



Ship Recycling

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Istanbul
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Monaco
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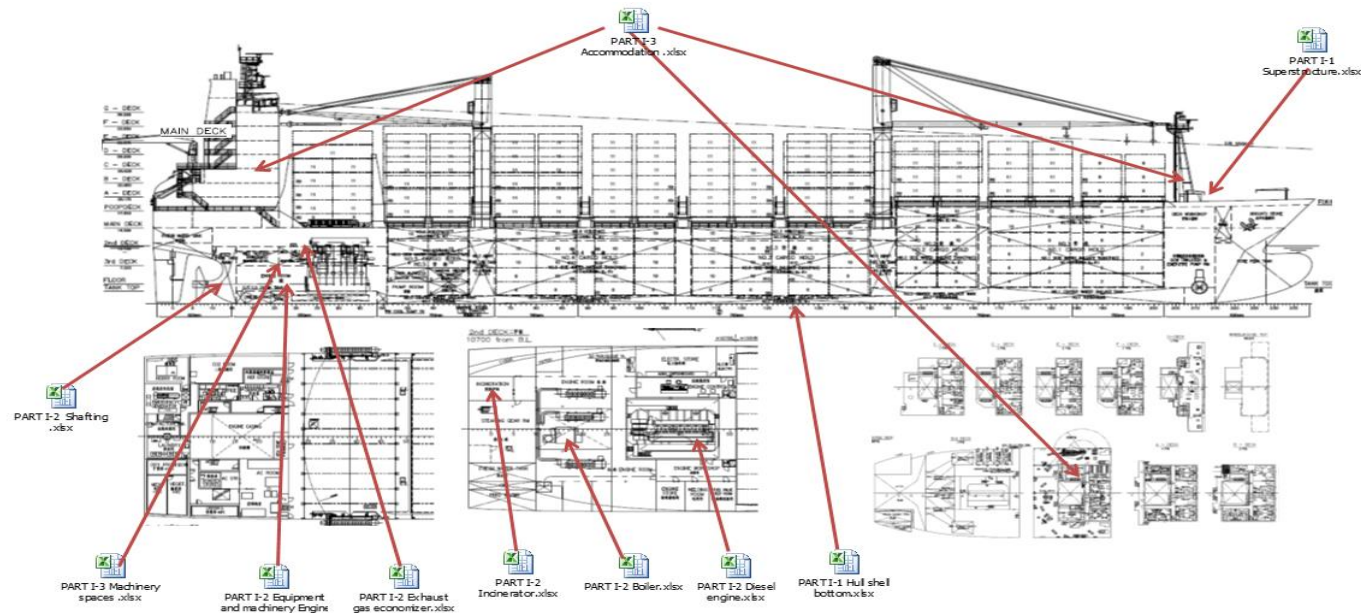
Hong Kong Convention

- Entry into force requirements:
 - 15 states must ratify
 - Representing not less than 40% WGT
 - Combined max annual recycling volume for previous 10 years must not be less than 3% GT of combined MSGT of those same states
- As of 21 Jan. 2016, Ratified by 3 States - 1.86% of World GT
- Depends primarily on India, Bangladesh, China and Pakistan
- Ship Requirements:
 - Limit use and installation of listed HM
 - Inventory of Hazardous Materials (IHM)
- Resolution MEPC.269(68) on 2015 Guidelines for the development of the Inventory of Hazardous Materials

Hong Kong Convention: IHM

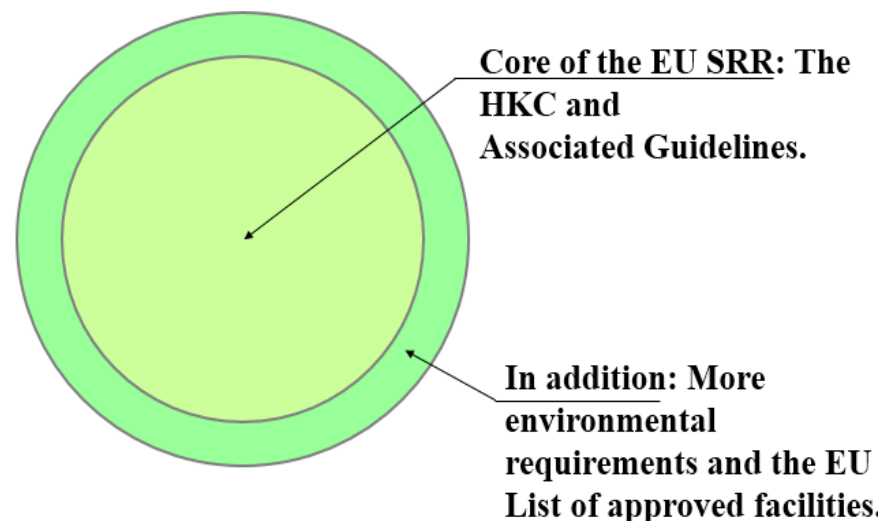
Inventory of Hazardous Materials

- Three Parts
 - Part I: HM inherent in the construction/equipment
 - Part II: Operationally generated wastes
 - Part II: Ship Stores



EU Ship Recycling Regulation (SRR)

- Regulation (EU) No 1257/2013 (30/12/2013). A verified Inventory of Hazardous Materials (IHM) with a Statement of Compliance:
 - EU flagged new ships: 31 Dec. 2015 to 31 Dec. 2018
 - EU flagged existing ships: Not later than 31 Dec. 2020 or if ship is to be recycled from the date when the EU list of approved recycling facilities is published (not expected before 31 Dec. 2016).
 - Non-EU flagged ships: Before 31 Dec. 2020
- Applies the ship recycling requirements of the HKC to EU flagged ships
- Certain specific requirements to non-EU flagged ships
- A system of control and enforcement over a ship's life cycle from design, through construction, operation and up to the recycling stage "Cradle-to-Grave" approach



Control of Hazardous Materials

- Control of hazardous materials the use of which has been prohibited or restricted
- Prohibits and/or restricts the installation and use of the hazardous materials listed in Annex I on ships
- Five groups of prohibited/restricted hazardous materials as following:
 - Asbestos
 - Ozone-depleting substances (ODS)
 - Polychlorinated biphenyls (PCBs)
 - Perfluorooctane sulfonic acid (PFOS) and its derivatives
 - Anti-fouling compounds and systems

Hazardous Materials for Inventory

- List of items of hazardous materials for inventory in Annex II
- A list of heavy metals and chemical substances
 - All prohibited or restricted hazardous materials in Annex I
 - Cadmium and cadmium compounds
 - Hexavalent chromium and hexavalent chromium compounds
 - Lead and lead compounds
 - Mercury and mercury compounds
 - Polybrominated biphenyl (PBBs)
 - Polybrominated diphenyl ethers (PBDEs)
 - Polychlorinated naphthalenes (more than 3 chlorine atoms)
 - Radioactive substances
 - Certain shortchain chlorinated paraffins (Alkanes, C10-C13, chloro)
 - **Brominated Flame Retardant: Hexabromocyclododecane (HBCDD)**

Surveys

- Scopes: three mandatory and one voluntary surveys same as those set out in HKC
- Initial Survey
 - New Ships – be conducted before the ship is put in service or before the Inventory Certificate is issued
 - Existing Ships – before 31 December 2020
- Renewal Survey
 - At intervals specified by the administration, but not exceed 5 years
- Additional Survey
 - As requested by shipowner after a change, replacement or repair of the structure, equipment and systems which has an impact on the IHM
- Final Survey
 - Prior to the ship being taken out of service and before starting the recycling



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