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## INFORMATION NOTE

From:	European Commission
To:	Council
Subject:	Survivability of passenger ships after an accident: societal acceptability of risks - <i>Information from the Commission</i>

Delegations will find annexed an information note from the Commission on the above-mentioned subject, which will be dealt with under "Any other business" at the meeting of the Council (Transport, Telecommunications and Energy) on 5 December 2013.

**Information note from the Commission*****Survivability of passenger ships after an accident: societal acceptability of risks***

In the aftermath of the Costa Concordia accident that took place on 13 January 2012 the Commission underlined the good safety record of large passenger vessels in Europe, but also set out, in a note to the Transport Council on 22 March 2012, a three-pronged approach to the continued enhancement of passenger ship safety. This approach included: (i) updating and/or amending existing EU legislation and (co)-sponsoring submissions for international standards setting at the IMO, (ii) continuing to enforce and implement existing rules and drawing any lessons from best practices and, (iii) promoting voluntary commitments of the industry. A status and follow-up of each of these three axes was presented at the Transport Council on 10 June 2013. The present note focuses on the improvement of IMO rules for the survivability of passenger ships after an accident, given that a ship is considered to be its best life boat.

***IMO rules for the survivability of passenger ships after an accident***

The existing international and European rules build on the IMO regime for the survivability of ships after an accident, set by SOLAS.

A standing agenda item on passenger ship safety was introduced in May 2012 for the Maritime Safety Committee (MSC) of the IMO. European input has since helped advancing important issues within IMO, including the operation of watertight doors within passenger ships; evacuation analysis and damage stability. The Commission considers damage stability of crucial importance, because this is the most important requirement determining the survivability of a ship after an accident.

In December 2012, a joint submission by the Commission and Member States proposed to the relevant IMO sub-committee possible alternatives to improve the calculation method for the survivability of passenger ships in a damaged condition as laid down in the SOLAS Convention since 1 January 2009. More importantly, a joint European submission aiming at a substantial increase in the safety level provided by the IMO passenger ship damage stability regulations was submitted to the MSC for its meeting in June 2013. This was based on the results of EU-funded research which demonstrated that the level of damage stability can be improved significantly, and by cost-effective measures, compared to that provided by the IMO's existing regulations on damage stability. The above mentioned submission was also supported by the United States.

At the 92<sup>nd</sup> session of the IMO MSC meeting, it was decided that the stability of a passenger ship after an accident should be reviewed in two parallel phases: in the first phase options for an increase of stability after an accident should be investigated, while the second phase should determine what safety level must be achieved by passenger ships.

*EU research results: are the risk levels inherent to current IMO rules still acceptable today?*

A major EU funded study<sup>1</sup> found that the safety level provided by the 2009 IMO damage stability regulations allow for one major accident (like the "Estonia" ferry accident in 1994 with more than 800 victims) to occur approximately every 20 years. In view of the Commission, this risk can - and should - be reduced: the study's results suggest that appropriate and affordable risk control options could bring down the acceptable risk levels to one such an accident every 100 years.

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<sup>1</sup> 'Study of the specific damage stability parameters of ro-ro passenger vessels according to SOLAS 2009 including water on deck calculation', carried out by the Ship Stability Research Centre (SSRC) of the University of Strathclyde (UoS) commissioned by EMSA. This study started in December 2009 and finalised in June 2011.

Another comprehensive EU research project bringing together major European ship yards, owners and classification societies<sup>1</sup> found that the safety level provided by the 2009 IMO damage stability regulations could be considerably increased by cost-effective ship design measures: a 6000 passenger ship, for instance, could survive up to 97% of all possible collisions (compared to 84% under the current rules); additional building and operational costs are minimal (1-2% of cost). At an IMO meeting in November 2013 both studies received a positive review from a group of dedicated international experts in risk analysis and cost benefit assessment.

### *Developments in the EU and in the IMO*

Based on the outcome of this EU research, the Commission has recently tabled a joint European submission to the IMO Ship Design and Construction Sub Committee (SDC), which will meet from 20-24 January 2014. The draft submission covers ship new-buildings and argues that a substantial increase of stability after an accident can be achieved by measures that are cost-effective, while ship designers continue to be free –under the generally accepted paradigm of SOLAS 2009 – to develop and choose innovative measures to achieve the proposed increase of stability after an accident. The content of this intended submission to the IMO was discussed in several meetings with Member State experts and was subsequently debated in the preparatory bodies of the Council. Regrettably, the Council was so far not able to agree on the respective joint submission to IMO.

The United States subsequently made a submission to the IMO, which builds on the EU-funded research results and is generally in line with the suggestion made by the Commission: it covers new ships only, but suggests more efforts to be made by bigger than smaller ships.

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<sup>1</sup> GOALDS: 'GOAL based Damage Stability project' which was carried out under the 7th EU Framework Programme for RTD under the Theme 'Sustainable Surface Transport'. The project started in September 2009 and finalised in August 2012.

## *Next steps*

The Commission considers that there is a compelling need and political urgency to make a proposal to increase the safety level provided by the 2009 IMO damage stability regulations at the IMO. There is no need to embark on another round of studies. There is, in particular, no need to wait for any accidents to occur. Cost- and result-effective proposals are openly on the table. Europeans travelling on passenger ships across the world will not understand why easily available safety improvements are not introduced.

The Commission is calling for a constructive and coordinated approach at IMO on passenger ship safety, especially in view of the next MSC meeting in May 2014. Building on the two phased approach so far followed together with international partners, the Commission suggests a joint European submission to MSC on damage stability of new passenger ships. This submission should take into account the results of the IMO's scrutiny of EU funded research results as well as EU support for the proposal made by the United States which will be discussed in the relevant IMO body in January 2014. In line with suggestions received from Member States and jointly with Member State experts, the Commission is open to explore avenues for improvements to existing large passenger ships, under appropriate transitional arrangements.

At this next MSC meeting, the Commission would hope to see progress also on technical and operational issues, such as watertight doors, evacuation analysis, ship design and search & rescue issues, following the safety technical investigation report into the Costa Concordia marine casualty,<sup>1</sup> which was delivered in June 2013.

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**1** Ministry of Infrastructure and Transport, Maritime Casualties Investigative Body; Cruise ship Costa Concordia, Marine Casualty on January 12, 2012; Report on the safety technical investigation

The Commission invites the Member States to:

- take note of the progress made so far on passenger ship safety and in particular the improvement of the survivability of passenger ships after an accident as demonstrated by the available research results;
  - confirm the need for an increase of safety levels in relation to the stability of passenger ships after an accident, for passenger ship new-buildings by introducing a joint European submission to the IMO.
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