

PrimeShip-INVENTORY

A software for development of Inventory of Hazardous Materials

17 November 2010 NIPPON KAIJI KYOKAI



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Introduction of ClassNK A World Classification Society

Formal Name NIPPON KAIJI KYOKAI

Brand Name ClassNK

Status
Non-profit Organization

History Founded in 1899

◆ IACS Founding Member

Authorizations from Governments

Survey for ICLL, SOLAS, MARPOL & TM69:

101 Administrations

Audit for ISM:
63 Administrations

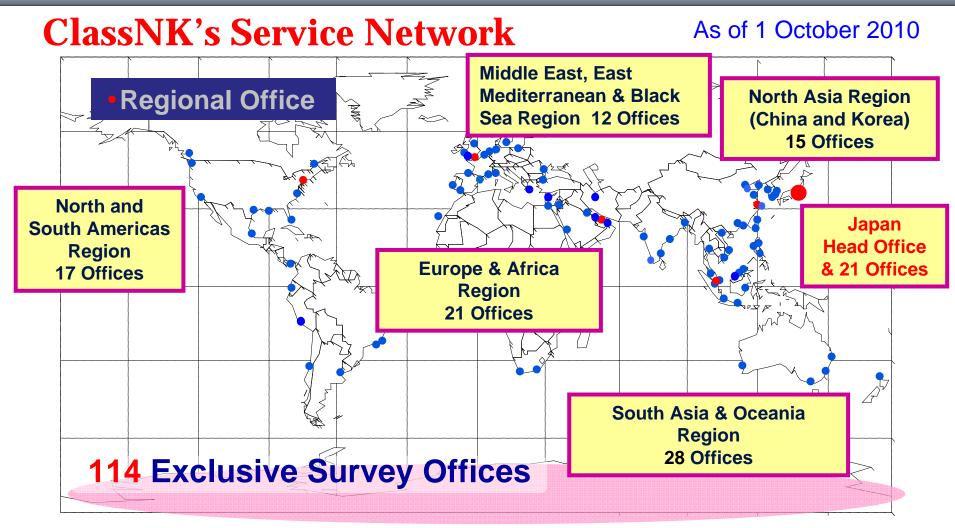
Audit for ISPS: 49 Administrations







Introduction of ClassNK A World Classification Society

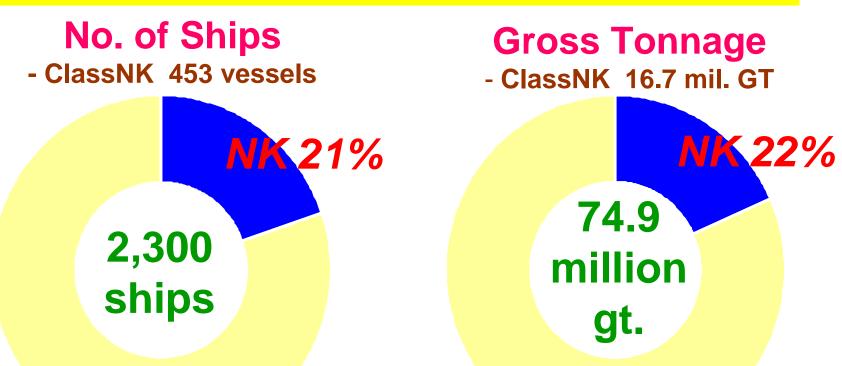


"Our high quality survey services span the globe"



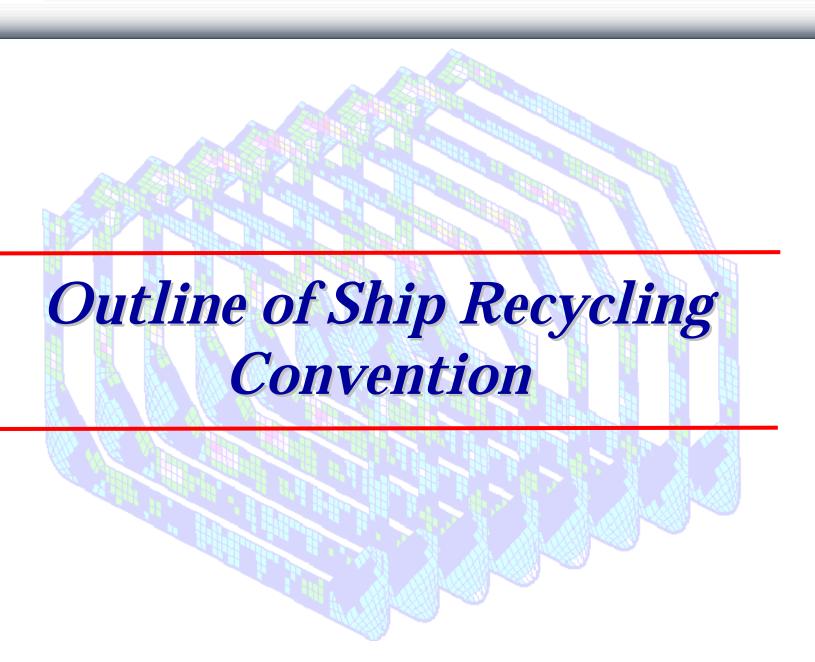
Introduction of ClassNK A World Classification Society

ClassNK's Share of New-building in 2009



Abt 20% of the world's tonnage classed with ClassNK (7000+ ships), making us the No. 1 class society in the world.







As an Example of Recycling Matters... What is the issue of Car Recycling?



80% 100% Recycling: 20% 60%









To produce <u>resource more from cars</u> than wastes.

http://www.jarc.or.jp/recycle/



What is the issue of Ship Recycling Matter?



Recycling 90-95%

Not much waste



Totally different from other Recycling Issues.



What is the aim of Ship Recycling Matters?

But... Ships are too Big to be dismantled.



So, if no plan

Planned



To establish good manners to dismantle ships.



The Convention proposes 3 Items as;

- Sufficient Technology
 - > Environmental Friendly Technology to Ship Recycling Facility
- Sufficient Information
 - > Development and Maintenance of IHM
- Sufficient Preparation
 - > Producing of Ship Recycling Plan

for establishing Environmentally Sound Ship Recycling.

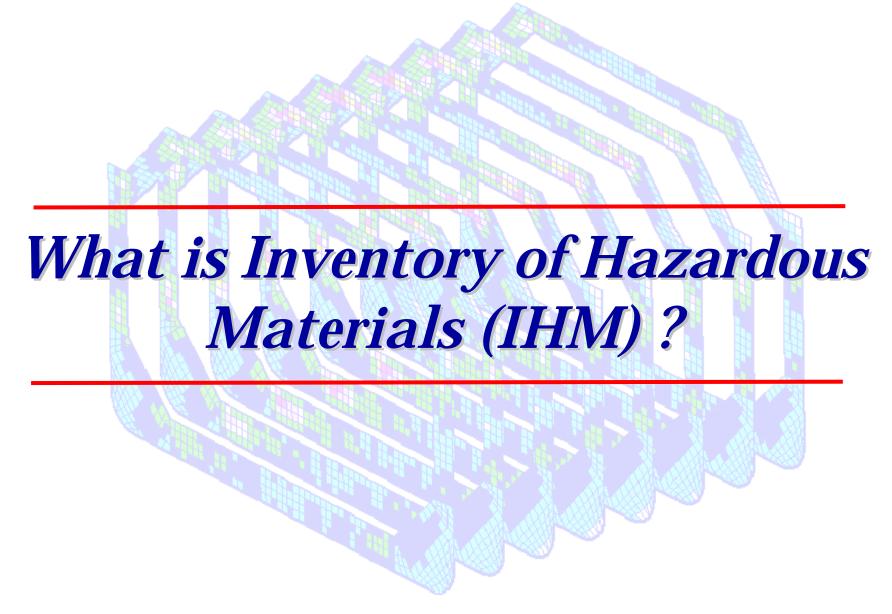




Ship Recycling Convention* was adopted on 15 May 2009

* Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009







Role of IHM

Role of IHM in the Convention

IHM indicates Quantity & Location of actual Hazardous Materials on board the ship, Wastes, and





Table B	Mercury and Mercury Compounds	1,000 mg/kg	Yes	10	g
taterials Listed in ppendix 2 of the	Polybrominated Biphenyl (PBBs)	1,000 mg/kg	No		



Scope of the IHM

The Inventory consists of 3 parts:

	Contents	Developed at
Part 1	Ship structure and equipments	Delivery of the ship (to be maintained during her operation)
Part 2	Operationally generated wastes	Just before the Recycling
Part 3	Stores	Just before the Recycling



Materials to be listed in the IHM

Following materials are to be listed in the IHM

Table A	Prohibited/Limited Materials (4) Asbestos, PCBs, Ozone-depleting substances (e.g. Halon), Organotin compounds (e.g. TBT)	Part 1		
Table B	Tiaitinai materiais (6)			
Table C	Potentially Hazardous Items Kerosene, Light oil, Lubricant, Antifreeze, Battery electrolyte, Paint, Acetylene, etc.	Parts 2 & 3		
Table D	Regular consumable goods potentially containing Hazardous Materials Computers, refrigerators, printers, scanners, television sets, radio sets, video cameras, video recorders, telephones, consumer batteries, etc.	Part 3		



Example of IHM

(Standard Format of the Guideline for the Convention)



Part I HAZARDOUS MATERIALS CONTAINED IN THE SHIP'S STRUCTURE AND EQUIPMENT

I-1 Paints and coating systems containing materials listed in Table A and Table B of appendix 1of the guidelines

No.	Application of paint	Name of paint	Location	Materials (classification in appendix 1)	Approx. qua	ntity	Remarks
1	Anti-drumming compound	Primer, xx Co., xx primer #300	Hull part	Lead	35.00	kg	
2	Anti-fouling	xx Co., xx coat #100	Underwater parts	TBT	120.00	kg	

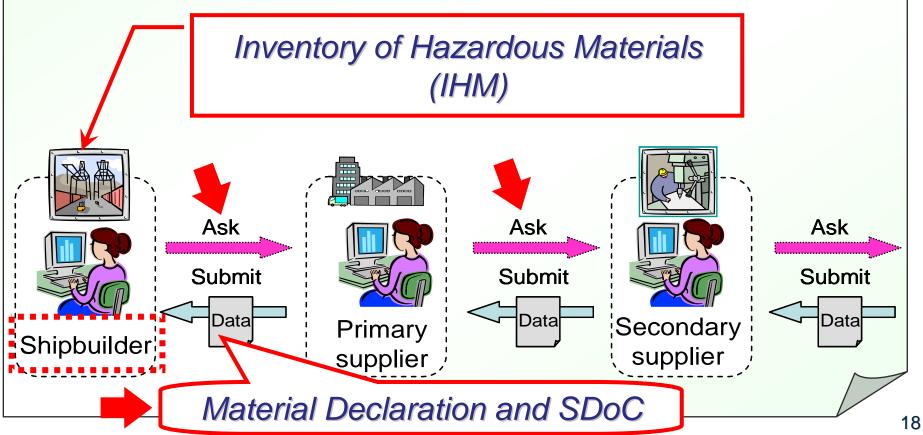
I-2 Equipment and machinery containing materials listed in Table A and Table B of appendix 1 of the guidelines

No.	Name of equipment and machinery	Location	Materials (classification in appendix 1)	Parts where used	Approx. quantity		Remarks
1	Switch board	Engine control room	Cadmium	Housing coating	0.02	kg	
			Mercury	Heat gauge	<0.01	kg	less than 0.01kg
2	Diesel engine, xx Co., xx #150	Engine room	Cadmium	Bearing	0.02	kg	
3	Diesel engine, xx Co., xx #200	Engine room	Cadmium	Bearing	0.01	kg	Revised by XXX on Oct. XX, 2008
4	Diesel generator (x 3)	Engine room	Lead	Ingredient of copper compounds	0.01	kg	



How to develop IHM for New Ship

Shipbuilder is requested to develop the IHM-Part 1* for New Ships at the time of delivery.

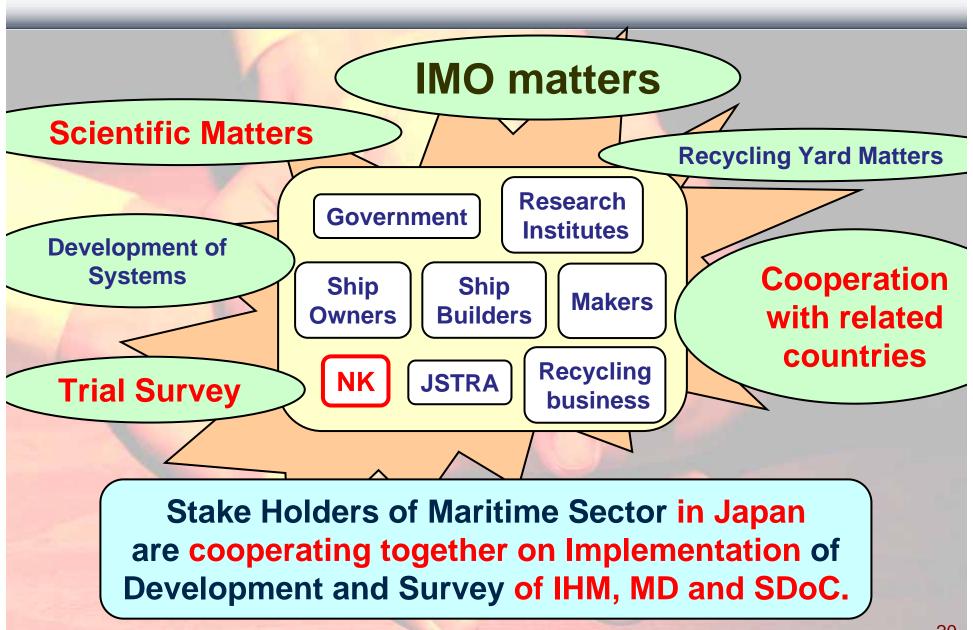








Cooperation in Japan





ClassNK Cooperation in Japan and ClassNK

ClassNK is

cooperating with all the concerned parties (ship owners, shipbuilders, etc.) for necessary preparation to ensure smooth implementation of the Convention.

Activities in Japan for Ship Recycling (from 2008 to 2010)

- Trial of IHM for Existing Ships (approx. 40 Ships)
- Trial of IHM for Newly Built Ships (approx. 20 Ships)
- Trial of Ship Recycling Muroran Project
- Making a software for Development of IHM;

ClassNK's PrimeShip-INVENTORY





Trial of IHM for Newly Built Ships





Concept of PrimeShip-INVENTORY

<u>ClassNK</u> decided to develop a software;

PrimeShip-INVENTORY,

for the **smooth** development IHM, MD and SDoC for Newly-Built Ships.





PrimeShip-INVENTORY is FREE OF CHARGE



Merits of PrimeShip-INVENTORY

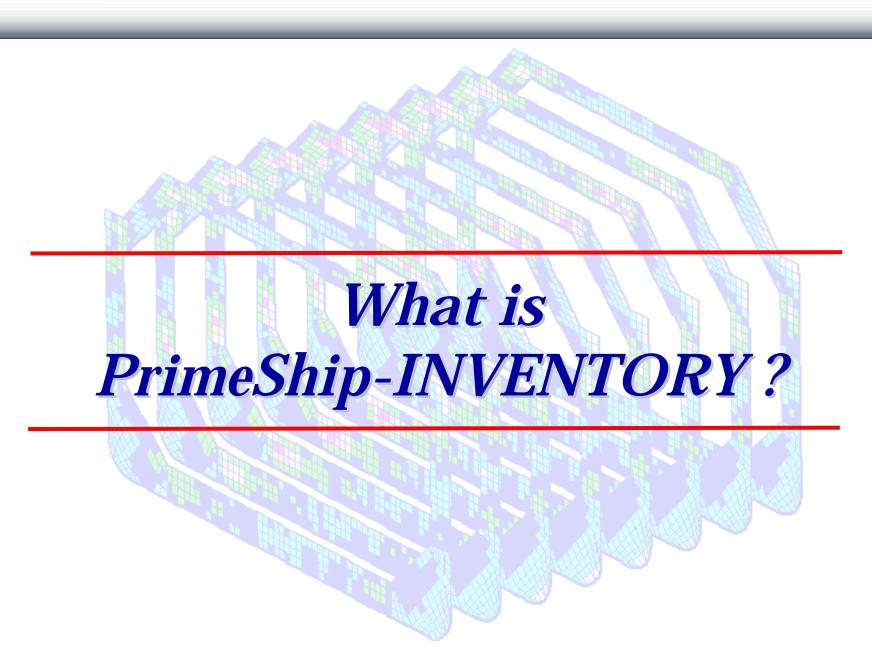
NO NEED

- √ to record MD & SDoC one by one
- √ to screen MD containing Hazardous Materials
- ✓ to calculate the mass of Hazardous Materials at each location
- √ to prepare IHM by hand
- ✓ to submit and keep
 MD/SDoC in paper format



Greatly reduces the Industry's work for developing IHM of new building ships







ClassNK What is PrimeShip-INVENTORY?

Supplier

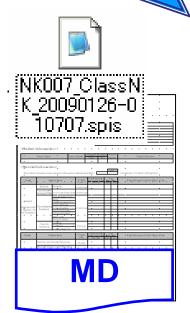
- **Create Material Declaration** (MD) Data file by "MD Tool" [Excel-based]
- > Create Supplier's Declaration of Conformity(SDoC) file [pdf]

Send MD & SDoC by Email

Shipbuilder

PrimeShip-INVENTORY

- > Import MD & SDoC files
- > Set Locations for the MD data containing **Hazardous Materials**
- > IHM is prepared automatically







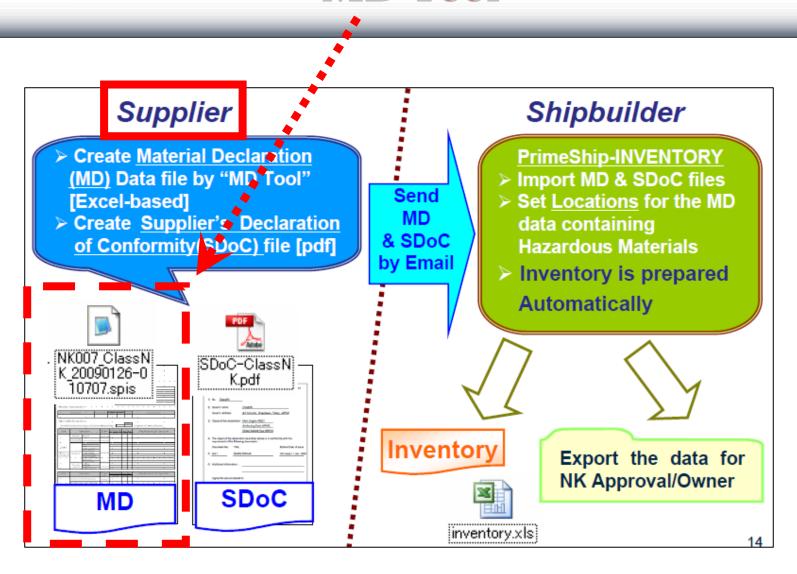
IHM



Export the data for **NK Approval/Owner**

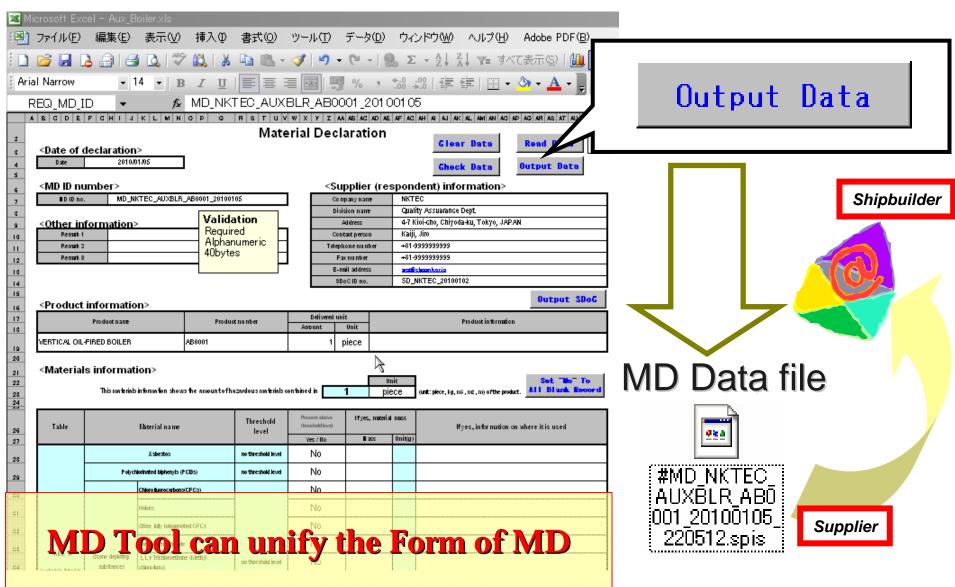


MD Tool



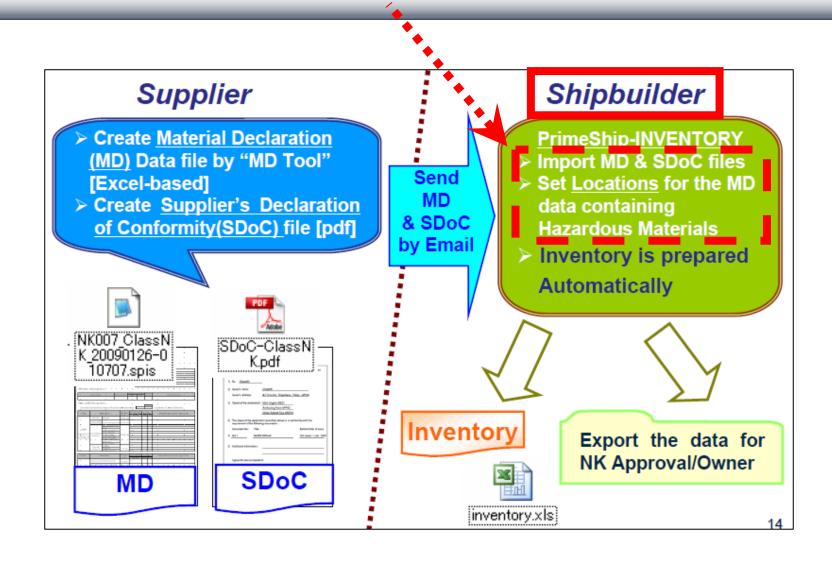


MD Tool





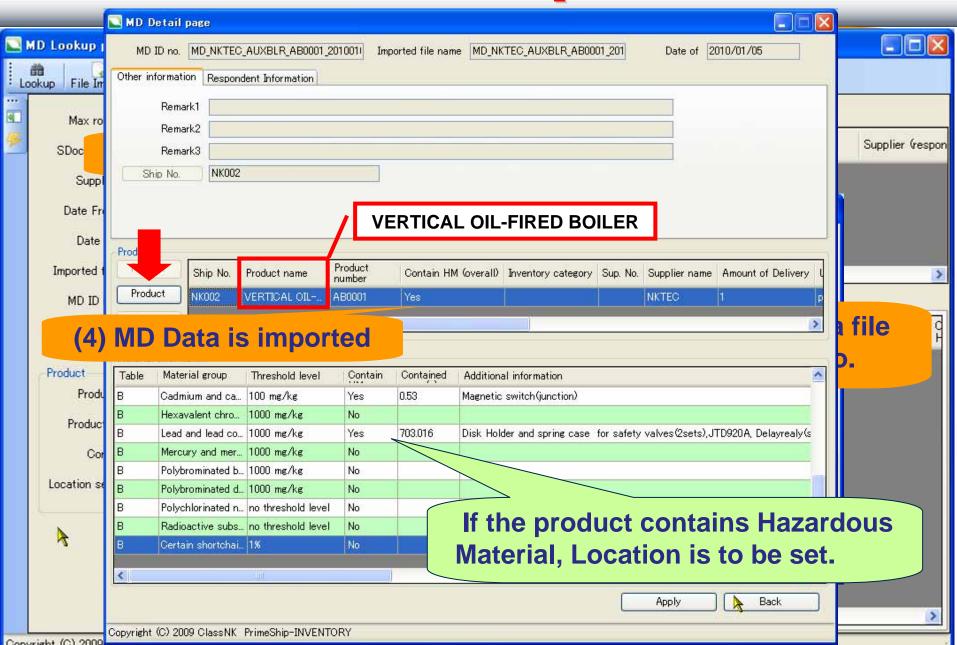
Import MD





PrimeShip-INVENTORY

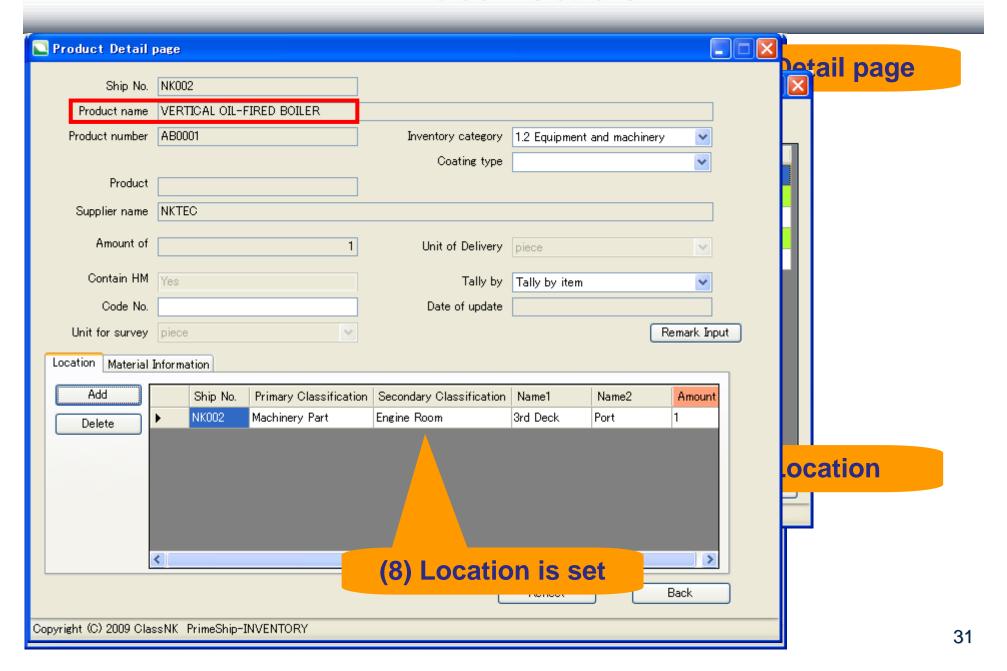
MD Import





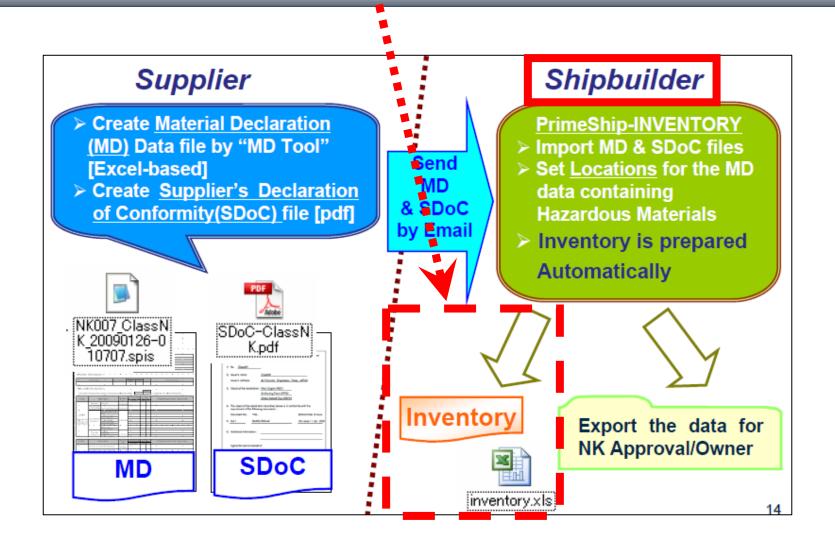
PrimeShip-INVENTORY

Set Location



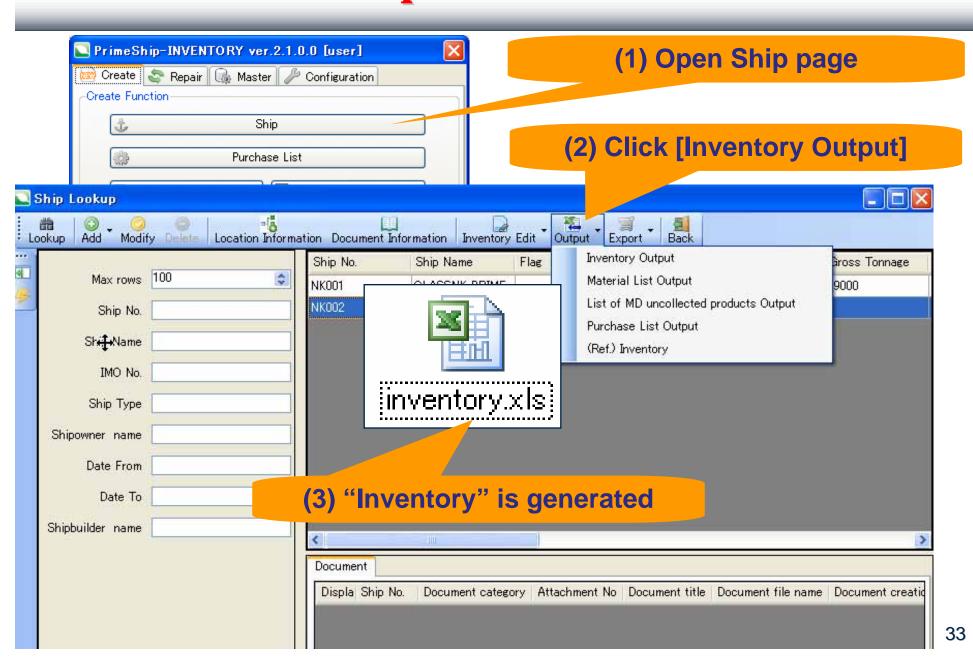


Output IHM Form





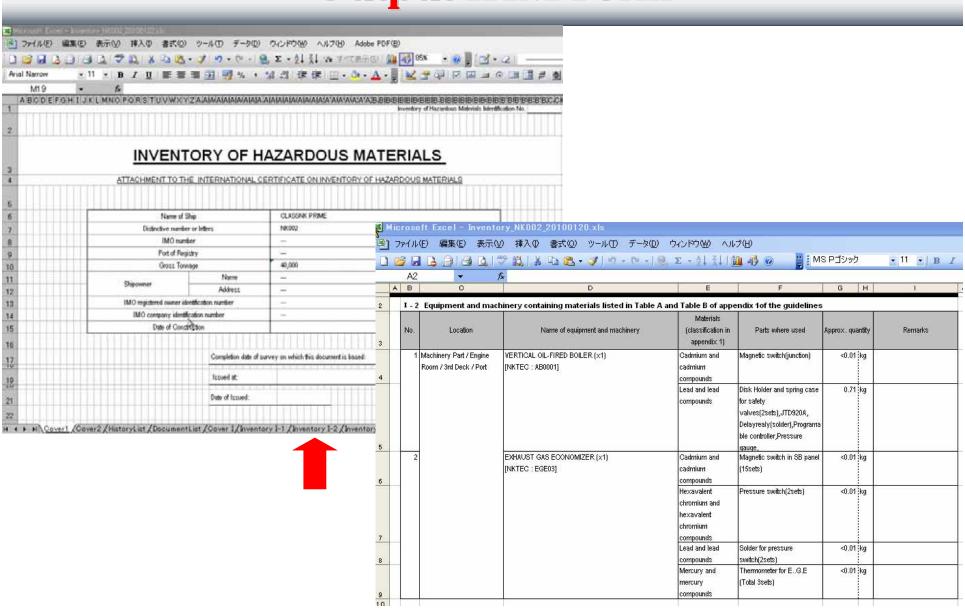
Output IHM Form PrimeShip-INVENTORY





PrimeShip-INVENTORY

Output IHM Form





PrimeShip-INVENTORY on Web



Coming Soon!

Requests from shipbuilders and manufactures in Asian Region:

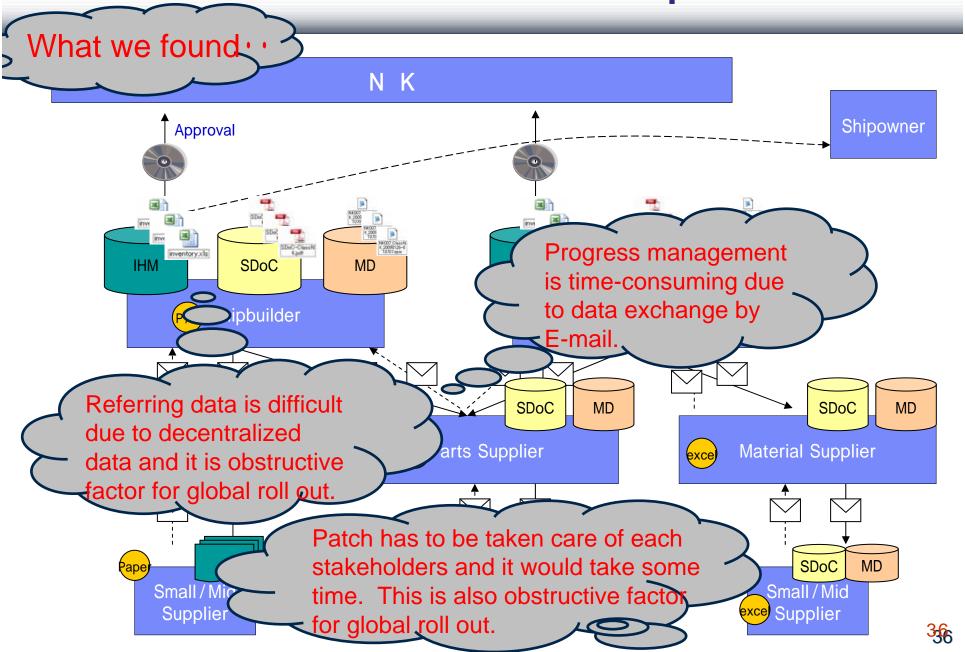
- Exchanging MD and SDOC by E-mail is troublesome.
- Wanting to upload them through Web!
- ClassNK started to develop Web software with IBM.







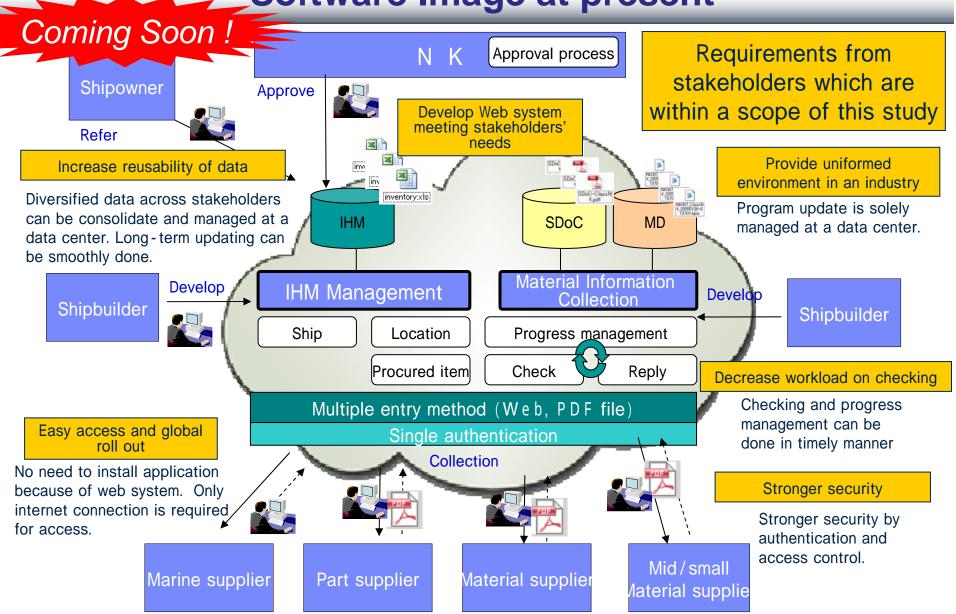
Current Status on PrimeShip-INVENTORY



ClassNK NIPPON KALII KYOKAI

PrimeShip-INVENTORY on Web __Software Image at present







PrimeShip-INVENTORY on Web Image for Next Development Coming Soon



Construction



Operation

Recycling

Develop IHM (Part I) for new ships

Develop MD & SDoC

Develop IHM (Part I) for existing ships

Maintain/
Update IHM
(Part I∧

Develop IHM (Part II and III)

Providing
Information on
Recycling Facilities
fulfilled
Requirements

Preparation for ship recycling (recycling plan etc)

IHM Experts

With High Security

Utilize the same Web application through the whole industry

Shipbuilders

Manufactures



Traders

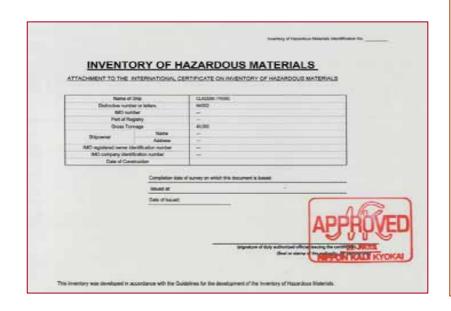
Ship Recyclers

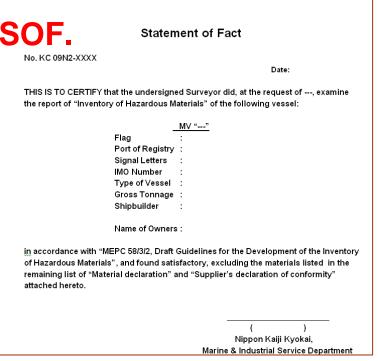
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Statement of Fact for IHM

- ✓ ClassNK issues Statement of Fact (SOF) for the IHM developed before the convention comes into force.
- ✓ Shipowners are able to proceed to the early preparation since SOF is rewritten to the conventional certificate after the convention comes into force.
- ✓ ClassNK has already issued SOF.







Information Service on Website

Please visit the Ship Recycling page of ClassNK website at http://www.classnk.or.jp





ASEF meeting 2010 in Kyoto

Inventory of Hazardous Materials lidentification No. INVENTORY OF HAZARDOUS MATERIALS ATTACHMENT TO THE INTERNATIONAL CERTIFICATE ON INVENTORY OF HAZARDOUS MATERIALS Name of Ship CLASSNK PRIME Distinctive number or letters NK002 IMO number Port of Registry 40,000 IMO registered owner identification number IMO company identification number Date of Construction Completion date of survey on which this document is based: Date of Issued: (signature of duly authorized official issuing the certificate), This inventory was developed in accordance with the Guidelines for the development of the Inventory of Hazardous Materials MazzbD Thank you for your attention!