

ClassNK Activities for Ship Recycling

10 December 2014

Ship Recycling Team, ClassNK

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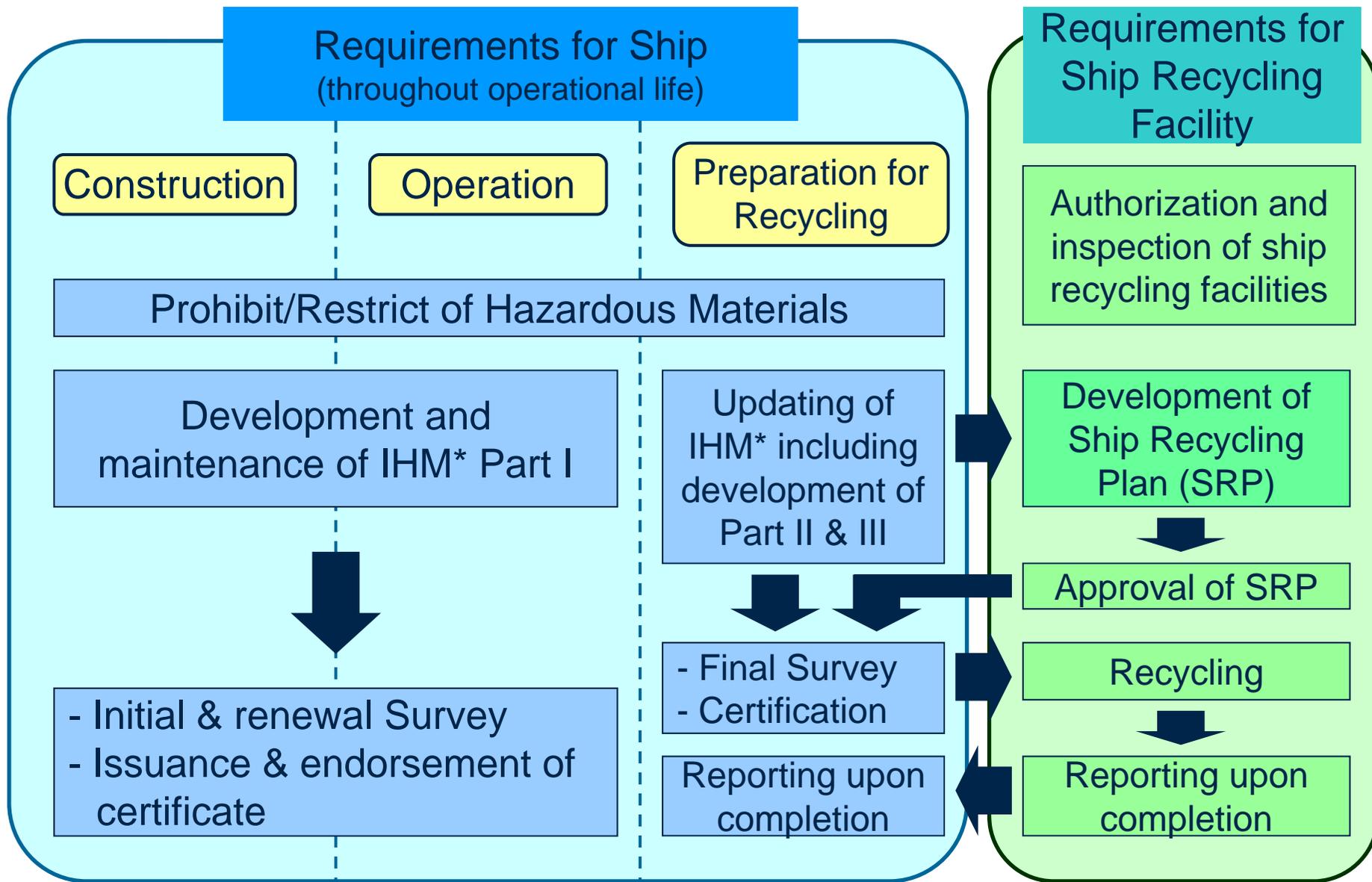
2. Discussion

Breakthrough to realize sustainable, safe and environmentally sound ship recycling



Hong Kong Convention* (HKC) was adopted on 15 May 2009

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



*IHM: Inventory of Hazardous Materials



REGULATION (EU) No 1257/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC

Requirements of the EU Regulation (SRR) are basically in line with HKC.

Requirements for ships	(1) Control of Hazardous Materials (2) Inventory of Hazardous Materials (IHM) (3) Surveys
Requirements for SRFs*	(1) Authorization and inspection of SRFs (2) Listing in “ EU List ”

*SRF: Ship Recycling Facility

What is needed to comply with HKC?

Parties concerned	Tasks
Shipowners	Development of IHM for Existing Ships Maintenance and update of IHM during operation
Shipbuilders	Development of IHM for New Ships
Equipment Manufacturers	Development of Material Declaration (MD) and Supplier's Declaration of Conformity (SDoC)
Ship Recycling Facilities	Development of Ship Recycling Facility Plan (SRFP) Development of Ship Recycling Plan (SRP)

- ✓ In order to develop IHM for existing ships, shipowners may draw upon “Expert” assistance.
- ✓ ClassNK Consulting Service Co., Ltd. (NKCS) is providing “Expert” services to develop IHM for existing ships.



Shipbuilders should develop IHM for new ships based on MD and SDoC submitted by their suppliers.

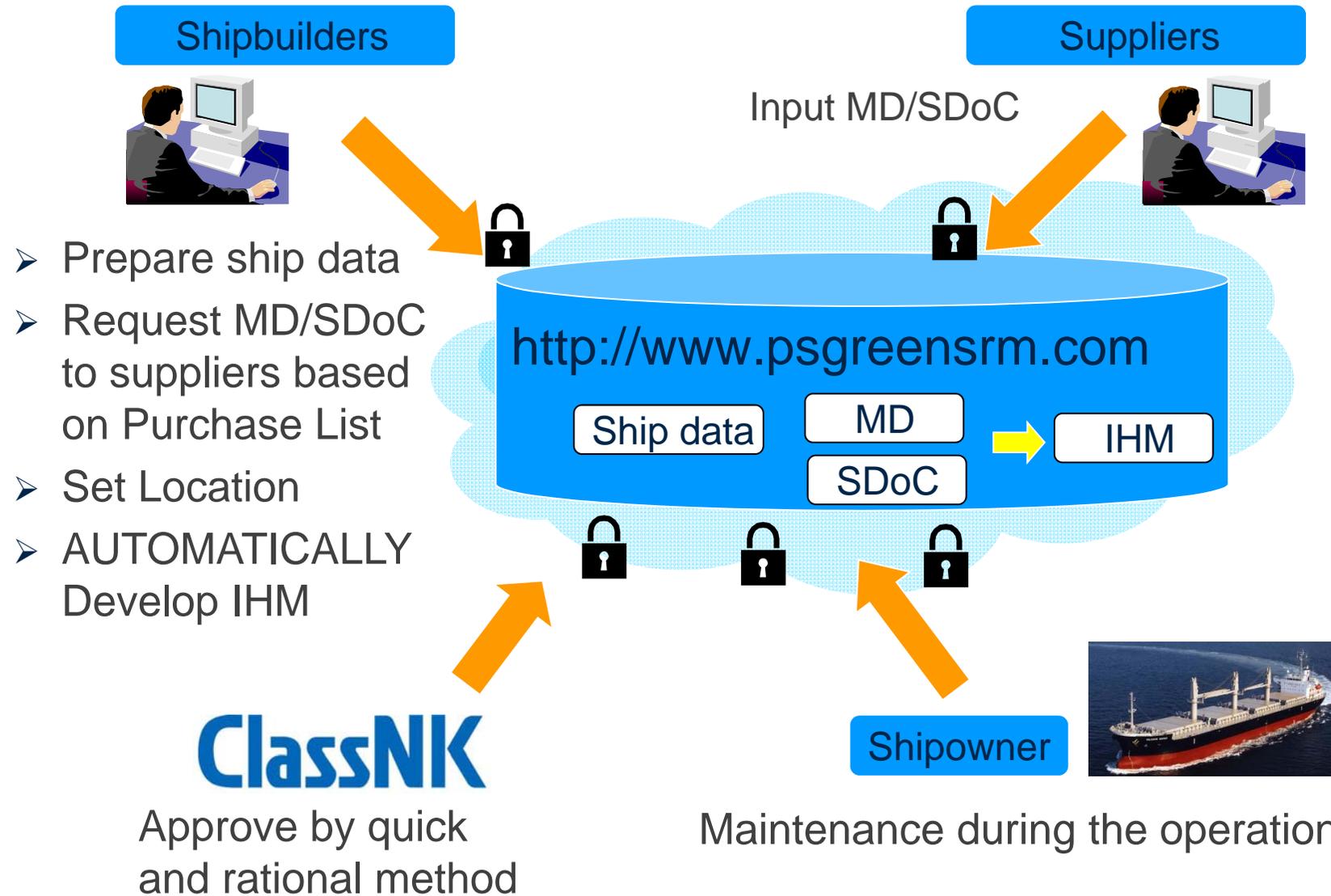
Problems:



- ✓ Exchange & store large number of paper documents
- ✓ Record & post MD contents to IHM
- ✓ Calculate of mass of Hazardous Materials per Location

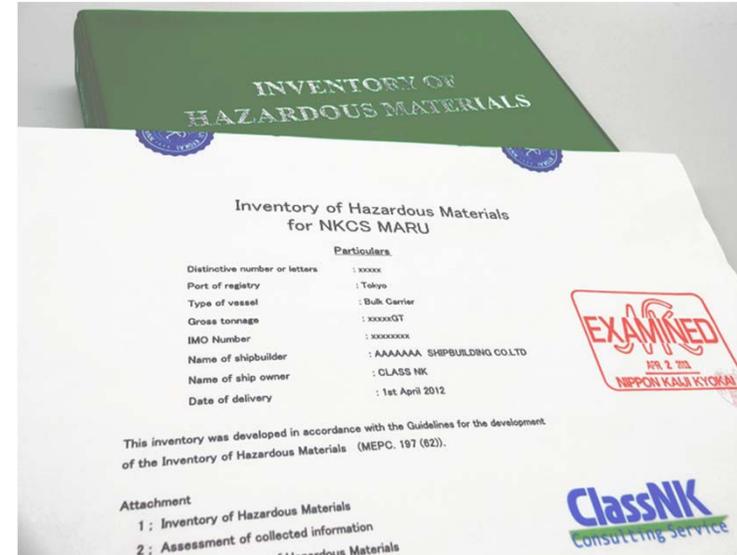
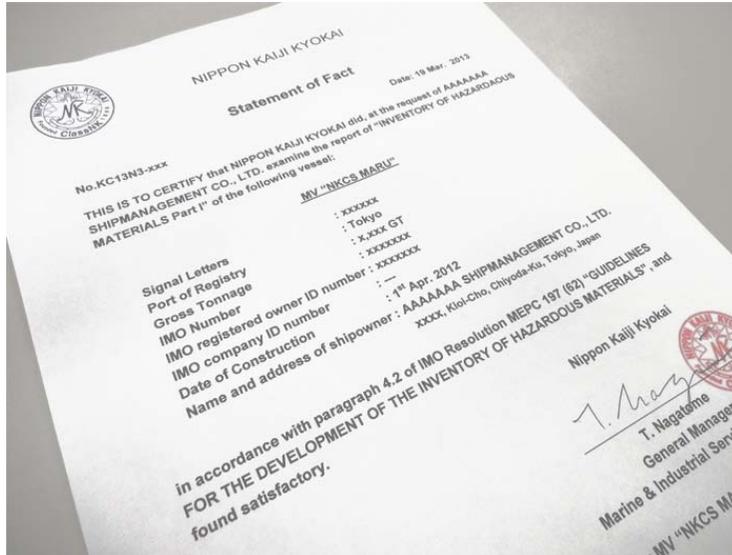
Free of charge software for electronic MD & SDoC data collection and automatic IHM output





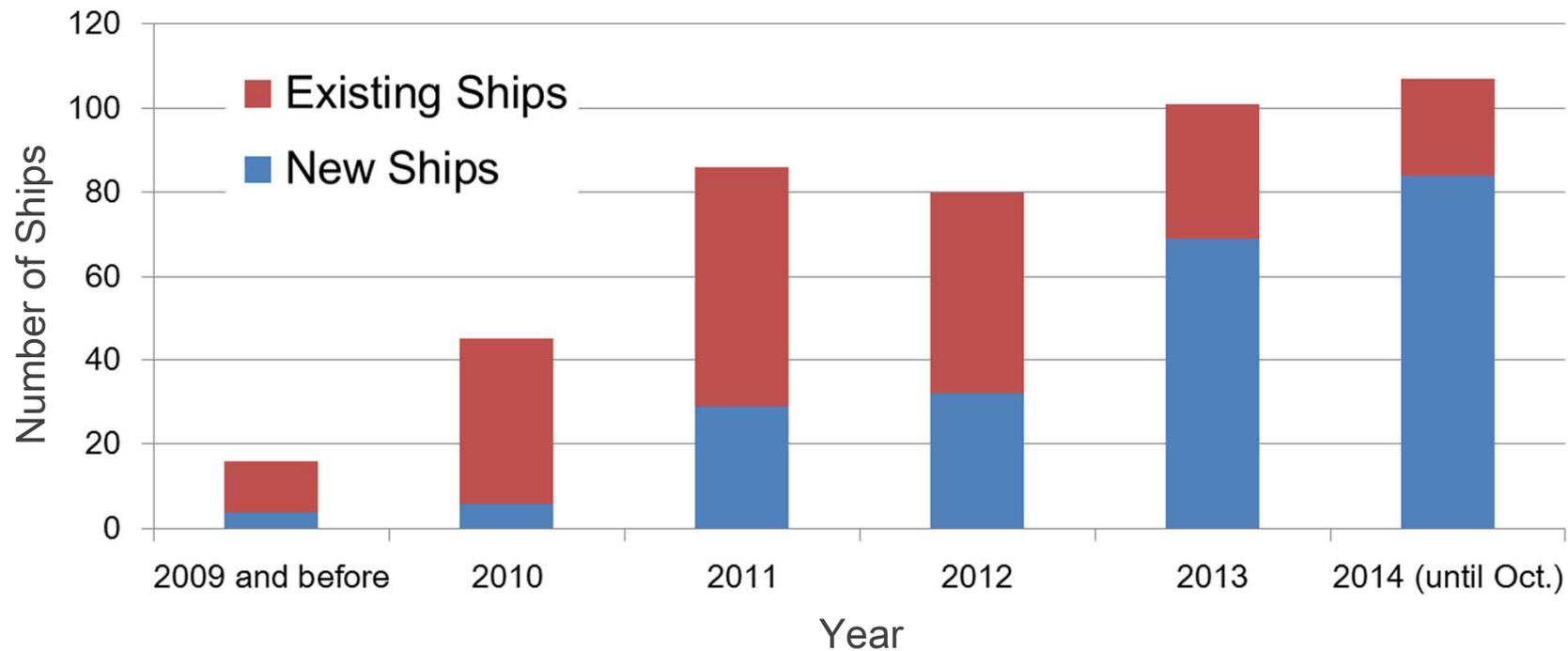
As of Oct. 2014, more than 2,200 companies are registered.

- ✓ ClassNK issues Statement for IHM developed.
- ✓ Once the convention entry into force, the statement shall be rewritten to a conventional certificate.
- ✓ Classification Notation “IHM” is also provided.



Trend of IHM Certification

- ✓ Certification of IHM for new ships is growing rapidly.
- ✓ In 2014, more than 17% of new ships registered in ClassNK have IHM at the delivery.
- ✓ Almost all the IHMs are developed by “PS-GREEN/SRM”.



Trend of IHM certification by ClassNK

ClassNK issued world's first statement of compliance (SOC) which certify compliance with HKC for a ship recycling facility (SRF) as a third party.

Chinese yard is first with IMO green ship recycling compliance

JING YANG – HONG KONG

CLASS NK has certified the facility and operation in a Chinese yard compliant with the International Maritime Organization's green ship recycling convention. It is the first time that such a credential has been issued.

Jiangmen Zhongxin Shipbreaking & Steel Co is the world's first yard to receive a statement of compliance based on the Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships.

Founded in 1984, Jiangmen

Zhongxin, based in Guangdong Province, has a working yard of 400,000 sq m and was recognised as an AAAA-level green shipbreaking enterprise by the China National Ship Recycling Association in 2010.

"Zhongxin has grown to become one of the largest ship recycling facilities in China," ClassNK said in a press release. "The yard has been a pioneer in green ship recycling."

Adopted in 2009, the Hong Kong Convention requires every ship sent for recycling to carry an inventory of

hazardous materials and yards to provide a ship recycling plan, specifying how each ship will be recycled, depending on its particulars and its inventory.

Enforcement of the convention requires 15 states to sign and ratify it, representing 40% of global merchant shipping gross tonnage. But of the major ship recycling nations, only Turkey has signed the convention.

Other major players including India, Bangladesh, China and Pakistan have yet to sign up. ■

www.loydslist.com/classification



Photo: Handing the SOC from ClassNK to Zhongxin

Lloyd's List December 18, 2012

SRFs certified by ClassNK

1. Jiangmen Zhongxin Shipbreaking & Steel Co., Ltd. (China)
2. Dalian Shipbuilding Industry Marine Service Co., Ltd (China)
3. Miyaji Salvage Co., Ltd (Japan)
4. Jiangsu Changrong Steel Co., Ltd (China)
5. Jiangmen Xinhui Shuangshui Shipbreaking Iron & Steel Co., Ltd. (China)

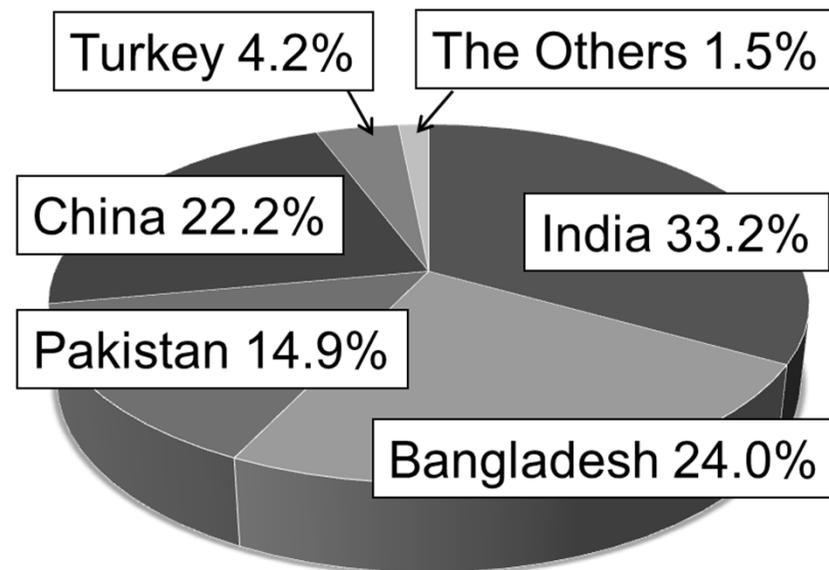


Question: What is most important to realize sustainable, safe and environmentally sound ship recycling globally?

Answer: **Entry into force of HKC**

Current status:

- “Beaching Method” is applied by most of SRFs in India, Bangladesh and Pakistan (more than 70% of the world).
- According to the calculation by IMO, ratification of China and Turkey is not enough to meet the entry into force condition of HKC.



Market share of ship recycling in the world in 2012 (data by HIS-Fairplay)

- **Upgrading of current Beaching SRFs** must be the fastest approach for the entry into force of HKC.
- **Technical and transparent approach** should be taken for the upgrading of the SRFs.



- Safe and environmental measures based on Risk Assessment
- Environmental monitoring



Consultation for SRFs in India

NKCS started consultation for four SRFs in Alang (India) to comply with HKC and the EU regulation.



Shree Ram Group of Industries



Leela Ship Recycling

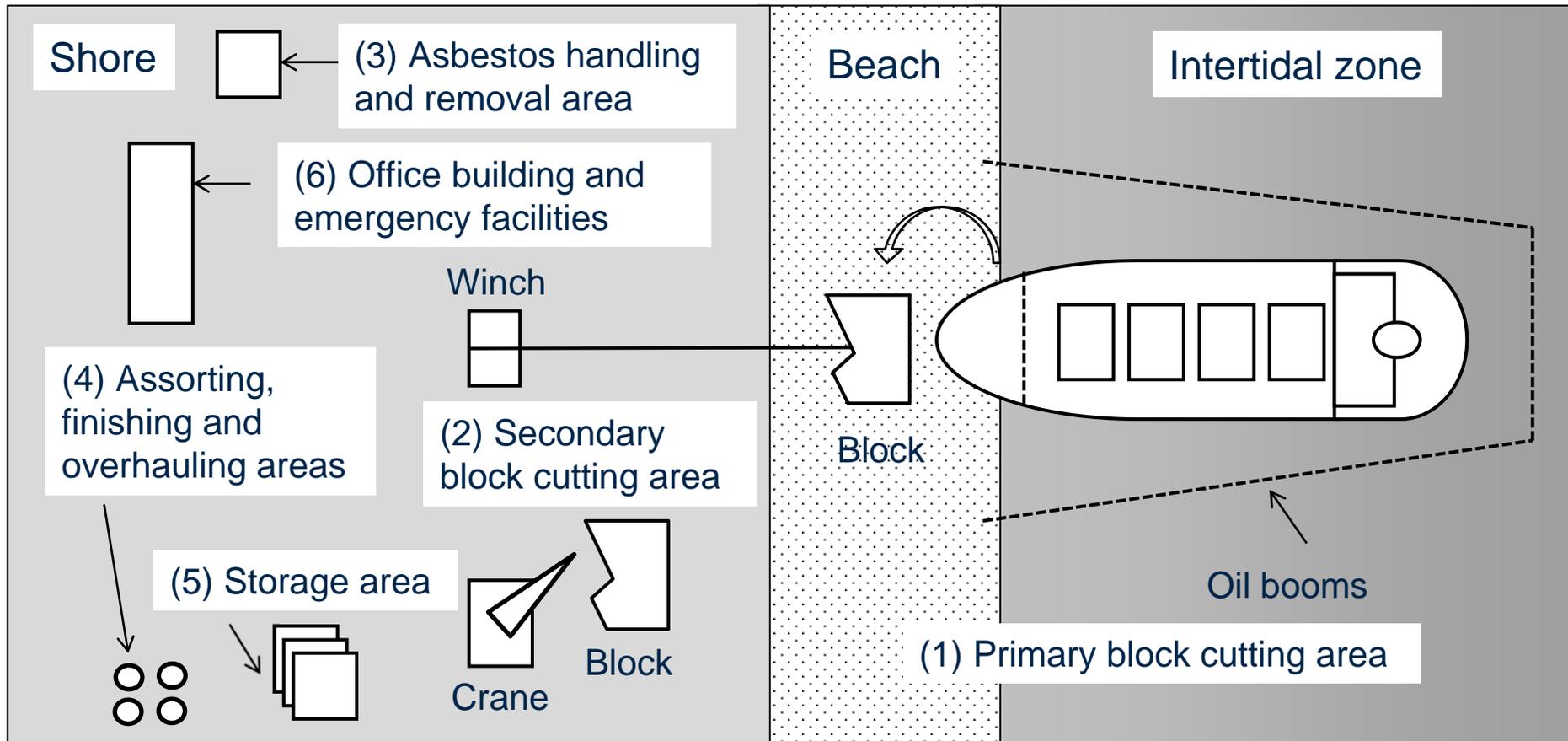


Priya Blue Industries



RL Kalthia Ship Breaking

Typical layout of a SRF in India



Work zones in a Ship Recycling Facility which apply Beaching Method

Activities on shore



Assorting, finishing and overhauling area



Asbestos handling and removal area



Storage area



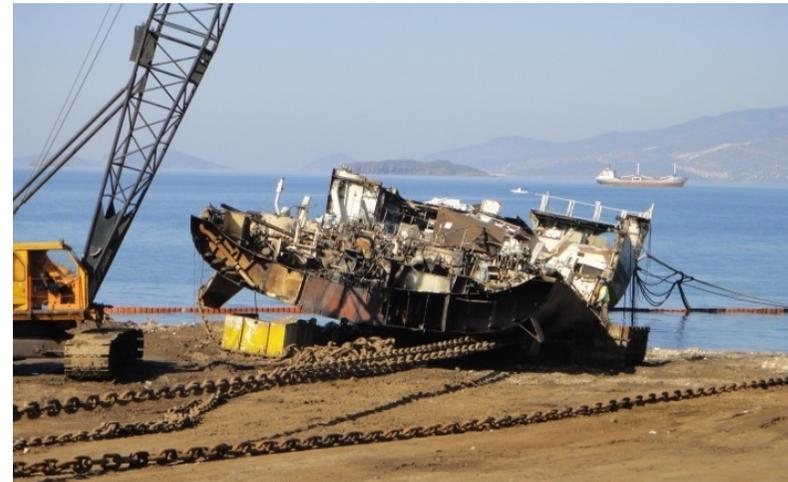
Office Building and emergency facilities

Work zones located on shore (India)

Primary Brock Cutting Area



(a) Beaching (India)



(b) Landing (Turkey)



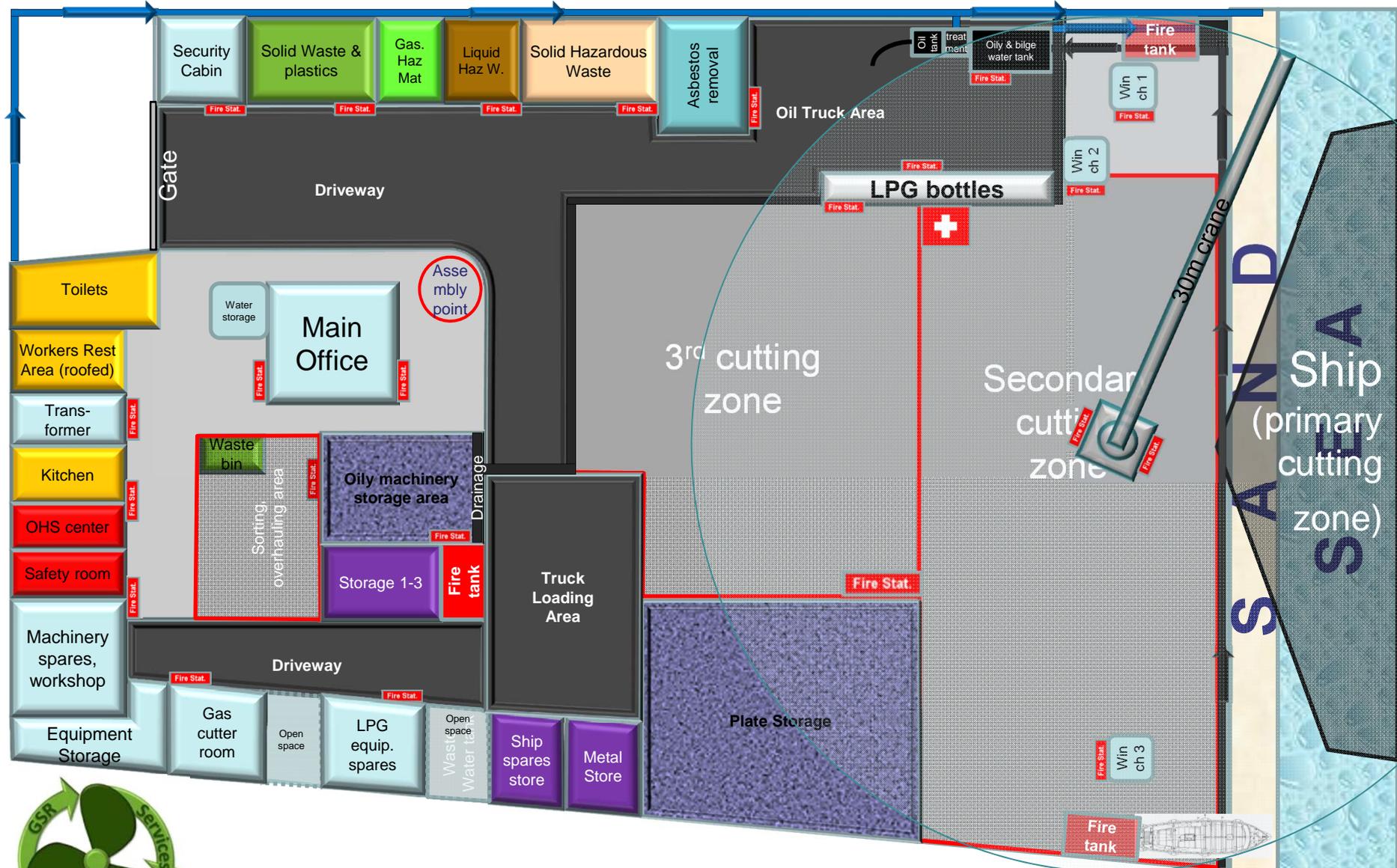
(c) Afloat (China)



(d) Dry dock (China)

Comparison of primary block cutting area

Proposed layout by the Consultant



- Entry into force of HKC is the most important thing for the realization of sustainable, safe and environmentally sound ship recycling.
- ClassNK have been providing solutions for the smooth implementation of HKC, and will make further effort.
- Upgrading of current Beaching SRFs must be the fastest way for the entry into force of HKC.
- Technical and transparent approach should be taken for the upgrading of Beaching SRFs.

THANK YOU

for your kind attention

