Design Transparency

vs.

Intellectual Property Protection

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1. The Facts of GBS/SCF

- **GBS** are IMO-Rules for **Class-Rules**.
- Conformity of “**Class-Rules**” with GBS shall be verified by IMO.
- Ship Construction File (SCF) is to certify Design & Construction of “Each Ship” conform with GBS.
- SCF covers **all information** relevant to structural safety, and shall be kept “**on board**” throughout ship’s lifetime according to **draft SOLAS amendments**.
2. Problems Involved

- Since Shipyards usually offer short guarantee period, Design & Construction transparency and long-term traceability are required by IMO.
- Unilateral transparency can lead to leakage of intellectual property (IP) of Shipyards.
- Easy dead-copying and “steal a ride” catch-up can jeopardize continuous investments in R&D, and hence technological stagnation within whole maritime sector.
- Countermeasures are essential.
3. Actions Taken by Shipyards

- Responding to presentations made by CESA & SAJ at Tripartite Meeting 2008 in Beijing, cross industry agreed to find out a practical solution.

- On appeals made by CESA & SAJ, MSC 85 agreed to stipulate “Due consideration to IP” in GBS & SCF guidelines.

- Considering concept paper submitted by cross industry, MSC 86 agreed to wait for concrete proposals to be made at MSC 87 (May, 2010).
4. Cross Industry Partners

Cross industry partners are composed of major Shipbuilding, Shipping and Classification associations.

1st meeting in Brussels
2nd meeting in London
3rd meeting at MSC86 in London
4th meeting at Tripartite meeting 2009 in Seoul
5th meeting in London (18th Nov., 2009)

The 3rd Asian Shipbuilding Experts' Forum in Shanghai (3-4 Dec. 2009)
5. Concept Suggested at MSC 86

- Shipyards ensure Transparency.
- Ship Owners respect IP.
- In order to achieve right balance, Highly IP sensitive information which is unnecessary to be retained on board at all times might be kept ashore, subject to availability on demand.
- To be (kept on board), or not to be: that is the solution! (suggested by cross industry)
6. Cross Industry Agreements

- At Tripartite Meeting 2009 in Seoul, cross industry reconfirmed the principle and directions; “SCF onboard & SCF Supplement onshore”.

- Cross industry will tune up, and jointly submit draft SCF guidelines and amendments to SOLAS & GBS verification guidelines to MSC 87.
7. SCF Coverage & Storage

Yard Property Information

IP Sensitive Information

Highly IP Sensitive Information

Safety Related Information

All Subject to Appropriate IP Protection

1. Required by SCF Guidelines (IMO) but NOT necessary on board;
2. NOT required by SCF Guidelines (IMO) but kept ashore based on bi-lateral agreement;

Not Necessary On Board

Necessary On Board

SCF Supplement On Shore Archive

Full copy

SCF On Board

Full or part copy

Summary, Location & Access procedure

Owner’s Office

IP outside of Yard; E.g. innovative Steel, special Hatch cover / Rudder

No matter their IP sensitivity

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8. Scope of Joint Submission

- Draft definition & list of SCF contents which covers all safety-related information required by SOLAS-GBS
- **Principles** of availability, storage and update of SCF
- Attention to **IP** protection

- Storage of each SCF information and detailed access procedures should be left to industry standards. *(Tier V of GBS)*
9. SCF Archive Specifications

- Long-standing & stable
- Neutral among IP holders
- Internationalized
- Excellent in security control
- Full of quality & economy senses
- Capable of early backup-recovery
- Open 24 hours & 365 days for information delivery on demand
10. SCF Archive Operator

- **Virtual SCF Archive** might be composed of a lot of archives operated in various places individually, subject to common specification.

- Rise and fall of specific archive depend on quality & cost of its long-term service.
11. IP Control Measures

IP Control Measures should be:
- **Strict** enough for sure IP protection
- **Simple** enough for smooth access
- **Robust** enough for onboard utilization
- **Durable** enough for lifetime service
- **Compatible** enough for ext. systems
- **Economical** enough for the industry

Compliance with **Standard Confidentiality Terms & Conditions** is a firm baseline.
12. Key : Access Identification!

- Who?
- When?
- Where?
- Why?
- to What?
- How often?
13. Tool for Practical Solution?

- Biometrics Authentication -

➢ Fingerprint

➢ Vine pattern

Getting common in Government, High-tech. industry, Bank ATM, Immigration control, etc.
14. On and After MSC87

- Cross industry wishes MSC 87 would accept joint proposals, with positive support given by Shipbuilding & Shipping member States, and recognize future development of detailed industry standards.
- GBS will be adopted at MSC 87.
- GBS & SCF guidelines will be applied to new ships from 1st Jan. 2015.
- By the time, cross industry must make all preparations.
15. Probable Expansion of GBS

- GBS might expand to cover ship types other than BC & OT, and/or areas other than hull structure in near future.
- Unrelated to IMO, Shipping industry may request expansion of information to be kept at onshore Archive.
- Shipping industry may also request application of SCF guidelines before IMO program.
16. Digression ; Rule-making

- It is important and fruitful to take part in international Rule-making at early stage.
- IMO welcomes voluntary & timely standards/best practices, which are proposed by Industry, for improved safety and environmental protection.
- When some issue is taken up for IMO discussion, drafts made by member States and/or Shipping industry used to be the base hard to vanquish.
17. Consultative NGO

- Asian Shipbuilders cannot escape from international regulatory regime.
- If that’s the case, it is better to have direct channel of communication at IMO as an NGO like CESA.
- If Asian Shipbuilders are recognized by IMO, we might be consulted in advance about issues such as SCF.
- Asian Shipbuilders can provide our own messages & proposals to IMO.
18. New NGO and CESA

- Shipping industry has more than 10 NGOs.
- Machinery & Equipment industry has more than 5 NGOs.
- Total No. of NGOs at IMO is over 70.
- At present, only CESA has NGO status.
- 2 NGOs representing Shipbuilding industry can be more powerful at IMO.
Thank you for your attention!