Alternative propulsion systems/fuels in inland navigation: identifying necessary adjustments in the ADN

Transmitted by European Barge Union (EBU) and European Skippers Organisation (ESO)

Introduction

1. In line with the goal of achieving the environmental and climate protection aims set by the European Union, inland navigation will have to switch to alternative propulsion systems and alternative fuels more and more in the near future. Various technologies are currently being researched. Examples include fuel cell propulsion ("green" hydrogen, methanol), diesel-electric or purely electric propulsion. The bunkering of ammonia is also currently being discussed. Which technology will prevail on the market in the end is not yet foreseeable. Nevertheless, developments can already be observed today, which show that there is a strong willingness to invest in the modernisation of the fleet within the inland navigation industry.

2. EBU/ESO are of the opinion that in due time the ADN Safety Committee will have to deal with the question which regulations in the ADN would have to be adapted, in order to continue guaranteeing the safety of transport of dangerous goods on the inland waterways in future.

3. Not only regulations relating to the bunkering process should be considered. It may also be necessary to teach additional content in the training of experts. Furthermore, questions arise for the classification societies, among others, regarding the requirements for the certification of ships that have undergone such an innovation.

Proposal

4. EBU/ESO therefore suggest that the ADN Safety Committee should start a discussion on the subject at its 40th session and afterwards develop a systematic plan on how/if this subject should be regulated within the framework of the ADN. The formation of an informal working group with the involvement of experts would be a sensible approach.
5. In this context, EBU/ESO request that the following suggestion for a procedure be taken into consideration:

6. As the use of low flashpoint fuels isn’t allowed according 7.X.3.31.1 (except for LNG) a derogation needs to be applied for when using alternative fuels. Applying for a derogation and the uncertainties associated with the outcome is considered to be a risk by ship owners, and slows down the greening of the IWW fleet.

7. The CESNI Committee has established a procedure on derogations, and it would be desirable when a similar procedure could be adopted for the ADN as well.

8. Annex 8 of ES-TRIN is being updated with the inclusion of requirements for fuel cells (adopted by the CESNI Committee), methanol storage (adopted in the CESNI-PT Working Group) and hydrogen storage (expected to be adopted in the CESNI-PT Working Group end of 2022).

9. An alternative approach for the ADN could be to update 7.X.3.31.1 accordingly. By doing so the time-consuming process of derogations will be avoided.