
Economic Commission for Europe**Inland Transport Committee****Working Party on the Transport of Dangerous Goods****Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)****Thirty-sixth session**

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Matters arising from the work of United Nations bodies or other organizations

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English

Information on special requirements regarding electric propulsion systems in ES-TRIN**Transmitted by the Central Commission for the Navigation of the Rhine (CCNR)****Introduction**

1. The Safety Committee asked the CCNR Secretariat at its 35th meeting to inform the Committee about the work of CESNI¹ in regard to electric propulsion, the integration of provisions into ES-TRIN² and effects on the transport of dangerous goods.
2. With this document, the CCNR informs the Safety Committee about the background and decisions taken in CESNI regarding electric propulsions systems as well as whether the Safety Committee needs to adopt additional provisions regarding electric propulsion systems to be integrated into ADN.

Provisions on electric propulsion systems in ES-TRIN

3. With ES-TRIN 2019 which enters into force in January 2020, CESNI has introduced a set of technical requirements for electric propulsion systems (Chapter 11) which considers the state-of-the-art technologies and ensures high level of safety for inland navigation. ES-TRIN 2019, as well as the detailed explanatory notes³ of this Chapter 11, can be download on the CESNI website. (<http://cesni.eu/nl/technische-voorschriften/>)
4. In the preparation of ES-TRIN Chapter 11, CESNI paid special attention to ensure that electric propulsions systems are as safe as conventional propulsions systems, especially with the various sources of energies involved (generating set, batteries, ...). Article 11.01(7) addresses also the cases for which two independent propulsion systems are mandatory requested.
5. With the preliminary experience gained by inspection bodies, following a Dutch proposal, the Working Group CESNI/PT is now working on a FAQ document to ease the implementation of Chapter 11. Finalisation and publication are expected in 2020.

¹ Comité Européen pour l'Élaboration de Standards dans le Domaine de Navigation Intérieure – CESNI (www.cesni.eu)

² European Standard laying down Technical Requirements for Inland Navigation vessels (ES-TRIN, www.cesni.eu/en/types/technical-requirements/)

³ https://www.cesni.eu/wp-content/uploads/2019/04/Not_expl_estrin2019en.pdf

Current provisions in the ADN regarding electric propulsion systems

6. The ADN requirements applicable to vessels and equipment are in force regardless of the type of ship propulsion system. Moreover, paragraph 1.1.3.7 ADN exempts the carriage of electric energy storage and production systems (e.g. Lithium-ion batteries, electric capacitors, asymmetric capacitors, metal hydride storage systems and fuel cells) for the vessel's propulsion system.

7. The ADN requirements do not exclude that vessels carrying dangerous goods can be equipped with electric propulsion and experience is currently collected with few vessels already in operation, such as the "Sendoliner" in the Netherlands.

Conclusion

8. The CCNR Secretariat concludes that the ADN does not to be amended for the use of electrical propulsion systems.
