European Maritime Safety Agency

Assessment on the German proposal and IMO studies made on the Stockholm Agreement in Conjunction with Future SOLAS 2009 Revised Damage Stability Rules

Lisbon, 09 March 2007

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1. THE GERMAN PROPOSAL

During the workshop on Ro-Ro Passenger Ships fitted with Long Lower Holds held in Lisbon 17 November 2006, Germany proposed to consider a revision of floodable length curves calculations from 1 January 2007.

Germany drew up a proposal for "*Equivalent safety standard for the floodable length curve (SOLAS II-1, Regulations 4 – 7) on RoRo passenger ships with a long lower hold* " which has been forwarded to EMSA and the member states for evaluation.

1.1 The possible effect

There is a great variety of technical solutions in order to fulfil German proposal for equivalent standard for the floodable length curve on Ro-Ro passenger ships with longer lower hold.

Most likely these vessels will have a higher operational cost (turnaround time following modification of the ship layout), and also might have to count for an increased running cost due to external modifications of the ship geometry (fuel, lubricating oil*).*

1.2 Impact assessment requirements

The cost involved to adjust a vessel in a design stage is minor or rather neglectable. Where the retrofitting cost of a vessel under construction depends on the extent of the required modifications and the technical solutions found.

In order to make an assessment of the ships in advance stage of building (Table 2), more details need to be provided. To have an indication of the cost, figures can be derived from earlier retrofittings as presented in the SA study by Vassalos & Papanikolaou in 2001 (Annex 2).

An adequate impact assessment of the vessels concerned can be made as soon as been considered necessary.

1.3 The vessels affected

In order to prepare for the study of impact for retrofitting, the following has been extracted from the Sea-web database.

Currently the EU members have 76 newbuidings planned (Table 1), of which 16 vessels are identified to be in a building stage and might require retrofitting in order to comply with this application (Table 2).

Table 1: Newbuilding programme under EU flag.

Flag	Projected	On Order / Not commenced	Launched	Keel Laid	Under Construction	Grand Total
Cyprus					**1**	1
Estonia	1		1	**1**		3
Finland		1		**1**	**1**	3
France		2		**1**		3
Greece	1	1				2
Italy	3	10	1	**6**		20
Netherlands			1			1
Norway		8	3	**1**		12
Poland	1					1
Portugal		2		**2**		4
Spain	1	5	1			7
Sweden	1	3			**2**	6
UK		3	2			5
Grand Total	8	38	10	**12**	**4**	76

Table 2: Vessels under construction or in a similar stage of construction.

Flag	Name_of_Ship	Deadweight	Order	Built	Status	Class
Cyprus	VELOCE	5000	2005-08	2008-01	Under Const.	BV
Estonia	GALAXY 2	4850	2005-04	2008-06	Keel Laid	BV
Finland	NORDLINK	9653	2004-10	2007-06	Keel Laid	NV
Finland	AKER HELSI. 1358	3500	2005-11	2008-01	Under Const.	LR
France	COTENTIN	6200	2006-07	2007-10	Keel Laid	BV
Italy	RODRIGUEZ 329	1000	2005-01	2007-12	Keel Laid	RI
Italy	VISENTINI 218	7000	2004-00	2007-10	Keel Laid	RI
Italy	VISENTINI 219	7000	2004-12	2008-04	Keel Laid	RI
Italy	VISENTINI 220	7000	2006-11	2008-11	Keel Laid	RI
Italy	VISENTINI 221	7000	2006-11	2009-05	Keel Laid	RI
Italy	VISENTINI 222	7000	2006-11	2009-10	Keel Laid	RI
Norway	AA 244	16	2005-11	2007-07	Keel Laid	
Portugal	FISKERSTRAND 55	500	2006-02	2007-06	Keel Laid	NV
Portugal	FISKERSTRAND 56	500	2006-02	2007-06	Keel Laid	NV
Sweden	BALTIYSKIY 05443	8500	2005-08	2008-01	Under Const.	LR
Sweden	BALTIYSKIY 05444	8500	2005-08	2008-04	Under Const.	LR

1.4 The conclusions of the members states

The German proposal was sent to all invited member states for there point of view. Two member states have replied so far.

- Greece disagree and sees no reason for interpretations or deviations from the implementation of the relevant legislation in force.
- Finland says that the German proposal might be a way forward for applying SOLAS on this type ships from this date onwards until the new rules (SOLAS 2009) enters into force

1.5 Conclusion on existing vessels

The phase-in timetable to upgrade existing ships to the Stockholm Agreement is getting closer and a large legacy fleet of 47 existing ships built under SOLAS 90 regulation are to be considered.

The vessels identified might require retrofitting in the same order as a new ships under construction.

We realize that the German proposal for the subdivision and stability calculation of existing Ro-Ro passenger ships with Long Lower Holds could be in view of naval architects and shipbuilders a favourable option.

However we have to make sure that the German proposal provides the same level of safety as the Stockholm Agreement before deciding to use it as a substitute.

2. IMO PAPERS/STUDIES REGARDING TO STOCKHOLM AGREEMENT

In view of the Stockholm Agreement – SOLAS 2009 discussion between the EU members states, it has been investigated in which extend the Stockholm Agreement has been studied by IMO and, if there is any consideration made by the IMO regarding the Stockholm Agreement in the creation of SOLAS 90.

2.1 Studies made by IMO

Concerning papers/studies made within the IMO on the Stockholm Agreement we know that the ro-ro expert Panel discussed it after the Estonia accident at MSC 65 (panel report MSC 65/4/Rev.1.).

The Agreement is not an IMO document and was not drafted and/or concluded at IMO, it is an Agreement signed during a meeting of interested parties in Stockholm on 27 and 28 Feb 1996. The original Agreement was then deposited with IMO, a completely extraordinary thing and unique in IMO history as far as unilateral agreements are concerned.

The only IMO resolution/ paper that has been directly base on the Stockholm agreement is MSC.141(76) "Revision of the Model Test Method" which was adopted on 5 December 2002.

For SOLAS 2009 the Static Equivalent Method (SEM) has been revaluated in the “Harder” project without a clear outcome.

In Lisbon 9th March 2007,

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Annex 1 Draft statement of Germany *: Equivalent safety standard for the floodable length curve (SOLAS II-1, Regulations 4 – 7) on RoRo passenger ships with a long lower hold.*

Annex 2 Conclusion of Greece regarding the German proposal

Annex 3 Conclusion of Finland regarding the German proposal

Annex 4 Stockholm Agreement – Past, Present & Futere (Part I) : *by Prof. Dracos & Prof. Apostolos Papanikalaou.*

Annex 5 MSC.141(76) : *Revision of the Model Test Method*.