



MARITIME SAFETY COMMITTEE  
86th session  
Agenda item 5

MSC 86/5/1  
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## GOAL-BASED NEW SHIP CONSTRUCTION STANDARDS

### Report of the Working Group on Goal-based Standards at MSC 85 (Part 2)

#### Submitted by the Chairman of the Working Group

#### SUMMARY

<i>Executive summary:</i>	This document reports on the discussions of the GBS Working Group at MSC 85 on the resource implications of the conduct of the verification process and the draft Guidelines on the information to be included in a Ship Construction File
<i>Strategic direction:</i>	10
<i>High-level action:</i>	10.1.1
<i>Planned output:</i>	10.1.1.1
<i>Action to be taken:</i>	Paragraph 12
<i>Related documents:</i>	MSC 85/26, section 5; MSC 85/WP.3 and MSC 85/WP.5

1 Following its report to the Committee at MSC 85 (MSC 85/WP.5), the GBS Working Group reconvened to further consider the resource implications associated with the verification process and the draft Guidelines for the information to be included in a Ship Construction File.

#### Resource implications of the verification process

2 The group considered the cost estimates for the verification of compliance of ship construction rules with GBS (MSC 85/WP.3).

3 The group agreed that for the purposes of considering resource implications for the Organization, the verification costs should include expert fees, travel costs and subsistence allowance. Additionally, the group agreed that costs associated with rule development, rule implementation at design offices and shipyards, and the development of documentation/self-assessment packages should be excluded from the Organization's verification costs.

4 The group noted that the cost estimates contained in document MSC 85/WP.3 presume the submission, including the self-assessment, is well-documented with no significant need for multiple review iterations (i.e. supplementary submissions and reviews). Accordingly, the group noted that it may be worthwhile to consider worst case, best case and most likely case scenarios.

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Additionally, the group noted that the scalability of the verification scheme should be considered with a view towards future expansion of GBS.

5 The group noted that the cost estimates in document MSC 85/WP.3 are based on a cost per rule set and do not consider that experts may be needed for multiple years and/or rule sets. The group considered the spreadsheet, set out in the annex, to illustrate the possible impact of reviewing multiple rule sets. Table 1 illustrates the costs associated with reviewing multiple rule sets assuming that all rule sets based on the IACS Common Structural Rules (CSR) are submitted and verified together, resulting in significant efficiencies. Table 2 illustrates the total time required to conduct a verification based on the assumptions listed in table 1 and the number of Groups of Experts established. The group noted that the data used in table 1 requires validation.

6 The group agreed that more information was needed to accurately assess costs associated with the verification scheme currently under consideration. Additional inputs needed to fully assess resource implications include:

- .1 an estimate of the number of rule sets to be verified as submitted by recognized organizations (RO);
- .2 an estimate of the number of Administrations who may submit rules under the provisions of the International goal-based ship construction standards for bulk carriers and oil tankers;
- .3 an estimate of the availability of experts for the verification process as proposed;
- .4 typical consultancy rates for experts; and
- .5 time needed to conduct the “rule review” under the proposed verification scheme including resource time and calendar time.

7 The group agreed that any alternative verification schemes that might be proposed in the future should include a complete assessment of costs.

8 Some members noted that since the costs could be recovered by either the submitter, Administration or the Organization, the mechanism for funding the verification process is not important.

9 The group briefly discussed a number of other issues that may need to be considered when assessing the viability of the verification process, but did not reach any conclusions. Considerations include: the type of payment to the experts (i.e. fixed or variable fee), ensuring fairness between ROs and, for smaller ROs, ensuring no conflict of interest over the duration of a Group of Experts (GoE) that could last one or two years, ensuring the availability of nominated experts for assignment to a GoE, ensuring the pool of nominated experts is continually refreshed, ensuring consistency of results from different GoEs, level of detail documented in and transparency of the GoE’s report; and handling submissions that do not cover all of the functional requirements.

10 The group considered the funding options proposed in document MSC 85/WP.3 as well as the comments made in plenary. A fifth option was suggested, namely the establishment of a fund to cover all verification costs with contributions from Administrations according to their registered tonnage. The group did not discuss the merits of this option, but did agree that it was premature to preclude this or other possible solutions or variations.

### **Information to be included in a Ship Construction File**

11 The group did not discuss the proposals made by CESA in paragraphs 14.3 and 16 of document MSC 85/5/5, nor the proposals made by the Republic of Korea in paragraph 2.1 of document MSC 85/5/8. However, the group agreed that the proposals in both documents pertaining to the information to be included in a Ship Construction File should be considered by the GBS Working Group at MSC 86.

### **Action requested of the Committee**

12 The Committee is invited to approve Part 2 of the report of the GBS Working Group in general and, in particular, to:

- .1 note the discussions on the resource implications associated with the verification process (paragraphs 2 to 10);
- .2 note the discussion on the information to be included in a Ship Construction File (paragraph 11); and
- .3 agree that the proposals made in documents MSC 85/5/5 and MSC 85/5/8 pertaining to the information to be included in a Ship Construction File should be considered by the GBS Working Group at MSC 86 (paragraph 11).

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## ANNEX

## PRELIMINARY VERIFICATION FORECAST

**Table 1:** Estimated verification costs for multiple rule sets

Rule set	Number of rule sets	Number of experts	Verification time (months)	Resource time (weeks)	Cost (USD)
CSR tankers	10	9	12	15	\$810,000
CSR bulkers	10	9	12	15	\$810,000
Other tanker	1	9	4	5	\$270,000
Other tanker	1	9	4	5	\$270,000
Other tanker	1	9	4	5	\$270,000
Other bulker	1	9	4	5	\$270,000
Other bulker	1	9	4	5	\$270,000
Other bulker	1	9	4	5	\$270,000
	<b>Total</b>				\$3,240,000

**Table 2:** Total verification time for multiple rule sets

Total time	Expert groups	Number of experts
12 months	4	36
16 months	3	27
24 months	2	18

**Key**

Verification time	calendar time needed to verify a rule set; includes meetings, presentations, travel, revisions, etc.
Resource time	actual or billable time required by each expert to conduct the verification; includes review, travel, meetings, etc.
Total time	calendar time required to complete the verification of the rules as listed in table 1; assumes expert groups working in parallel
Cost	estimated cost of experts to verify rule set based on 40-hour work week at \$150 per hour; travel costs are excluded