

Ship Construction File (SCF)

European Implementation of the SCF Industry Standard (IS)

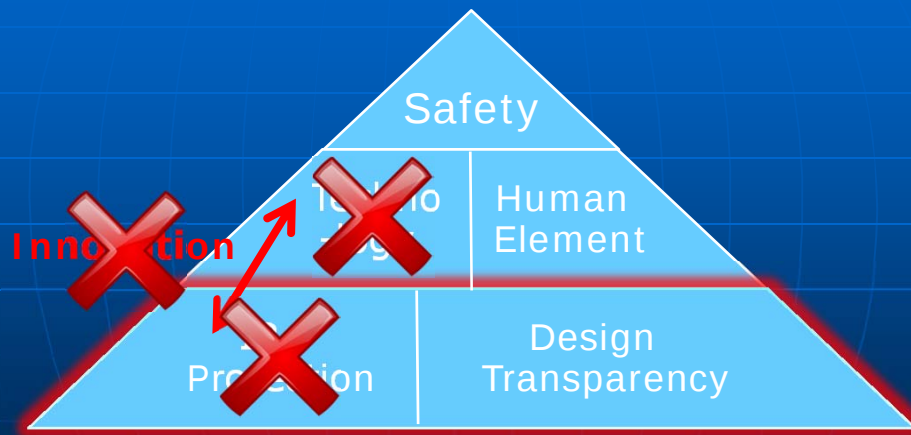


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6th Technical Workshop @ EMSA
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Regulatory IP Protection Concerns

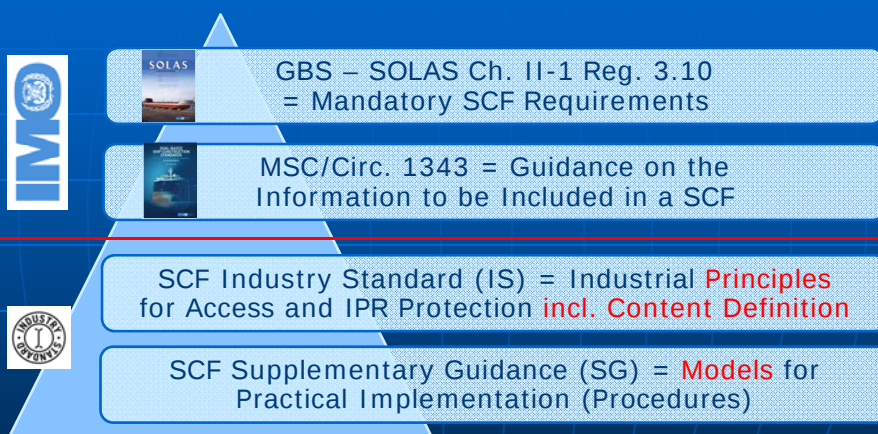
Regulatory area affected	Causing IP concerns to	
	Shipyards	Suppliers
Ship Safety	GBS Ship Construction File (SCF)	LSA Counterfeit and Sub-Standard Products
Marine Environment Protection	EEDI Technical Cooperation and Transfer of Technology	
	EEDI Survey and Certification	

Safety first – the foremost SCF motivation

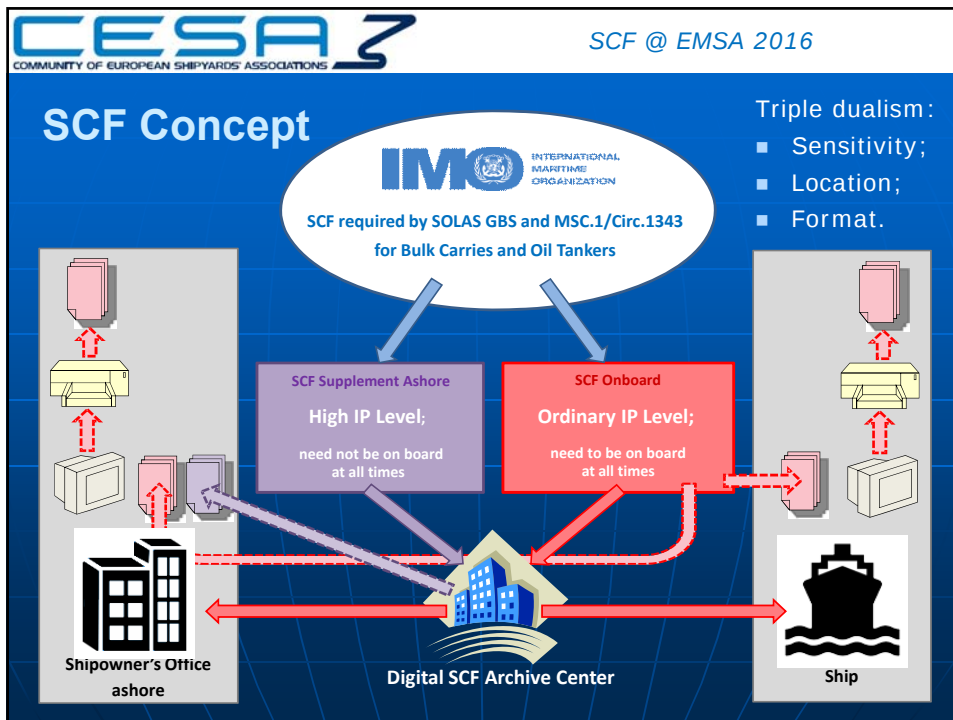


Ship Construction File (MSC.1/Circ. 1343)

Four Tier Structure of SCF Provisions



- IS defines principles that should be noted by IMO (MSC 96)
- SG provides technical details for Archive Centers / SCF users



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Final Draft SCF Industry Standard

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Executive Summary	<u>47 page document:</u> ■ 4 pg. summary; ■ 5 pg. intro, def., admin.; ■ 34 pg. content; ■ 4 pg. protection.
1. Introduction	
2. Definitions	
3. SCF Information	
4. Management of SCF Information	
5. Revision of the Industry Standard	
References	
Annex:	Practical Guidelines for SCF Information Definition

Scope – Format – IP Levels – Location

Preparation – Access / Safekeeping – Archive



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IP Level	Document/drawing name used in Industry Standards	Storage location
Ordinary	Capacity plan (*)	on board ship
	Loadline manual (*)	on board ship
	Utility manual (*)	on board ship
	Loading instruction manual (*)	on board ship
	Operation and maintenance manual (*)	on board ship
	General arrangement	on board ship
	Damage control plan (*)	on board ship
	Docking plan (*)	on board ship
	Calculation of hull girder section modulus	on board ship
	Dangerous area plan (*)	on board ship
	Coating technical file	on board ship
	Structural details of hatch covers, doors and other closings integral with the shell and bulkheads	on board ship
	Hatch cover Make drawings	on board ship
	Inspection Guidance in Operation	on board ship
	Block inspection list	on board ship
	List of materials	on board ship
	Inspection schedule for ship structures	on board ship
	Copies of certificates of forgings and castings welded into the hull	on board ship
	Tank testing plan including details of the test requirements	on board ship
	Non-destructive testing plan	on board ship
	Areas prone to yielding and/or buckling	on board ship
	Areas prone to fatigue	on board ship
	Areas prone to excessive corrosion	on board ship
	Detail of bottom plating	on board ship
	Details for in-water survey	on board ship
	Means of access to other structure-integrated deep tanks and large void spaces	on board ship
	Ship structure access manual	on board ship
	List of applied Rules & Standards and General Information on SCF	on board ship
	Midship section	on board ship
	Main O.T. and W.T. transverse bulkheads	on board ship
Construction profiles/plans	on board ship	
Shell exposures	on board ship	
Forward and aft sections in cargo tank (or hold) region	on board ship	
Engine-room construction	on board ship	
Forward construction	on board ship	
Stem construction	on board ship	
Superstructure (deck house) construction	on board ship	
Double and rubber stode	on board ship	
Stem frame	on board ship	
Structural details	on board ship	
Transverse to fore plan	on board ship	
Highly sensitive, infrequently used	Full Detailed strength calculation	on shore archive
	Full Detailed stability calculation	on shore archive
	Master Lines plan	on shore archive

New Simplified IP Levels and updated access procedures

Access managed
by the shipowner on a
day-to-day basis

onshore Archive storage,
access request required,
copies to be returned
/destroyed



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Time plan for SCF finalization

- 24 Sept 2015 Cross Industry WG – final draft SCF IS
- Oct 2015 Tripartite approval in principal
- early 2016 Implementation of SCF IS,
start on preparation of Archive Centers
- Feb 2016 SCF Approval by all Associations
- March 2016 joint SCF Submission to IMO, MSC 96
- May 2016 MSC 96, IMO notes SCF IS
- 1 July 2016 GBS/SCF apply to new contracts
- 1 July 2020 GBS/SCF apply for delivery of new ships

Early implementation has started in Asia (CANSI, KOSHIBA and SAJ), but no host is found in Europe!

Elements of joint industry submissions MSC 96/5 /7 and MSC96/INF.9 by ICS, BIMCO, IACS, OCIMF, INTERTANKO; INTERCARGO:

- Submit final report and present final SCF IS;
- Request IMO to note the SCF IS (Tier 1 only);
- Announce continued development of SCF UI based on feedback from software providers/archive center + SCF users;
- Support submission by presentation of SCF IT systems.



MSC/Circ. 1455

GUIDELINES FOR THE APPROVAL OF ALTERNATIVES AND EQUIVALENTS AS PROVIDED FOR IN VARIOUS IMO INSTRUMENTS

7.2 Onboard documentation requirements

7.2.1 All ships are required to carry documentation (...).

7.2.2 In general, the following documentation should exist:

- .1 certificates stating that the ship has an alternative and/or equivalency, including condition of approval, if any; and
- .2 **information on the alternative and/or equivalent design**, comprising of the following:
 - .1 scope of the analysis or design, incl. the critical design assumptions and critical design features;
 - .2 description of alternative/equivalent design and arrangements, incl. drawings and specifications;
 - .3 list of IMO regulations affected;
 - .4 summary of the results of the engineering analysis and basis for approval; and
 - .5 test, inspection and maintenance requirements.

7.2.3 **Where appropriate, the details of onboard documentation are to be consistent with relevant SCF requirements.**

Actions towards Better IP Protection

Use of SCF Archive Center for EEDI verification documents

- Define amount of information necessary for ship safety and environmental protection
- Find appropriate location and ensure that the material remains there
- Manage access to sensitive information
- Agree on secrecy / confidentiality



IPR and safety/ environmental issues have to be balanced and solved in one competent organization

► **Promote IP protection understanding at IMO!**

Status of European SCF Archive Center

- Japanese and Korean SCF Archive Centers are in operation;
- Chinese SCF Archive is under development;
- Marginal Bulker / Tanker production in Europe yielding limited interest of relevant shipyards in a pilot project;
- More class based Archives might become available, also provided by non-Asian classes;
- A commercial SEA Europe / GUARDSHIP Archive need to be operating 24/7, which necessitates many ships;
- The European Archive could be used for other shiptypes on a voluntary basis or for alternative design documents;
- Alternative Design Certificates onboard could be e-tagged to provide user-friendly access to sensitive design documents safely stored in an Archive ashore.

...an important new role for EMSA?