protect their interests either by creating pilots tailor made to their needs or not deciding to become contracting party to the protocol.

14. The Working Party on Road Transport (SC.1) at its ninety-second session (TRANS/SC.1/363, paragraph 41, December 1998) agreed that a protocol to the CMR to incorporate Electronic Data Interchange (EDI) was a complex issue that would require further analysis by experts on EDI, transport and private law, and asked the secretariat to contact the International Institute for the Unification of Private Law (UNIDROIT), based in Rome, for their views on the matter.

15. Professor J. Putzeys from UNIDROIT was the main drafter of the eCMR Additional Protocol in the framework of SC.1. This work started in 2000 and finished in 2008 when the protocol was submitted for signing and ratification by the governments.

16. Professor J. Putzeys introduced for first time Article 5, which refers to the main processes that would operationalize the electronic consignment note in the draft text of the protocol in 2006. The proposed text was Article 6 of the draft Rotterdam rules of 2005 with the title “Procedures for use of negotiable electronic transport records”. The final text of the Rotterdam rules that was proposed for signature and ratification by the governments included it as Article 9. Furthermore, the eCMR Additional Protocol specifically refers to the parties interested in the performance of the contract of carriage. Then under Article 1, definitions, provides the following description for the “Electronic consignment note”: “…means a consignment note issued by electronic communication by the carrier, the sender or any other party interested in the performance of a contract of carriage to which the CMR Convention applies…”. Meaning not only the carrier and the sender.

17. In road transport the operational challenges are completely different comparing to maritime transport (Rotterdam rules). The carriers are thousands and the borders that the trucks are crossing are hundreds. Even if there is agreement that the word “parties” refers only to the consignor and the carrier – if we follow the Rotterdam rules then most probably this is the case – then we should acknowledge that it would be impossible for those thousands of large, medium, small and very small road carriers from different geographical regions to meet and agree on common procedures and standards.

18. It should be noted that the work towards the operationalization of eCMR should not focus only in making the actual paper form / consignment note electronic. The focus should be on ensuring that the convention applies also in the electronic environment. For example, the manner in which the party entitled to the rights arising out of the electronic consignment note is able to demonstrate these rights and the acceptance of the electronic consignment note as the legal equivalent to an accepted paper CMR consignment note.

III. Progress of the Group of Experts on Operationalization of eCMR and discussions at the 118th session of SC.1 (GE.22)

19. GE.22 was established in early 2022 and met six times between July 2022 to July 2023. The Group of Experts tabled its report which is comprised of documents ECE/TRANS/SC.1/2023/2 to 5 at the 118th session of the Working Party on Road Transport (SC.1).

20. ECE/TRANS/SC.1/2023/2 contained proposed conceptual and functional specifications of the future eCMR system. ECE/TRANS/SC.1/2023/3 covered the
operational procedures stipulated by the eCMR Additional Protocol – digital environment. ECE/TRANS/SC.1/2023/4 suggested proposed conceptual and functional specifications of the future eCMR system / Use Case Analysis. ECE/TRANS/SC.1/2023/5 provided a short historical review concerning the development of the CMR Convention and analysis on how and why the CMR Consignment notes are used today in different geographical regions by customs. It also included information provided by customs officials participating in GE.22.

21. The points in the analysis contained in the documents that require further elaboration for the Group to give concrete recommendations to SC.1 include:

- **Authentication of the users:** The eCMR Additional Protocol refers to the authentication of the consignment note (Article 3). However, based on the group’s mandate which is about the operationalisation of eCMR and the high-level architecture of the future eCMR system, the experts identified two authentication requirements, a. the authentication of the users and b. the authentication of the consignment note (or of the final form of the consignment note). The proposal was not finalised by the group.

- **Electronic Signatures:** Article 3 of the eCMR Additional Protocol makes specific reference to the use of electronic signatures for the authentication of the electronic consignment notes even though paragraph 2 of the same article mentions that the consignment note may also be authenticated by any other electronic authentication method permitted by the law of the country. The proposal was not finalised by the group.

- **Information technology Solutions:** An entity interested in generating electronic CMRs based on the group’s mandate will make use of the functional and technical specifications prepared by the group and will be eventually adopted by ECE Inland Transport Committee following proposal by the Working Party on road transport (SC.1) in order to develop an electronic solution that generates the electronic consignment notes ensuring that the CMR Convention and its protocol applies. However, ECE cannot make those specifications mandatory. The proposal was not finalised by the group.

- **National Validation Body:** The group discussed without yet having reached an agreement about the need to have a national validation body established. The main reason for the existence of such a body would be to make sure that compliance exist with the specifications and the CMR Convention applies. The group still examines this idea and other options that could be established. However, if the use of a validation body is proposed then the group suggests that the validation procedures (conformance tests?) should be agreed.

- **Safe storage of data:** The safe storage of data is connected with the functions of the national validation body, but special reference should be made since it is of critical importance for the trustful environment that should be developed for the future eCMR system. CMR data includes commercially sensitive information that should not be disseminated in one hand or be concentrated by a minority of IT companies. The group is of the opinion that the number of years of safe storing the data should be harmonised. The group tentatively agreed that the eCMR data should be kept for a period of ten years after its generation for future use by any entity, public or private. The proposal was not finalised by the group.

- **Cyber security – Backups:** Cyber security is also connected with above the mentioned topic and with the trustful environment that this IT solution should operate. The issue of integrity of the particulars is strictly connected with trust in the system. The future eCMR system should first keep a strict – not changeable – sequence of events based on the days and time that events take place. The proposal was not finalised by the group.

- **Fallback procedure:** There is no provision in the eCMR Additional Protocol as such that speaks about a fallback procedure. However, article 5 paragraph 2 - point f mentions that the parties should agree on “procedures for the possible replacement of the electronic consignment note by a consignment note issued by different means”
implying a fall-back procedure. The fallback procedure is of paramount importance for the operations of the future eCMR system when for some reason the system does not work as designed. The proposal was not finalised by the group.

- eCMR high level architecture description: As elaborated in the introduction to the eCMR, the final objective of the computerization of the CMR Convention encompasses the computerization of the whole CMR Consignment note life cycle from distribution, issuance reflecting all rights and obligations that the CMR Convention stipulates and it should, ultimately, be aimed at replacing the current paper CMR consignment note without changing the basic philosophy of the CMR Convention. The group has started discussing the different options concerning the high level architecture of the future eCMR including possible operational challenges but it has not finalised any proposal yet.

22. The Group, in order to achieve its objectives, has set the following principles while designing the future eCMR system:

(a) The future eCMR system(s) should create trust and be based on trust by all stakeholders from all regions.

(b) The future eCMR system(s) should ensure that the interests and requirements of all stakeholders from all geographical regions are covered with the most efficient and successful way.

(c) The future eCMR system(s) should be a sustainable solution that further facilitates road transport and border crossings operations leading ultimately to the non-stopping of the trucks at the borders.

(d) The future eCMR system(s) should be based on the free market principles, encouraging competition and being developed on the functional and technical specifications adopted by SC.1 and endorsed by ITC creating a global solution recognised by all contracting parties.

(e) The future eCMR system(s) should efficiently address all challenges that the digital world requires such as authentication of the users and mutual recognition of those authentication mechanisms by all contracting parties, secured archiving of data for a period required by the authorities (courts, customs, others), inalterability of messages and no access to data which is considered as commercially sensitive data by no authorised users or oligopolistic / monopolistic practices leading like that to a trustful and mutually recognised system.

23. The electronic CMR consignment note is about the evidentiary value that the consignment note brings. The manner in which the party entitled to the rights arising out of the electronic consignment note is able to demonstrate these rights and the acceptance of the electronic consignment note as the legal equivalent to an accepted paper CMR consignment note. We should ensure that the Convention applies.

24. At the 118th session of SC.1, a workshop was organized which included presentations by the European Commission, the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), the International Federation of Freight Forwarders Associations (FIATA), the International Road Transport Union (IRU) and the secretariat. SC.1 agreed to a two-year extension of GE.22 in order to address the above-mentioned points. If time permits, GE.22 may also prepare technical specifications before reporting back to SC.1 at its 120th session in October 2025.

25. SC.1 requested the secretariat to request an extension of the mandate of GE.22 at the next session of ITC and thereafter at EXCOM. SC.1 also requested the provision of secretariat services for up to three sessions per year comprised of up to three days/sessions.

IV. Considerations by the Committee

26. The Committee may wish to take note of the information provided in this document and endorse the decision and request from SC.1 to extend the mandate of the group for
additional two years. Also, the Committee may wish to invite all relevant parties that are participating at the Group of Experts on the operationalization of the eCMR to finalize this demanding task as soon as possible, and ensure that the future eCMR environment/system will include the interests/requirements of all stakeholders involved in today’s daily CMR practice and of all regions, thus creating a sustainable electronic solution, continuing the great success over time of the CMR Convention by leading road transport to a fully digital environment.