### **Economic Commission for Europe**

Inland Transport Committee

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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)

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### **Report of the Working Group on Means of Evacuation,** 15-17 December 2010, Utrecht

### Transmitted by the Government of the Netherlands

Participants:

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#### Introduction

1. During the last meeting of the ADN Safety and Administrative Committee (23-27 August 2010), the Terms of Reference of the informal working group on 'means of evacuation' in Arnhem (26 and 27 April 2010) were accepted. The Netherlands hosted the second meeting of the working group from 15 until 17 December 2010 in Utrecht.

#### Developing guidelines

2. One of the more challenging and substantial tasks in the Terms of Reference is to develop guidelines, taking into account different circumstances, hazards and scenarios during transshipment. Prior to the meeting, the Dutch delegation had prepared a starting document to facilitate this discussion. It contained a numbered list with suggested options of possible means of evacuation and refuge. In addition, the starting document contained matrixes with various hazards as well as types of transshipment, in which the numbered options could be entered during the course of the meeting.

3. It soon became clear that the inland waterway transport industry was very much divided. The shippers on the one hand and the terminal operators on the other, had different opinions on many topics. During the discussion, several themes kept recurring. A few examples:



Who is primarily responsible for providing evacuation means/places of refuge?

What means of evacuation/refuge are acceptable and under what circumstances?

What hazards should be used and how should they be categorized and/or defined?

Do we accept the current practice of ship-ship transshipments in open water? If not, what are the financial-economic consequences of terminating such operations? If yes, what level of safety is acceptable and feasible?

Results

5. Despite the differences and at times tough discussions, there was a strong will to reach the common safety objective. The results of 'Utrecht' can be summed up as follows:

List of definitions of commonly used terms (see enclosure 1).

List of options of possible means of evacuation or refuge (see encl. 2). It should be stressed that the list has no ranking. Furthermore, the options have not (yet) been subjected to a feasibility or cost-risk test.

A filled in matrix (provisional) for tank vessels (encl. 2).

Future work

6. It soon became clear that many of the issues discussed could not be solved during the meeting. It was also clear that in order for the next meeting to be as effective as possible, it would be helpful if the industry would get together beforehand and work out their goals and premises – both shared ones and differing ones. The next meeting of the working group will take place from 9-11 March 2011 in Utrecht and the industry will get together before that time.

## **Enclosure 1**

#### Definitions

Means of evacuation: any means that can be used to bring people from danger to safety.

Escape route: is a safe route from danger towards safety or to a means of escape.

Escape boat: Is a specially equipped onsite boat designed to withstand all identified hazards of the cargo and to evacuate the people in danger.

Evacuation boat: Is a specially equipped and manned boat called in for rescuing people in danger.

Life boat: Is an onboard boat for use in transport, rescue, salvage and work duties.

Safe haven: Is a module (including fixed or floating) that must be capable of protecting people from all identified hazards of the cargo for a predetermined length of time.

### **Enclosure 2**

#### EVACUATION MEANS

Possible options:

1a. Two escape routes x meters outside of cargo area on opposing ends.

1b. Two escape routes outside of cargo area on opposing ends.

1c. One escape route outside of cargo area and one safe haven outside the vessel on the opposing end.

1d. One escape route outside of cargo area and one safe haven on the vessel on the opposing end.

1e. One escape route outside of cargo area one life boat on the opposing end.

1f. One escape route outside of cargo area and one escape boat on the opposing end.

2a. One escape route inside of the cargo area and one escape route outside of the cargo area at the opposing end.

2b. Two escape routes inside of cargo area on opposing directions.

2c. One escape route inside of cargo area and one safe haven outside the vessel on the opposing direction.

2d. One escape route inside of cargo area and one safe haven on the vessel on the opposing end.

2e. One escape route inside of cargo area and one life boat on the opposing end.

2f. One escape route inside of cargo area and one escape boat on the opposing end.

- 3. One escape route outside of cargo area.
- 4. One escape route inside the cargo area.
- 5. One safe haven outside the vessel, including the escape route towards it.
- 6. Two safe havens outside the vessel, including the escape routes towards them.
- 7. One safe haven on the vessel.
- [8. Two safe havens on the vessel.]
- 9. One escape boat.

10. Two escape boats.

- 11. One escape- and one evacuation boat
- 12, One evacuation boat
- 13, Two evacuation boats
- 14 One lifeboat

# **Enclosure 2**

Tank vessel

Remark:

When one of the listed options can be fulfilled, transshipment can take place. There is no agreement on the question how to deal with ship-ship transshipment in open water.

Danger\Situation	Ship-shore	Ship-ship, given is that the boarded ship in itself is not safe
Class 2	1a, 1b, 1c, 1d, 1f, 2a, 2b, 2c, 2d, 2f, 6, 8, 10,	1a, 1b, 1c, 1d, 1f, 2a, 2b, 2c, 2d, 2f, 6, 8, 10.
Class 3 packing group I and II	1a, 1b, 1c, 1d, 1f, 2a, 2b, 2c, 2d, 2f, 6, 8.	1a, 1b, 1c, 1d, 1f, 2a, 2b, 2c, 2d, 2f, 6, 8.
Class 3 packing group III (UN 1202 two entries)	1a, 1b, 1c, 1d, 1e, 1f, 2a, 2b, 2c, 2d, 2e 2f, 3, 4, 5, 6, [7] 8, 9	1a, 1b, 1c, 1d, 1e, 1f, 2a, 2b, 2c, 2d, 2e 2f, 3, 4, 5, 6, [7] 8, 9
Class 4.1		
Class 5.1		
Class 6.1		
Class 8		
Class 9		

Push tug/towboat (dry cargo)

Danger\Type of interface	Quay	T-Jetty	'Finger Pier'	Ship
Three blue cones				
Two blue cones				
One blue cone				
Fire - flashpoint < 60C				
Fire - flashpoint > 60C				
Toxic/suffication/exfixiation				
Corrosive				
Explosive				

Push tug/towboat (tank)

Danger/Type of Quay	Quay	T-Jetty	'Finger Pier'	Ship
Three blue cones				
Two blue cones				
One blue cone				
Fire - flashpoint < 60C				
Fire - flashpoint > 60C				
Toxic/suffication/exfixiation				
Corrosive				
Explosive				

Dry cargo (bulk)

Danger/Type of Quay	Quay	T-Jetty	'Finger Pier'	Ship
Three blue cones				
Two blue cones				
One blue cone				
Fire - flashpoint < 60C				
Fire - flashpoint > 60C				
Toxic/suffication/exfixiation				
Corrosive				
Explosive				

Container vessel

Danger/Type of Quay	Quay	T-Jetty	'Finger Pier'	Ship
Three blue cones				
Two blue cones				
One blue cone				
Fire - flashpoint < 60C				
Fire - flashpoint > 60C				
Toxic/suffication/exfixiation				
Corrosive				
Explosive				