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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.

Statens Haverikommission
P.O. Box 125 38
102 29 Stockholm

Response of the Swedish Transport Agency to recommendations in final report RS 2014:11 M/S Gotland – grounding outside Oskarshamn, Kalmar county, on 2 January 2014

The Swedish Transport Agency hereby submits responses on the implementation of the recommendations presented by the Swedish Accident Investigation Authority (SHK) in the final report of the incident in the heading above.

The Swedish Transport Agency's responses have been preceded by a referral statement of 12 December 2014 concerning SHK's external referral.

Recommendations

The Swedish Transport Agency is recommended to:

RS 2014:11 R7

– Verify that damage control plans on ships fulfil the requirements of applicable rules and that they are constructed to include both scenarios of collision and grounding with water leakage in different parts of the ship at the same time.

Response: Damage control plans and damage control manual are part of the ship's stability documentation in accordance with TSFS 2009:114, Appendix 9 and Rule 4.4.8 and are to be approved in accordance with the same regulation and appendix and with Rule 3.2. In accordance with the same regulation and appendix, damage control plans shall be permanently posted on, among other places, the bridge in accordance with Rule 15 together with manuals which are to be available. The instances of damage presented are the damage rule of thumb provided by the regulations that the ship is covered by, and therefore represent no full compilation of the total number of instances of damage the ship might conceivably be ex-

posed to. If the ship has a DIP plan (Damage Information Procedure), the Swedish Transport Agency has no objections to this, and it can provide further information on damage and the ship's buoyancy in damaged condition.

The Swedish Transport Agency assesses that an international introduction of Damage Control Drills (see response to R8) will entail a continuous work of improvement on board SOLAS ships within the areas mentioned above.

Measures taken: See response to R8

Measures planned: See response to R8

RS 2014:11 R8

– Verify that the use of damage control plans is included in training of emergency procedures on ships.

Response: Internationally, IMO/SDC 2 (Sub-Committee on Ship Design and Construction) is, among other things, working on a proposal for Damage Control Drills, i.e. precisely that which is indicated by the recommendation.

It is reasonable to say that the Swedish Transport Agency's development of rules for national tonnage will be affected by this international work.

As regards the Swedish Transport Agency's supervision, the responsible master's knowledge of the damage control plan is controlled through periodic inspection in accordance with THB¹ 8.15.

Measures taken and planned: The IMO/SDC 2 meeting is in progress (16 – 20 February 2015). The Swedish Transport Agency is participating in these works.

RS 2014:11 R9

– Work on an international to ensure clearer and more harmonised guidelines of bridge layout, which take into account the ship's intended area of use.

Response: The Swedish Transport Agency is working for, and will continue to work internationally for, a better bridge design in view of the relationship between human and machine/equipment. This is what IMO calls

¹ The Swedish Transport Agency's Supervision Manual [*Tillsynshandbok*, THB]

Human Element (HE) issues. IMO resolution A.947(23) contains the vision, principles and goals for its international work and circular MSC-MEPC.7/Circ.1 contains a checklist for ensuring that HE issues are considered in the implementation of new rules.

An important part of the e-Navigation (e-Nav) project advocates that HE and Human Centred Design (HCD) should be part of the process of new bridge equipment in order to make navigation safer, thereby protecting the environment. The tool advocated by e-Nav is Human Element Analyzing Process (HEAP), which is a process that can be summarised in a flow scheme/checklist that is intended to ensure that HE is taken into account in matters such as training and exercises.

One proposal from Norway and Australia with regard to the implementation of e-Nav, which the Swedish Transport Agency will take a position on during the spring ahead of the MSC 95 meeting between 3 and 12 June, raises the point that footnote amendments need to be made to Rule 15 in SOLAS Chapter V, which among other things contains the performance standards MSC/Circ.982, Guidelines on ergonomic criteria for bridge equipment and layout. This will also mean that performance standards for INS, IBS, SN.1/Cir.265 and the technical ISO standard 8468 will need to be amended.

Sweden also has conditions that also require special attention in bridge design and standardisation works. Above all, this concerns the MTOP² aspect concerning conditions due to the extensive navigational challenges within the Swedish coastal and archipelagic fairways, but also the subarctic climate entailing periods of ice navigation with or without the assistance of icebreakers. This is essentially to say clearer and more harmonised guidelines and standards of bridge layout, which take into account the ship's planned use.

Measures taken: The Swedish Transport Agency is working on and monitoring the international work according to the above. On 12 March, the Swedish Transport Agency's centre of excellence for HF/MTO held an information meeting with Swedish shipping and navigation researchers within the area. This meeting shed light on both national and international research work.

Measures planned: In addition to the above, the Swedish Transport Agency will consider the scope of its participation in standardisation works within the area.

² Människa Teknik Organisation Procedurer (MTOP) [Human Technology Organisation Procedures]

This matter has been decided by Head of Unit Simon Posluk. Participating in the final administration of the matter were Roland Eklöf, Stefan Eriksson, Fredrik Nilsson, Patrik Jönsson, Tove Jangland, Anna Tullberg and coordinator Erik Sandberg, the latter also acting as rapporteur.

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Simon Posluk
Head of Market, Environment and Analysis Unit