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This document is a translation made by SHK of the original response in Swedish to the safety recommendation. In case of discrepancies between this translation and the Swedish original text, the Swedish text shall prevail in the interpretation of the response.

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## **The Swedish Transport Agency's response to recommendations in Final Report RS 2020:01 Peter Pan – engine breakdown and fire in the southern Baltic on 9 July 2019**

### **Introduction**

We describe below our reasoning regarding the specific safety recommendations addressed by the report to the Transport Agency and how we will be handling them.

### **Handling of recommendations**

#### ***Safety recommendation No. 1 The Swedish Transport Agency is recommended to:***

*Draw attention to the problem of cross-flooding rules in combination with risks of the spread of fire and take suitable action to raise the matter, also internationally (see section 3.4). (RS 2020:01 R1)*

#### **Response:**

As SHK notes, the rules for cross-flooding and the rules for fire integrity may in some instances influence the aim of each regulation, i.e. compliance with stability or fire safety requirements. One solution to balancing out asymmetrical water penetration may be a common space from one side of the vessel to the other or an open connection through which water can flow freely. On the other hand, completely sealed subdivision would be ideal in order to restrict the spread of fire.

The various national regulations that implement Chapters II-1 and II-2 of the SOLAS Convention reflect this through requirements to make cross-flooding arrangements *automatic*, if possible, and that two engine rooms shall be *separated* through A-0 bulkheads. Each regulatory framework currently allows deviation from the basic requirements and the safety functions may therefore exist in parallel, even if engine rooms are placed in compartments that are connected through cross-flooding pipes.

One way of addressing the criticised problem is for an authority and shipping company to actively choose to analyse whether they want A-0 integrity, e.g. by installing a valve in the cross-flooding pipes, (see TSFS 2009:114 and SJÖFS 2006:1, Annex 1) or whether it is more advantageous to have an open flow in the event of water penetration and then do without A-0 integrity in accordance with the table mentioned in note 21 in the report. However, until 2006 there was a special requirement in the Swedish regulation (SJÖFS 1993:3) which did not permit valves in cross-flooding pipes. As (SJÖFS 1993:3) has been repealed, (SJÖFS 2006:1) applies generally to damaged stability. The arrangement for cross flooding on Peter Pan was changed in conjunction with her extension in 2018, and is executed in accordance with (TSFS 2009:114).

Passenger vessels over 120 metres with three or more main fire zones that were built in 2010 or later are subject to the rules on *Safe Return to Port*. For these vessels, the Transport Agency has made the assessment that the problem is thus resolved through explicit requirements concerning redundancy.

At present the Transport Agency primarily sees a need to acknowledge the problem when building new vessels that are not subject to the rules on *Safe Return to Port* – as well as through internal information campaigns.

The Transport Agency sees that the accident investigation report will automatically be discussed in the IMO subcommittee, *Implementation of IMO Instruments* (III) when the report is uploaded to GISIS and analysed in the pertinent working group.

***Safety recommendation No. 2 The Swedish Transport Agency is recommended to:***

*Take action nationally and internationally in order to draw attention to the problem of combined crankcase ventilation (section 3.2). (RS 2020:01 R2)*

**RESPONSE:**

The requirement stating that the crankcase ventilation must not be combined can be found in the classification societies' own rules. However, there are rules for oil mist detectors (greater engine output of over 2250 KW or cylinder bore greater than 300 mm) in the SOLAS Convention that

the Transport Agency has incorporated into national legislation and which forms the basis of the surveys conducted by the agency or recognised organisations.

The Transport Agency intends to inform the industry via information in *Transportstyrelsen informerar* about ensuring the functionality of oil mist detectors in combined crankcase ventilation. A *Safety Alert* published on our website may also be pertinent.

The Transport Agency will also be informing internal members of staff about the problem for the purpose of highlighting this both in conjunction with conversions and new builds, in conjunction with supervision and during the agency's supervision of recognised organisations.

The Transport Agency sees that the accident investigation report will automatically be discussed in the IMO subcommittee, *Implementation of IMO Instruments* (III) when the report is uploaded to GISIS and analysed in the pertinent working group.

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Decisions in this case have been made by Andreas Tapani, Head of Section, Analysis Section. Case officers Mats Hammander, Mattias Hörnquist, Robin Cook, Saeed Mohebbi, Stefan Eriksson, Gabor Szemler, international coordinator, Fredrik Nilsson, vessel surveyor, Fredrik Jonsson, Fredrik Hellsberg, Henrik Pahlm and Lotta Taxén, heads of section, and Patrik Jönsson, accident coordinator, have participated in the final administration of the case, the latter acting as rapporteur.

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