



MARITIME SAFETY COMMITTEE
86th session
Agenda item 5

MSC 86/5/2
24 February 2009
Original: ENGLISH

GOAL-BASED NEW SHIP CONSTRUCTION STANDARDS

Report of the correspondence group

Submitted by Germany

SUMMARY

<i>Executive summary:</i>	This document reports on the outcome of the correspondence group on GBS
<i>Strategic direction:</i>	10
<i>High-level action:</i>	10.1.1
<i>Planned output:</i>	10.1.1.2
<i>Action to be taken:</i>	Paragraph 28
<i>Related documents:</i>	MSC 84/WP.4, MSC 84/5/3; MSC 85/WP.5, MSC 85/5/1, MSC 85/WP.5/Add.1; MEPC 58/17/2, MEPC 58/INF.2; MSC 85/19/1; MSC 83/INF.2; MSC/Circ.1002 and MSC/Circ.1212

Establishment of a correspondence group

1 The Committee, at its eighty-fourth session, continued its work on goal-based new ship construction standards on two parallel tracks. In the first track, the development of GBS for bulk carriers and oil tankers with the prescriptive approach was continued. In the second track, the development of GBS safety level approach (SLA) was pursued. In order to continue the development of GBS, the working group of MSC 85 was dedicated to this approach.

2 The Committee agreed, in order to progress work on the generic guidelines for developing [IMO] Goal-based standards, to establish a correspondence group between MSC 84 and MSC 86, under the coordination of Germany, with the following terms of reference:

- .1 further development of the section on “Verification of compliance” to address process, method and criteria needed to verify rules/regulations for ships;
- .2 development of a process for monitoring the effectiveness of GBS, taking into consideration the relevant items in paragraph 52.4 of the report of the GBS correspondence group (MSC 84/5/3);

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- .3 further refinement of the generic GBS framework, taking into consideration the relevant items in paragraph 52.2 of the report of the GBS correspondence group (MSC 84/5/3);
 - .4 development of definitions and terminology as needed for effective use of the guidelines; and
 - .5 incorporation of lessons learned from the pilot project on the trial application of the verification of compliance with GBS using IACS CSR for oil tankers (MSC 83/28, paragraph 5.66); and
 - .6 submit a report to MSC 86.
- 3 The following Member States participated in the work of the correspondence group:
- | | |
|----------------------------|------------------------------------|
| ARGENTINA | MEXICO |
| BAHAMAS | NETHERLANDS |
| BRAZIL | NORWAY |
| CANADA | PANAMA |
| CHINA | POLAND |
| CYPRUS | REPUBLIC OF KOREA |
| DENMARK | ROMANIA |
| FINLAND | SINGAPORE |
| FRANCE | SOUTH AFRICA |
| GERMANY | SPAIN |
| GREECE | SWEDEN |
| INDIA | THAILAND |
| IRAN (ISLAMIC REPUBLIC OF) | TURKEY |
| JAPAN | UNITED KINGDOM |
| MALTA | UNITED STATES |
| MARSHALL ISLANDS | VENEZUELA (BOLIVARIAN REPUBLIC OF) |

the following Associate Members of IMO:

HONG KONG, CHINA

FAROE ISLANDS

and observers from the following non-governmental organizations:

THE BALTIC AND INTERNATIONAL MARITIME COUNCIL (BIMCO)
COMMUNITY OF EUROPEAN SHIPYARDS' ASSOCIATIONS (CESA)
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)
INTERNATIONAL CHAMBER OF SHIPPING (ICS)
THE INSTITUTE OF MARINE ENGINEERING, SCIENCE AND TECHNOLOGY
(IMarEST)
INTERNATIONAL ASSOCIATION OF DRY CARGO SHIPOWNERS
(INTERCARGO)
INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS
(INTERTANKO)
OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)
THE ROYAL INSTITUTION OF NAVAL ARCHITECTS (RINA)

4 Germany would like to thank the participants for the contributions they made. The discussion of the correspondence group is summarized below. Progress was made in the development of the Generic Guidelines for Developing [IMO] Goal-Based Standards and proposals for the further development of these guidelines are made. The correspondence group especially considered the issue of verification of compliance, also in view of the outcome of MSC 85.

Further development of the section on “Verification of compliance”

5 The present status of this section addresses the aims of the verification process and what should be established by the verification of compliance as well as the elements to be considered in the verification of compliance. The discussion related to this section of the guidelines was focused on the methods and the criteria used in the verification process. Furthermore, this discussion provides additional information with respect to issues that may need further attention.

6 It is noted by the group that the objective of the verification process is to ascertain that the rules/regulations are based on sound scientific and technical principles using proven, lately established technology and that rules/regulations are capable to cover at least the currently known modes and cases of failure effectively. The developers of rules/regulations should use the latest available technology, methods, tools and data for the justification of compliance. This technology varies from first principle models including basic data to historic records of casualty reports.

7 One member highlighted that, with respect to rules, the verification process (Tier III) should be applicable to rules relevant with respect to safety and environmental protection. Many of the classification rules are not relevant with respect to safety or environmental protection but they are commercially relevant. It was argued that rules with little safety impact or environmental impact should not be included in the scope of the IMO process.

8 The group discussed the role of FSA in the process of verification of regulations. Deviating opinions could be identified. On the one side it was stated that the basic idea of FSA is to propose new regulations that are justified by their risk reduction effect and are cost effective in reducing risk. Hence, FSA provides verification of the new regulation and criteria should be defined when to make the use of FSA mandatory. On the other side it was mentioned by one member that FSA is a tool to analyse the efficiency of a regulation; in this respect it would provide an interesting input to the whole verification process but could not be considered to fulfil by itself the whole purpose of the verification.

9 Members noted that rules and regulations for the same functional requirements may be derived and justified using different methodologies, models and tools as long as the same evaluation criterion is fulfilled. However, as mentioned by another member, because models are mostly using approximations, the results of different models describing the same matter may deviate from each other to such an extent that the verification of compliance becomes complicated. Hence the validity of the methodology, models, or tools that are used for the development and self-assessment of the rules needs to be accepted or verified by IMO and the national Administration concerned or its assigned representative, e.g., IMO Panel of Experts. Different opinions exist whether these methodologies, models, etc., should be accepted or verified. As noted by the Netherlands, a verification requiring an analysis in detail may be time-consuming and in some cases it might be difficult to find experts. Accordingly, the Pilot Panel included benchmarking in the information and documentation requirements (e.g., III.2.2.4 and III.3.2.1.13 in document MSC 85/WP.5/Add1).

10 In the discussion it was highlighted that some of the compliance criteria specified in Tier III would depend on the approach that is applied for the rule/regulation (SLA or prescriptive). Moreover, some rules/regulations are standards which are independent of the approach, e.g., frequency to be used for radiocommunication. These rules/regulations only need a practical verification, e.g., whether the frequency is available or not. However, clear compliance criteria should be defined to meet the requirements of paragraph 9 in the annex of document MSC 84/WP.4. In this context, one member noted that Tier III verification of compliance should establish qualitative and quantitative criteria to be met by the regulation/rule. As far as possible, quantitative values should be specified.

11 Two members supported the proposal of assigning responsibilities in the guidelines for the parties involved in the approval of rules/regulations.

12 In the context of the discussion of “verification of compliance”, some members highlighted the relation between the setup of this section and the later execution. This topic was also touched in the working group discussion on “resource implications of the conduct of the verification process” at MSC 85 (MSC 85/WP.5, paragraph 36 and following). This discussion showed the existence of diametrically opposed opinions of delegations on whether the process should be interpreted as “a self-assessment” or as “a thorough check”. In view of the lack of specific proposals at MSC 85, it was decided to postpone the further discussion. The correspondence group continued this discussion in the context of a further development of Tier III. The detailed comments made in the discussion on this topic are summarized in annex 2 of this report.

13 In the discussion of the group, some delegations supporting the “self-assessment” point of view argued, for instance, that verification by an IMO Panel of Experts will be resource-demanding and time-consuming. It was proposed to base the verification of compliance on a synopsis of the analyses (rule/regulation commentary) that was carried out by the rules/regulations developer with the aim of proving that the rules/regulations comply with the functional requirements which the rules/regulations intend to cover. IMO should clearly define the scope of classification rules. The justification of rules shall follow standard published procedures, e.g., FSA Guidelines or part B of the GBS Tier III Guidelines (MSC 85/5/1, annex 1). A self-assessment by the rule developer will limit the amount of work required of an independent IMO verification body. Furthermore, it would avoid a situation where the responsibility for the rules may be questioned. In order to fulfil the intention of Tier III, this self-assessment should be subject to formal audits. It was proposed that a suitable process for this audit could be oriented along the lines of the process that is outlined in the draft Code for recognized organizations (ROs). Germany highlighted the advantages of this process, e.g., continuous rule development by ROs under the supervision of Administrations, whereby the responsibility for rules (also in legal disputes) and rule development remain with class.

14 The delegations supporting the point of view of “thorough check” (Bahamas, Greece and Spain) pointed out that the present verification process is a result of an extensive debate. Its validity and feasibility was proved by two Pilot Panels and the value was demonstrated. The intention of GBS for new ship construction standards was to assure that standards set by classification societies are adequate and transparent. To achieve this, the monitoring exercise must be carried out by persons outside the classification societies. A self-assessment would be totally contrary to this idea. It was also noted that the audit by flag States would require processes that are not available to all IMO Member States. It was further argued that this required highly qualified experts to check aspects such as the soundness of the methodology, the correctness of the assumptions, the values taken for the key parameters. All these checks would imply costs which have not been determined yet. However, as noted by Spain, these costs will not be

excessive and are to be considered in association as to what the verification is intended to achieve and against the background of prices of ship operation. Spain highlighted that the verification process as outlined by the Pilot Project Panel in document MSC 85/5/1, annex 1, part B, and discussed in the GBS Working Group at MSC 85 (MSC 85/WP.5/Add.1, annex 3, part B) was not “unpredictable”. Precisely the fact that the information and documentation requirements as well as the evaluation criteria are clearly stated will guarantee the consistency and repeatability of the results of the process, independently of the IMO Panel of Experts selected to perform each verification.

15 In a later stage of the discussion the Netherlands made a proposal for a so-called “smart verification” which is something in between “thorough check” and “self-assessment”. The “smart verification” should concentrate on certain aspects only and should be detailed enough in order to give confidence that the functional requirements still to be defined are met. This comment initiated a further detailed discussion of the proposal in the correspondence group. Based on the experiences of the Pilot Panel, the concern was raised that a self-assessment may not be specific and comprehensive enough to be used in a “smart verification”.

16 The discussion with respect to the kind of verification process (“self-assessment” versus “thorough check”) which was initiated in the GBS Working Group at MSC 85 has significant impact on the process of verification. The group noted that the process of verification should be addressed in the guidelines. However, the group proposed to postpone the development of this section of the guidelines until this issue has been settled.

17 Additionally, concern was raised by Norway that a high-level verification of Tier I and Tier II would be required to verify whether all functional requirements have been covered. This verification should be the responsibility of IMO which is the owner of the process.

Development of a process for monitoring the effectiveness of GBS

18 The discussion of this topic is also a continuation of the work of previous correspondence groups and working groups. In document MSC 83/5/3 it was already mentioned that the continuous monitoring and analyses of safety and environmental friendliness would provide the possibility of defining goals and acceptance criteria as well as revise functional requirements.

19 The discussion showed a consensus among the members of the correspondence group that a monitoring process is required to verify the effectiveness of rules/regulations as well as the effectiveness of GBS to keep the risk as low as reasonably practicable. Thus, the monitoring activities address two aspects: the monitoring of the effectiveness of single rules/regulations and the monitoring of the effectiveness of the goals (Tier I) and the functional requirements (Tier II). It was pointed out by INTERTANKO that the monitoring mechanism provides the possibility for feedback from ships designed and built under the GBS regime.

20 Usually information sources such as historical data, in-service experience, accident investigations, incident reports and new scientific research results as published in the industry are used for monitoring. However, to be pro-active (MSC 83/5/3, paragraph 52.4), also risk analysis should be used to identify new types of risk.

21 The group noted that monitoring by casualty records (historical data) and statistical analysis is affected by the issues of required monitoring time and quality of data capture/acquisition. The issue of quality of available data was addressed, for instance, in document MSC 85/19/1. In that document, it was mentioned that the investigation of historical data for general cargo ships indicates that an issue of completeness of incident reporting as well as under-reporting exists. The quantity of available data was demonstrated in the FSA for crude oil tankers (MEPC 58/17/2, MEPC 58/INF.2). The present world fleet (PANAMAX, AFRAMAX, SUEZMAX, VLCC and ULCC) is about 1,900 ships. In 2007, after roughly 15 years of MARPOL regulation I/13F, still about 20% of the fleet is of single hull type. These influences (quality and availability) have to be taken into consideration for the development of the monitoring process and the evaluation/analysis. One member noted that the current safety level can be monitored in very few cases only.

22 It was mentioned that the degree of detail that is required in the monitoring has to be specified (by IMO?) in accordance with goals and functional requirements.

23 The following topics should be taken into consideration for the development of a monitoring process:

- .1 quality of data acquisition;
- .2 monitoring duration required to achieve sound data basis;
- .3 uncertainty in statistical evaluation;
- .4 responsibility for the recording of data;
- .5 selection of data to be recorded;
- .6 responsibility for the analysis; and
- .7 decision if standard analysis should be presented and, if applicable, in which intervals.

24 The issue of the responsibility of monitoring was discussed. A proposal is summarized in annex 1. This proposal follows the assumption that IMO would also take over responsibility for monitoring. As proposed by one member, responsibilities should be divided so that goals (Tier I) are monitored at the Committee level and functional requirements (Tier II) are monitored at Sub-Committee level. Another member noted that a monitoring of rules/regulations by casualty databases seems not to be realistic (see also paragraph 21). Classification societies have a much closer control/more detailed knowledge which should be used because a new allocation of responsibilities may decrease the incentive of classification societies to continuously update rules by carrying out research.

25 Three group members mentioned that the monitoring should be the responsibility of bodies making rules/regulations and that results should be reported to IMO periodically. This promises the most efficient way of monitoring. The effectiveness evaluation should be carried out by an IMO expert group. However, as noted by one member of this group, it may be doubtful whether IMO has enough resources to perform this task.

26 It was further mentioned by one member that monitoring could be used to verify whether the justification or rules/regulations was based on the latest technology.

Development of definitions and terminology as needed for effective use of the guidelines

27 The development of definitions and terminology, which is required for the further development of the guidelines, was only briefly touched upon in the work of the correspondence group. As already agreed (MSC 82/WP.5), definitions provided by existing IMO instruments should be given preference against new definitions (e.g., MSC 83/INF.2, MSC/Circ.1002, MSC/Circ.1212, IACS FSA glossary). Some additional definitions are summarized in annex 1 of this report.

Action requested of the Committee

28 The Committee is invited to note the discussion within the correspondence group, together with the information provided in the annexes, and, in particular to:

- .1 note the progress made with respect to the development of the Generic Guidelines For Developing [IMO] Goal-Based Standards;
- .2 note the discussion with respect to the further development of the “verification of compliance” and agree to the group’s assessment that a further elaboration of the scope of this verification is needed;
- .3 note the discussion on the development of a process for monitoring the effectiveness of GBS (paragraphs 18 to 26); and
- .4 forward the report for in-depth review and discussion to the GBS Working Group.

ANNEX 1

**AMENDMENTS PROPOSED FOR THE GENERIC GUIDELINES FOR DEVELOPING
[IMO] GOAL-BASED STANDARDS**

9bis The verification process should be focused on the rule/regulations relevant to safety and environmental friendliness.

10 Verification of compliance (Tier III) should establish the method and evaluation criteria to be applied during the verification process, and should consider the following elements:

10bis Verification of compliance should:

- .1 be based on techniques varying from first principle models to historic data;
- .2 be based on analyses using proven, lately established technology;
- .3 be based on defined clear qualitative and quantitative criteria with a preference of quantitative values; and
- .4 check whether currently known modes and cases of failure are covered.

10ter The developer of the rules/regulations under consideration is responsible for performing the analysis required to prove that the rules/regulations comply with the functional requirements the rules/regulations intend to cover.

A new section “Monitoring” after present paragraph 12 of the guidelines

13 Monitoring provides the information that is required in order to ensure the effectiveness of rules and regulations as well as the proactive identification of new risks. In order to verify that risk of shipping is kept as low as reasonable practicable safety should be continuously monitored and systematically analysed. The degree of detail for the data recording depends on the item to be monitored.

14 As illustrated by figure 1 in these Guidelines two monitoring processes are distinguished:

- The monitoring of the effectiveness of single rules/regulations; and
- The monitoring of the effectiveness of the goals (Tier I) and the functional requirements (Tier II).

15 The monitoring system to be established should address (list without any prioritization):

- Safety of passengers;
- Safety of third parties;
- Occupational safety and health of seafarers;
- Safety of ship;
- Protection of environment; and
- Safety of cargo.

16 For both processes monitoring should consider, but is not limited to, historical data, such as casualty reports, in-service experience, accident investigation, incident reports, near miss reports, new scientific research results as published in the industry, as well as risk analysis.

17 Monitoring responsibilities should be assigned with respect to monitoring task.

- Tier I:
 - a. Monitoring (including data collection): IMO
 - b. Analysis: IMO
 - c. Evaluation by committee
- Tier II:
 - a. Monitoring (including data collection): sub-committees
 - b. Analysis: sub-committees
 - c. Evaluation by sub-committees
- Tier IV:
 - a. Rules: monitoring (including data collection) and analysis by rule maker, evaluation by rule maker, supervision by IMO?
 - b. Requirements: monitoring and analysis by IMO/sub-committees, evaluation by IMO/sub-committees maker?

The organization(s) responsible for the monitoring and analysis is (are) also responsible for the development and update of the reporting format.

Development of definitions and terminology as needed for effective use of the guidelines

Accident: An unintended event involving fatality, injury, ship loss or damage, other property loss, damage or environmental damage.

Risk: The combination of the frequency and the severity of the consequence (MSC 83/INF.2).

Rule commentary: Explanation of what functional requirement(s) is (are) intended to be covered by the rule/regulation (section or chapter), and how it is intended to be covered including a synopsis of the analysis performed to prove that the rules/regulations comply with the functional requirements the rules/regulations intend to cover.

Safety: Absence of unacceptable levels of risk to life, limb and health (from unwilful acts).

Evaluation criteria: Standards, which represent a value-judgement, usually that of a regulation. These are the values used as limits for rule/regulation acceptance.

Risk evaluation criteria: Criteria for evaluating that a specific risk level is acceptable.

ANNEX 2**COMMENTS RECEIVED WITH RESPECT TO “VERIFICATION PROCESS” IN
CHRONOLOGICAL ORDER****2008-06-30****JAPAN**

With regard to the TOR1, this delegation is of the following opinion: Verification process should be considered the process of assessment of the safety level, which is ensured by functions, using the latest technology. Safety level approach for each function should be developed to define compliance criteria.

2008-07-12**SWEDEN**

Verification of compliance consists in our view of two principal parts:

- justification (technical and procedural), and
- approval procedures

The justification elements are well covered by paragraphs 10.1 to 10.6 in the draft Generic GBS Guidelines (MSC 84/WP.4, annex). It should be the responsibility of the Rule/Regulation developer to perform this justification. In order to support that this is done in a consistent way, preferably a general circular in line with MSC/Circ.1002 and MSC.1/Circ.1212 should be developed. We expect that the Pilot Panel will deliver some good thoughts on this to MSC 85.

Regarding approval procedures, it may not be realistic to have separate expert panels to scrutinize every item in an expanded GBS framework. In general it should be the responsibility of the relevant sub-committee to consider (recommending) approval similar to what is done with performance standards today.

2009-01-15**SPAIN**

Regarding the statement from Norway on the verification process that “a self-assessment by the rule developer should be sufficient” we have to say that we cannot accept this. As a matter of principle, the judge can never also be the judged party. If this approach is followed, then the IMO involvement would be limited to a blank endorsement of what the Rule developer previously stated. The credibility of a verification process (as for example it is also a plan review, a tank testing, or indeed an annual survey) is based on the actual personal examination and checking work performed by the evaluator who signs the report. If a self-assessment is intended to be sufficient, then the whole process will be meaningless and void, but with the additional involvement of IMO as provider of a backing to the rule developer.

Some delegations have repeatedly argued against the verification process that it will be resource demanding and time-consuming. Of course if it is intended to be an actual professional verification and not a simulacrum it will require highly qualified experts working thoroughly to check the soundness of the methodology, the correctness of the assumptions, the values taken for the key parameters, etc. All this means costs. However, as in any human activity, the costs are to be considered in association to what it is intended to achieve. An official independent recognition by the International Maritime Organization that a specific set of rules meet the safety objectives of the GBS is a major badge, much beyond what is nowadays credited to the individual class rules. This will be undoubtedly used by those which receive such award as an important marketing tool.

On the other hand we are seeing now and then jumps and drops in the prices of the commodities, the ships and the freight charters of much greater importance than the objective costs associated to a proper verification process. Anyway, the cheapest verification will always be the one which is not performed, and if those delegations so much worried with the cost are going to be successful in getting enough support to convert it into a pure paperwork exercise, we should better stop the whole GBS right now and would save a lot of money and effort.

We do not agree at all that the verification process as outlined by the Pilot Project Panel in MSC 85/5/1, annex 1, part B, and discussed at the WG 1 of MSC 85, document MSC 85/WP.5/Add.1, annex 3, part B, might be “*unpredictable*”. Precisely the fact that the information and documentation requirements as well as the evaluation criteria are clearly stated will guarantee the consistency and repetitiveness of the results of the process independently of the Group of Experts selected to do each one. On the contrary the results would surely be “*unpredictable*” if the criteria are vague and left open to the personal judgment – or indeed the mood – of each expert at the time of performing the verification.

The steps proposed here for the verification are just a short abstract of what was proposed by the Pilot Project Panel in MSC 85/5/1, annex 1, part A, and discussed at the WG1 of MSC 85, document MSC 85/WP.5/Add.1, annex 3, part A. Therefore, we cannot support throwing overboard the huge professional work done by the PP and we think that we must use that text as the base document for our further work.

Regarding the last question we think that the verification process should always be the same, independently of which rules and regulations are been verified. This will ensure consistency in the actions taken.

2009-01-20

NORWAY

In SOLAS, IMO should just clearly define the scope of classification rules (which limit states). How to justify rules than follows a logic that can be found in textbooks and the FSA Guidelines. IMO, not being competent on structural strength issues, should not try to verify the rules. Classification societies should demonstrate that the rules are in agreement with the risk acceptance criteria for the limit states listed in an updated SOLAS. This should be submitted together with a self-assessment, and may be subject to audits.

2009-01-21

GREECE

On the subject of the method of verification, the issue goes back to the very beginning of consideration of Tier III, i.e. before MSC 81, (MSC 80-81 intersessional CG) where the need for specific Tier III acceptance criteria was agreed so that “determination of (rules) acceptability is not left to the subjective discretion of the Verification authority” and “to make verification clearer” (see also MSC 81/6/1).

Since that point, following extensive debate, the method and way of verification has been agreed and furthermore two expert panels (pilot project) proved its validity and feasibility. It is sad that some want to take us back to four years ago and are reopening the same debate, which will only cause further delay to the already delayed GBS progress.

Greece has repeatedly expressed the opinion that Tier III is the make or break tier of the whole GBS process and this tier is related to the very reason that IMO at Assembly level decided to endorse the GBS and make it a strategic priority.

Therefore, Greece cannot accept anything less than full verification of rules by IMO based on specific acceptance criteria developed by IMO. We do not agree with the opinion of some that this will be overly expensive/stress resources etc. We feel to a degree this is being used as a new found argument to reinvent the wheel. On the contrary we feel, audits, self assessments, justifications, etc., will be a real waste of IMO's resources, dealing with a paper exercise.

2009-01-29

BAHAMAS

Self-assessment in Goal-based standards

The purpose of the exercise to determine Goal-based standards for new ship construction was to give Member States, through IMO, a means to check the standards being set by classification societies. The reason for starting was that some Member States were not satisfied that the standards being set by class were adequate and, even if adequate, they were not transparent and therefore could not be verified. This being the cause of the exercise, it was, and is, clear that the monitoring exercise must be carried out by people outside the classification societies.

The proposal that societies should carry out a self-assessment to determine whether their rules comply with IMO set standards, as a replacement for an IMO check, is totally contrary to the idea of a separate system to ensure that societies meet IMO determined requirements. From a flag State point of view, it could be assumed that such a system already exists. Societies must already carry out checks on their own standards, however, such checks are not available to IMO Member States and it would be beyond the capacity of individual Member States to verify if such checks are adequate, even if the information were to be available.

The Pilot Panel has demonstrated the need and the value of an external system of monitoring the societies processes for determining their standards. It has also demonstrated that the costs involved will not be excessive. The present move by class societies to reverse the process which has been built up over several years and two pilot projects is simply a reversion to their original position that they should be left alone to conduct their affairs as they wish. This should not be allowed to happen.

2009-02-04

INTERTANKO

A very late response but succinct as it expresses support for Dr. Del Moral's (Spain) suggestions. With regard to the methodology for verification, we believe it is too late to reverse all progress and efforts made until now and re-start to define a complex new verification mechanism involving self-assessment by the rule maker.

2009-02-06

GREECE

Paragraph 0: As presented seems to suggest that only 3 delegations support the "thorough check". In fact this is the method so far agreed by the Committee (MSC) through the span of several years of work and debates and at the direction of MSC it was finalized in two Pilot Projects. The "self-assessment" has not even been discussed at Committee level. This has to be done in the future and it cannot be a matter of compromise between the two approaches, since the verification method is, in our opinion, the backbone of GBS. **Either one or the other approach**

has to be used. Meantime, we feel that the task of this CG should have been to advance the so far agreed by MSC methodology and those opposing it should first convince the Committee to change course.

2009-02-08

GERMANY

The normal implementation process of international conventions is through national legislation of IMO Member States. As the GBS approach for bulk carriers and tankers will be an amendment to SOLAS, the implementation of these requirements will be through the individual Member States with all the consequences behind. Reading the draft SOLAS amendments, they fit perfectly with the entire SOLAS concept, i.e. the responsibility of compliance of a ship with the SOLAS requirements rests with the flag State. Following the SOLAS concept, a flag State may authorize recognized organizations to act on their behalf in accordance with IMO resolutions A.739(18) and A.789(19) requiring a monitoring and verification system established by the Administration as described in resolution A.739(18). In consequence, each individual Administration will have to introduce a monitoring and verification system for GBS within their own concept of monitoring and verification of their ROs activities.

Therefore the rule development process, including a self-assessment, will be subject to the regular monitoring process of the individual Administrations. This concept bears a number of advantages:

- .1 as different Administrations follow different basic concepts, the variety of aspects looked at would be much greater than having only one body looking at the rules and the rule development process;
- .2 the ROs could continue with proper rule development whenever safety problems occur and could implement improvements without delay;
- .3 the responsibility for the rules, including further development, would remain with the RO; and
- .4 in legal disputes the RO would have to prove that their rules are meeting technical state of the art standards.

In particular the last point should give sufficient reason for an RO to do a self-assessment in a proper way.

A full discussion of the verification and monitoring concept should not be limited to costs but also take into account efficiency, compliance with existing concepts, responsibilities and duties towards future rule development. Whatever the result will be, a process leading to a standstill of rule development would definitely be counterproductive; and what would motivate a RO to spend any money in further rule development after having received an IMO document saying that their rules are verified in accordance with GBS?

2009-02-11

NETHERLANDS

With respect to the question ‘thorough check’ versus ‘self-assessment’ (paragraphs 10 to 12), we do not favour the first method. In our view, the Pilot Project proved that already for one ship type and only part of the rules, this is time consuming. Of course if there were unlimited resources and expertise this would be the ideal way to do it. However, this will not be the case.

On the other hand, we also understand the arguments from those who are not too happy with a self-assessment. Therefore, perhaps we should look for something that we would call a 'smart verification'. This means you would concentrate on certain aspects that are still to be defined, but one could e.g., think of limitations of models/calculations, validity of assumptions, possible weaknesses in the whole framework, etc.

We consider such a 'smart verification' to be something in between 'thorough check' and 'self-assessment' and the result of this should give enough confidence to say yes or no to the question if the appropriate functional requirements are met.

We agree that it was felt that the 'thorough check' could be a way to go. However, there has not been a decision against any other methods.

2009-02-12

SPAIN

We wish to express our recognition to the good and constructive approach that the Netherlands is showing in its last e-mail. It offers some interesting ideas about the verification method, however there are two questions which we think should be clarified:

1 The submission from IACS to the PP cannot be considered an adequate self-assessment, the first reason was because they ignored completely the first component of the verification guidelines, i.e. the information and documentation requirements. The submission had not even a list showing where the documents relevant to each of the points had to be found (e.g., in which document of what part of its web page, etc.), and therefore it hardly might have been considered a proper submission to an actual verification.

The second reason was because the submission went directly to the evaluation criteria supplying a table similar to a check list wherein in most of the cases under the compliance column it was a "Yes" but without any reason to justify such answers. It was developed a fully detailed example covering requirement III.4 on fatigue (218 pages) in order to show what information and how it should have been submitted. A copy of this document is attached for the ready reference of all CG members and to clarify the above.

2 The "smart verification" proposed sounds good but it may have some drawbacks. The first is that the time which will have to be devoted will depend mainly on the quality of the information supplied. A well organized, thoroughly and duly justified self-assessment will undoubtedly simplify the process and reduce the time needed for its verification, while a lousy and incomplete one will make the process to become endless. Having readily available a clear list of what and how the documentation has to be submitted, as well as how it will be considered acceptable (the evaluation criteria), this part of the process depends exclusively on the submitter.

Regarding the possible selection of some items on which the verification will be concentrated, we must say that such selection cannot be established beforehand because then the effort of the submitter would be devoted only on such items neglecting the others. In any case this should be a decision of the Group of Experts on each specific case taken in connection with the quality of the submission.

2009-02-13

IACS

Lastly, having consulted with Project Manager, Alex Johnston, and Ex-Project Manager, Gary Horn, of the IACS Team that had been working for the IMO GBS Pilot Project by providing the information to the Pilot Panel, I would like to make comments to the correspondence made recently within the CG and advise of factual statements from IACS side as follows.

It should be noted that the two IACS submissions to the IMO Pilot Project were made as a representative assembly of information intended to test the verification process and assist the Pilot Panel in further developing the documentation/information text as well as the evaluation criteria.

The IACS submissions were never intended to be a true and complete submission for verification of the CSR against the Goal-based standards (GBS) guidelines.

The summary of the “self-assessment” information was a high level listing to help the Pilot Panel home in on issues that may be of more interest to them.

It should also be noted that cross reference tables indicating the relevant CSR rule which is associated with each GBS functional requirement are included in the submissions.

In this context, IACS would like to draw your attention to the fact that the following statement was also included in the submissions:

The objective of the pilot project is to conduct a trial application of Tier III of the GBS for oil tankers and bulk carriers with the intention of validating the Tier III verification framework, identifying shortcomings and making proposals for improvement. [Note, the pilot project will test the IMO GBS Tier III verification framework and not actually carry out the verification of the IACS CSR at this time.]

As far as IACS understands, it is clear therefore that the Pilot Panel members never expected a full and complete submission from IACS of the CSR oil tankers to verify the rules against the Tier II functional requirements as Professor Moral implies.

In addition, the limited time between the publication of the final Pilot Panel draft of the Part B Guidelines and the deadline for submission of the second IACS Pilot Project submission should also be noted.

I hope that the information above will help the CG members to understand how the IACS Team contributed to the Pilot Project.

2009-02-13

NORWAY

Further to the draft CG report, the comments and proposals given by other CG members, I have the following remarks:

Generally the verification process has to be consistent and effectively both regards to the purpose and economics, and should not bring MSC/IMO in a situation where the responsibility for the rules may be questioned. I believe the proposal for detailed verification of GBS rules for tank/bulk, by a GoE reporting to MSC for final decision, was the reason for lack of support at MSC 85. If not something more manageable is proposed, I see problems to get the GBS proposal adopted.

The comments by Mr. Assheuer addresses a central issue regarding flag State responsibility and procedures already established. On the other hand, the comments in the draft CG report, paragraph 0, from Bahamas, Greece and Spain, stating that “audit by flag State require processes that are not available to all IMO Member States” address a totally new aspect. The comment apparently means that IMO should take the role as flag State. Some of the same may have been the issue in the GBS WG at MSC 85, where it was suggested that an IMO body should be available for repetitive submissions of rule proposals using the competence of a GoE to check out compliance. From my point of view this is not a good idea. IMO does not have the adequate instruments and bodies inclusive finance and resources to be or act as flag State or a kind of common international overarching technical society.

To move forward the idea and proposal by Mr. Metselaar may be valid, if they are projected towards the understanding of the difference between the role of flag State and IMO as pointed out by Mr. Assheuer.

From the Norwegian point of view the “smart verification” will be a specified self-assessment, including information of the models used and the rule development procedure, accompanied by audit from the flag State. In any case, IMO should not state acceptance but only express consent. The responsibility for the rule should rest with the rule maker.

The level of self-assessment may be further discussed and in practice it is possible to require that the self-assessment should be a transparent “thorough check”, but focusing on certain aspects may be more valid. The details of the specified self-assessment may be further developed, based on the experience from the PP trial application and relevant technical information related to the area of rule in question.

The audit by flag State may be organized through IMO to allow States to cooperate in their efforts to deal with their responsibility to ensure that ships comply with SOLAS. IMO on the other hand already has a possibility to audit a flag State.

Based on the above I believe that there is a need for a debate on the general principles before recommendations on verification of compliance and the monitoring process to the MSC 86. This goes also for the verification process of GBS rules for tanker and bulk carrier.

2009-02-14

JAPAN

I would like also to express my consent to what was said by Mr. Karlsen and Dr. Metselaar.

I would like to put one remark to the group that SOLAS regulates ships and puts responsibility onto the flag State administration. Draft SOLAS amendment for GBS also state, as the intended meaning, that “ships shall be constructed to the rules (Tier IV rules) which comply with GBS.” The final decision on whether a Tier IV rule complies with GBS falls into the responsibility of the flag State administration. IMO verification results on Tier IV (by GoE and MSC) would be a recommendation or suggestion to the flag State administration.

2009-02-21

IACS

Having reviewed your final draft of the CG report, etc., and discussed about them within the IACS Team, I wish to provide following comments.

As all of you know very well, the latest draft of “Part A verification process”, which are contained in the “Guidelines for verification of conformity with the international goal-based ship construction standards for bulk carriers and oil tankers” set out as annex 3 of document MSC 86/5, prepared by IMO Secretariat, refers to “self-assessment” in paragraph 9.3.
