ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods Seventy-fifth session, Geneva, 19-23 January 2004 agenda item 9

ANY OTHER BUSINESS

Classification of Bowsers under ADR

Transmitted by the Government of the United Kingdom

Summary: An information paper by the UK seeking views on how other Contracting Parties classify certain small mobile containers known as 'bowsers' within the UK.

Decision to be taken:

How to treat 'bowsers' under ADR, and specifically whether it would be beneficial to create a new category for 'bowsers'

Introduction

- 1. Since the 1940s there have been in use within the UK, small mobile receptacles used principally for the transport of water or diesel fuel. These vessels, typically under 3000 litres capacity, are called 'bowsers' after the company that first constructed this type of receptacle.
- 2. A 'bowser' could be constructed in several different ways. Typically a 'bowser' is generally constructed as a small tank shell mounted on a frame to which it may, or may not, be permanently attached which is then towed behind a vehicle to a site where it can then be used to dispense liquid (see Annex 1).
- 3. It is known that similar equipment is used in a number of other European countries.

The problem

Page 2

- 4. The UK is seeking clarification on how 'bowsers' should be defined in the context of ADR and would welcome the opinions of other delegations. There appear to be three possible options for definition. 'Bowsers' could meet the definition of intermediate bulk containers (IBCs) and tested according to 6.5.4 or they could be considered to be tanks and tested according 6.9.4, or a new definition could be created for 'bowsers'. There is no UK legal definition of a 'bowser'.
- 5. Some 'bowsers' consist of two distinctly separate components namely a receptacle and a trailer to carry it. The container which, when tested separately will meet all the requirements of an IBC, and a trailer to carry it. The container is then sometimes permanently fastened to the trailer. When the container is permanently fixed to a trailer or to running gear it should probably be considered as a tank. There is often no difference in design between a 'bowser' of less than 3000 litres capacity (the maximum for an IBC) and ones greater than 3000 litres.
- 6. We are aware that within the UK, the Netherlands and Italy this type of vessel has on an individual design basis been tested and certified as IBCs.

The Proposal

- 7. There are three options for the definition of 'bowsers':
 - 1. Treat all 'bowsers' as tanks*
 - 2. Treat all 'bowsers' as IBCs*
 - 3. Create a new category 'bowser' and define the necessary technical requirements.
- * Under ADR rules a 'bowser' can not be tested and certified as both a tank and an IBC.
- 8. The UK would like to see consistent definition in all Contracting Parties on how these containers are defined to avoid subsequent restrictions on movement across borders or unnecessary barriers to trade. At this stage the UK would prefer a simple approach of creating a new category for 'bowsers' in ADR, which would achieve a consistent approach, removing any potential restrictions to trade.
- 9. The UK welcomes delegations' initial comments on the feasibility of the three proposals and, if it would be helpful, will submit a formal proposal for consideration at the May 2004 meeting.

The effect

- 10. 'Bowsers' are firmly established within the UK and it is unlikely that the creation of a new definition will create difficulties. However, the testing requirements will cause initial difficulties for some companies.
- 11. Below is a table charting some of the differences between the requirements for IBCs and tanks:

Intermediate Bulk Containers (IBC)	Tanks

INF.20 Page 3

Definition in ADR	a rigid or flexible portable package, other than those specified in chapter 6.1 (requirements for the construction and testing of packagings);	 a shell including its service and structural equipment, "tank container" means an article of transport equipment meeting the definition of a container, and comprising a shell and items of equipment, including the equipment to facilitate movement of the tank-container without significant change of attitude, used for the carriage of gases, liquid, powdery or granular substances and having a capacity of more than 0.45m3 (450 litres). "fixed tank" a tank having a capacity of more than 1 000 litres which is permanently attached to a vehicle (which then becomes a tank-vehicle) or is an integral part of the frame of such vehicle. "portable tank" means a multimodal tank having a capacity of more than 450 litres in accordance with the definitions in chapter 6.7 or the IMDG code and indicated by a portable tank instruction (T-Code) in Column (10) of table 10 of chapter 3.2
-------------------	--	--

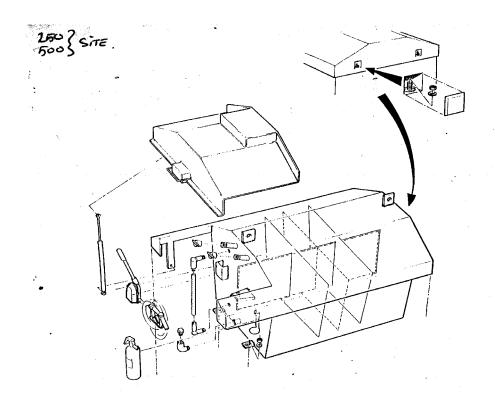
INF.20 Page 4

Capacity	 Not more than 3000 litres for solids and liquids of packing groups II and III; Not more than 1.5m³ for solids of packing group I when packed in flexible rigid plastics, composite, fibreboard and wooden IBCs; Not more than 3m³ for solids of packing group I when packed in metal IBCs; Not more than 3m³ for radioactive material of class 7 	- no specified capacity limitations for tanks;
Tests	- Tests dependent on design type of the IBC, but with a mandatory drop test;	 Tanks - capable of absorbing under the maximum permissible load, the forces exerted by: In the direction of travel; twice the total mass; at right angles to the direction of travel: the total mass; vertically upwards: the total mass; vertically downwards: twice the total mass; Tank containers – in the direction of travel: twice the total mass; Horizontally at right angles to the direction of travel: the total mass; (here the direction of travel is not clearly determined, twice the total mass in each direction); Vertically upwards: the total mass; Vertically downwards: twice the total mass;
Limitations	 Can't have larger than 3000 litre capacity Must be designed for mechanical handling Must not be permanently fixed to a vehicle chassis Must be resistant to stresses outlined for IBCs 	

INF.20 Page 5

Annex 1

How a Bowser is constructed:





INF.20 Page 6

The Most Common Type of Bowser:



