

# **An exploratory study on crew actions as a precondition to use remote experts for preventing shipping disasters**

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## **Abstract**

On behalf of the Dutch Maritime Knowledge Centre, TNO studied the possibilities of using remote experts in addressing serious non-routine problems onboard. The idea is that this might contribute to the captain maintaining a better control of the situation on board and to the prevention of disasters at sea. The objective of this study was to do a first exploration about any possible obstacles to involving remote experts from the crew point of view. In two cases the actions were investigated that were taken prior to a disaster by the captain and his crew and that in retrospect appeared to have been unsafe. Results showed that more than 24 hours elapsed between the moment of first discovery of irregularities until the point of no return. In theory, this would leave sufficient time to involve remote expertise. However, results also showed that while the crews noticed irregularities, they did not fully understand underlying problems or implications of these irregularities. Obstacles in involving external guidance might be that ships' captains cannot always recognise the significance of structural failures onboard, and that they may be hesitant to disclose problems to anyone beyond the crew.

## **Introduction**

The objective of this investigation, which is part of a wider study, is to perform an exploration regarding the feasibility of involving remote experts or external specialist knowledge in addressing serious problems onboard. The aim of this concept is that it contributes to a better control of the situation. In shipping industry, safety specialists are normally not part of the crew onboard. The Bureau Enquêtes Accidents / mer (BEAmer) recently recommended the use of remote experts by stating that: 'The classification societies set up round-the-clock- 'safety watches' able to answer questions from a captain or ship owner about what action to take, when a vessel has suffered damage affecting its structure and/or stability' (BEAmer, 2003, p. 147). To do a first tentative research on the question whether this concept would be feasible, we investigated possible obstacles to involving remote experts from the crew point of view.

In D. de Waard, K.A. Brookhuis, R. van Egmond, and Th. Boersema (Eds.) (2005), *Human Factors in Design, Safety, and Management* (pp. 93 - 97). Maastricht, the Netherlands: Shaker Publishing.