Summary of the session 1 (Safety Session) by Mr. Wu Jiameng (CANSI)

Safety session was held in the afternoon of 7th November, 2013 from 14:00 to 18:00.

The session topics were grouped into 4 topics:

- Gas fuelled ship
- Testing arrangements for watertight compartments
- GBS / CSR-H, SCF
- Liquefaction of bulk cargo

1. Gas fuelled ship

The first speaker, Mr. Shin Jung Gyu from KOSHIPA, gave the experience of the first environmentally friendly LNG fuelled ship in Asia, including the LNG supply system (Samsung so-called FuGas), DF engine, electric propulsion, bunkering station, automation system and network structure. The safety issues on the LNG tank room arrangement and storage, vaporization, bunkering facilities were discussed.

The other presentation of this topic was on the study of achievements and prospects for the near future by Mr. Takashi Unseki from Japan. The comparison between different LNG tank type was introduced, as well as the possibility of potential of LNG as fuel on different kind of vessels. The speaker also gave some emission calculation of typical vessels and some concept design with gas fuel.

Both participants shared the view that the increasing use of LNG fuel could get the benefit from abatement in Emission of NOx, SOx, GHG, as well as EEDI. At the same time, the session noted the potential safety risks with the use of gas fuel by IGF are to be concerned.

2. Testing arrangements for watertight compartments

The presenter, Mr. Bai Yugang, from CANSI reviewed the progress of the issue on

tank testing and tight boundaries, the difference between the requirement of SOLAS Convention and IACS UR S14, and introduced the related instrument with current practice, effects and solutions by the informal JWG. The speaker also strongly proposed that SDC 1 next year can discuss such issue.

The session noted that further explanation is important to secure mutual understanding of stakeholders and looked forward to better solution for such issue based on the balance between regulation and workload or cost of shipbuilders within safety scope by the amendments to SOLAS by IACS, under the support of shipbuilding industry by updated joint paper.

3. GBS / CSR-H, SCF

For the topic of CSR-H, the two presenters, Mr. Wen Baohua from CANSI and Mr. Toshihiro Fujii from SAJ, both gave the consequence assessment of harmonized CSR 2nd draft, while 5 tankers and 7 bulk carriers from China, 4 tankers and 9 bulk carriers from Japan were the subject vessels. It was found that similar results and problems occurred during the consequence assessment by CANSI and SAJ respectively, including the Rule Min. thickness requirement, the increase of steel weight, fatigue issues, workload of FEM analysis, etc. Both speakers would asked IACS to reconsider the mentioned technical issues based on damage data or report. The weight impact of CSR-H is about 1%~2% for oil tankers and 2%~3% for bulk carriers estimated by CANSI, and 1%~4% estimated by SAJ. The session also noted that after IACS adoption of CSR-H and submission to IMO for GBS verification, possible revision would be made by the procedure of Rule maintenance. The speaker from CANSI also requested for essential time for external review and feedback for revisions of TC version or final version by industry.

For the topic of SCF, Mr. Kenji Kamita from SAJ, reviewed the outline of the Ship Construction File (SCF) Industry Standards (Version 1.0), especially the Intellectual Property Rights (IPR) security level and security measures. Then the current situation of development and future directions of revised SCF standards by cross industry were

explained with possible restructuring, reduction, simplification and more flexibility. The session also noted the short-term and long-term milestones for SCF industry standards and the recent SCF Owner standard by some owner association.

4. Liquefaction of bulk cargo

The speaker, Mr. Yuki Tamura, on behalf of ClassNK, gave an introduction of the ClassNK activities for the Safe Carriage of Nickel Ore. This is a safety issue not only for shipowners, but also for shipbuilders and classification societies. As he mentioned, Nickel Ore was newly being categorized as Group A Cargo in the Appendix 1 of IMSBC Code and would enter into force on 2015, in order to prevent loss of stability by liquefaction of Nickel Ore. Any cargo with Moisture Content (MC) in excess of Transportable Moisture Limit (TML) should not be accepted for loading unless on specially constructed or fitted ships.

The presenter mentioned two steps to enhance the safe carriage of nickel ore: to keep MC less than the TML in operational phase and to ensure entire safety in any case in hull structural phase even if its MC exceeds the TML during voyage. The 2nd edition of “Guidelines for Safe Carriage of Nickel Ore” developed by ClassNK would provide not only operational best practices, but lay out new construction standards to ensure the safe carriage of Nickel Ore.

As a conclusion, to realize “Specially Constructed Cargo Ship” defined in IMSBC Code 7.3.1.1 for the carriage of Nickel Ore, ClassNK would aggressively continue to offer technical explanations of these NEW requirements to various Administrations and make a platform for owners to get “Evidence of Approval” smoothly.

This is the end of the summary. Thank you very much for your kind attention.