



PRESS RELEASE

The CCNR prepares the way for the use of LNG for inland navigation – Safety takes top priority

Strasbourg, 23/5/2011. *Inland navigation on the Rhine and in Europe may be on the verge of an historic turning point: The approval of liquefied natural gas (LNG) as a fuel in combustion engines for inland vessels. Four vessels powered by LNG are scheduled to be put into operation this year. The CCNR immediately initiated the required decision-making process, for which it is responsible, in order for LNG – with its particular hazards – to be used as a fuel for navigation on the Rhine. The aim is to be in a position to be able to make the requested recommendations by this summer. The CCNR is confident that, together with the shipping industry, the shipbuilding industry and the classification societies, it will be possible to come to a decision that is favourable for the future development of inland navigation, without having a negative impact on safety or ease of navigation.*

Following road traffic and maritime shipping, LNG is now finding its way into inland navigation. The international workshop held by the CCNR “*How can CO₂ emissions be measured and how can they be reduced?*” which took place on 12 April 2011 made the advantages of the use of LNG clear:

- CO₂ emissions reduced by up to 25% relative to gas oil,
- LNG can be blended with biogas, thus further reducing greenhouse gas emissions,
- significant reduction in emissions of pollutants,
- suitable for use as a fuel in “green” supply chains.

The use of LNG as a fuel can thus contribute towards meeting key overall objectives in transport and environmental policy such as improvement of air quality, minimisation of greenhouse gas emissions and increased use of domestically produced biofuels.

However, the CCNR workshop also made it apparent that there are still major hurdles to be overcome before LNG can come to be seen as a normal fuel for inland navigation. The main hurdles, apart from securing tax incentives and establishing quality standards for LNG are the supply and storage of LNG on land and on board as well as guaranteeing the safety of ships that use it and the safety of inland navigation as a whole. In addition, the use of LNG can only be climate- and environmentally friendly if the LNG is completely burned in the engine. Off-gassing of LNG, known as the boil-off effect, and methane slip (when unburned methane escapes into the atmosphere with the exhaust) need to be prevented. The introduction of LNG is thus anything but simple and can be seen as the most decisive turning point in inland navigation in recent years.

The CCNR is pursuing the approval of LNG in order to achieve two of its most important objectives, firstly to promote the economic development of inland navigation and secondly to guarantee its safety and ease. In this respect the CCNR can take recourse to its extensive know-how and experience in relation to the technical requirements for inland vessels, and equally its holistic view of inland navigation.

This is because the approval of LNG as a fuel – the current regulations for inland navigation on the Rhine and in Europe only permit fuels with a flash point over 55°C, in other words gas oil or diesel, to power ships' engines – is only one of the aspects that needs to be considered. Issues of bunkering and emissions from on-board storage and from the engines require consideration, as do the use of locks and berths by ships that use LNG as fuel. The CCNR also has suitable procedures in place that are needed to make the necessary decisions both quickly and also on a well-founded basis – neither should the introduction of LNG be delayed, nor should any mistakes be made.

The responsible bodies of the CCNR and its delegations are addressing the topic and the associated hurdles vigorously. The first step of the process involves permitting the use of LNG as a fuel in exceptional cases under the Rhine Vessels Inspection Regulations (RVIR). In mid-February 2011, the Dutch delegation to the CCNR submitted draft recommendations for three vessels in accordance with Art. 2.19 RVIR for its decision. In order to be able to use LNG it is first necessary to dispense with certain provisions of the RVIR. At the same time it is also necessary to make additional requirements in order to control the particular hazards posed by the use of gaseous fuel for safety, the environment and the climate. At the beginning of March the Dutch delegation also submitted a draft of a recommendation in accordance with Article 2.19 of Annex II to Directive 2006/87/EC¹, since, in contrast to the others, the ship in question did not require a Rhine vessel certificate, but rather a Community certificate.

By the middle of March 2011 these draft recommendations were already being discussed by the responsible body of the CCNR, the Inspection Regulations Working Group. The delegations invited ship owners as well as shipyards to take part in these discussions and had, in particular, secured the expert know-how of the classification societies. The experts from the delegations debated the extensive documentation that had been submitted, which were, of course, very technical and very detailed. The experts provided the Dutch delegation with specific information on improvements and addenda that could be made to the draft recommendations. It proved especially important to focus on the training and instruction of the crews who would be on board so that they would be able to handle the LNG safely, even in exceptional situations. By mid-April the delegations had submitted their questions and comments in writing. In cooperation with the ship owners and external experts, the Dutch delegation plans to revise and finalise the drafts by the end of May. The working group will inspect the revised drafts in June 2011. The experts belonging to the working group are then responsible for deciding on whether all of the aspects have been adequately addressed and all of the delegations' questions have been answered satisfactorily. If it is not possible to approve the recommendations then, the working group will make the necessary decision at the meeting that is already planned for September. All those involved, the delegations, the ship owners, the shipyards and the classification societies, are unanimous on one thing, and that is: Safety first! It would not be beneficial to anyone if inadequate recommendations were made, which may then bring LNG or inland navigation into disrepute.

The relevant committees of the CCNR, first and foremost its Inspection Regulations Committee, have already dealt with the topic of the introduction of LNG. The delegations also almost all agreed that a comprehensive impact assessment is necessary due to the considerable impact of the introduction of LNG. This is primarily an analysis of the potential consequences of the use of LNG and the presentation of the necessary measures to prevent any possible risk to the ease or safety of inland navigation. All those involved appear to be of the opinion that this impact assessment is not yet necessary in order to publish the recommendations that are being proposed at present. Rather, the recommendations should first of all make it possible to gain experience so that the impact assessment can be based on a broad and practical foundation.

¹ Commission Directive 2008/126/EC of 19 December 2006 amending Directive 2006/87/EC of the European Parliament and of the Council laying down technical requirements for inland waterway vessels

The CCNR's Committee for Transport of Dangerous Goods has also already discussed the use of LNG as fuel for inland navigation. Since all of the concerned vessels are type C tankers as specified in ADN² which practically only permits the use of gas oil or diesel as fuel, as do the technical regulations, there is also a need for recommendations in accordance with the ADN as well as in accordance with the RVIR and Directive 2006/87/EC. In order to avoid a situation where recommendations published by the CCNR being rejected by the UNECE³, which is responsible for the development of the ADN, on the same topic, the delegations aim to adopt the same fundamental positions, both in the CCNR as well as in the UNECE. Furthermore, it has also been suggested that the recommendations should build on each other or possibly even refer to each other. This would avoid the need for both the CCNR and the UNECE to conduct the extensive testing and documentation of the same matter. The inland shipping industry as the proposer and innovation driver must not be burdened with unnecessary red tape.

With its offensive and pragmatic approach, the CCNR has shown that it lends its active support to this important innovation, whilst also making sure that it does not fail to guarantee the ease and safety of inland navigation, on the Rhine or elsewhere. Although it may seem as if the decision that it is expected to make is an impossible tightrope act, the CCNR is confident that, as was the case for past innovations that represented a paradigm shift in inland navigation in Europe, the demands for economic viability on the one hand and for safety on the other can be reconciled.

² European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway (ADN)

³ United Nations Economic Commission for Europe (UNECE)