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**Economic Commission for Europe**

English

**Inland Transport Committee****14 January 2015****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)****Twenty-sixth session**

Geneva, 27-30 January 2015

Agenda item 4 (b)

**Implementation of the ADN:****Special authorizations, derogations and equivalents**

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**ADN 7.1.3.31, 7.2.3.31.1 and 9.3.X.31.1 - LNG as fuel****Transmitted by the Government of the Netherlands****I. Introduction**

1. Since the end of 2011 the Central Commission for Navigation of the Rhine (CCNR) and the ADN Administrative Committee have issued derogations for the use of Liquid Natural Gas (LNG, UN No. 1972) as fuel on inland vessels.

2. More in detail, the ADN Administrative Committee has issued derogations (based on ADN 1.5.3.2) for 11 vessels to deviate from ADN 7.1.3.31, 7.2.3.31.1 & 9.3.X.31. These vessels are:

I. Argonon, type C Tanker (Derogation No.1/2012 of 27 January 2012, ECE/ADN/17)

II. I-Tanker 1401, type C Tanker (Derogation No.3/2012 of 31 August 2012, ECE/ADN/20)

III. I-Tanker 1402, type C Tanker (Derogation No.4/2012 of 31 August 2012, ECE/ADN/20)

IV. I-Tanker 1403, type C Tanker (Derogation No.1/2013 of 30 August 2013, ECE/ADN/24)

V. I-Tanker 1404, type C Tanker (Derogation No.2/2013 of 30 August 2013, ECE/ADN/24)

VI. Chemgas 851, type G Tanker (derogation No.1/2014 of 31 January 2014, ECE/ADN/26)

VII. Chemgas 852, type G Tanker (derogation No.2/2014 of 31 January 2014, ECE/ADN/26)

VIII. Push boat, Kooiman Marine (derogation No.3/2014 of 31 January 2014, ECE/ADN/26)

IX. Damen River Tanker 1145 Eco liner 949, type C Tanker (Derogation No.4/2014 of 31 January 2014, ECE/ADN/26)

X. Damen River Tanker 1145 Eco liner 951, Type C Tanker (Derogation No.5/2014 of 31 January 2014, ECE/ADN/26)

XI. Eiger, dry cargo vessel (derogation no.6/2014 of 29 August 2014, ECE/ADN/29)

## II. Current status on the use of LNG as fuel

3. Currently, five vessels are operational: Argonon, I-Tanker 1401 (“Greenstream”), I-Tanker 1402 (“Greenrhine”), Chemgas 851 (“Sirocco”) and the Eiger.

4. The Recommendations issued by the ADN Administrative Committee include preconditions the vessel has to comply with when using LNG as fuel. One of the preconditions is to send an annual evaluation report to the ADN Safety Committee. These reports have to provide all information on the safety of the vessel relevant for the ADN Committee, including but not limited to any system failure, leakage, bunkering data and any abnormalities. Such a report was provided for the Argonon during the 22nd session of the ADN Safety Committee (January 2013, INF.21 and INF. 35).

5. These reports indicate the experiences with the use of LNG as fuel and are satisfactory. No major issues concerning safety have occurred.

## III. Considerations

6. To allow the use of LNG on a structural basis, both the Rhine Vessel Inspection Regulations (RVIR) and the ADN have to be amended.

7. The necessary amendments to the RVIR are in an advanced stage and will probably be finalized in the first half of 2015.

8. The provisions of the ADN to be amended are ADN 7.1.3.31, 7.2.3.31.1 and 9.3.X.31.1. These provisions all address the flash-point of the fuel. The ADN has to be extended with new provisions to deal with the possible hazards of the use of LNG.

## IV. Proposal

9. To organize an informal working group on the use of LNG as fuel. The aim of this informal working group would be:

- (a) to analyse the current trials with vessels using LNG as fuel;
- (b) based on (a) to draft proposals to amend the ADN to allow the use of LNG as fuel.

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