



# Workshop on Goal Based Standards (GBS)

Expert discussion on IMO Goal Based Standards (GBS), CSR, Safety Level Approach and their impact on European and National legislation

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## IMO Goal Based Standards (GBS)

Basic principles and goals for goal-based standards (GBS) for new ship construction were agreed in principle by IMO's Maritime Safety Committee (MSC) at MSC 80 in May 2005.

They were developed to be applicable to all goal-based standards developed by IMO and not only to ship construction standards.

MSC 81 agreed to limit the scope of its consideration initially to bulk carriers and oil tankers and consider expansion to other ship types and areas of safety at a later time.

## IMO Goal Based Standards (GBS)

At present there are two parallel tracks.

**GBS-CSR** IACS Harmonized Common Structural Rules (H-CSR).

Regarded as prescriptive GBS

**GBS-SLA** Safety Level Approach.

Safety-level (risk) based

## What has been done on GBS-CSR

The GBS Tiers I to III constitute the IMO GBS, became mandatory on 1 January 2012 under the SOLAS Convention New SOLAS regulation II-1/3-10 “Goal-based ship construction standards for bulk carriers and oil tankers” of 150 m in length and above (on or after 1 July 2016).

- Resolution MSC.290(87)
- Resolution MSC.287(87) (The standards)
- Resolution MSC.296(87) (Verification guidelines)
- MSC.1/Circ.1343 (Ship Construction File)

## Current status **GBS-CSR**

Under the GBS-CSR Standards, construction rules for bulk carriers and oil tankers of classification societies which act as recognized organizations (ROs) or national Administrations will be verified.

- Timetable and schedule of activities for the implementation of the GBS-CSR verification scheme (MSC 87/26/Add.1 Annex 13).
- IMO nominated persons for the GBS-CSR verification (MSC 90/5/1).
- The first (Pilot) team on GBS-CSR verification (MSC 93/5) started in March 2014 (ongoing).
- IMO established the rest of the Teams (2 to 5) for the GBS-CSR verification (MSC 94/5) Sep 2014.

## Task of the audit team **GBS-CSR**

The first (pilot) team will audit the following 2 packages.

- IACS Common Package, part 1 – composed of pertinent IACS resolutions (URs, UIs and PRs) and other IACS documents.
- IACS Common Package, part 2 – composed of the IACS Common Structural Rules (CSR Ver. 1/1/2014) and relevant self-assessment sheet.

## First result of the audit team **GBS-CSR**

- A progress report (MSC 93/5) on the implementation of GBS verification audits has been published. In this paper the IMO Secretariat-General informs the formation of GBS auditor teams and their deliverables.
- Recent progress report on the implementation of the GBS verification audits (MSC 94/5) (some difficulties have been identified).

## What has been done on **GBS-SLA**

Since the beginning several Northern-European states have been interested in widening the scope to all vessels and all requirements, e.g. also for equipment. Once that the (CSR-H) for Tankers and Bulk Carriers was adopted the focus has shifted to this wider development, including the development of the ‘safety level approach’ (SLA).

- Generic guidelines for developing IMO goal-based standards (MSC.1/Circ.1394, 2011).
- Circular on approval of alternative design and equivalence (MSC 1/Circ.1455, 2013).



## Current status **GBS-SLA**

Discussion on GBS was continued after finalisation of GBS-CSR (MSC 88). We have noted since MSC 87 only a few submissions to IMO have been made.

- A GBS working group has been established at MSC 91 to consider matters related to the safety level approach and to draft guidelines for the approval of alternative designs.
- A Correspondence Group on Life-Saving Appliances (LSA) has been set-up (SSE 1/21) to consider particular issues (TOR) e.g: “functional requirements” and submit a report to SSE 2.  
(Active participation of Germany, Norway, USA, Royal Institute of Naval architects)  
(progress made....??)

## Current status **GBS-SLA** in relation to FSA

The GBS-SLA debate is now focused on the safety-level based standards (FSA).

- Guidelines for Formal Safety Assessment (FSA) for use in the IMO rule-making process (MSC-MEPC.2/Circ.12, 2013).
- Several GBS and FSA papers at next MSC 94.

Suggestions on the development of Interim Guidelines for the safety level approach (SLA) to the IMO rule-making process MSC 94/5/1 (Chinese paper).



**Thank you for your attention!**

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