LNG as fuel - Introduction Veerhaven Push boat

Transmitted by the Government of the Netherlands

I. Introduction

The current ships which sail on LNG are inland tank vessels. This new proposal is the first push boat to use LNG as fuel. This document, accompanied by a presentation of the shipyard involved at the ADN-session, will give an impression of the project to the Safety Committee. A formal application for a derogation will be submitted to the January 2014 meeting of the Safety Committee.

II. Veerhaven push boat

Shipyard Gebr. Kooiman B.V. member of De Kooiman Groep and situated in Zwijndrecht, Netherlands is developing for ThyssenKrupp Veerhaven B.V. a push boat using as fuel a mixture of 99% LNG and 1% diesel. The engines, however, can also operate on 100% regular diesel fuel, in case LNG is not available. The LNG-fuel tank will be 160m³. Also a diesel fuel tank of 80m³ will be installed on the vessel.

The push boat will be used for transporting ore and coal in barges on the river Rhine.

The new push boat has to be more fuel efficient than the current ones in use, has less draught and has to comply with the 2016 standards for fuel emissions. The functionality of the new design has to be at least on a par with the current push boats.

A HAZID-study has been finalized, and a request for a recommendation has been issued at the CCNR.
MAIN PARTICULARS LNG PUSH BOAT:
LENGTH: 40 M
BEAM: 18 M
DRAUGHT: 1.60 M  
(WITH 30% CONSUMABLES)
PROPULSION: 4 X 1060 kW
WÄRTSILÄ: 6L20 DF  
(99% LNG, 1% DIESEL)
BUNKER CAPACITY: DIESEL 80 M³, LNG 160 M³