

## *EMSA Summary*

**WONDERMAR public workshop**

**1<sup>st</sup> March 2002**



- **What is EMSA**
- **Membership**
- **EMSA function**
- **Member services**



- Promote deployment of Product Data Standards in the Maritime Industry
- Implement early versions of models and test prototypes
- Provide harmonised contributions to the development of ISO 10303 Ship Product Model
- Define scenarios based on existing business processes
- Establish, co-ordinate, and support maritime Product Data projects
- Disseminate Know-how and results
- Maintain repository of marine International Standards



- **Founded in 1994**
- **Currently 16 members from Europe and US**
- **4 Levels of membership**
  - Full large company (€12,000)
  - Full small company (€4,800)
  - Observer (€2,400)
  - Academic (Free, but must contribute effort)



■ **Full**

- Germanischer Lloyd
- Bureau Veritas
- Det Norske Veritas AS
- Lloyd's Register of Shipping
- Warship Support Agency
- Napa Oy
- ABS Europe
- SENER
- FINCANTIERI
- British Maritime Technology Ltd

■ **Observer**

- Registro Italiano Navale
- Odense Steel Shipyard
- Marintek
- Intergraph Corporation

■ **Academic**

- University of Rostock
- IST

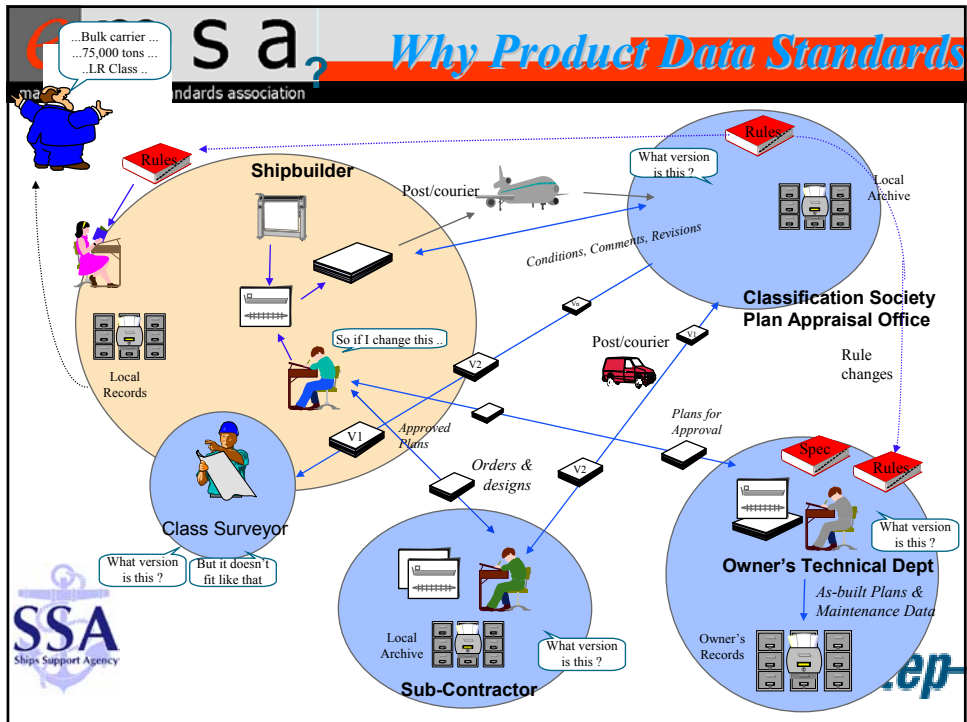
■ **Board**

- Chaired by the EMSA chairman (rotates every 2 years)
- meets twice yearly

■ **Technical committee**

- Chaired by the Technical coordinator
- meets 2 times yearly
- arranges additional technical workshops
- Reports to the board
- Co-chair of T23





**e m s a** *What is e-business*  
marine e-business standards association

- e-business is doing your business electronically
- What do you want it to be?
- It is necessary to look at your business needs first
- But generally...
  - e-business is the use of information and communication technology to streamline business processes and improve communication with internal and external organisations.

SSA Ships Support Agency

•eurostep

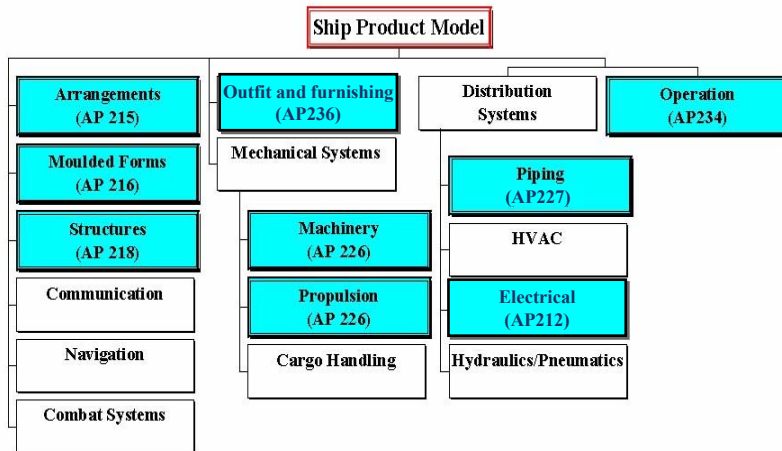
- **It may constitute one or more of the following components**
  - Electronic working
  - System integration
  - Marketing
  - E-commerce
  - Supply chain integration
  - Collaborative product commerce

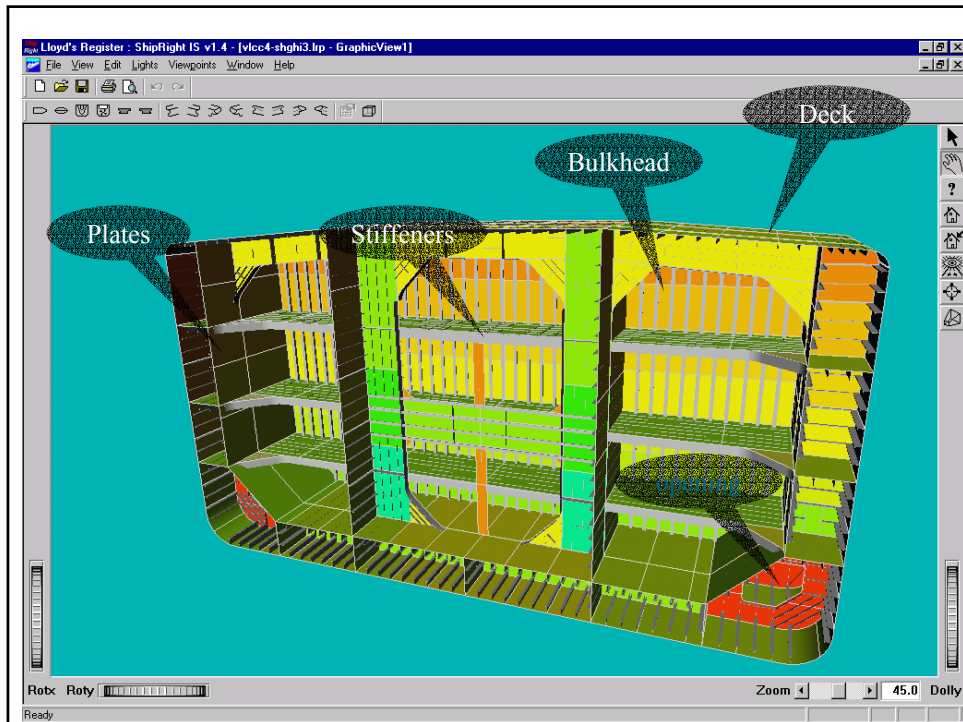


- **Use e-business to:**
  - Streamline your business processes
  - Lower costs
  - Create savings
- **By:**
  - Linking dealers and suppliers
  - Reducing lag time and paperwork
  - Online procurement
  - Links to vendors
  - Web enabled billing and payment



- Technology is not a substitute for a business strategy
- Look at your business first!
  - Business objectives
  - Business processes
  - Information required to fulfil those processes
  - Interfaces
    - Organisations, both internal and external
    - Systems
  - Implementation technology
    - Formats
    - Platforms



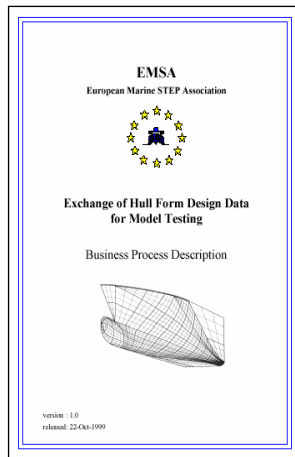
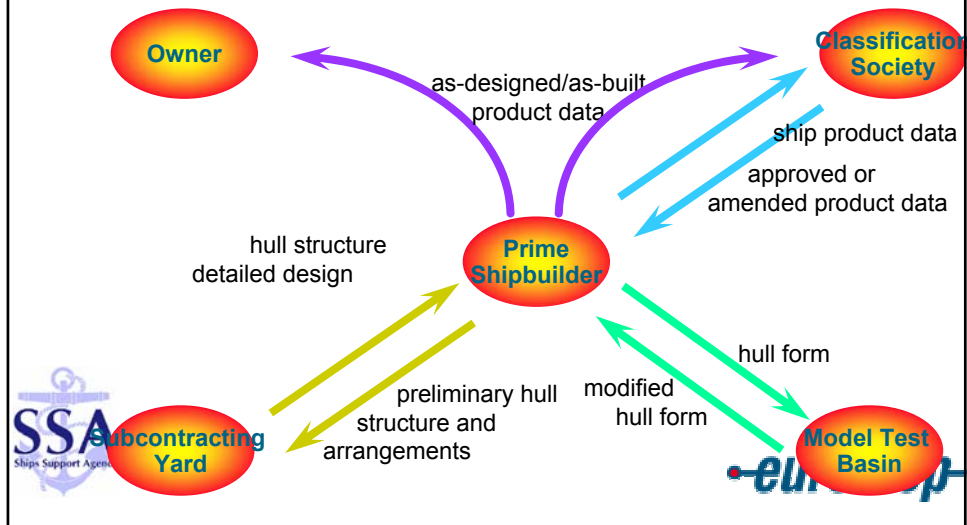


**e m s a** *EMSA Protocols*  
marine e-business standards association

- Industry standards for the exchange of product data within clearly defined usage scenarios
- Achieve business benefit in advance of the International Standards being published
- Exact subsets of International Standards
- Will be withdrawn when Standards covering the same scope are published
- XML DTDs based on EP models published (e.g. on BizTalk)
- Coordination with other standards (e.g. NSRP)

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Ships Support Agency

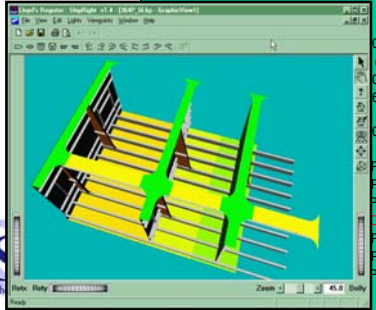
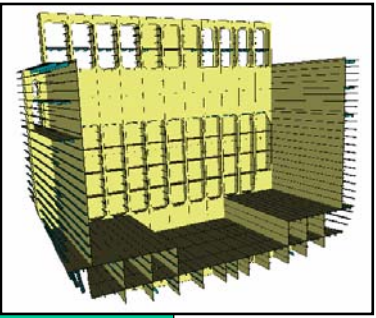
**europstep**





**e m s a** *Structural Design for Hull Cross Section Approval*  
 marine e-business standards association

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HEADER;
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FILE_NAME('seasprit.p21',Dec 18 1998 T10:00:00',
('Henrik M. Hansen'),
...
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```

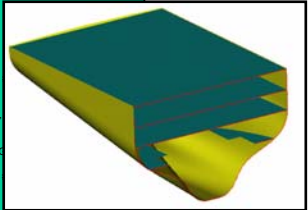
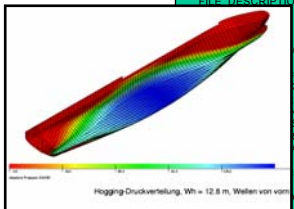


```
000000);
('metre', 'metre/second', 'kilogram
000001);
6.03', #7, (#5), (), $, 'Double Hull Very Large Crude Carrier',
000002);
P#4VW8-P, (1.571400E+02, 1.713600E+01, 1.185800E+01);
P#4VW8-P, (1.558650E+02, 1.713600E+01, 1.185800E+01);
P, (#393, #394);
BOUNDARY(#392, 0.000000E+00);
P#3VW9-P, (1.585155E+02, 1.310400E+01, 1.184000E+01);
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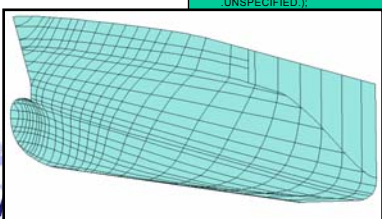


**e m s a** *Hull Form Design for Model Testing*  
 marine e-business standards association

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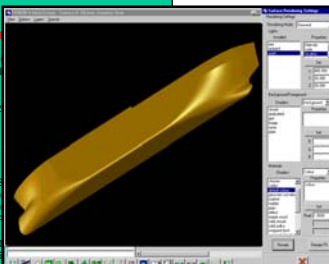


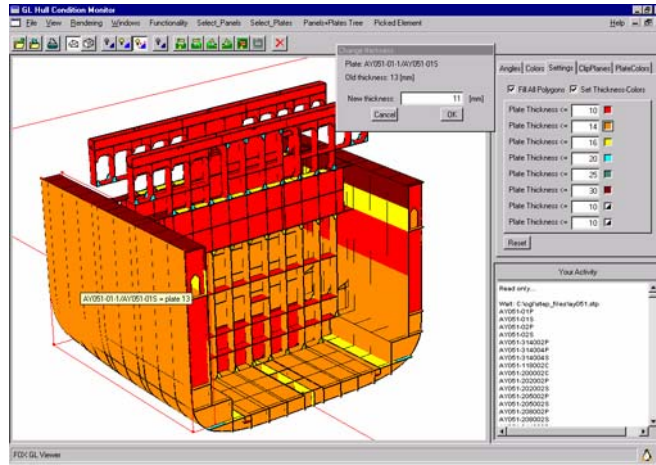
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#79090, #79290), 'id', 'testship');
CHARACTERISTICS(' ', $, 198.7000, 26.6600,
NATION(' ', $, ' ', $, 'CALL-XY');
$ _PLACEMENT(' ', $, _FORWARD_POINTING
ID(#10, (#60));
AL_SPACING_TABLE((#70, #80, #90, #100,
560, #2570, #2580, #2590, #2600, #2610),
'frame system');
SITATION(1, 'frame 1', 0.7880);
```



```
#2610=SPACING_POSITION(255, 'frame 255', 198.3040);
#2620=MOULDED_FORM_REGION((#2630), 'id', 'SE--00
UNSPECIFIED.);
```

```
IN_DEFINITION(DE--00
SE_SHAPE_REPRESENT
((#2660, #2670, #2680
#750, #2760, #2770), (#2
.F., .F., .F.);
NOTS(1, 1, 1, 1, 1, 1, 1,
0.0000, 1.0000, 1.0000
0.0000, 1.0000, 1.0000,
DED_SURFACE()
N_ITEM) RATIONAL_B
1.0000, 1.0000, 1.0000);
1.0000, 1.0000, 1.0000);
001-TMP_1') SHIP_SUR
001-TMP_1_11', (27.560
001-TMP_1_12', (28.865
```





- **Machinery – 7 new business cases. Exchange of:**
  - Product data to support quotation based procurement process
  - BOM – to support CAD/ERP integration and catalogue based procurement
  - Machinery design data to support simulation and functional verification
  - Machinery design data to support class type approval and product certification.
  - Machinery product data to configure maintenance systems
  - Machinery operational data to support survey and maintenance requirements
  - Component libraries and product catalogues



- **Facilitates business process re-engineering for improved efficiency**
- **Facilitates single source of data throughout design, production and in service support**
  - saving costs
  - greater scope for 'plug and play' IT solutions
- **Reduction in time for design and construction; more time to investigate design options**



- **Reduce the need to re-digitise data supplied by shipbuilders for:**
  - stability assessment
  - hull design assessment
- **Improve efficiency of processes**
- **Improve accuracy of data capture**
- **Improve turn-round time and response**



- Reduced lead time for design and manufacture
- Lifecycle support for ship data
  - survey
  - maintenance
  - Disposal



- Fewer translators to support
- Niche products more easily integrated
- Competitive advantage by giving the customer what he wants

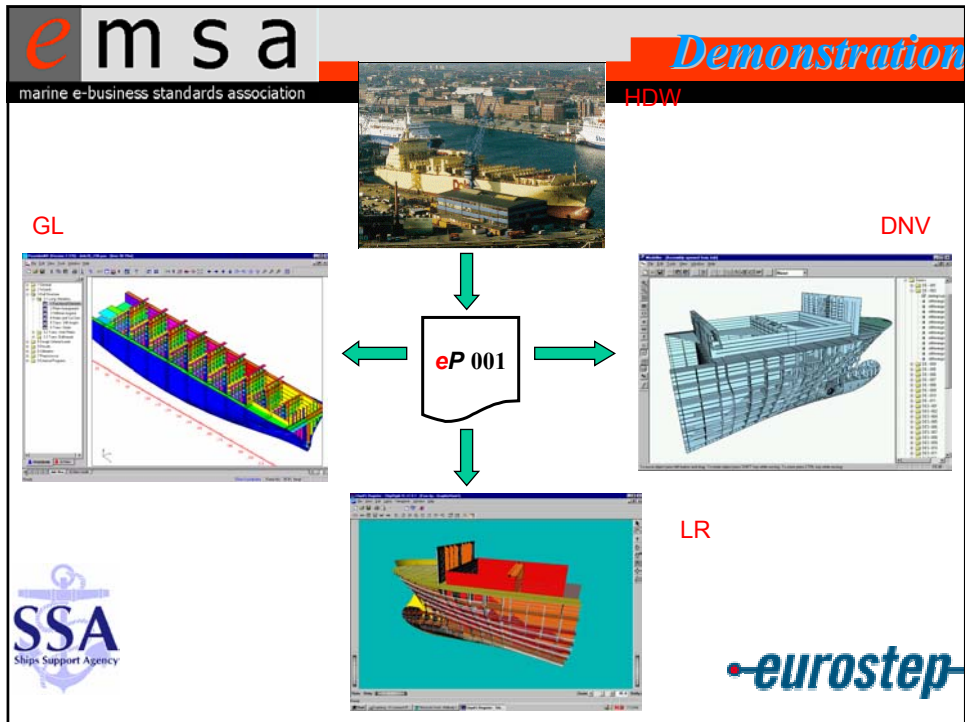


- **European shipyard estimates:**
  - Reduction in design time 4 to 6 weeks per design
  - A saving of 500 kECU per design
- **20% reduction in effort for Classification plan approval**
- **model basin spends 300 to 500 man days per year to digitising data**



- **Free to Full Members not Observers**
- **Full participation at all technical forums and workshops**
- **Translator testing and certification**
  - DNV and Napa applied for certification of their eP 001 translators
- **Access to EMSA commissioned work**
  - STEP/XML
  - PDM Interface capability
  - Data mapping tools
- **Free Subscription EMSA News**





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**Summary**

- **The industry has the need to manage ship data**
  - as part of business
  - more efficiently and effectively
- **EMSA provides a forum for the development of Marine Related data exchange and management standards**
- **EMSA will 'harvest' the results from funded projects and provide a repository for future development**
- **EMSA promotes the development and use of product data standards**

SSA  
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- Cost-savings and increased efficiency will materialise from e-Business implementations
- Product Data Technology is a framework for business strategy, but not a substitute for it



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