



Economic Commission for Europe

Administrative Committee of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)

Thirty-second session

Geneva, 30 August 2024

Item 3 (b) of the provisional agenda

Matters relating to the implementation of ADN: special authorizations, derogations and equivalents

Request for a recommendation on the use of methanol as fuel for the propulsion of the tank vessel “Chicago”

Transmitted by the Government of the Netherlands*

Introduction

1. In light of the energy transition towards cleaner fuels, several vessels are now being build or rebuild that use alternative fuels for their propulsion. One of these vessels is the Chicago, which will be outfitted with a hybrid methanol/diesel generator. The methanol will be stored in a part of an existing tank in the cargo zone.
2. The Chicago is a motor tank vessel Type C.
3. The Chicago is scheduled to receive a recommendation from the CCNR in July 2024. This recommendation will be communicated as an informal document. Furthermore, the working group on technical requirements of the CESNI (CESNI/PT) is working to expand Chapter 30 and annex 8, with regulations on the use of methanol as a fuel to allow for these kind of propulsion systems on a permanent basis.
4. As the use of methanol as a fuel is currently not allowed according to 7.2.3.31 and 9.3.2.31.1 of ADN, the Netherlands would like to request for a recommendation from the ADN Administrative Committee to issue a derogation for this vessel according to 1.5.3.2 of ADN.
5. To supplement this request for a recommendation, a document containing the relevant information has been submitted to the ADN Administrative Committee in informal document INF.3.
6. During the forty-third session of the ADN Safety Committee this project was introduced by the owners. Following the discussion on the other four requests we asked the owners to provide a similar document containing the relevant information for the ADN Safety Committee. The project contains similarities with the other “methanol project”.

* Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/2024/4.



Justification and sustainable development goals

7. The use of alternative fuels for propulsion for inland navigation vessels is one of the steps to be taken in the general energy transition towards the use of sustainable energy. For non-dangerous goods, work is being carried out to expand the European Standard laying down Technical Requirements for Inland Navigation vessels (ES-TRIN) Chapter 30 and Annex 8 to include methanol fuel systems. When the regulations for the use of methanol systems for non-dangerous goods are in place in the ES-TRIN, the ADN Safety Committee could decide to evaluate if the use of methanol systems for dangerous goods could be regulated in the ADN. This derogation could provide the Safety Committee with further information, which could help make that decision in the future.

8. The issuing of this recommendation is a step towards the regulation of alternative fuel systems within ADN, as such this proposal could be linked to the United Nations Sustainable Development Goals: 7; *to increase substantially the share of renewable energy in the global energy mix*, and 13; *Climate action*.

Action to be taken

9. The ADN Safety Committee is requested to consider the proposals and to advise the ADN Administrative Committee as it deems appropriate.

Annex

Decision of the ADN Administrative Committee relating to the use of methanol fuel system on the tanker vessel Chicago (ENI 02332788)

Derogation No. X/2024 of XX August 2024

1. The competent authority of the Netherlands is authorized to issue an addition to the trial certificate of approval of the motor tank vessel Chicago (ENI 02332788) for use of a methanol fuel system.
2. Pursuant to paragraph 1.5.3.2 of the Regulations annexed to ADN, the above-mentioned vessel may, on a trial basis, deviate until 31 December 2028 from the requirements of paragraphs:
 - 7.2.3.31, making use of methanol as a fuel having a flashpoint below 55 degrees Celsius;
 - 9.3.2.31.1, making use of methanol as a fuel having a flashpoint below 55 degrees Celsius.
3. The Administrative Committee decides that the use of this methanol fuel system is sufficiently safe if the following conditions are met at all times:
 - The conditions as set in recommendation X/2024 by the Central Commission for the Navigation of the Rhine (CCNR);
 - The crew should wear appropriate PP during bunkering, maintenance, and when entering the engine room after engine room alarms
4. All information on the use of the methanol fuel system needs to be collected by the ship owner and kept for at least five years. This info will be submitted to the competent authority upon request.
5. The ship owner will submit an evaluation report to the competent authority at the following moments:
 - 6 months after the commissioning of the ship;
 - 2 years after the issue of this recommendation;
 - 5 years after the issue of this recommendation.

The competent authority will submit these evaluation reports to the UNECE secretariat for information of the ADN Administrative Committee.
6. These evaluation reports should at least contain the following information:
 - Failure and damage of the methanol fuel system;
 - Leakage;
 - Bunkering information;
 - Repairs and alterations of the methanol fuel system;
 - Operational data;
 - Incidents, including the interaction or possible interaction with dangerous goods.