

Economic Commission for Europe

Inland Transport Committee

12 August 2013

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) (ADN Safety Committee)

Twenty-third session

Geneva, 26 - 30 August 2013

Item 3 (c) of the provisional agenda

Implementation of ADN:

Interpretation of the Regulations annexed to ADN

Dock Lock System

Transmitted by the Government of the Netherlands

I. Introduction

1. Mampaey Offshore Industries located in Dordrecht (Netherlands) has developed an innovative system called the Dock Lock System. This system is initially intended for mooring a bunker vessel to the receiving sea vessel, but can also be used for mooring at a pier.
2. In general during bunkering, a bunker vessel is moored with ropes to a receiving sea vessel. This method is time consuming and the handling of heavy ropes can create hazardous situations for the crew.
3. The Dock Lock System is an automated alternative to the use of ropes when mooring. The system consists of multiple mechanical arms installed on the bunker vessel. These mechanical arms are equipped with large magnetic panels. The magnetism is created by electricity. These panels are attached to the hull of the sea vessel by computer control. The mechanical arms have a certain flexibility to adjust to the movement of the vessels.
4. The Dock Lock System will enter its national test-phase in the fourth quarter of 2013.

II. Relevant provisions

5. The Dock Lock System is a fixed electrical installation to be used during loading and unloading, therefore the system has to comply with 9.3.1.50-9.3.1.56 of ADN.
6. 7.2.5.3 of ADN states that vessels have to be moored securely, but in case of an emergency release has to be quickly possible. The ADN Checklist (question (3)) gives some insight into the meaning of "moored securely" or as described in the ADN Checklist "*well moored*".

However, ADN does not provide specific regulations for the methods of mooring.

III. Request for clarification

7. Questions for the ADN Safety Committee:

- a. Does the bunker procedure between a bunker vessel and a sea vessel fall under the scope of “mooring” as in 7.2.5.3? Or is this provision only relevant for a vessel mooring onto a regular pier?
 - b. Are there other provisions of ADN relevant for the Dock Lock System besides 7.2.5.3 and 9.3.1.50-9.3.1.56 ?
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