

The 2nd Asian Shipbuilding Experts' Forum (ASEF)

Intellectual Property Rights vs. Design Transparency

*** A GBS-related issue ***

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1. Background

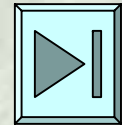
- ❑ Finalization and approval of Goal-based New Ship Construction Standards (GBS-NSC) for Bulk Carriers and Oil Tankers, and associated SOLAS amendments, are scheduled for early in Dec. 2008 at MSC 85.
- ❑ GBS-NSC are the comprehensive intervention of IMO in the structural rules.
- ❑ The good reason is to prevent Class and Shipbuilding Industry from going too far in scantling discount, under their cutthroat competition, which is considered as one of the causes of the marine casualties.
- ❑ GBS-NSC therefore require rules to ensure “Design Transparency”.



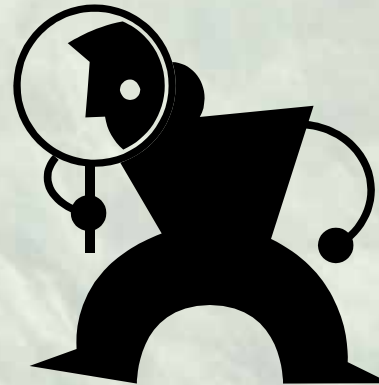
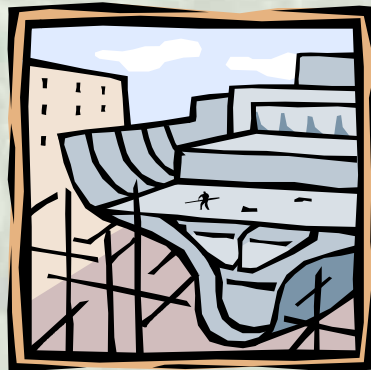
2. Final draft Part B of Tier III of GBS-NSC placed by Pilot Panel

- ❑ The draft criterion to ensure “**Design Transparency**” is ;

Do the Rules establish clear and auditable procedures to provide for ship's structural related design and technical correspondence and data pertaining to the ship to be made available to the owner, classification society and/or flag State upon request ?



- ❑ Should any rules require no procedure, such rules would fail in complying with IMO regulations, after the entry into force of GBS-NSC and associated SOLAS amendments, resolution and circular !



3. Information submitted to **Class** for plan approval (**Present Status --- CSR**)

- Information submitted to Class for plan approval work

- Drawings and documents **for Approval** ;

- General Arrangement
 - Midship Section & Typical Transverse Bulkhead
 - Construction Profile & Deck Plan
 - Loading Manual
 - Etc.



- Drawings and documents **for Reference** only ;

- **Lines**

- "Essential" for SERS/LR or ETAS/NK, etc.
 - Strength Calculation
 - Etc.



4. Information kept onboard (**Present Status --- CSR**)

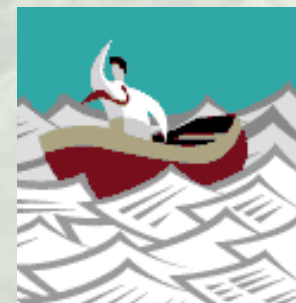
- ❑ Plans indicating the new-building and renewal thickness for each structural item :
 - ❑ Main scantling plans
 - ❑ Detailed construction plans
 - ❑ Final approved loading manual
 - ❑ Welding
- ❑ Details of the extent and location of higher tensile steel together with details of the specification and mechanical properties, etc.
- ❑ Details and information on use of special materials, such as aluminium alloy



No accompanying information for scantling appraisal is required after the plan approval.

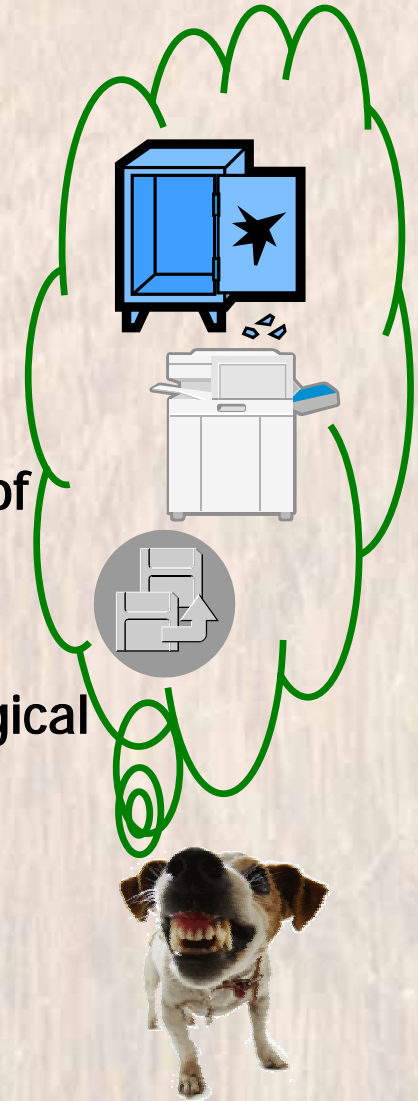
5. Information available to Class, Owner and/or Flag State (GBS age)

- ❑ Before Delivery of the ship ;
 - ❑ All structural design-related information, including **lines**, and technical correspondence between Shipyard and Class/Subcontractors should be made available to the owner, classification society and/or flag State.
- ❑ After Delivery of the ship ;
 - ❑ Draft GBS-NSC require “**Ship Construction File (SCF)**” to be kept onboard and ashore.
 - ❑ SCF should include net (renewal) scantlings for “all the structural members”.
 - ❑ SCF should also include design conditions, strength calculation conditions & results, corrosion protection measures, etc. in addition to those already specified in MSC Circ. 1135 (2004).



6. Shipbuilding Industry is very much afraid that

- ❑ Much more extensive design-related information, such as advanced hull form, state-of-the-art structural design & construction methodologies, high quality control procedures, etc. can be accessed **than ever**.
- ❑ It is to be noted that “**Design Transparency**” should be required in the same way, when GBS-NSC will be expanded to cover other ship types and every aspect of design & construction of new ships.
- ❑ It is quite likely that unilateral “**Design Transparency**” can encourage illegal copying and/or unfair technological catch-up through the frequent infringement of IPR.



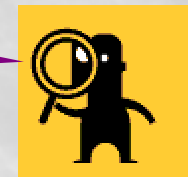
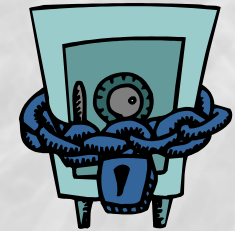
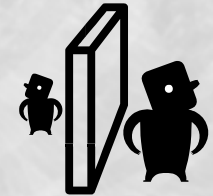
7. Sustaining Innovation requires proper reward in fair competition

- ❑ Sustainable Research, Development and Innovation in Shipbuilding sector require reasonable reward to the challengers who make straight investments.
- ❑ Unfair competition brings all Shipbuilders less investing in R&D, and hence technological stagnation or even retrogression.
- ❑ COP15 (Dec. 2009) for UNFCCC will probably require drastic reduction in **GHG** emission of Maritime Industry, which cannot be achieved by ordinary approaches and means. Should technological R&D and Innovation decline, all stakeholders will be far from the goal !



8. Maritime Industry is most likely to come to a Deadlock !?

- Arising from lack of protection against IPR infringement, a “**serious confusion**” should be created in reality, at any time when access is attempted to the design information of each individual ship in **GBS age**.
- Without safeguard regime against unfair competition, even reasonable access to the design information could therefore be disrupted, too.
This can result in malfunction of GBS-NSC.

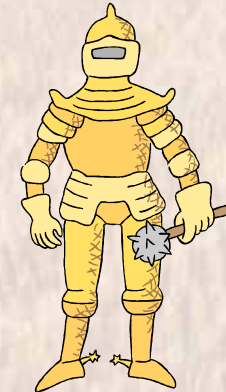


All stakeholders come to a deadlock !?

The Dark Age !?

9. Basic position of CESA on "Design Transparency"

- ❑ The Community of European Shipyards' Associations (CESA : A NGO in consultative status with IMO) set up a Shipbuilding IPR management organization "GuardSHIP" in 2008.
 - ❑ IPR handbook
 - ❑ Standard IPR/Confidentiality terms and conditions between Class and Shipyard
- ❑ CESA submitted a paper to MSC 85, requesting due consideration to IPR within SCF and associated SOALS amendments.
 - ❑ CESA proposed only one SCF to be kept ashore by the Administration or its Recognized Organization.
- ❑ CESA also co-sponsored a paper submitted to MSC 85 by Japan, requesting due consideration to IPR within Tier III of GBS-NSC.



10. Basic position of SAJ on Design Transparency requirements of GBS-NSC

- ❑ The Shipbuilders' Association of Japan (SAJ) supports the enhanced "**Design Transparency**" in general, recognizing that access to the structural design information is one of the key factors in ensured structural safety.
- ❑ SAJ also understands that IPR could be a side issue of IMO.
- ❑ Japan, SAJ and CESA, however, believe firmly that the establishment of "**Protection of IPR**" is inseparably essential to the establishment of "**Design Transparency**".
- ❑ Japan and CESA jointly submitted a comment paper to MSC 85, proposing an additional criterion in Part B of Tier III of GBS-NSC, with a view to creating a systematical and balanced environment ;



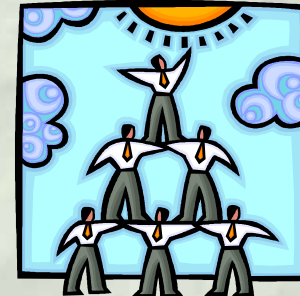
Do the Rules establish clear and auditable procedures to provide for the protection of intellectual property rights ?



11. Towards Coexistence of IPR with Design Transparency

- Once the intent of the subject proposal is acknowledged, it is desirable that the details of the procedures for “**Protection of IPR**”, as well as for “**Design Transparency**”, might be developed and agreed in the Joint Working Group (JWG) to be organized by IACS.
- The results of JWG would be placed as relevant Industry Standards/Codes (**Tier V of GBS-NSC**).

Balance between
“Design Transparency” and “Protection of IPR”
is crucial.



An appeal is made to
all Stakeholders for
Mutual understanding and Cooperation on
IPR issue.

