

SDC 4 13 – 18 FEBRUARY 2017

Sec Gen opened the Sub Committee and specifically highlighted the Work of the WG on Subdivision and Stability; that Lessons Learned from the Costa Concordia should be brought into IMO Instruments, see Agenda Items 3,4 and 7 and particularly the safe evacuation of passengers; and the need for Safe Mooring Arrangements on ships and dock sides.

1. Adoption of the agenda

- a. SDC 4/1, SDC 4/1/1, SDC 4/1/2**
- b. The following working groups will be held during the session
- c. Working Group on Subdivision and Damage Stability (SDS) (agenda items 3, 4 and 7);
- d. Working Group on Intact Stability (IS) (agenda item 5); and
- e. Working Group on Fire Protection (FP) (agenda items 6 and 12).
 - i. ITF represented on all WGs.
 - ii. Nothing significant to Report.

2. Agenda item 2 Decisions of other IMO bodies

- a. SDC 4/2 and 4/2/1 - Secretariat - Outcome of MSC 96, C116, MEPC 70 and MSC 97.
- b. The Sub-Committee will be informed of relevant decisions made and action taken by other bodies of the Organization, and will be invited to take action, as appropriate, under the relevant agenda items.
 - i. Nothing significant to Report.

3. Agenda item 3 - Amendments to SOLAS regulations II-1/6 and II-1/8-1

- a. SDC 4/3 – Chair of the WG - Report of the working group at SDC 3 (part2)
- b. SDC 4/3/1 – US - Report of the correspondence group
- c. Consider part 2 of the report of the Subdivision and Damage Stability (SDS) Working Group at SDC 3 and the report of the SDS Correspondence Group, established at SDC 3 (SDC 3/21, paragraph 3.35), and any other relevant documents submitted to this session. A Working Group was established to deal with the matter (see also paragraphs 4 and 7).
 - i. Part 2 of the Report approved.
- d. SDC 4/3/2 – Norway – Proposals for a new explanatory note for SOLAS regulation 17-1 (Integrity of the hull and superstructure, damage prevention and control on ro-ro passenger ships)
- e. SDC 4/3/3 – China – Comments on the SDS Correspondence Group and, in particular, to the time-domain flooding simulation and the fire test of the heat-sensitive pipe penetrations
 - i. Germany, Canada, Norway and others (EU Nations) were not in favour of taking the time-domain forward to

the WG as it was state of the art technology and further Norway did not support any of the points in the Chinese Paper.

- ii. The Chair proposed that 4/3/1 and 4/3/2 be sent to the WG and that 4/3/3 would not be taken forward – this was agreed. The SDS WG was therefore stood up.
- iii. Nothing significant for IFSMA.

4. **Agenda Item 4** – Computerized stability support for the master in case of flooding for existing passenger ships
- a. MSC 94/6/1 – Bahamas et al - Further consideration of the proposal to extend, to existing passenger ships, the SOLAS requirement relating to computerized stability support for the master in case of flooding.
 - b. The Sub-Committee will be invited to consider draft amendments to SOLAS regulation II-1/8-1.3, as set out in annex 2 to document MSC 94/6/1 and the issues related to the implementation of the draft revised Guidelines on operational information for masters of passenger ships for safe return to port by own power or under tow (MSC.1/Circ.1400) on existing passenger ships (SDC 3/21, paragraph 4.8), together with any relevant documents submitted to this session.
 - c. SDC 4/4 – IACS - discusses the need for existing passenger ships to be provided with computerized stability support and proposes a draft amendment to SOLAS regulation II-1/8-1.3
 - d. SDC 4/4/1 – US - comments on the draft amendment to SOLAS regulation II-1/8-1.3, proposed in document SDC 4/4 (IACS), and provides an alternative proposal that is intended to improve clarity and also align with the similar text used to apply the draft new SOLAS regulation II-1/19-1 to existing passenger ships
 - i. Chair stated that both Papers should go forward to the SDS WG for further consideration. A number of delegations felt that this Regulation should only be brought in if the data exists and should be flexible, reasonable, practicable and proportionate. The WG should be aware of this but when arguing for it, Delegations need to state how this can be done.
5. **Agenda Item 5** - Finalization of the second generation intact stability criteria
- a. SDC 4/5 – Chair of WG – Report on the IS Working Group at SDC 3 Part 2
 - i. This was agreed by the Sub-Committee
 - b. SDC 4/5/1 and /Add.1 – Add.6 – Japan – Reports of the Correspondence Group Parts 1 – 7) on Intact Stability regarding the finalization of the draft explanatory notes for the second-generation intact stability criteria, and, in particular, the draft explanatory notes on the vulnerability of ships to the pure loss of stability failure mode

- i.
- c. SDC 4/5/2 – China - This document provides proposals on selection of motion prediction method for parametric rolling level 2 criteria and on setting of calculation parameters
 - i.
- d. SDC 4/5/3 – China - Comments on parameter setting of level 2 criteria of excessive acceleration and on standard deviation integral method
 - i.
- e. SDC 4/5/4 – China - Results of the sample calculation conducted by China for vulnerability of ships to surf-riding/broaching, and comments on level 2 vulnerability criteria for Surf-riding/Broaching, based on the analysis of the calculation results
 - i.
- f. SDC 4/5/5 – China - Comments on the draft Guidelines on Direct Stability Assessment Procedures
 - i.
- g. SDC 4/5/6 – US - Draft consolidated explanatory notes that restructure, generally consolidate and suggest some edits to the draft working versions of the explanatory notes, set out in document SDC 3/WP.5, into a single document, and proposes to finalize the draft explanatory notes at the same session as the target completion year
 - i.
- h. SDC 4/5/7 – US - Comments on the status of the finalization of second generation intact stability criteria, the challenges yet to be resolved and consistency issues, and recommends elements to be included in the draft terms of reference for a Working Group on Intact Stability, if re-established at SDC 4
 - i.
- i. SDC 4/5/8 – Germany - An input for discussion and finalization of the Guidelines for the direct stability assessment in the framework of the second-generation Intact Stability Criteria
 - i.
- j. SDC 4/5/9 – Japan - Proposes updates to the draft guidelines for operational limitations, focusing on the inclusion of operational limitations in the second-generation intact stability criteria
 - i.
- k. SDC 4/5/10 – Japan - Reports on the outcome of model experiments of an offshore supply vessel in astern waves and provides comments on the definition of a vessel with extended low weather deck with a view to finalization of the draft explanatory notes on the vulnerability of ships to the pure loss of stability failure mode
 - i.
- l. SDC 4/5/11 – Japan - Proposes a way for refining the second check of level 2 vulnerability criterion for parametric roll, by focusing on the critical ship speed for parametric roll

- i.
- m. SDC 4/5/12 – Germany- Comments on the report of the IS Correspondence Group on Intact Stability and provides a proposal concerning dead ship stability criteria
 - i.
- n. SDC 4/5/13 - Germany- Comments on documents SDC 4/5/1 and SDC 4/INF.4
 - i. SDC 4/Inf .4 - /Inf.10 – It is interesting that looking through these Inf Papers as it shows that that the newly proposed Intact Stability Criteria deliver inconsistent results for all vessels across the board. There is a lot of data to be considered by the WG and will become quite technical. They were not introduced and should be taken into account by the WG
 - ii. Papers 4/5/2 – 4/5/13 Were introduced by the Delegations and it was clear there is a lot of Technical Input in these Papers for the IS Working Group to consider. There were a number of issues raised on these Documents by many Delegations which showed the amount of work still to be done on this Agenda Item in the WG.
 - iii. The UK is unhappy with the progress of this WG in this area and concerned that it keeps coming up with new issues. UK urged the Chair to refocus the IS WG and to ensure they meet their current timescale for completion or even earlier after a number of years of reverification. A number of delegations stated the Explanatory Notes highlighted in Paper 4/5/6 should be a low priority for the WG.
 - iv. The Chair summed up by stating that because of the wide-ranging thoughts of the Sub-Committee it was too difficult to sum up but felt the TOR of the WG needed to be modified. Following intervention from Norway and Israel it was felt the recommended TOR by the US in 4/5/7 should be taken by the WG. ICS stated they were concerned with the direction of the WG as it was far too technical with the Direct Assessment Method and needed some real practical guidance as suggested by the US. The Chair reminded the WG of their TOR and the comments made in Plenary and that they have to make the 2019 revised deadline for completion. The WG was established and sent out.

6. **Agenda Item 6** – Amendments to SOLAS and FSS Code to make evacuation analysis mandatory for new passenger ships and review of the Recommendation on evacuation analysis for new and existing passenger ships
 - a. No Papers received for this Item. The Chair therefore asked for comments on how to proceed. The UK felt that the work had been completed and should therefore be deleted from the Output of MSC. This was agreed by the Chair and the Sub-Committee

7. **Agenda Item 7** – Revision of section 3 of the Guidelines for damage control plans and information to the master (MSC.1/Circ.1245) for passenger ships
 - a. MSC 93/6/12 – CLIA – Damage Stability of Cruise Passenger Ships: Enhanced damage Control Plans
 - b. The Sub-Committee will be invited to further consider a tangible output from the Cruise Ship Safety Forum related to proposed enhancements to the damage control plan based on experience of the global cruise industry and use on board during damage response drills, together with any relevant documents submitted to this session (SDC 3/21, paragraphs 10.4 and 10.5).
 - c. SDC 4/7 – China - Proposal on enhancements to graphical symbols for damage control plans for passenger ships
 - i. The Chair proposed that this Paper should go forward to the SDS Working Group as well as MSC 96/6/12– This was agreed.
 - ii. Nothing significant for IFSMA

8. **Agenda Item 8** – Mandatory Instrument and/or provisions addressing safety standards for the Carriage of more than 12 Industrial Personnel on board vessels engaged on International Voyages
 - a. The Sub-Committee will be invited to progress the development of the draft new Chapter [XV] of SOLAS and the draft new Code (SDC 4/2, paragraphs 4 to 6), taking into consideration any decisions to be taken by MSC 97 on this issue. Any documents related to classification of offshore industry vessels and a review of the need for a non-mandatory code for offshore construction support vessels, if submitted to this session, will be considered under this Agenda Item as well (MSC 96/25, paragraph 7.15).
 - b. SDC 4/8 – Germany - Draft Code of Safety for Ships Carrying more than 12 Industrial Personnel onboard vessels engaged on international voyages
 - c. SDC 4/8/1 – US - Comments based upon the draft text proposed by Germany in document SDC 4/8, and recommends elements for inclusion into the Draft Terms of Reference for a Correspondence Group.
 - i. There was a lot of discussion on this topic and many views. In general, there was support , led by Norway,

for the formation of a Correspondence Group on the subject and ToR agreed. In the past NAUTILUS INT, David Appleton, has represented IFSMA on Working Groups in other IMO Committees and I will discuss with him if he would be interested in being part of the Correspondence Group on behalf of IFSMA. The issue will be to try and keep the production of the Code simple and clear but I think is a subject which could be quite time consuming.

- ii. The Chair proposed that a small group of interested parties get together to Draft ToR taking into account the US Paper and produce a J Paper, with secretarial support, this week for the Sub-Committee to discuss. Norway agreed to take this forward.

9. Agenda Item 9 - Amendments to the 2011 ESP Code.

- a. SDC 4/9 – IACS - Preparation of the consolidated text of the Code
 - i. IACS proposed no amendments to ESP Code now but a tracked changes document of all changes be produced for consideration at SDC6.
- b. SDC 4/9/1 – India – Comments on Paper 4/9
 - i. India reported out that ROs differ in their approach as to which tanks are inspected i.e. a 'ring' of tanks or tanks on one side only. IACS interpretation accepted, supported by INTERTANKO, that individual tanks considered.
 - ii. Nothing significant to comment on

10. Agenda Item 10 – Unified interpretation to provisions of IMO safety, security, and environment-related Conventions

- a. SDC 4/10 – IACS – Draft amendments to MSC/Circ.686
 - i.
- b. SDC 4/10/1 – IACS - Unified interpretations regarding drainage of enclosed spaces situated on the bulkhead deck (IACS UI SC81) and special requirements for vehicle ferries, ro-ro ships and other ships of similar type (IACS UI SC220)
 - i. The Chair asked for this Paper to be considered out of the AI as it might need to go to the SDS WG for consideration. It was agreed that this Paper had been fully discussed and agreed by the SDS Correspondence Group and should not be sent to the WG. It should therefore go to the Secretariat to prepare the Circular.
- c. SDC 4/10/2 – IACS - Application of SOLAS regulation II-1/3-6, as amended, and the revised Technical provisions for means of access for inspections (IACS UI SC191)
- d. SDC 4/10/3 – IACS - Determination of the deadweight to be stated on certificates
 - i. Nothing significant to concern IFSMA

11. **Agenda Item 11** – Revised SOLAS regulation II-1/3-8 and associated guidelines (MSC.1/Circ.1175) and new guidelines for safe mooring operations for all ships

- a. SDC 4/11 – Denmark and Japan – Report of the Correspondence Group
- b. SDC 4/11/1 - Japan - Issues for further consideration regarding safe mooring operations
- c. SDC 4/11/2 – ICS - Comments on document SDC 4/11
- d. SDC 4/11/3 – OCIMF - Comments on document SDC 4/11
- e.

i. **IFSMA made an Intervention as follows:**

- ii. Thank you Chair. IFSMA, representing the Shipmaster, would like to thank Denmark and Japan for the Report of the Correspondence Group and we agree with the comments of both ICS and OCIMF. On a more specific point there appears to be a number of conflicting issues in Annex 2 of SDC 4/11– The Draft Guidelines. As an example, in Sub Paragraph 4.2.3 (Objectives) it states that " In normal mooring operations only mooring lines that are **permanently fixed** to a winch are used;" but in Sub Paragraph 5.1.6 (Construction) it states that; "The mooring arrangement should be so designed that manual handling of towing and mooring lines is minimized [(As Low As Reasonably Practicable)]. This could be accomplished through use of fixed/dedicated mooring lines, use of spooling equipment and by placing mooring winches close to the ship side served." This seems to be a conflict between the Objective being a Wish List and the Construction being the Practical Application. I will forward this Intervention for inclusion in the Sub-Committee Report. Thank you Chair.

1. There were a lot of generic comments from the floor stating that more work needed to be done before the work of the Correspondence Group was complete and reported to SDC 5.
2. Captain Harry Gale of the NI will take this forward on behalf of IFSMA at the Correspondence Group.

12. **Agenda Item 12** - Guidelines for use of Fibre Reinforced Plastic (FRP) within Ship Structures.

- a. SDC 4/12 and 4/Inf.2 – Sweden – Report of the Correspondence Group on Development of Interim Guidelines for use of Fibre Reinforced Plastic (FRP) elements within ship structures, including the updated Draft Interim Guidelines and the associated Draft MSC Circular.

- b. SDC 4/12/1 – Germany - Proposal on the application of FRP/composite material for elements within ship structures
 - i. Nothing significant to report on this Item. The Chair then went through Para 32 of the Recommendations of the Correspondence Group and the Items were all endorsed, noted and consider consider the draft Interim Guidelines for use of Fibre Reinforced Plastic (FRP) elements within ship structures: Fire safety issues and the associated draft MSC circular, and take action as appropriate (paragraph 31 and the annex). There were no comments and the FRP WG was established.

13. **Agenda Item 13** – BIENNIAL STATUS REPORT AND PROVISIONAL AGENDA FOR SDC 5

- a. SDC 4/13 – FOEI, WWF etal - International Code for Ships Operating in Polar Waters (Polar Code) – Phase 2
- b. SDC 4/13/1 – New Zealand – Mandatory Polar Code Phase II – non-SOLAS ships operating in polar waters
- c. Nothing Significant for IFSMA.

14. **Agenda Item 14** - Any Other Business

- a. SDC 4/15 – Antigua and Barbuda, China, France, - Progress made on the draft Guidelines for wing-in-ground (WIG) craft
- b. Nothing Significant to report.