

## 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)

Sixteenth Meeting

Geneva, 25 - 29 January 2010

Item 4 (b) of the provisional agenda

## PROPOSALS FOR AMENDMENTS TO THE REGULATIONS ANNEXED TO AND

### Other amendment proposals

#### ADN 7.1.16.12

Transmitted by the European Barge Union (EBU)

### Introduction

After having communicated the compliance burden regarding ADN 7.1.6.12 in an earlier phase at CCNR level, the Dutch Government has set up an inquiry by an independent international consultancy agency named “*Berenschot*”. The results of this inquiry are available and thus the reason for the EBU to ask the distinguished experts to form a working group to specifically decrease the current compliance burden on this issue.

### Background

During the course of the last years the inland container barging sector has been confronted by the regulatory bodies with the interpretation of ADN 7.1.6.12. This article contains specific ventilation regulations. The interpretation by some regulatory bodies has led to a responsibility of the carrier to identify whether dangerous goods are present on the vessel that have additional VE requirement in column 10 of table A. According to the interpretation the transportation company needs to comply with additional requirement VE02 when e.g. UN 2322 is loaded on board of a container vessel the crew. For the crew this would mean that a measurement needs to be carried out in the applicable holds immediately after loading. Further, an additional measurement would need to be carried out one hour later for monitoring purposes. These results of the measurements need to be recorded in writing. The EBU prefers that these additional requirements are applicable only when article 7.1.4.12.2 is applicable.

7.1.4.12.2 On board vessels carrying dangerous goods only in containers placed in open holds, ventilators do not require to be incorporated but must be on board. Where damage of the container or release of content inside the container is suspected, the holds shall be ventilated so as to reduce the concentration of gases given off by the cargo to less than

10% of the lower explosive limit or in the case of toxic gases to below any significant concentration.

In order to comply with the interpretation that measurements need to be carried out when column 10 of table A mentions an additional requirement the carrier also needs to cross reference table A with the loading list. Table A has approximately 2861 separate or common proper shipping names of which approximately 1365 have an additional requirement. The effectiveness of current measurement techniques can be questioned when operating in an open cargo hold with containers stacked with a width of up to five. While performing such measurements the crew needs to operate in a hazardous surrounding with limited space available.



Every measurement technique, this either being a so-called PID measuring apparatus or gas detection tubes has their pros and cons. Gas detection tubes have a broad measurement spectrum however have a limited life span, need to be stored continuously in a cooled surrounding and when using the results parameters like humidity and temperature need to be taken into account in the calculation. A commonly used tube is the polytest tube. This tube is relatively cost efficient and measures approximately 80% of the dangerous goods mentioned above. Exotic tubes run up to more than 100 EUR per measurement with the chance of never using these tubes on board. At this moment it is not communicated by the consignor whether substances are carried on board with these additional requirements. A technique using a PID apparatus is more user friendly however is not able to measure a significant number of dangerous goods due to the chemical characteristics. The crew on board container vessels has a significantly less amount of knowledge regarding gas detection and by using calculation tables by the crew submitted by the manufacturers of the measurement apparatus in order to get a clear and reliable result may lead

to misleading indications due to the multiple dangerous goods on board with a broad variety of chemical characteristics. The EBU does appreciate the current regulation that measurements need to be carried out when entering the cargo hold. 7.1.3.1.6.

### **Justification**

The “*Berenschot*” consultancy agency has calculated in depth that the compliance costs run up to EUR 4,000 for each vessel on an annual basis. The total national compliance cost in the Netherlands runs up to 5.2 mln EUR on a sector level based on 52 annual voyages and 1310 ADN container vessels. The EBU would like to call upon the experts to address this issue in depth in order to avoid dangerous situations while performing the tests and reduce the height of the compliance costs without reducing the safety on gas safety since 7.1.3.1.6 and 7.1.4.12.2 are in place.

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