Economic Commission for Europe

Inland Transport Committee

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English

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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Reports of informal working groups

Report of the first meeting of the informal working group loading on top in barges

Transmitted by the Federation of European Tank Storage Associations, (FETSA)

Summary:	Report of the first meeting of the Informal Working Group loading on top in barges.
Actions to be taken:	Further discussing the topic regarding the mandate given by The ADN Safety Committee (SC) during its 31st meeting.
Related documents:	WP.15/AC.2/30/INF.15
	WP.15/AC.2/31/INF.6 as addendum to document
	ECE/TRANS/WP.15/AC.2/2017/44

I. Introduction

- 1. The first meeting of the Informal Working Group Loading on Top in barges took place in Rotterdam (NL), on November 21st, 2017. The meeting was organized by FETSA and attended by representatives from Physikalisch-Technische Bundesanstalt (PTB/DE) Germany, The Netherlands (NL), Port of Rotterdam (POR), Fuels Europe, EBU/ESO and EBOTA.
- 2. FETSA refreshes the memory of participants on results achieved at the 31th meeting of the SC and the mandate given:
 - To clarify the issue, notably in respect of current practice, regardless of applicable legal provisions;
 - To define the measures that should be taken;
 - To decide whether current practice violates ADN;
 - To decide which operations could be authorized and under which conditions.
- 3. The meeting aims to clarify the position of participants, describing practice, further fine tune FETSA's proposals and work to develop a report for presentation during the 32nd session of the ADN SC.

II. Background

- 4. The issue has been raised because of Dutch Authorities stating that if operations with dangerous goods are not described in the ADN, they are not allowed. Commingling or loading on top in barges is not described in ADN and therefore not allowed.
- 5. FETSA states that the practice has been a reality for almost 40 years (without incidents). It is the general consensus that the practice still continues today at different installations. NL states that it is still sceptic about the issue and emphasizes that loading on top politically remains a very sensitive topic.
- 6. All agreed that this discussion was to create a framework which gives a set of clear, transparent and safe set of rules of play sufficient and thus handles to authorities to enforce and of course not to create opportunities to legalize waste blending in heavy fuel oil.

III. Scope

7. An elaborate discussion on the current practice follows.

EBOTA explains that loading on top of same and different products is an important part of logistic business for their members, this to enable supply to customers respecting specific requirements, specifications whilst minimizing operational risks and operational movements. EBOTA members load on top with different dangerous goods (DG) as well as non-DG as for example biocomponents.

EBOTA says that terminals, refiners, ideal product availability and ideal characteristics are never present on one location. Terminals having restricted storage permits, customs licenses, refiners more and more producing intermediates than finished grades which, if you are supplying finished grades, need to be blended to specifications.

The Dutch delegation emphasizes that efficiency arguments only can never justify loading on top in inland tankers. The industry must prove clearly that these type of operations contribute to public goals and will certainly have no negative impact on the safety level on board of inland tankers. Otherwise the question on the necessity of the operation is politically impossible to answer.

The industry states that the operation is not only optimization of logistics. It's also a result of, for example geographical aspects; sometimes products are located at different terminals because of impossibilities in permits to store specific products at a terminal, limitations regarding customs licenses or simply because of unavailability of storage capacity for all products at one terminal or for products in whole. Loading on top batch by batch into a barge, possibly at different locations, prevents unnecessary product handling and barge movement because it's not necessary to subsequently bring products that can be stored at different terminals together to one terminal, do all kinds of product movements at that terminal to blend in a reserved landtank from which this product finally would be pumped into a barge again.

A new trend because of the energy transition, is the adding of bio components. Europe will see more of these so called drop inn fuels within the next period of shifting energy needs. Bio components will be often coming from different origins, different terminals. As also stipulated by the POR representative.

POR also states that prohibition of the operation will lead to more barge movements and higher number of transport operations.

- 8. Industry parties state that the discussion is to be seen as a way of reaching out and seeing to a clear, transparent and safe process. They also state that "facilitating transport operations and promoting international trade" is one of three integrated pillars of the contracting parties of the ADN. The first pillar being "increasing the safety of international carriage of dangerous goods by inland waterways" and the second "contributing effectively to the protection of the environment by preventing any pollution resulting from accidents or incidents during such carriage".
- 9. EBOTA has difficulties understanding the difference between IMO regulations and ADN regulations and also questions if there are differences between the restrictions with respect to this amongst the ADN contracting parties.
- 10. Blending in sea vessels is under strict conditions regulated in IMO and amongst others also in the Port of Rotterdam regulated in Bye-laws. This results, because of the position of Dutch Authorities, in the legal but very complicated daily practice:
 - Barge A loads product A from terminal A, discharges into sea vessel on Terminal 1
 - Barge B loads product B from terminal B, discharges into the same sea vessel on Terminal 1
 - Product in the sea vessel is a new product now.
 - Barge C loads the new product from sea vessel and delivers to final customer.
- 11. Those present conclude that 3 situations of loading on top in same cargo tanks on one or more loading facility could be described:
 - Loading DG with non DG (Bio components) in same cargo tank; i.e. loading Gasoil and FAME
 - Loading DG with non DG (non bio components) in same cargo tank;
 - Loading DG with different UN numbers in same cargo tank; i.e. gasoline commingling with Naphtha, MTBE, ETBE, etc.

The Informal working group discussed the loading over top of substances with the same UN number in barges. An example of this is loading Gasoil UN 1202 from one shore tank in a barge cargo tank, then load Gasoil UN 1202 from another shore tank in the same barge cargo tank. It was concluded that this working group was not in a position to make this call.

The Group would like to ask the SC for their interpretation of this operation. Is this considered as loading on top in barges ?

- 12. Discussion evolved on a definition of the practice. It is agreed that it is better to use the existing ADN because of the fact that components of the mixture and the products are described in the AND.
- 13. Responsibilities (1.4 ADN) also stay the same, as already stated they will lie fully with the consignors. He is responsible for the right paperwork, classification, commingling plan and so on.
- 14. However, Non dangerous products are not in Table C so they need to be described. EBOTA suggests to refer to the Renewable Energy Directive (RED)¹ as this gives clear guidance what can be loaded together with Fuels. Suggested is that new proposals could reference to products in the RED. This would cover the Bio components, but not the Non

¹ Directive 2009/28/EC

dangerous Non Bio components. Parties conclude that reference to components should be possible.

- 15. NL states that IMO might be a good starting reference for basic views on the matter. Because blending on board of sea vessels is permitted under strict conditions. POR indicates to be able to investigate the IMO regulations. FuelsEurope and EBOTA state they could investigate what products are described in the RED, in view of Bio components loading, but also limit the NON UN Non BIO products.
- Of course dangerous goods components and end products have to be on the ships substance list.
- 17. Working Document 44 is shortly discussed in respect of the changes to be made to come to a new proposal for the January 2018 meeting. The industry will have to demonstrate how to guarantee safety, particularly on the calculation/test of hand blend and properties. What is the margin of error in the prediction of the outcome of blending calculations.
- 18. FuelsEurope asked if having the loading on top on board visualized in a flow chart with according responsibilities would help support the case. The Dutch delegation supports such an initiative.
- 19. Next discussion follows about the use of vapor treatment systems. This item was already covered in the first FETSA document² which stated that "the loading has to be performed closed if for any of the components to be loaded, carriage in closed cargo tanks is required".
- 20. At last risk assessments are discussed. Of course participant will check possible accessory risks, like always. A special checklist could be of use.
- 21. Participants agree on the following steps:
 - Provide Safety Committee with examples of the necessity of the process of loading on top;
 - Describe the current practice of blending on board sea vessels;
 - Highlight possible complications of blending at loading installations including sea vessels:
 - Highlight and explain the chain of responsibilities of participants with regards to the ADN;
 - Highlight and be able to describe the traceability of documents of commingled products;
 - Investigate RED and possible relevant aspects of for example REACH and petrol directive with regards to commingling to achieve documented commingling of documented products;
 - Develop a visualization of regular loading operations versus a commingling operation.

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² WP.15/AC.2/30/INF.15