

Safe and Environmentally Sound Ship Recycling in Bangladesh

SENSREC

PHASE II

Main Report



Norwegian Embassy
Dhaka



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Ministry of Industries
Government of the People's Republic of Bangladesh

INTERNATIONAL MARITIME ORGANIZATION

Safe and Environmentally Sound Ship Recycling in Bangladesh (SENSREC) – Phase II

Work Package 1

Legal and Institutional Refinement

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Abbreviations and acronyms

AERB	Atomic Energy Regulatory Board
Basel Convention	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
BSBRA	Bangladesh Ship Breakers and Recyclers Association
BSRA 2018	Bangladesh Ship Recycling Act 2018
BSRB	Bangladesh Ship Recycling Board
BWM Convention / Ballast Water Management Convention	International Convention for the Control and Management of Ships' Ballast Water and Sediments
CA	competent authority
CP	competent person
DASR	Document of Authorization for Ship Recycling
DGS	Director General of Shipping (India)
DIFE	Department of Inspection for Factories and Establishments (Bangladesh)
DoEx	Department of Explosives (Bangladesh)
DoE	Department of Environment (Bangladesh)
DoL	Department of Labour (Bangladesh)
DoS	Department of Shipping (Bangladesh)
DWT	deadweight tonnage
ECA 1995	Environmental Conservation Act 1995 (Bangladesh)
ESIC	Employees' State Insurance Corporation
ESM	environmentally sound management
ENGO	environmental non-governmental organization
EoL	end of life
GEPIL	Gujarat Enviro Protection and Infrastructure Ltd (a waste management facility in Alang, India)
GMB	Gujarat Maritime Board
GoB	Government of the People's Republic of Bangladesh
GPCB	Gujarat Pollution Control Board
GT	gross tonnage
Hong Kong Convention	Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009
HWMR 2011	Hazardous Waste and Ship Breaking Hazardous Waste Management Rules 2011 (Bangladesh)
IHM	inventory of hazardous materials
ILO	International Labour Organization
ILO 2004 Guidelines	ILO 2004 Guidelines - Safety and health in shipbreaking: Guidelines for Asian countries and Turkey
IMO	International Maritime Organization
IMO 2012 Guidelines (Resolution MEPC.210(63))	IMO 2012 <i>Guidelines for safe and environmentally sound ship recycling</i> (Resolution MEPC.210(63))
IRRC	International Ready for Recycling Certificate
ISRA 2019	Indian Ship Recycling Act (officially, the Recycling of Ships Act 2019)

ISB Code	Shipbreaking Code 2013 (India)
LA 2006	Labour Act 2006 (Bangladesh)
LDT	light displacement tonnage
LNG	liquefied nitrogen gas
LPG	liquefied petroleum gas
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, and as further amended by the Protocol of 1997
MEPC	Marine Environment Protection Committee (IMO)
MHE	material handling equipment
MMD	Mercantile Marine Department (Bangladesh)
MLDT	million light displacement tonnage
MoI	Ministry of Industries (Bangladesh)
MoEF	Ministry of Environment and Forestry (Bangladesh)
MOE	Ministry of Environment (India)
MP	member of parliament
MSO 1983	Merchant Shipping Ordinance 1983 (Bangladesh)
NGO	non-governmental organization
Norad	Norwegian Agency for Development Cooperation
NOC	no objection certificate
PPE	personal protective equipment
PSC	port State control
RFMP	recycling facility management plan
RRC	ready for recycling certificate
RO	recognized organization
SA	safety agencies
SBC 2013 (Revised)	Shipbreaking Code (Revised) 2013 (India)
SBRR 2011	Ship Breaking and Recycling Rules 2011 (Bangladesh)
SCB	Supreme Court of Bangladesh
SO	safety officer
SRB	ship recycling board
SRF	ship recycling facility
SRFP	ship recycling facility plan
SRFMP	SRF management plan
SRIA	Ship Recycling Industries Association (India)
SRP	ship recycling plan
SSRP	ship-specific recycling plan
ToR	terms of reference
TSDF	treatment storage and disposal facilities
UN	United Nations
UNEP	United Nation Environment Programme
UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United National Development Programme

Executive summary

Objective

The International Maritime Organization (IMO) and the Government of the People's Republic of Bangladesh (GoB), represented by the Ministry of Industries (MoI), Bangladesh, are affiliated to implementing a project funded by the Government of Norway, entitled "Safe and Environmentally Sound Ship Recycling in Bangladesh – Phase II (Capacity Building)" (SENSREC Phase II – Bangladesh). This project constitutes the follow-up phase of a project funded by the Norwegian Agency for Development Cooperation (Norad) – "Safe and Environmentally Sound Ship Recycling in Bangladesh" (SENSREC Phase I) – initiated in 2014 and completed in 2017. Built on the success of Phase I of the project, Phase II was designed to enhance national capacities for safe and environmentally sound recycling of ships in Bangladesh and to guide the GoB towards accession to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009 (the Hong Kong Convention). Specifically, the key two work packages of Phase II inter alia focus on building the national legal capacities for accession to and implementation of the Hong Kong Convention, through three interconnecting activities:

- .1 Assessing the present legal ship recycling regime of Bangladesh;
- .2 Exploring current best practices in other ship recycling countries; and
- .3 Identifying recommendations and a road map to guide the GoB towards accession to the Hong Kong Convention.

Methodology

To achieve the objective of the project, both comparative study and case study methods have been used. To find out the legal and institutional gaps between the international regime on ship recycling (as regulated by IMO) and the corresponding regime in Bangladesh, the consultants have relied on a comparative study between these two regimes.

Further, India is one of the dominant States in global ship recycling and is also the nearest competitor of Bangladesh in the industry. India has recently carried out a major overhaul of its domestic ship recycling legislations, followed by accession to the Hong Kong Convention. Before the accession of India to this global treaty, about 50% of its ship recycling facilities (SRFs) had already achieved compliance with the Hong Kong Convention from leading classification societies. Given the geographic, constitutional, legislative, administrative, regional, cultural and other similarities between these two countries, this report has also carried out a case study on Indian ship recycling legislations and ship recycling practices. This case study was carried out to recommend the area of reorganization and restructuring needed for the Bangladesh ship recycling industry, to bring the domestic laws of Bangladesh on ship recycling in line with the corresponding provisions of the Hong Kong Convention.

Data collection method*

The studies for this project were based on a combination of desk study and field visits. Data has been collected from different stakeholders in the shipbreaking industry of Bangladesh, India and China. Arrangements were made to directly interview key persons of different relevant organs of the GoB including the MoI, Ministry of Shipping, Department of Environment (DoE), Department of Explosives (DoEx), Mercantile Marine Department (MMD), Bangladesh Marine Academy Chittagong, University of Chittagong as well as the SENSREC Phase I consultants in Bangladesh, senior officials of non-governmental organizations (NGOs), shipbreaking workers, workers' representatives, safety agencies, beaching masters, Bangladesh Ship Breakers and Recyclers Association (BSBRA) and SRF owners, China Maritime Safety Administration and the China

* See also the section in Introduction.

Waterborne Transport Research Institute. The study was predominantly based on the analysis of several international conventions and domestic legislations of Bangladesh, pertaining to shipbreaking. In addition to this primary data analysis, the consultants have relied extensively on various secondary data including, journal articles, reports, newspaper reports, articles, website information, research depository, podcasts, academic texts and conference presentations mostly sourced online.

Work plan*

To complete this report, work plans have been projected in five sections, which have been developed further in annex 1. The key points of each section are as follows:

- .1 Section I: This section has attempted to set the background, objective and justification of the research project that has been carried out using different primary, secondary and online resources.
- .2 Section II: This section sets out the jurisdiction, practice and procedure on ship recycling, followed by a gap analysis between the Hong Kong Convention and its applicable domestic laws of Bangladesh.
- .3 Section III: This section has elaborated on the health and safety management in the ship recycling industry and considered a gap analysis between the Hong Kong Convention and its applicable domestic laws of Bangladesh.
- .4 Section IV: This section has analysed the environmentally sound management (ESM) in ship recycling and carried out a gap analysis between the Hong Kong Convention and its applicable domestic laws of Bangladesh.
- .5 Section V: This section has provided recommendations and a road map to GoB having carried out a detailed comparative analysis of the ship recycling laws of Bangladesh with reference to the Hong Kong Convention.

Gaps and need analysis

Sections II, III and IV listed earlier have been dedicated to figure out the institutional and legislative gaps in Bangladesh, with respect to the corresponding articles and regulations of the Hong Kong Convention. Gaps have been identified in both of these aspects, particularly in the following areas: domestic definition of several legal terminologies used in the Hong Kong Convention; authorization of SRFs using a comprehensive plan as required by the Hong Kong Convention; controls related to ship recycling activities at SRFs; survey and certification of ships; exchange of information on which the decision of the competent authority (CA) for authorization of an SRF is based; inspection of ships both at anchorage and at the SRFs while authorizing a ship recycling plan (SRP) by the CA; detection of violations by SRF owners; provisions on undue delay or detention of ships; communication of information between the CAs and the ship recyclers; flag State administration and the Organization (IMO); technical assistance and cooperation between State parties to the Hong Kong Convention; dispute settlement between State parties to the Hong Kong Convention as well as the relationship with international law and other international agreements.

Gaps have also been noticed in the proper implementations of a set of six non-mandatory ship recycling guidelines adopted under the Hong Kong Convention (refer to the relevant IMO resolutions). These guidelines provide clarifications, interpretations and uniform procedures for technical issues arising from the provisions of the Hong Kong Convention. Although not mandatory in application, it is mandatory upon the Member States to consider these guidelines while enacting the domestic legislations implementing the Hong Kong Convention in their respective jurisdictions. Presently, as section 7(3) of the Bangladesh Ship Recycling Act (BSRA 2018) stands, it empowers the CA to prepare and use the guidelines but does not mandate the CA to prepare those guidelines or to consider those while introducing enabling ship recycling legislations in Bangladesh.

* See also section 5.2 in Part A of the Main Report.

In analysing the jurisdictional part of the ship recycling regime, the report considered among others, the Ship Breaking and Recycling Rules 2011 (SBRR 2011) and the Hazardous Waste and Ship Breaking Hazardous Waste Management Rules 2011 (HWMR 2011), the BSRA 2018, the Labour Act 2006 (LA 2006), the Environment Conservation Act 1995 (ECA 1995) and the Environment Conversation Rule 1997, which are the key framework legislations regulating the ship recycling activities in Bangladesh. Several key issues on ship recycling in Bangladesh have been analysed, including preparation of the inventory of hazardous materials (IHM), approval of the SRP, authorization of the SRF and issuing of the ready for recycling certificate (RRC). From the perspective of definition and terminologies, several issues, which are not in conformity with the Hong Kong Convention, have been identified and analysed in detail.

The report makes very elaborative comments on various jurisdictional and administrative issues relevant to the implementations of those provisions of the Hong Kong Convention in the domestic regimes of Bangladesh, which include safety inspection; delegation of power by SRF owners; ESM; ship recycling facility plan (SRFP); conditions of authorization of the SRFs; inspection, control and monitoring; downstream waste management; use of personal protective equipment (PPE); material handling equipment (MHE) and technology at the facility; ballast water management; and other obligations of the State parties to be incumbent on ratification of / accession to the Hong Kong Convention.

In Section III, which covers the health and safety requirements, the report analyses that the management of SRFs are required to ensure terms of reference (ToRs) for authorization of SRF, as covered in the SRFP. The terms of the SRFP need to be strictly followed by the SRF owners but, the detailed process for preparing the SRFP and authorizing the SRF by the CA is yet to be considered under the relevant Bangladesh ship recycling legislations.

SRFP is a principal document based on which the authorization of the SRF is granted by the CAs considering the guidelines of the Hong Kong Convention as adopted by IMO vide separate resolutions. Importantly, the CA remains the sole authority to enforce the ToRs or conditions stipulated in any SRFP.

The report has identified the essential health and safety personnel at the SRF. Close physical supervision of workers and constant monitoring of potentially hazardous activities in SRFs have been found as indispensable terms, under both the Hong Kong Convention and its associated guidelines, as adopted. However, such close supervision and monitoring features and responsibilities are inadequately addressed in the current ship recycling regime of Bangladesh.

Analyses have been made in the report about the risk assessment and the identification of hazards involved in ship recycling works. Analyses have also been made on the requirements of entering the enclosed spaces, safe for entry conditions and procedures for hot work conditions and certification procedures as required by the Hong Kong Convention, in comparison to the corresponding provisions in Bangladesh. Lacunas have been identified in this regard and the report has addressed it accordingly.

The report has identified gaps between the Hong Kong Convention and its comparable provisions in Bangladesh ship recycling regime on the use of MHE, firefighting installations, emergency preparedness and response plan, supply of tools and equipment, issues of medical surveillance, workplace monitoring, workers' treatment, workers' training, job benefit and social security, workers' representative, use of contractors, subcontractors' liability and the matters of liability and compensations.

In Section IV of the report, while analysing the provisions on ESM in ship recycling, the report has discussed elaborately how the Hong Kong Convention has attempted to ensure the ESM when dealing with hazardous waste from ship recycling and the manner in which Bangladesh has responded to such issues, through its domestic law-making.

Notably in the Hong Kong Convention, the term "hazardous waste" has never been used, unlike the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (known as the Basel Convention) (ratified by Bangladesh in 1992). On the other hand, in the SBRR 2011, the terms "hazardous waste" and "hazardous material", have been used interchangeably. This is a prospective lacuna which may potentially create a massive confusion between the Hong Kong Convention and the Basel Convention, which has already been incorporated into the Bangladesh Environment Conservation Act 1995 (ECA 1995) and the reference of this piece of essential legislation has been drawn in SBRR 2011.

A case study on ship recycling in India

The sensitization and drive for the improvement in the ship recycling industry in India started as a result of public outrage, international rebuke and the initiative of various public interest groups. A campaign led by Greenpeace stirred to prevent the *Le Clemenceau* (a French aircraft carrier) from dumping toxic wastes in the Indian waters, finally resulting in the landmark Supreme Court judgment, namely *Research Foundation for Science, Technology and Natural Resources Policy v. Union of India*, which barred the entry of the ship, until further orders and designated a committee of technical experts, to form a panel to assess the hazards posed by it. Considering the outcry, the Hon'ble Supreme Court of India issued several rulings demanding the improvement of the ship recycling industry, to bring it in line with the national and international requirements for safe working conditions, environmental protection, waste trade law etc.

As a result of intervention by the Hon'ble Supreme Court, the committee constituted through its orders, mandated to evaluate the "hazards associated with shipbreaking" and elucidate the recommendations, which were eventually adopted in 2013 as the Indian Shipbreaking Code (ISB Code), eventually revised in 2017 as the Shipbreaking Code (Revised) 2013 (SBC 2013 (Revised)).

The ISB Code, although comprehensively drawn, was a jury-rigged expedient to appreciate the judgment(s) of the Hon'ble Supreme Court. It was designed to function as a hybrid, to overarch the four pillars of imbibing and transposing the essential principles of international convention into domestic law, namely coding the law, the administrative requirements to administer the law, procedure for implementation and the enforcement of the provisions described.

The Indian Recycling of Ships Bill, 2019 became an act after it received the assent of the President of India on 13 December 2019. The Government of India decided to accede to the Hong Kong Convention on 28 November 2019. Prior to this accession, India attempted to implement the detailed provisions of the Hong Kong Convention through domestic legislations on ship recycling, namely ISRA 2019 and SBC 2013 (Revised).

Though the SBC 2013 (Revised) is very detailed and attempted to envisage all the requirements as stated in the conventions, it fell short in elaborately covering the aspects such as disposing of radioactive materials, delay and detention of ships, process for communication of information, technical assistance and cooperation, and dispute settlement. Hence, the proposed Recycling of Ships Bill 2017 attempted to supersede the flaws and perfect the shortcomings found in the SBC 2013 (Revised).

Eventually, ISRA 2019 emerged as a blender between SBC 2013 (Revised) and the Hong Kong Convention. ISRA 2019 not only has imbibed the Hong Kong Convention, but it has also made provisions to form rules and regulations, for duly implementing, administering and enforcing the Hong Kong Convention. For the time being, until the formation of rules and regulations under ISRA 2019, SBC 2013 (Revised) remains an intrinsic part of ISRA 2019.

The Alang-Sosiya Ship Recycling Yard (Gujarat, India) is the core reason for the blossoming of the ship recycling laws in India. As it is the largest ship recycling yard in India, it has been used as a case study for this project.

The recycling process in Alang is administered by the Gujarat Maritime Board (GMB). GMB is constituted under the Gujarat Maritime Board Act 1981 and is an administrator for the entire maritime activity in the state of Gujarat. All ministries and agencies concerned with ship activities, including building, port infrastructure and recycling, infused in their respective powers and functions into GMB.

GMB acts as the one-stop service for implementing, administering and enforcing the activity for the recycling industry in Gujarat. GMB is the prime custodian of the Ship Recycling Code in India.

GMB embarked upon the formation of the rules and regulations for safe and environmentally sound ship recycling around the year 2000. From then onwards, GMB has come a very long way in refining this industry. GMB made landmark regulations under the GMB Act 1981, to regulate the recycling industry. The regulations manage the activities such as compliance of ship beaching, ship cutting permission, SRP, SRF, ship recycling activity management, hazardous waste management (HWM) and solid waste management, and also give authority to GMB to take action against a ship recycler who is not in compliance.

More than 50 yards in Alang have been granted the Hong Kong Convention Statement of Compliance from leading international classification societies as late as 2019. The efforts are persistent and continuously strengthen the ship recycling industry to meet the expectations of the Hong Kong Convention and the EU Ship Recycling Regulations and achieve safe and environmentally sound ship recycling.

Recommendations for the Government of Bangladesh for accession to the Hong Kong Convention

Having carried out a detailed and careful analysis on the legislative and institutional gaps between the international regime (as regulated by IMO) on ship recycling and the corresponding regime in Bangladesh, the consultants have attempted to provide detailed recommendations, taking into account the Indian legislative experience(s) as an example on ship recycling practices, and the system of administration of the ship recycling industry as revealed from the case study, which are covered in Part B of this report. In particular, the report has also provided recommendations on the substantive legal provisions, definition and terminology used in the Bangladesh ship recycling rules and Act, administration of SRFs, jurisdiction of the CA over SRFs, jurisdiction of the recycling State, port States over end-of-life (EoL) ships, current ship recycling practice and procedure, procedure of SRPs authorization and SRFPs and the procedure of implementation of the six sets of guidelines of the Hong Kong Convention, in the Bangladesh ship recycling jurisdiction. Reforms have been suggested on the institutional structure pertinent to ship recycling governance in Bangladesh.

The report has provided recommendations to GoB as to the area of reform and how to align the domestic laws of Bangladesh on ship recycling, with that of the Hong Kong Convention.

Road map for a gradual and planned administration and implementation of the Hong Kong Convention in Bangladesh

As per section 7(2) of BSRA 2018, Bangladesh has a mandate to build its legal and technical capacity to conform to the requirement of the Hong Kong Convention, within five years from the date of implementation of the act, which will end in February 2023. SENSREC Phase II therefore aims to provide a road map for effective domestication, administration, implementation and enforcement of the Hong Kong Convention in Bangladesh, within the mentioned time frame.

Accordingly, this report ends with a recommended road map to be followed by GoB for the perspectives of institution and legislation, keeping in view the country's financial ability, technological capacity and need for a cost-effective policy for Bangladesh.

Main Report and attachments

The reader will find a detailed version of each Part A and B in annexes 1 and 2, respectively.

This Main Report is an abridgement of four parts, as under:

- 1** Part A: Ship Recycling Legislative and Institutional Gap Analysis between Hong Kong Convention and Bangladesh regime (elaborations in annex 1), by **Ishtiaque Ahmed**
- 2** Part B: Case Study from India – Ship Recycling Legislation and Institutional Structure (elaborations in annex 2), by **Archana Reddy**
- 3** Part C: Recommendations for the GoB for accession to the Hong Kong Convention, by **Ishtiaque Ahmed**
- 4** Part D: Road map for a gradual and planned implementation of the Hong Kong Convention in Bangladesh, by **Ishtiaque Ahmed**

List of annexes

Annex 1:* Activity 1 – Hong Kong Convention versus Bangladesh domestic laws – Legislative and institutional gap analysis, by **Ishtiaque Ahmed**

Annex 2:1 Activity 2 – Case study from India, by **Archana Reddy**

Annex 3:1 Comparison between the Hong Kong Convention, ISRA 2019, SBC 2013 (Revised), BSRA 2018 and SBRR 2011, by **Archana Reddy**

* Due to the large file size, the report is not reproduced here and available upon request.

1 Introduction

1.1 The International Maritime Organization (IMO), acting as the executing agency, and the Ministry of Industries (MoI) of the Government of the People's Republic of Bangladesh (GoB), acting as the national executing partner, have been jointly implementing a project entitled "Safe and Environmentally Sound Ship Recycling in Bangladesh – Phase II (Capacity Building)" (SENSREC Phase II) since April 2018. Phase II builds on SENSREC Phase I, which was successfully implemented from January 2015 to March 2017. Phase II is funded by the Ministry of Foreign Affairs, Norway, channelling finance through the Embassy of Norway to Bangladesh.

1.2 The key goal of SENSREC Phase II is to enhance national capacities for safe and environmentally sound recycling of ships in Bangladesh and to guide Bangladesh towards accession to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (the Hong Kong Convention).

1.3 Two core work packages form the basis of the Phase II project.

- .1** Work Package 1 (WP1) focuses on building the national capacities to prepare for accession to the Hong Kong Convention, through three interconnecting activities: assessing the present situation; exploring current best practices in other ship recycling countries; and identifying recommendations and a road map to guide GoB towards accession to the Hong Kong Convention.
- .2** Work Package 2 (WP2) aims at delivering targeted pilot-training activities for a variety of stakeholders in line with the Hong Kong Convention requirements, establish a robust training management and governance system and deliver training activities developed for various stakeholders and workforces.

1.4 This report provides an up-to-date analysis on impediments and needs for accession to and effective implementation of the Hong Kong Convention as well as related legal framework and institutional systems including recommendations and a road map to progress towards accession to and effective implementation of the Hong Kong Convention.

1.5 WP1 interconnects three activities to assess the present situation, explore current practices in other ship recycling countries and identify recommendations and a road map to guide GoB towards accession to the Hong Kong Convention.

1.6 The GoB enacted Bangladesh Ship Recycling Act 2018 (BSRA) to assist the industry in achieving international standards and assist the sustainable development of the industry.* Among many of the important provisions of this landmark national legislation, the act states that GoB will have to attain the provisions of the Hong Kong Convention no later than the five-year time period from the enactment of the act.†

1.7 Therefore, the GoB needs legal assistance to provide guidance to the MoI and the SRFs/industry so that actions to prepare the necessary legal framework to incorporate the Hong Kong Convention into the domestic legislation can take place. The specific demand is to develop a strong legal platform, including a well-entrenched structure to implement, administer and enforce the compliance of the ship recycling industry with the Hong Kong Convention.

1.8 WP1 has been carried out in three activities, viz.:

- .1** Activity 1 - Legislative gap analysis of Bangladesh;
- .2** Activity 2 - Case study of a major ship recycling country - India; and
- .3** Activity 3 - Recommendations and way forward.

1.9 The Executive Summary is enriched with the brief description of the findings of research work/analysis.

* S. Illius, "Green ship-breaking yards still a far cry", The Business Standard, 17 August 2020. Available at <https://tbsnews.net/economy/industry/green-ship-breaking-yards-still-far-cry-120394> (accessed 20 December 2020).

† Illius, "Green ship-breaking yards still a far cry".

Data collection method

1.10 The study is based on a combination of desk study and field visits.

1.11 Data has been collected from different stakeholders from the shipbreaking industries of Bangladesh and India.

1.12 Arrangements were made to directly interview key persons of different relevant organs of GoB, including MoI, Ministry of Shipping, Department of Environment (DoE), Department of Explosives (DoEx), Mercantile Marine Department (MMD), Bangladesh Marine Academy Chittagong, Chittagong University, consultants of SENSREC Project in Bangladesh, senior officials of non-governmental organizations (NGOs), shipbreaking workers, workers' representatives, safety agencies, beaching masters, Bangladesh Ship Breakers and Recyclers Associations (BSBRA) and SRF owners.

1.13 The research is predominantly based on analysis of several international conventions and domestic legislation of Bangladesh pertaining to shipbreaking.

1.14 In addition to this primary data analysis, the consultants have relied extensively on various secondary data including journal articles, reports from international organizations, newspaper reports, articles published in national dailies, website information, research depository, podcasts, academic texts and conference presentations, mostly sourced online.

1.15 A desk study has been conducted regarding recent developments. Currently IMO, UNEP, EU and the Secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention) are working closely with GoB in different projects which have been considered in this project.

1.16 Some variations however have been observed in the data collected in fieldwork and sourced online.

Part A: Bangladesh Ship Recycling Legislative and Institutional Gap Analysis

Note: All references and elaborate explanations can be found in the Activity 1 Report, attached to this Main Report.

1 Introduction to the Bangladesh ship recycling industry

1.1 The ship recycling market is virtually monopolized by three South Asian nations: Bangladesh, India and Pakistan.* Bangladesh has been one of the top players in global ship recycling since the late 1980s.† The recent adoption of its ship recycling laws has drawn significant international attention owing to its powerful transnational impact.‡ The concern of Bangladesh however has always been whether, and to what extent, the ratification of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009 (the Hong Kong Convention) and the new international commitment would impact its long-standing position in businesses.

1.2 Bangladesh is currently the world's biggest producer of scrap iron from ocean-going end-of-life (EoL) ships.§ On the directives of the Supreme Court of Bangladesh via Writ Petition 7260 of 2008 to regulate the industry, two sets of framework legislations, which had specific relevance to ship recycling, were adopted in 2011.

1.3 The framework legislations adopted in 2011 include the Ship Breaking and Recycling Rules 2011 (SBRR 2011) and the Hazardous Waste and Ship Breaking Hazardous Waste Management Rules 2011 (HWMR 2011). Both these laws are fully enforced since their gazette notifications in 2011. On 12 February 2018, Bangladesh enacted a primary legislation, the Bangladesh Ship Recycling Act 2018 (BSRA 2018), to provide further legal basis for the framework rules already adopted pursuant the order of the Supreme Court. This is to allow the Government of the People's Republic of Bangladesh (GoB) to amend the existing rules and to develop additional rules for the development, management and progress of the ship recycling industry in the country. Besides, the Labour Act 2006 (LA 2006) and the Environment Conservation Act 1995 (ECA 1995), inter alia have close bearing on the ship recycling matters in Bangladesh.

2 Overview of the Bangladesh legal system

2.1 Bangladesh has a well-written constitution and follows a democratic system of government. Bangladesh follows the dualistic common law tradition,¶ hence requiring the enactment of domestic laws in order to give effect to the international agreements, within its domestic jurisdiction. The Constitution of the People's Republic of Bangladesh has vested exclusively all the legislative powers of the Republic upon the parliament.** The constitution is divided into 11 parts, which are further subdivided into 153 articles. In addition, there are 7 schedules. The Constitution of Bangladesh is inflexible. It can only be amended by a majority of two thirds of the members of parliament (MPs) voting in favour of an amendment. Bangladesh follows a parliamentary form of government.†† The Separation of Powers is the model of governance for the State of Bangladesh.

* I. Ahmed, "Toward a Safe and Sustainable Industry of Ship-breaking: International Initiatives and South Asian Response", *Journal of Maritime Law and Commerce* 51, no. 3 (2020d): 187. Available at <https://www.jmlc.org/nextissue.php> (accessed 23 December 2020).

† I. Ahmed, "The Origin and Evaluation of Ship Breaking Regime of South Asia: A Critical Perspective from Bangladesh", *Legal Issues Journal* 8, no. 2 (2020c): 11. Available at <https://www.legalissuesjournal.com/article/0822> (accessed 23 December 2020).

‡ Ahmed, "The Origin and Evaluation of Ship Breaking Regime of South Asia", 12.

§ Ahmed, "Toward a Safe and Sustainable Industry of Ship-breaking", 213.

¶ A. Hasanat, "Using International Law in National Courts: Bangladesh Perspective" *Bangladesh Journal of Law* 13, nos. 1 & 2 (2013): 49.

** Article 65.1 of the Constitutional Law of Bangladesh. Available at <http://bdlaws.minlaw.gov.bd/act-details-367.html>.

†† Bangladesh Parliament, "Functions and Procedures of Parliament". Available at <http://www.parliament.gov.bd/index.php/en/about-parliament/functions-and-procedures-of-parliament> (accessed 18 December 2020).

3 Law-making process in Bangladesh

3.1 As per constitutional provision, articles 80 and 82 of the Constitution of Bangladesh encompass the basic provision of law-making process.

3.2 The law-making process of Bangladesh Parliament is initiated primarily by the MPs submitting a notice to parliament secretary for seeking permission to raise a bill. Subsequently, crossing various stages, it is passed by parliament as a law and ends with the assent of the president. After following various stages and long procedure, the bill turns into law and is published in the official gazette.

3.3 Bangladesh has three main classifications of legislations:

- .1 Ordinary bills;
- .2 Money bills; and
- .3 Finance bills.*

Under the ordinary bill, there is no relation to financial matters and the same may pass with a general majority vote of MPs in parliament. The ordinary bill can be further subdivided into:

- .1 Public bills; and
- .2 Private bills.†

3.4 If a notice for introduction of the bill has been given by a minister, it is known as government bill, and if a non-minister MP introduces it, it is known as private members' bill.‡ It does not require the prior recommendation of the president for introduction into parliament, whereas, money bills and financial bills require the prior recommendation of the president before placing in the House.§ The bill follows certain pre-legislative procedures such as drafting, policy development and cabinet approval before being introduced to parliament.

3.5 According to the Rules of Business 1996 and the Secretariat Instructions 2008, a ministry is responsible for the formulation of policies of the government within its jurisdiction and also require that any legislative proposal shall be initiated at the administrative ministry to which the law or subject matter is assigned. Interministerial consultation is often completed when drafting a bill. Bills are brought on a casual basis as and when found necessary, with the administrative/sponsoring ministry concerned initiating the process.¶

3.6 In accordance with the Rules of Business 1996, the Ministry of Law, Justice and Parliamentary Affairs is required to be consulted on all proposals for legislation.** These proposals would include drafting, scrutiny and examination of bills, ordinances and other statutory orders, rules, regulations, by-laws, resolutions and notifications.

3.7 In accordance with the law-making process, after the cabinet approves an initial legislative proposal,†† the administrative/sponsoring ministry is required to send the file to the Ministry of Law to prepare the draft bill or for vetting of the preliminary draft bill already approved in principle by the cabinet.

3.8 The Legislative and Parliamentary Affairs Division of the Ministry of Law and Justice undertake to prepare the bill.‡‡ When an acceptable version of the bill is achieved, it is forwarded to the cabinet for consideration as an official bill of the government. Upon receiving the final endorsement of the bill from

* G. Murphy, "How Legislation is Drafted and Enacted in Bangladesh", *Statute Law Review* 27, no. 3 (2006): 134.

† Murphy, "How Legislation is Drafted and Enacted in Bangladesh", 4.

‡ Murphy, "How Legislation is Drafted and Enacted in Bangladesh".

§ Murphy, "How Legislation is Drafted and Enacted in Bangladesh", 5.

¶ A. Saleh, "Law Making Process in Bangladesh Parliament", 6. Available at https://www.academia.edu/22382535/Law_Making_Process_in_Bangladesh_Parliament (accessed 10 October 2021).

** Rules of Business 1996 (Bangladesh), sec. 14A.

†† Saleh, "Law Making Process in Bangladesh Parliament", 8.

‡‡ Saleh, "Law Making Process in Bangladesh Parliament".

the cabinet, the administrative/sponsoring ministry arranges with the parliament secretariat to initiate the parliamentary phase.

3.9 The law-making process of Bangladesh is divided into three broad phases: (1) pre-legislative phase (2) legislative phase and (3) post-legislative phase.^{*} In the pre-legislative phase, the concerned ministry or line agency on behalf of the executive submits a proposal to cabinet for its approval to make a new law.

3.10 Through cabinet approval, the law-making process is initiated primarily from the sponsoring ministry.[†] Generally, the cabinet approves this primary proposal for making law.

3.11 Further, the legislative phase follows three stages:

- .1 *First reading*, where the title of the bill is announced;
- .2 *Second reading*, where extensive discussion on the principles the bills takes place; and
- .3 *Third reading*, where a motion is moved to pass the bill.

Subsequently, the post-legislative phase involves the assent of the president and the publication of a gazette notification.

4 Treaty-making process in Bangladesh

4.1 Accession to the Hong Kong Convention by Bangladesh

4.1.1 As per article 143(2) of the Constitution, the courts of Bangladesh have interpreted that the executive power of the Prime Minister shall be exercised only in accordance with the Constitution by an act of parliament, which imposes limitations on its treaty-making power, particularly when boundary settlement is involved.[‡] Treaties signed and ratified by GoB require implementing legislation or constitutional amendment to domesticate the treaty if the treaty (i) involves alteration of the existing laws; (ii) confers new powers on the executive; (iii) imposes financial obligation upon the citizens; or (iv) involves alienation or cession of any part of the territory of Bangladesh. With reference to the accession to the Hong Kong Convention in Bangladesh, the following legal process is pertinent. The Hong Kong Convention is an international treaty. Ratification of any international treaty is a process of a State expressing their willingness to be legally bound by its provisions. As a follower of “dualist approach to international law”, the higher judiciary in Bangladesh does not enforce the rules of international treaties unless they are transformed into domestic law by way of enabling legislation.[§] Under British Commonwealth jurisprudence, a State with a dualist constitutional system is responsible in following the mutual obligations it has with other States but it is the State who decides the ways and the means in which to carry out those obligations.[¶]

4.1.2 The Constitution of Bangladesh does not contain any specific provision with respect to ratification of international treaties. It can however be inferred both from the customary practices of Bangladesh since the adoption of its constitution and the ratification practices of other common law countries, that international treaties irrespective of their nature and character require ratification.^{**} The Hong Kong Convention will therefore undergo the usual ratification process in Bangladesh.

^{*} Saleh, “Law Making Process in Bangladesh Parliament”, 9.

[†] K. Arifuzzaman, “Legislative Process in Bangladesh”, Legislative and Parliamentary Affairs Division, Ministry of Law, Justice & Parliamentary Affairs. Available at <https://slideplayer.com/slide/10505237/> (accessed 20 December 2020).

[‡] S. Karzon and A. Al-Faruque, “Status of International Law under the Constitution of Bangladesh: and Appraisal”, *Bangladesh Journal of Law* 3, no. 1 (1999): 44.

[§] M. Islam, “Absence of legal regime to apply treaties”, *The Daily Star*, 8 September 2015. Available at: <https://www.thedailystar.net/law-our-rights/absence-legal-regime-apply-treaties-139354> (accessed 20 December 2020).

[¶] M. Chiam, “Monism and Dualism in International Law”, *Oxford Bibliography*, last modified on 27 June 2018. Available at <https://doi.org/10.1093/obo/9780199796953-0168> (accessed 18 December 2020).

^{**} Karzon and Al-Faruque, “Status of International Law under the Constitution of Bangladesh”, 40.

4.2 *Legislative approval*

4.2.1 It is pertinent to discern whether legislative approval is necessary before or after the ratification of the Hong Kong Convention is actioned by Bangladesh. Notably, the constitutions of many countries provide that all or certain treaties, in order to be valid, must be approved by parliament either before or after their ratifications.* The requirement of such legislative approval depends primarily upon the nature of the treaty itself which varies greatly in their purposes and substances.

4.2.2 The Constitution of Bangladesh does not contain any such express provision requiring legislative approval of any treaties. Article 145A of the Constitution of Bangladesh requires all treaties with foreign countries to be submitted to the president, who shall cause them to be laid before parliament. There are some ambiguities surrounding this constitutional provision. It is not clear from this language what kind of treaties would be construed as coming within the purview of this article or whether the treaty requires any approval or disapproval from parliament after laying down the same before parliament.

4.2.3 The purpose of laying down any treaty before parliament is not to get approval from parliament but to incite a fruitful discussion to identify any potential problems at the domestic level. Owing to uncertainty on this point under the current state of law of Bangladesh, none of the treaties ratified by Bangladesh, except one, has been laid down before parliament for approval before accession or ratification.†

4.2.4 Treaty-making is an executive action in Bangladesh, not a legislative action.‡ Article 48(2) of the constitution confers upon the president, as the head of the State, to enter into treaties with foreign countries. However, as per the Constitution of Bangladesh, enacted in 1971 and subsequently revised, the president holds a legally ceremonial position where all executive actions are taken in the name of the president§ and the executive power is vested in the office of the prime minister as the head of the government and the cabinet.¶ The prime minister and their cabinet determine the treaty-making policy of GoB.

4.2.5 The High Court Division of the Supreme Court of Bangladesh held that failure to lay a treaty before parliament will not affect its validity. Laying the instrument of the Hong Kong Convention before parliament either before or after the ratification will therefore not be legally mandatory.

4.2.6 Under the current practice, the concerned ministry of GoB, in this case the Ministry of Industry (MoI), should take initiative and send the file to the cabinet for approval. The cabinet, using its discretionary power, may delegate to the Ministry of Foreign Affairs or any ministry deemed suitable by the cabinet, to take necessary actions for the deposition of the instrument of ratification of the Hong Kong Convention before IMO.

5 **Synopsis of ship recycling legislation in terms of legislative and institutional gaps**

5.1 *Background*

5.1.1 The Hong Kong Convention was adopted under the auspices of IMO, but the instrument has not yet entered into force.

5.1.2 Despite a wide-ranging consensus in favour of ratification of the Hong Kong Convention, fulfilment of its entry into force provision has remained a challenge for the international community.**

* Karzon and Al-Faruque, "Status of International Law under the Constitution of Bangladesh".

† Karzon and Al-Faruque, "Status of International Law under the Constitution of Bangladesh", 42.

‡ M.Z. Ashraf, "Status of Treaty under the Constitution of SAARC Countries: An Approach towards Bangladesh and India Perspective", *Mediterranean Journal of Social Sciences* 5, no. 2 (2014): 131. Available at <https://www.mcser.org/journal/index.php/mjss/article/viewFile/1968/1967> (accessed 16 December 2020).

§ Constitution of Bangladesh, art. 55(4).

¶ Karzon and Al-Faruque, "Status of International Law under the Constitution of Bangladesh".

** I. Ahmed, "Ungovernable Ships at the End of their Lives and the Response of the Hong Kong Convention: A Critical Appraisal of the Treaty on Shipbreaking from the Perspective of South Asian Ship-breaking Nations", *Santa Clara Journal of International Law* 18, no. 2 (2020e): 168.

5.1.3 This is owing to the lopsided track record of history of shipping and shipbreaking businesses which almost exclusively were undertaken by the developed and developing countries respectively for about last 40 years.*

5.1.4 The accession to the Hong Kong Convention by Bangladesh plays a crucial role in the entry into force of this Convention because of the typical track record of history of shipbreaking in Bangladesh. This study has been focused on the domestic laws of Bangladesh on shipbreaking and the analysis of the gap between the domestic ship recycling regime of Bangladesh and that of the Hong Kong Convention for the purpose of its effective implementation.

5.1.5 In order to apply the Hong Kong Convention in Bangladesh, GoB adopted a comprehensive regulation, SBRR 2011 to regulate its shipbreaking industry. This law has been in force since December 2011. The country enacted BSRA 2018 and published it in the official gazette on 12 February 2018. There has been a need to assess the compatibility of the legislation in Bangladesh with the Hong Kong Convention.

5.2 Work plan

A work plan has been projected in five sections to complete the Main Report, with key points as under:

5.2.1 Section I sets the background, objective and justification of the research that has been carried out using different primary, secondary and online resources.

5.2.2 Section II sets out the jurisdiction, practice and procedure on shipbreaking followed by a gap analysis between the Hong Kong Convention and its applicable domestic laws of Bangladesh.

5.2.3 Section III elaborates the health and safety management in shipbreaking and considered a gap analysis between the Hong Kong Convention and its applicable domestic laws of Bangladesh.

5.2.4 Section IV analyses the ESM in shipbreaking and carried out a gap analysis between the Hong Kong Convention and its applicable domestic laws of Bangladesh.

5.2.5 Section V provides recommendations and a road map to GoB having carried out a detailed comparative analysis between the ship recycling laws within the jurisdiction of Bangladesh and the Hong Kong Convention.

6 Work plan elaborated

6.1 Jurisdiction, practice and procedure on shipbreaking

6.1.1 Among others, SBRR 2011, HWMR 2011, BSRA 2018, LA 2006 and the ECA 1995 remain the key legislations by which shipbreaking activity is being governed in Bangladesh.†

6.1.2 Several key issues on shipbreaking in Bangladesh have been analysed that include preparation of the inventory of hazardous materials (IHM), approval of a ship recycling plan (SRP), authorization of a ship recycling facility (SRF) and issuing of ready for recycling certificates (RRCs). From the perspective of definition and terminologies several issues not in conformity with the Hong Kong Convention have been analysed in detail.

6.1.3 The report has analysed the duty of shipowners, SRF owners, port State, flag State and recycling States as proposed in the Hong Kong Convention and attempted to show the current state of domestic laws in this respect.

6.1.4 The report has demonstrated the differences and distinctions in the enforcement mechanism applicable under the Hong Kong Convention and those that exist in the current ship recycling regime of Bangladesh.

6.1.5 Further, the report has made very elaborative comments on various jurisdictional and administrative issues relevant to the implementation of those provisions of the Hong Kong Convention in the domestic regime of Bangladesh which includes safety inspection; delegation of power by SRF owners; ESM; ship recycling

* Ahmed, "The Origin and Evaluation of Ship Breaking Regime of South Asia", 7.

† Ahmed, "The Origin and Evaluation of Ship Breaking Regime of South Asia", 11.

facility plan (SRFP) and the conditions of authorization, inspection, control and monitoring; downstream waste management; use of personal protective equipment (PPE); material handling equipment (MHE) and technology at the facility; ballast water management and obligations of the State parties on ratification of the Convention.

6.2 Health and safety management in shipbreaking

6.2.1 Regulations 19, 21, 22 and 23 of the Hong Kong Convention deal with the matters related to the safety and health in shipbreaking. The Hong Kong Convention typically has adopted a dual tier approach of health and safety management in shipbreaking.*

6.2.2 The Hong Kong Convention has relied on domestic labour welfare laws of State parties generally applicable to workers at any industrial facility for management of health and safety in an SRF.

6.2.3 The report observed that the relevant department of labour in the respective States shall be responsible to exclusively enforce their regulations against any violations related to labour welfare laws.

6.2.4 Additionally SRFs management are also required to ensure that ToRs for authorization of an SRF are strictly followed from their end. These ToRs are entered in the SRFP based on which the authorization of SRF is to be granted by the competent authority (CA) following the guidelines of the Hong Kong Convention as developed. The CA remains the sole authority to enforce the ToRs or conditions stipulated in any SRFP.

6.2.5 This includes all the substantive provisions on health and safety and the environmental management within the company policy document approved by its board.

6.2.6 The SRFP is expected to incorporate all the rights provided in regulations 19, 21, 22, 23 of the Hong Kong Convention, including the relevant national labour welfare legislations.

6.2.7 Regulation 18 of the Hong Kong Convention requires that SRFs authorized by a party shall prepare the SRFP. The SRFP shall be adopted by the board or the appropriate governing body of the recycling company.† As per clause 3 of the IMO 2012 Guidelines (resolution MEPC.210(63)), the SRFP is the main document that the CA, or an organization recognized by it, will rely on in authorizing an SRF.

6.2.8 The report has identified the essential health and safety personnel at an SRF. Close physical supervision of workers and constant monitoring of potentially hazardous activities in SRFs have been found as indispensable terms under both the Hong Kong Convention and its guidelines.

6.2.9 Discussion has been made about the risk assessment and the identification of hazards involved in ship recycling works. Analysis has been made on the requirement of entering the enclosed space, the safe-for-entry conditions and procedures and the safe-for-hot-work conditions and procedures as required by the Hong Kong Convention in comparison to the corresponding provisions in Bangladesh.

6.2.10 Differences have been noticed in both jurisdictions about the use of MHE, firefighting installation, emergency preparedness and response plan, supply of tools and equipment, medical surveillance, workplace monitoring, workers' treatment, workers' training, job benefit and social security, workers' representative, use of contractors' and subcontractors' liability and the matters of liability and compensation.

6.3 Environmentally sound management in shipbreaking

6.3.1 This part discusses how the Hong Kong Convention has attempted to ensure ESM when dealing with hazardous waste from shipbreaking and how Bangladesh has responded to this matter through its domestic law-making. Notably in the Hong Kong Convention, wastes are not termed as "hazardous waste" but as "hazardous material" or Hazmat.‡

* Ahmed, "Ungovernable Ships at the End of their Lives and the Response of the Hong Kong Convention", 131.

† 2012 *Guidelines for safe and environmentally sound ship recycling*, clause 3.

‡ Ahmed, "Ungovernable Ships at the End of their Lives and the Response of the Hong Kong Convention", 162.

6.3.2 Many of the typical hazardous wastes, acknowledged in other international waste conventions such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention), form part of the structure of a ship.* These have been termed in Hong Kong Convention as hazardous materials in Part I of the IHM list.† It also appears that no structural part of the ship can be categorized as hazardous waste under the Hong Kong Convention until they are separated from the ship's hull.‡ It is also observed that the term “waste” has been used in the Hong Kong Convention to denote operationally generated waste that is listed in Part II of the IHM.§

6.3.3 Operationally generated hazardous wastes are not part of ship's structure. These may include bilge water, ballast water, ballast sediment, dirty oil, overflowing liquid from any service tank such as lube oil tank and sewage tank. Accumulated oil due to leakages in engine room machineries or even the cargo residues can oftentimes be connected to the ordinary operations at sea for example.

6.3.4 Part III of the IHM refers to the materials kept in the ship's store such as cleaning agents or other hazardous chemicals, liquids or solid substances kept in the ship's deck stores or engine room workshops.

6.3.5 The hazardous substances, after having been separated from the ship's hull and sent to the treatment storage and disposal facilities (TSDf) come under the purview of the Basel Convention.¶ SBRR 2011 has used the term “hazardous material” in the same sense but also interchangeably with the term “hazardous waste”.** For the denotation of such an interchangeable term, ECA 1995 has used a known benchmark of definition which was used in the Basel Convention, i.e. the characteristic test.

6.3.6 HWMR 2011 is the implementing legislation of the Basel Convention in Bangladesh†† and has defined the term “hazardous waste” almost in the same terms as the Basel Convention, namely with reference to constituent characteristics and a specified list. Bangladesh has followed the same criteria of the Basel Convention to define the term “hazardous waste”.

6.3.7 Structural hazardous and imbedded substances of EoL ships do not therefore fulfil the definition of waste and hazardous waste as per the Basel Convention.‡‡ Additionally, the topics that are relevant to ESM and have been covered in this chapter include party to non-party dealings, State-level contact while importing ships, verification of the IHM by the flag State, designation of CA, amount of hazardous waste that can be imported, RRCs and pre-cleaning of ships.

7 Identification of gaps

7.1 In South Asia, until 2011, a legal framework for ensuring safety at work and preservation of ESM in shipbreaking was scanty. This framework addressed only a few of the contentious issues raised by the operations of this industry, and even these were rather perfunctory. Although not having acceded to the Hong Kong Convention, Bangladesh, in 2011, having been directed by its Supreme Court, adopted SBRR 2011 to regulate its shipbreaking industry, which has been enforced since 2011.§§

7.2 The country also enacted a primary legislation, BSRA 2018, and published it in the official gazette of GoB on 12 February 2018. The significance of this new enactment in shipbreaking legislation lies in the fact that where SBRR 2011 was originally adopted by the order of the Supreme Court of Bangladesh via Writ Petition 7260 of 2008, BSRA 2018 is an act of parliament.

* I. Ahmed, “The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: A Legal Misfit in Global Ship Recycling Jurisprudence”, *Washington International Law Journal* 29 (2020b): 420.

† Hong Kong Convention, reg. 5.1.

‡ Ahmed, “The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal”, 427.

§ Hong Kong Convention, reg. 5.4.

¶ Ahmed, “The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal”, 420.

** Ahmed, “The Origin and Evaluation of Ship Breaking Regime of South Asia”, 37.

†† Ahmed, “The Origin and Evaluation of Ship Breaking Regime of South Asia”.

‡‡ Ahmed, “The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal”, 427.

§§ Ahmed, “The Origin and Evaluation of Ship Breaking Regime of South Asia”, 19.

7.3 There are significant gaps to address the issue, whether these domestic framework legislations, namely the SBRR 2011 and the BSRA 2018, reflect the best policy for Bangladesh and would therefore be able to contribute to the safe and environmentally sound shipbreaking in the country.

8 Gaps in Bangladesh legislation (acts and rules) mapped against the Hong Kong Convention and corresponding regulations

It is important to ascertain to what extent Bangladesh would be able to protect the health and safety of workers and prevent environmental issues arising from shipbreaking, while keeping business interests unharmed from the accession to the Hong Kong Convention. The legislative and institutional gaps in the legislation of Bangladesh (acts and rules) mapped against the Hong Kong Convention and corresponding regulations are covered in the following paragraphs.

8.1 Hong Kong Convention article 1: General obligations

8.1.1 It is found that the preamble/objective of the BSRA 2018 needs to exhaustively cover the requirements of Hong Kong Convention articles 1.1 to 1.5, including the legislation. It will be read with all the corresponding laws affiliated thereto considering all the annexes attached to the Convention, in the realm governing and involved with human health and the environment caused by ship recycling, taking into consideration and encourage, continued development of technologies and practices, while primarily contributing towards safe and environmentally sound ship recycling.

8.1.2 Gaps are found in the legal language used to propose the domestic legislation.

8.1.3 The Hong Kong Convention applies to existing ships, new ships and EoL ships,^{*} whereas the BSRA 2018 only applies to EoL ships.[†]

8.1.4 The Hong Kong Convention is designed to incorporate all methods of ship recycling not necessarily just the beaching methods of recycling. BSRA 2018 has incorporated provisions for other improved methods of ship recycling but has not defined or made any reference to any of those methods. Given that Bangladesh has an obligation to encourage the recyclers to consider other improved methods of ship recycling in the upcoming future, omitting other methods than the beaching methods entirely from the legislative text is a discouraging move and affront to the purpose of article 1.4 of the Hong Kong Convention.

8.1.5 Section 6(7) of BSRA 2018 grants power to the CA to take steps to introduce other improved methods of ship recycling, whereas, under the Hong Kong Convention, it is a duty and not merely a power to consider taking the necessary steps (articles 1.1, 1.3 and 1.4). Power implies a discretion which, if not employed, does not necessarily lead to any violation in law.

8.2 Hong Kong Convention article 2: Definitions

8.2.1 Gaps are found in the domestic definition of several legal terminologies also used in the Hong Kong Convention. The following terms have been found to be not in line with the Convention:

- .1 Hazardous materials;
- .2 Ship recycling;
- .3 Recycling company;
- .4 Existing ship;
- .5 New ship;
- .6 New installation;
- .7 Safe for entry;
- .8 Safe for hot work;
- .9 Shipowner;
- .10 Site inspection;
- .11 Convention;

^{*} Hong Kong Convention reg. 1.

[†] Ahmed, "The Origin and Evaluation of Ship Breaking Regime of South Asia", 19.

- .12 Administration;
- .13 Organization;
- .14 Secretary general; and
- .15 Committee.

8.2.2 Under the Hong Kong Convention, “ship recycling activities” include activities carried out within the yard premises only.* In Bangladesh, beaching activities are also part of ship recycling activity,† which necessarily include beaching manoeuvring across the territorial sea that may start several hours before the ship touches the beachhead or the SRF.

8.2.3 According to the Hong Kong Convention, the definition of ship recycling includes activity of complete or partial dismantling of a ship at an SRF in order to recover components and materials for reprocessing and reuse and includes associated operations such as storage and treatment of components and materials on site. A gap exists in SBRR 2011 in that the position has not been made clear whether a partial dismantling of a vessel such as dismantling of a single component part of a ship in an SRF can at all qualify as ship recycling activity.

8.2.4 According to section 1(6) of BSRA 2018, the definition of ship recycling includes dismantling of ships followed by management, removal and disposal of different components of the dismantled materials. This wide definition necessarily incorporates activities outside the recycling facility which may include disposal of Hazmat and their management outside the facility. Articles 2.10 and 2.11 of the Hong Kong Convention on the other hand have expressly declined jurisdiction on downstream activities carried out beyond the SRF and by necessary implication required the State to govern these downstream activities under a separate controlling authority or jurisdiction.

8.2.5 Under section 15(1) of the BSRA 2018, the Bangladesh Ship Recycling Board (BSRB) has the power to assign authorized persons the tasks of inspecting SRFs and ships imported for recycling and monitoring the recycling operations. The same functions fall within the duties of the CA under the Hong Kong Convention (article 2.3 of the Hong Kong Convention and sections 3.3.4.1.8, 3.3.4.8 and 3.3.6 of the IMO 2012 Guidelines) as opposed to a discretionary power of regulation or inspection of the recycling facility.

8.3 Hong Kong Convention article 3: Application

8.3.1 Under article 1.2 of the Hong Kong Convention, parties can take more stringent measures consistent with international law, with respect to the safe and environmentally sound recycling of ships, in order to prevent, reduce or minimize any adverse effects on human health and the environment. The Hong Kong Convention does not apply to any warships, naval auxiliary or other ships owned or operated by a party and used, for the time being, only on government non-commercial services.‡ However, each party shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such ships owned or operated by it, that such ships act in a manner consistent with the Convention, so far as is reasonable and practicable.§ Bangladesh domestic legislation also applies to the following categories of ships¶ which might be beyond the scope of the application of the Hong Kong Convention:**

- .1 Warships;
- .2 Naval auxiliary;
- .3 Ships owned or operated by GoB and used for the time being only on government non-commercial service; and
- .4 Ships of less than 500 GT or ships operating throughout their life only in waters subject to the sovereignty or jurisdiction of the State whose flag the ship is entitled to fly.

* Hong Kong Convention art. 2.

† SBRR 2011, rule 2(x).

‡ Hong Kong Convention, art. 3.2.

§ Hong Kong Convention, art. 3.2.

¶ Ahmed, “The Origin and Evaluation of Ship Breaking Regime of South Asia”, 16.

** Hong Kong Convention, art. 3.2.

8.3.2 BSRA 2018 did not incorporate the “no more favourable treatment” provision as required by the Hong Kong Convention when dealing with non-party EoL ships proceeding to be recycled in Bangladesh.*

8.3.3 Under the Hong Kong Convention ships of less than 500 GT and other ships owned by the government and used for the propose of governmental services are legally required to be governed by separate jurisdiction of the CA.† Section 6 of the BSRA 2018 has waived off this mandatory injunction of the Hong Kong Convention.

8.4 *Hong Kong Convention article 4: Controls related to ship recycling*

This provision is read with annex chapter 2, part A: “Requirements for ships (design, construction, operation and maintenance of ships)” (regulation 4 – “Controls of ships’ hazardous materials” and regulation 5 – “Inventory of hazardous materials”); and part B: “preparation for ship recycling” (regulation 8 – “general requirements” and regulation 9 – “ship recycling plan”).

8.4.1 Gaps exist in the domestic regime of Bangladesh, in that the country has not imposed responsibility upon its government to take effective measures and to ensure that ships entitled to fly its flag or operating under its authority or recycling facilities operating under its jurisdiction are in compliance with the requirements set forth in the Convention‡ and shall take effective measures to ensure such compliance.

8.4.2 Obligations under part A, chapter 2 of the annex, particularly regulations 4.1 and 4.2 of the Hong Kong Convention on prohibiting and restricting installation or use of hazardous materials listed in appendix 1 on ships, have not been incorporated into Bangladesh legislation.

8.4.3 Requirements under regulations 5.1, 5.2 and 5.3 of the Hong Kong Convention on the verification of the IHM by the administration or its delegates following the guidelines of the Hong Kong Convention is absent in Bangladesh law. Bangladesh has not classified the hazardous materials as per part I, II and III.

8.4.4 Obligations under part B regulations 8.1, 8.3 and 8.6 are absent in Bangladesh legislation. These are related to considering the guidelines of the Hong Kong Convention, authorization of the SRF, requirement of safe-for-entry and safe-for-hot-work condition for tankers, respectively.

8.4.5 The preparation of and application for the SRP in the legislation of Bangladesh, where an SRP is prepared only after the ship is taken to the facility, appears to be different from the requirement of regulation 9 of the Hong Kong Convention. The Bangladesh legislation is not aligned with the use of language requirement for the SRP under regulation 9.2 and the tacit approval requirement in application for SRP under regulations 9.4.1.1, 9.4.2, 9.5 and 9.6.

8.4.6 Regulation 9 of the Hong Kong Convention requires an SRFP to be prepared, considering the guidelines developed by the Hong Kong Convention, which seems to be absent in Bangladesh legislation.

8.5 *Hong Kong Convention article 5: Survey and certification of ships*

This provision is read with the annex chapter 2, part C – “Surveys and certification” (regulation 10 – “Surveys”; regulation 11 – “Issuance and endorsement of certificates”; regulation 12 – “Issuance or endorsement of a certificate by another party”; regulation 13 – “Form of the certificates”; and regulation 14 – “Duration and validity of the certificates”).

8.5.1 Each party shall ensure that ships flying its flag or operating under its authority and subject to survey and certification are surveyed and certified in accordance with the regulations in the annex.§ A gap exists in the legislation of Bangladesh to implement the article 5 requirement of the Hong Kong Convention which is read with annex chapter 2, part C, regulations 10 to 14.

8.5.2 At present there is no duty that exists upon GoB as a party to ensure that EoL ships coming to the territory of Bangladesh are surveyed as prescribed in regulation 10 of the Hong Kong Convention.

* Hong Kong Convention, art. 3.4.

† Hong Kong Convention, art. 3.3.

‡ Hong Kong Convention, art. 4.2.

§ Hong Kong Convention, art. 5.

8.5.3 Each new ship under the Hong Kong Convention must be issued with an IHM certificate after successful completion of an initial or renewal survey.* No such obligation exists in Bangladesh.

8.5.4 All existing ships must comply with the IHM documentation requirements in no later than 5 years after the convention enters into force,† but no such duty exists as well in Bangladesh.

8.5.5 The administration may delegate its power of survey of EoL ships and the issuance of the international certificate on IHM to an organization.‡ A gap exists in the legislation of Bangladesh in this regard where IHM is certified by the master of the EoL ships.§

8.5.6 The administration, in any case, remains responsible for completeness and effectiveness to satisfy the requirement of the Convention.¶ The Bangladesh regime does not have any provision on the delegation to carry out such a survey and certification under the Hong Kong Convention.

8.5.7.1 An International Ready for Recycling Certificate (IRRC) shall be issued for a period specified by the administration that shall not exceed three months. No corresponding duty exists in Bangladesh. An IRRC is to be issued by the flag State and the SRF shall not begin recycling work unless a report of the planned recycling is submitted to the CA. The report shall include a copy of the IRRC. Under SBRR 2011, an RRC is issued by the CA after beaching and copies of an RRC and ship-specific SRP are submitted to the CA along with application for cutting permission duly filled as per Annexure IV of the SBRR 2011.

8.5.7.2 Under the Hong Kong Convention, a certificate issued under the authority of a party shall be accepted by other parties and to be regarded, for all purposes covered by the Hong Kong Convention, as having the same validity as a certificate issued by them.** The Bangladesh Flag State Administration does not incorporate such obligation by reference or otherwise.

8.6 Hong Kong Convention article 6: Authorization of ship recycling facilities

This provision is read with annex chapter 3 – “Requirements for ship recycling facilities” (regulation 15 – “Controls on ship recycling facilities”; regulation 16 – “Authorization of ship recycling facilities”; regulation 17 – “General requirements”; regulation 18 – “Ship recycling facility plan”; regulation 19 – “Prevention of adverse effects to human health and the environment”; regulation 20 – “Safe and environmentally sound management of hazardous materials”; regulation 21 – “Emergency preparedness and response”; regulation 22 – “Worker safety and training”; regulation 23 – “Reporting on incidents, accidents, occupational diseases and chronic effects”).

8.6.1 Article 6 of the Hong Kong Convention is related to the authorization of SRFs and considers the guidelines developed by IMO. The relevant provisions are contained in annex chapter 3 of the Convention and are read with regulations 15 to 23. Although provisions are there about authorization of SRF in the legislation of Bangladesh,†† a substantial gap exists in the domestic law in preparing relevant guidelines and implementation of these regulations in the Bangladesh regime considering those guidelines.

8.6.2 Regulations 19, 21, 22 and 23 of the Hong Kong Convention have dealt with the matters related to the health and safety in shipbreaking. The approach of the convention has been to protect the right of the workers by incorporating those in the SRFP which must be approved by the CA considering the guidelines of the Hong Kong Convention.‡‡ No such duty exists in Bangladesh.

* Hong Kong Convention, reg. 10.

† Hong Kong Convention, reg. 5.2.

‡ Hong Kong Convention, reg. 11.1 and reg. 11.2.

§ SBRR 2011, annexure II.

¶ Hong Kong Convention, reg. 10.4.

** Hong Kong Convention, reg. 11.12.

†† BSRA 2018, sec. 5.

‡‡ Ahmed, “Ungovernable Ships at the End of their Lives and the Response of the Hong Kong Convention”, 163.

8.7 Hong Kong Convention article 7: Exchange of information

8.7.1 A gap exists in the domestic legislation of Bangladesh about the exchange of information on which the decision of the CA to authorize an SRF is based.

8.7.2 The duty to exchange information in a swift and timely manner is apparently absent in domestic legislation of Bangladesh as the Bangladesh Flag State Administration does not incorporate such obligation by reference or otherwise.

8.8 Hong Kong Convention article 8: Inspection of ships

8.8.1 Existing ships are subject to inspection by officers of the port State control (PSC) duly authorized by the party for the purpose of determining whether the ship is following the mandate under article 8 of the Hong Kong Convention. There is a legal gap in Bangladesh to implement this provision of the Hong Kong Convention. The specific circumstances a port State can intervene and inspect an EoL ship is mentioned in the Hong Kong Convention, but these are yet to be incorporated in the domestic law of Bangladesh.

8.8.2 A detailed inspection may be carried out considering guidelines developed by IMO. Gaps exist in Bangladesh because there is an absence of guidelines in the Bangladesh regime.

8.9 Hong Kong Convention article 9: Detection of violations

8.9.1 The duty of the parties to cooperate in the detection of violations and the enforcement of the relevant requirements of the Hong Kong Convention, which is covered in articles 9.1 to 9.4, is not available in the domestic legislation of Bangladesh.

8.9.2 State parties have a duty to cooperate in the detection of violations by ships flying its flag and SRF operating under its jurisdiction and there is a duty to report promptly measures taken against the ship or SRF.* Bangladesh has not assumed such a duty to cooperate in the detection of such a violation and inform accordingly about the measures taken against a complaint.

8.9.3 Further, on receiving a complaint with enough evidence a State party has a duty under the Hong Kong Convention to initiate proceedings and impose sanction against a ship flying its flag or SRF operating under its jurisdiction.† There is a clear duty to provide prompt information to the complainant about any measures taken against the complainant.‡ No such mandate to initiate proceedings on a complaint or a duty to provide information exists in the domestic law of Bangladesh.

8.9.4 Beaching is the process in which a ship is laid ashore or grounded deliberately in shallow water.§ In the context of shipbreaking under SBRR 2011, the final permission for taking a ship out of service is designated as “beaching”. Beaching permission is granted by the “port authority”¶ which is not the CA for ship recycling but a wing of maritime administration in Bangladesh under the Director General of Shipping.** The CA in Bangladesh forwards all relevant documents to port authority for issuance of beaching permission within the next two working days of on-board ship inspection that is completed at anchorage by a team of inspectors appointed by the CA. Under the Hong Kong Convention, the final permission for taking the ships out of service is designated as an IRRC and is issued by the administration or its authorized delegates having considered an approved SRP issued by the CA of the recycling State. Under SBRR 2011, before the withdrawal of the vessel from service no SRP is required from the CA. Instead, an SRP under SBRR 2011 is prepared and issued by the CA after the ship is taken to the facility.

* Hong Kong Convention, art. 10.

† Hong Kong Convention, art. 10.

‡ Hong Kong Convention, art. 10.

§ I. Ahmed, “Unravelling Socio-Economic and Ecological Distribution Conflicts in Ship-Breaking in Bangladesh for Addressing Negative Externalities in Law and Policy Making” (2020f) 29 *Minn J Int'l L* 161.

¶ SBRR 2011, rule 9.

** SBRR 2011, rule 9.

8.10 Hong Kong Convention article 10: Violations

8.10.1 The procedure to receive a complaint from a party, acting against a ship or an SRF for a violation of the Hong Kong Convention provision, is absent in the Bangladesh regime.

8.10.2 Under the Hong Kong Convention there is a clear duty to provide prompt information to the complainant about any measures taken against the complaint.* No such mandate to initiate proceedings on a complaint or duty to provide information exists in the legislation of Bangladesh.

8.10.3 Under the Hong Kong Convention, the sanctions provided for by the laws of a party pursuant to this article shall have to be adequate in severity to discourage violations of this Convention wherever they occur (article 10.3 of Hong Kong Convention). The maximum financial sanction for several offences, including non-reversible beaching without appropriate clearance from the CA under the BSRA 2018, ranges from 10 lacs to 30 lacs (equivalent to USD 12,000 to USD 35,000) per violation (sections 26 and 27 of BSRA 2018). Given that there is no certain and fixed penalty of imprisonment available in law, the financial penalty seems to be far too low than the profit obtained generally from ship recycling activities[†] which is an average of one million US dollars per beached ship.[‡] This gap in the penal provision therefore may not discourage the violation as required by article 10.3 of the Hong Kong Convention.

8.11 Hong Kong Convention article 11: Undue delay or detention of ships

8.11.1 In the ship recycling legislation of Bangladesh, there is no provision on “undue delay” while carrying out inspection of EoL ships by the CA. There is also no provision for the detention of ships when carrying out the obligations under articles 8, 9 and 10 of the Hong Kong Convention by the CA.

8.12 Hong Kong Convention article 12: Communication of information

8.12.1 This article deals with communication of information via IMO. The Bangladesh Flag State Administration does not incorporate such obligation by reference or otherwise. Therefore, no duty currently exists upon the government of this State to report to IMO about information concerning:

- .1 list of SRFs authorized by the CA in Bangladesh;
- .2 contact details of CA;
- .3 list of recognized organizations;
- .4 annual lists of ships for which IRRCs have been issued;
- .5 annual lists of ship recycled within jurisdiction;
- .6 information on violation; and
- .7 actions taken against GoB’s ships and SRF for violations under the jurisdiction of the GoB..

8.13 Hong Kong Convention article 13: Technical assistance and cooperation

8.13.1 This article deals with technical assistance and cooperation by parties to the Hong Kong Convention. No duty exists in Bangladesh regime in this regard, namely to:

- .1 train personnel;
- .2 provide support to ensure that relevant technology is available to parties;
- .3 support on joint research; and
- .4 undertake other actions aimed at the effective implementation of this convention and of guidelines developed by the Convention.

* Hong Kong Convention, art.10.

† Ahmed, “The Origin and Evaluation of Ship Breaking Regime of South Asia”, 40.

‡ A. Bargfried, “The Economics of Ship Breaking & Scrapping”, *Marine Link*, August 2016. Available at <https://www.marinelink.com/news/economics-scrapping414382> (accessed 19 December 2020).

8.14 Hong Kong Convention article 14: Dispute settlement

8.14.1 The provision of the Hong Kong Convention requiring settling of the dispute(s) among the parties by negotiation and other peaceful means has not been incorporated into the Bangladesh regime by reference or otherwise.

8.15 Hong Kong Convention article 15: Relationship with international law and other international agreements

8.15.1 The relation with other international laws and other international agreements will remain unaffected by ratifying the Hong Kong Convention.* Gap exists in the domestic laws of Bangladesh to incorporate such obligations.

8.15.2 The Hong Kong Convention has specifically referred to UNCLOS and customary international laws.† Any other international laws of which Bangladesh is already a party before accession to the Convention will remain unaffected by the ratification of the Hong Kong Convention.

8.16 Hong Kong Convention articles 16 to 21: Signature, ratification, acceptance, approval and accession

8.16.1 Articles 16, 17, 18, 19, 20 and 21 deal with procedural matters and Bangladesh will be automatically subject to those procedural obligations once the Hong Kong Convention is ratified and acceded to. The obligations include signature, ratification, acceptance and approval (article 16) and entry into force (articles 16 and 17).

8.17 Hong Kong Convention regulations for safe and environmentally sound recycling of ships (Annex)

8.17.1 Under the Hong Kong Convention, the CA is a governmental regulatory authority.‡ A regulatory agency is a public authority or government agency responsible for exercising autonomous authority over some area of human activity in a regulatory or supervisory capacity.§ Regulatory agencies are typically a part of the executive branch of the government and have statutory authority to perform their functions with oversight from the legislative branch. Their actions are generally open to judicial review. Under BSRA 2018, the board of governors of the ship recycling board (SRB) is constituted of 13 board members where a significant number of personnel are appointed who represent the ship recycling industry who are, in turn, required to be governed by the CA.¶ Given that only 4 persons are required to form a quorum for meeting at the board level (even no quorum is permissible in any adjourned meeting)** and there are three reserved positions available for the owners of an SRF including the chair of this trade body,†† the objective of this regulatory body as the CA governing the ship recycling industry as mandated by the Hong Kong Convention, would likely be unattainable.

8.17.2 It is mandatory under the Hong Kong Convention to consider certain guidelines adopted by IMO to properly implement the Convention at the domestic level‡‡ (regulations 5.1, 5.2, 5.4, 9, 10.2, 11, 14, 15, 16, 17, 18 and 20 of the Hong Kong Convention). Section 7(3) of the BSRA 2018 empowers the CA to prepare and use such guidelines, but it does not create any mandate to prepare such guidelines.

8.17.3 According to section 1(8) of the BSRA 2018, an SRF means a plan regarding the use of the yard for the purpose of recycling of ships and all facilities associated with it. Under the Hong Kong Convention, an SRF includes predominantly a set of rules or policy on the safe and environmentally sound recycling of ships,

* Hong Kong Convention, art.15.

† Hong Kong Convention, art.15.

‡ Hong Kong Convention, art. 2.

§ B. Duignan, "Regulatory agency", *Britannica*. Available at <https://www.britannica.com/topic/regulatory-agency> (accessed 18 December 2020).

¶ BSRA 2018 sec. 10

** BSRA 2018, sec. 12.6.

†† BSRA 2018, sec. 10.

‡‡ Ahmed, "Ungovernable Ships at the End of their Lives and the Response of the Hong Kong Convention", 131.

adopted by the board of governors of the ship recycling company and which the ship recycling company is legally required to observe to continue its smooth operation.* Clause 3 of the IMO 2012 Guidelines (resolution MEPC.210(63)) confirms its status as the main document that the CA(s), or organization(s) recognized by it, will rely on in authorizing an SRF. It is therefore critical that the SRFP should fully describe the operations and procedures that are in place at the SRF to ensure compliance with the Convention more than extending necessary support for the operators of a ship recycling industry.

* Hong Kong Convention, reg. 18.

Part B: Case Study from India – Ship Recycling Legislation and Institutional Structure

This case study is structured in accordance with the well-established four pillars of domestication process of all international conventions, viz.:

- .1 Transposing the international conventions into the domestic legislation. This process primarily involves creation of primary, secondary and tertiary legislations;
- .2 Setting up administrative/ process to execute the domestic legislation. This process mainly involves the creation of an organizational structure, creating departments/divisions etc., which will manage/accomplish/operate the legislative requirements as stipulated under the Convention;
- .3 Processes to Implementing the legislative requirements, which are mostly operations and requirements needed apply the Convention requirements; and
- .4 Enforcement provisions, which mainly deal with penalties and sanctions, in case of breach/non-compliance of legislative requirements.

Note: All references and elaborate explanations can be found in the Activity 2 Report, attached to this Main Report.

9 Brief introduction to the Indian ship recycling industry

9.1 India commands one of the largest beaching facilities in the world,^{*} with over 150 recycling yards[†] along its coastline, spreading to over 10 km,[‡] covering over 20,000 hectares of land.[§] When a ship surpasses its service life and operational value, it is usually recycled, generating revenue. In India, the recycling industry is spread into Alang and Sosiya in Gujarat (the largest presence); Mumbai; Kerala; and smaller presence in other states.[¶] Most of these yards are situated on the Arabian Sea coastline.^{**}

10 Overview of the Indian legal system

10.1 Parliamentary form of government

10.1.1 India adopted a parliamentary form of government from Britain. In the Indian system of government, the Legislature, the Executive and the Judiciary are the three main organs. These organs are interdependent on each other, to ensure effective and efficient functioning of the government. Parliament or the Legislature makes laws. The Executive executes or implements the laws enacted by parliament and the judiciary interprets these laws.^{††} The Parliament of the Indian Union consists of two houses – the Rajya Sabha (Council of States) and the Lok Sabha (House of the People)^{‡‡} – and the president.

* Bargfried, “The Economics of Ship Breaking & Scrapping”.

† IRClass, “Ship Recycling”. Available at <https://www.irclass.org/marine/ship-recycling/> (accessed 19 December 2020).

‡ *The Economist*, “The world’s biggest ship-breaking town is under pressure to clean up”, 9 March 2019. Available at <https://www.economist.com/business/2019/03/07/the-worlds-biggest-ship-breaking-town-is-under-pressure-to-clean-up> (accessed 19 December 2020).

§ Environmental Justice Atlas, “Dirty and dangerous shipbreaking in Alang, India”, as updated on 16 September 2016. Available at: <https://ejatlas.org/conflict/dirty-and-dangerous-shipbreaking-in-alang> (accessed 19 December 2020).

¶ G. Seetharaman and P. Katiyar, “Can a new ship-recycling law help India regain its status as the world’s top dismantler of vessels?”, *Economic Times*, as updated on 22 December 2019. Available at <https://economictimes.indiatimes.com/industry/transportation/shipping-/-transport/can-a-new-ship-recycling-law-help-india-regain-its-status-as-the-worlds-top-dismantler-of-vessels/articleshow/72918468.cms> (accessed 19 December 2020).

** Reuters, “Is it end of the line for South Asia’s ship graveyards?”, *Financial Express*, 2015. Available at <https://www.financialexpress.com/economy/is-it-end-of-the-line-for-south-asias-ship-graveyards/102534/> (accessed 19 December 2020).

†† D. Sharma, “Legislature, Executive and Judiciary: Three Pillars of Indian Democracy”, *Lawcorner*. Available at <https://lawcorner.in/legislature-executive-and-judiciary/> (accessed 20 December 2020).

‡‡ Know India, “Legislature”. Available at <https://knowindia.gov.in/profile/the-union/legislature.php#:~:text=Legislature%20of%20the%20Union%2C%20which,be%20held%20in%20certain%20cases> (accessed 19 December 2020).

10.1.2 The Constitution of India postulates independence of the judiciary, which is a strong feature of Indian democracy. The key role of the judiciary is the administration of justice. The judiciary comprises three levels of courts, which are (1) the Supreme Court of India at the national level; (2) the high courts at state levels; and (3) the district courts at the district level.*

11 Method of forming legislation and entering treaties

11.1 In terms of the Constitutional Law of India, India follows a dualistic system.†

11.2 All government bills are piloted by members of the council of ministers, a wider body of ministers that includes cabinet ministers, ministers of state and deputy ministers. It is collectively responsible to the Lok Sabha. Cabinet ministers meet frequently and take decisions regarding the transaction of government business, having collective functions. It enforces the collective responsibility of the council of ministers to the Lok Sabha. The decision on bills is taken by the cabinet and its parliamentary affairs committee. A bill other than money bills can be introduced in either house of parliament. It has to be passed in identical form and consented by both houses before it can be presented for the presidential assent.‡ Once it receives presidential assent, a bill becomes an act.

11.3 The process starts with the introduction of the bill in either house of parliament. After a bill has been introduced, it is published in the official gazette. But, even before introduction, a bill might, with the permission of the speaker, be published in the gazette.§

11.4 International conventions are only recognized in India if they are transformed into domestic legislation,¶ by way of either enacting a new legislation, amending an existing legislation or enforcing the said convention as rules etc., if the main statute permits for the same.

11.5 Where an enactment of a new statute or an amendment to the municipal law is required to give effect to the ratification of treaties and/or conventions, which may have bearing on the Constitution of India and/or its citizens, parliamentary approval is necessary.**

11.6 Parliament has the power to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at an international conference, association or other body.

12 Indian ship recycling laws: Genesis, legal positions and challenges

12.1 Introduction

12.1.1 Greenpeace led a campaign that stirred action to prevent the Le Clemenceau (a French aircraft carrier) from dumping toxic wastes in the Indian waters, finally resulting in the landmark Supreme Court judgment, namely *Research Foundation for Science, Technology and Natural Resources Policy v. Union of India*,†† which barred the entry of the ship until further orders and designated a committee of technical experts, to form a panel to assess the hazards posed by it. The sensitization and drive for the improvement in the ship recycling industry started as a result of public outrage, international rebuke and the initiative of various public interest groups. Considering this, the Hon'ble Supreme Court of India issued several rulings demanding the improvement of the ship recycling industry and to bring it in line with the national and international requirements for safe working conditions, environmental protection, waste trade law etc.

* Sharma, "Legislature, Executive and Judiciary".

† P. Ranjan, Anmolan and F. Ahmad, "Is the Supreme Court Confused About the Application of International Law?", *The Wire*, 28 September 2016. Available at <https://thewire.in/law/supreme-court-international-law> (accessed 20 December 2020).

‡ Advocatanmoy Law Library, "Indian Parliament & Law-making Process". Available at <https://advocatanmoy.com/indian-parliament-law-making-process/> (accessed 19 December 2020).

§ Advocatanmoy Law Library, "Indian Parliament & Law-making Process".

¶ S. Chakravarty, "Legal System in India – International Law Influencing National Legal System", Legal Service India. Available at <http://www.legalserviceindia.com/article/I117-legal-system.html> (accessed 19 December 2020).

** R. Dua, "The International Treaties/Conventions and their Influence in India", Legal Service India. Available at <http://www.legalservicesindia.com/article/2574/The-International-Treaties-Conventions-and-their-Influence-in-India.html> (accessed 19 December 2020).

†† *Research Foundation for Science and Technology National Resource Policy v. Union of India* (2005) 10 SCC 510.

12.1.2 The Hon'ble Supreme Court of India also issued directions to the concerned ministry, to review the various issues arising with reference to shipbreaking. In compliance with the direction of the Hon'ble Supreme Court of India, the Ministry of Environment and Forests (now the Ministry of Environment, Forest and Climate Change (MoEFCC)) constituted an internal committee, for recommending on issues relating to shipbreaking. The committee was headed by the then secretary of the Ministry of Environment and Forests and comprised experts from reputed organizations such as the National Institute of Occupational Health (NIOH), Ahmedabad; the Indian Toxicological Research Centre (ITRC), Lucknow; as well as retired naval officers, academicians from Indian Institutes of Technology (IITs) of Kharagpur and Chennai and Central Pollution Control Board (CPCB). As a result of intervention by the Supreme Court, the committee constituted through its orders, mandated to evaluate the "hazards associated with shipbreaking" and elucidate the recommendations, which were eventually adopted in 2013 as the Indian Shipbreaking Code (ISB Code), revised in 2017 and renamed as the Shipbreaking Code (Revised) 2013 (SBC 2013 (Revised)).

12.2 Hazardous waste

12.2.1 As reasoned by the Indian legal system in the landmark judgment of the Hon'ble Supreme Court in the case of *Research Foundation for Science, Technology and Natural Resources Policy v. Union of India*,^{*} hazardous waste requires adequate and proper control and handling. Efforts are required to be made to minimize such waste. In developing nations, there are additional problems including that of dumping of hazardous waste on their lands by some of the nations, where the cost of destruction of such waste is felt very heavy. The above and other allied problems gave birth to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention),[†] where the key objectives are (a) to minimize the generation of hazardous waste in terms of quality and hazardousness; (b) to dispose of them as close to the source of generation as possible; and (c) to reduce the transboundary movement of hazardous waste.

12.3 Polluter-pays principle

12.3.1 In the activities related to ship recycling, the principle of polluter pays trickled through various public interest litigations, leading to constitution of a high-powered committee, placing its recommendations with regard to restructuring and other aspects of implementation of the Hazardous Waste Rules; the constitution of the monitoring committee empowered to co-opt with other representatives of the State, in lieu of overseeing the timely compliance of the Supreme Court directions;

12.3.2 The Hon'ble court righteously adjudged on the touchstone of the precautionary principles and the polluter-pays principle, glorifying the need of regulating the hazards associated with shipbreaking and alike and detailing the implemental measures of management in regard of the hazardous waste generated during such activities.

12.3.3 The Hon'ble Supreme Court has time and again shown its concern and willingness towards the need for codification of the terms, drawn for dismantling and recycling of ships. This issue has been dealt with in detail in article 4, and in Activity 2 (Case Study from India).

12.3.4 Polluter pays forms an integral part of the Indian Environmental Act 1896 and the Merchant Shipping Act 1958, which covers most of the IMO Conventions. During the absence of an Indian ship recycling act, the concerned authorities had been charging and imposing sanctions and penalties under their respective acts. ISRA 2019 covers the polluter-pays principle.

12.4 Hazards associated with shipbreaking

12.4.1 To battle the dangers and hazards associated with the ship recycling industry, under orders of the Supreme Court, the MoEFCC constituted a standing committee, to advise the ministry on issues pertaining to hazardous waste and other related areas.^{‡,§} The accepted recommendations of the committee were incorporated into the judgments and eventually India got its 2013 code.

^{*} *Research Foundation for Science and Technology National Resource Policy v. Union of India* (2005) 10 SCC 510.

[†] *Research Foundation for Science and Technology National Resource Policy v. Union of India* (2005) 10 SCC 510.

[‡] *Research Foundation for Science and Technology National Resource Policy v. Union of India* (2005) 10 SCC 510 at pg. 535, Para 52

[§] *Research Foundation for Science v. Union of India and Another* (2007) 8 SCC 583.

12.4.2 The recommendations of the committee included consultation of the authorities prior arrival of ship at port; decontamination; categorization of hazardous and non-hazardous waste that is to be generated; appropriate disposal of asbestos waste; authorization be given to the shipbreaking industries for disposal of waste in environmentally sound manner; safe disposal of all quantities of oils, sludge and alike outside the beach; immediate ban of burning of any material on the beach; and other recommendations regarding inventories, dumping sites, landfills etc.

12.5 Areas of focus in regularizing laws for the ship recycling industry

12.5.1 The standing committee converged on the following: (a) occupational and health issues; (b) primary preparation and breaking; (c) occupational health hazards associated with different stages of ships; and (d) secondary breaking and sorting and handling of hazardous materials. It also focused on ships of special concern and assessment of hazardous waste and potentially hazardous material.* The recommendations of the committee enlisted the following: (a) process for anchoring; (b) beaching and breaking inclusive of recycling facility management plan; and (c) ship-specific dismantling plan.

12.5.2 The committee report further identified stakeholders and also made references to the workers' welfare issues. The Hon'ble Supreme Court categorically expressed its desire for the Government of India to formulate a comprehensive code incorporating the recommendations of the standing committee; and that the recommendations therein adopted are to be operative until the concerned legislations materializes.†

12.6 Ecological balance, sustainable development and the principle of proportionality in respect of the hazards associated with shipbreaking

12.6.1 In lieu of another writ petition‡ before the Supreme Court and in assistance of the technical expert committee of the GMB, GPCB determined and assessed the ecological balance, sustainable development and the principle of proportionality in respect of the hazards that associate with shipbreaking, dismantling of ships and recycling of a beached-off ship.

12.6.2 The experts, through their reports, showcased the developmental priorities such as the generation of revenue, employment and benefits of the technical know-how and skill of workers, yet contrasted it with the need for minimizing the ill-effects of such development through formulation and adoption of norms and measures, safeguarding the interests of the workers protecting the environment, their health and the working conditions.§

12.6.3 The judgment¶ was intended to legally determine whether, the court should grant permission for dismantling of a ship, but in doing so it explicitly detailed application and interlinkage between concepts such as sustainable development, proportionality and balance.

12.7 Ruling of the Supreme Court on India's compliance to MARPOL and Basel conventions

12.7.1 In a 2012 judgment,** the Hon'ble Supreme Court referred to its previous judgments and ruled that compliance of MARPOL and Basel conventions is to be strictly adhered to.

12.7.2 The import of toxic wastes from industrialized countries to India, despite such wastes being hazardous to the environment and life of people of this country, and other such allowances from the MoEFCC, which were inclined to make India a dumping ground for toxic wastes, were challenged to be contrary the fundamental rights and also not in consonance with articles 47 and 48-A enshrined in the Indian Constitution.

12.7.3 Hence, in a separate judgment,†† involving the inspection of a ship and to determine whether to permit it into the Indian territorial waters to further its dismantling, the court emphasized that, in this and all future cases of similar nature, the authorities concerned shall strictly comply with the norms of the Basel

* *Research Foundation for Science v. Union of India and Another* (2007) 8 SCC 583, pg. 585, para 4.

† *Research Foundation for Science v. Union of India and Another* (2007) 8 SCC 583, pg. 592.

‡ WP(C) No. 657 of 1995.

§ *Research Foundation for Science and Technology National Resource Policy v. Union of India and Another* (2007) 15 SCC 193.

¶ *Research Foundation for Science and Technology National Resource Policy v. Union of India and Another* (2007) 15 SCC 193.

** *Research Foundation for Science, Technology and Natural Resource Policy v. Union of India and Others* (2012) 7 SCC 764.

†† *Research Foundation for Science, Technology and Natural Resource Policy v. Union of India and Others* (2012) 7 SCC 764.

Convention or any other subsequent convention, that may be adopted by the central government, in aid of a clean and pollution-free maritime environment, before permitting entry of any vessel suspected to be carrying toxic and hazardous material into the Indian territorial waters.*

12.8 Ruling of the Supreme Court to frame a comprehensive code for governing the shipbreaking industry

12.8.1 The Hon'ble Supreme Court recognized that precautionary and polluter-pays principles were a part of the Indian environmental law, but at the same time, permitted the Blue Lady to be recycled at Alang, thereby diluting the two principles.†

12.8.2 The court validated its stand by stressing on the fact that, the environmental degradation resulting from the breaking of the said vessel would be mitigated by the industrial opportunities generated.

12.8.3 However, the court took the notable step of ordering the government to frame a comprehensive code for governing the shipbreaking industry. In its order, the Supreme Court proposed several references, which were aimed at making the best of the status quo, i.e. making beaching as safe as possible. The court emphasized upon the need for formulation of a custom-made systematic plan specifying the breaking process for every ship. Besides this, the court also laid down guidelines regarding each stage of the shipbreaking process (i.e. categorization of ships, anchoring, beaching) as well as regarding various clearances which were required for health and safety purposes. Pursuant to the court laying down guidelines regarding each stage of the shipbreaking process (anchoring, beaching etc.) including various clearances which were required for health and safety purposes, the court also passed directions for a “code” to be formulated by the central government in 2013, which came into force as ISB Code.

12.8.4 Even though ISRA has been enacted in 2019 and is meant to replace the legislation stipulated under the existing SBC 2013 (Revised), SBC 2013 (Revised) is still applicable, given that India is yet to form rules and regulations, under ISRA.

13 The Hong Kong Convention and its interphase with the Indian legal system

13.1 Broad comparison between the Hong Kong Convention and the Shipbreaking Code (Revised) 2013 (SBC 2013 (Revised))

13.1.1 SBC 2013 (Revised) categorizes type of ships and the ships of specific concern,‡ along with its characteristics and precautionary measures yet, envisages provisions of no favourable treatment to the government/naval/war ships in respect of the shipbreaking process, unlike the Convention, which also relies upon such categorization, but there is no specific stratification mentioned thereunder.

13.1.2 SBC 2013 (Revised) being the secondary legislation in force (ISRA 2019 being primary), has been amended to address issues such as the disposal of radioactive materials and oil spills. The enforceable propositions in the ISRA 2019 are inclusive of specific steps necessary to be taken in lieu of prevention of spilling of oils and hazardous substances into the sea and also safe disposal of the radioactive material.

13.1.3 Comparing the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009 (the Hong Kong Convention) and SBC 2013 (Revised), it appears that all the definitions from the Hong Kong Convention have been adopted by SBC 2013 (Revised) using a specified approach, with few additional terms defined, to avoid any ambiguities.

13.1.4 SBC 2013 (Revised), in consonance with the Convention and its annexes detail, lays out the specific process in terms of activities such as anchoring of ship(s), beaching of ships and recycling of ships. It categorically provides for multi-stage clearance of the ships from the concerned specified authorities, formulation of specific action plans and further reporting of the conducted procedures. The distinct chapters of SBC 2013 (Revised) specifically provide for “General instructions on safety, health and environmental compliance for stakeholders involved in ship recycling” inclusive of provisions regarding training for the labour and usages of PPE and other

* *Research Foundation for Science, Technology and Natural Resource Policy v. Union of India and Others* (2012) 7 SCC 764, pg. 769.

† The Blue Lady case is a perfect example of how the Hon'ble Supreme Court has upheld the principle of polluter pays. The case has been covered *Research Foundation for Science and Technology National Resource Policy v. Union of India and Another* (2007) 15 SCC 193.

‡ SBC 2013 (Revised), codes 2.1 and 2.1.

important aspects mandating health, environment and safety compliances. Thus, SBC 2013 (Revised) has attempted to not only envisage all the requirements stated in the conventions but has also detailed it further for better and effective execution in terms of implementation, administration and enforcement.

13.1.5 SBC 2013 (Revised) also elaborately covers controls relating to ship recycling, survey and certification of ships,^{*} authorization of SRFs,[†] exchange of information,[‡] inspection of ships,[§] penalties for violation[¶] and prohibitory measures against such violation, undue delay and detention of ships, process for communication of information, technical assistance and cooperation, dispute settlement etc.

13.1.6 The Convention has been applauded for setting up procedures such as certificates, surveys and inventories which enable acknowledging the quality and quantity of the hazardous materials installed during the lifetime of the ship. SBC 2013 (Revised) has expanded beyond the scope of the Convention however and has elaborated its effort to overcome the limitation of the Convention and to further the intention of ensuring safety, health and environment protection issues related to ship recycling in India.

13.2 Main comparison between Hong Kong Convention articles and the Indian Shipbreaking Code 2013 (the ISB Code)

13.2.1 Hong Kong Convention article 1: General obligations

13.2.1.1 In lieu of comprising an exclusive and extensive legislation, the ISB Code does not explicitly mention the general obligations as per the Hong Kong Convention, but the entire legislation is in the same parlance.

13.2.2 Hong Kong Convention article 2: Definitions

Read with annex chapter 1: regulation 1 – “Definitions”

13.2.2.1 Section 2 of the ISB Code: On comparing the ISB Code with the Hong Kong Convention, it appears that, the definitions from the Convention have been adopted by the ISB Code.

13.2.3 Hong Kong Convention article 3: Application

Read with annex chapter 1: regulation 2 – “General applicability”

13.2.3.1 Based on the nature of concern in respect of certain ships categorized as the ships of “special concern”, the ISB Code has prescribed the necessity of an adequate level of precaution and essential infrastructure at the relevant ship recycling yards. This is to handle the increased level of threat of pollution and danger associated with the dismantling of such categories of ships.^{**} The ships of “special concern” include warships, large passenger liners of defined categories, nuclear powered ships and naval vessels, deep draft ships of certain categories, international maritime dangerous goods, floating platform for offshore production, chemical and oil carrying tankers and the like.^{††}

13.2.3.2 Unlike the Hong Kong Convention, the ISB Code does not make any sensible distinction between any warships, naval auxiliaries or other ships owned or operated by a State party or used only on government non-commercial services for the time being, and ships destined for recycling at an SRF. However SBC 2013 (Revised) now supplements ISRA 2019, according to which any new and existing war ship, naval auxiliary or other ships owned or operated by any government and used for non-commercial purposes for the time being, and all ships of less than five hundred tons, either new, exiting or destined for recycling in an SRF have been excluded from the purview of ISRA 2019.^{‡‡} Therefore, the applicability of SBC 2013 (Revised) read with the ISRA 2019 is compliant with the corresponding provisions of the Hong Kong Convention.

* SBC 2013 (Revised), code 7.3.

† SBC 2013 (Revised), code 5.3.

‡ SBC 2013 (Revised), code 7.5.

§ SBC 2013 (Revised), codes 2.2, 5.2.

¶ SBC 2013 (Revised), code 3.3.1.

** ISB Code 2013, code 2.1.

†† ISB Code 2013, code 2.2.

‡‡ ISRA 2019, sec. 5.

13.2.4 *Hong Kong Convention article 4: Controls related to ship recycling*

Read with annex chapter 2: “Requirements for ships”; part A – “Design, construction, operation and maintenance of ships”; regulation 4 – “Controls of ships’ hazardous materials”; and regulation 5 – “Inventory of hazardous materials”.

13.2.4.1 To control the ship recycling activities and the industry thereof as mandated by the Hong Kong Convention, an administration clause has been incorporated in the ISB Code, establishing and designating various bodies for administration, implementation and/or supervision etc. The ISB Code has incorporated the administrative bodies concerned in the definition clause itself and laid down their respective roles at the relevant section therein.

13.2.5 *Hong Kong Convention article 5 - Survey and certification of ships*

Read with annex part C – “Surveys and certification”: regulation 10 – “Surveys”, regulation 11 – “Issuance and endorsement of certificates”, regulation 12 – “Issuance or endorsement of a certificate by another party”; regulation 13 – “Form of the certificates”; and regulation 14 – “Duration and validity of the certificates”.

13.2.5.1 The ISB Code also has dispersed the provisions regarding survey and certification of ships throughout at relevant sections while incorporating them.

13.2.6 *Hong Kong Convention article 6 - Authorization of SRFs*

Read with annex chapter 2 – “Requirements for ships”: regulation 8 – “General requirements”; regulation 9 – “Ship recycling plan”; and chapter 3 – “Requirements for ship recycling facilities”: regulation 15 – “Controls on ship recycling facilities”; regulation 16 – “Authorization of ship recycling facilities”; regulation 17 – “General requirements”; regulation 18 – “Ship recycling facility plan”; regulation 19 – “Prevention of adverse effects to human health and the environment”; regulation 20 – “Safe and environmentally sound management of Hazardous Materials”; regulation 21 – “Emergency preparedness and response”; regulation 22 – “Worker safety and training”; and regulation 23 – “Reporting on incidents, accidents, occupational diseases and chronic effects”.

13.2.6.1 The ISB Code provides specific chapters, compliant with the Hong Kong Convention, that lay out the recommended process, the SRF management plan (SRFMP) and ship-specific recycling plan (SSRP) in a detailed manner ensuring less or no ambiguity in its implementation, keeping environmental impact in mind.

13.2.6.2 The ISB Code in compliance with the annex to the Hong Kong Convention has incorporated the following:

- .1** *Chapter V – Ship Recycling Process*
 - 5.1** Recommended process for ship recycling
 - 5.2** Ship recycling facility management plan (SRFMP)
 - 5.3** Ship-specific recycling plan (SSRP)
- .2** *Chapter VI – General Instructions for Safety Health and Environmental Compliance for stakeholders involved in Ship Recycling*
 - 6.1** Safety compliance
 - 6.2** Permission for shipbreaking
 - 6.3** Specific instructions regarding training for the labour and usages of personal protective equipment (PPE) and other important aspects
 - 6.4** Environmental compliance
 - 6.5** Creation/enhancement of facilities for removal, storage and disposal of hazardous materials and hazardous wastes
 - 6.6** Environmental measures and housekeeping

- 6.7 Solid waste management
- 6.8 Housekeeping
- 6.9 Health compliance
- 6.10 Action by the State maritime board (SMB)/port authority
- 6.11 Training
- 6.12 Other miscellaneous provisions

.3 Chapter VII – Management of Occupational Safety and Health

- 7.1 Implementation of occupational safety and health management system
- 7.2 Occupational safety and health policy
- 7.3 Planning and implementation
- 7.4 Emergency preparedness
- 7.5 Reporting, recording and notification of work-related injuries and diseases, ill health and incidents
- 7.6 Notification of work-related injuries
- 7.7 Notification of occupational diseases
- 7.8 Means of access and egress
- 7.9 Means of escape, in case of fire, or other dangers
- 7.10 Roadways, quays, yards and other places
- 7.11 Housekeeping
- 7.12 Scaffolds and ladders
- 7.13 Precautions against the fall of persons and materials
- 7.14 Fire prevention and firefighting
- 7.15 Dangerous atmospheres and confined spaces
- 7.16 Signs, notices and colour codes
- 7.17 Prevention of unauthorized entry

13.2.7 Hong Kong Convention article 12 – Communication of information

Read with annex chapter 4 – “Reporting requirements”: regulation 24 – “Initial notification and reporting requirements” and regulation 25 – “Reporting upon completion”.

13.2.7.1 The ISB Code has incorporated provisions relating to sharing of information in an indirect manner within distinct provisions at relevance; it ensures the data as prescribed in the Hong Kong Convention is notified and reported so that is readily available for exchange to the organization or other party, if requested.

13.2.8 Hong Kong Convention article 8 - Inspection of ships

Read with annex chapter 2: regulation 11 – “Issuance and endorsement of certificates”.

13.2.8.1 The ISB Code endorses inspection of ships and has prescribed so at various sections.

13.3 Current status of the Indian recycling legislation – Recycling of the Ships Act, 2019

13.3.1 The Republic of India acceded to the Hong Kong Convention on 28 November 2019.*

* International Maritime Organization, “India Accession Brings Ship Recycling Convention a Step Closer to Entry into Force”, IMO [website], 2019a. Available at <https://www.imo.org/en/MediaCentre/PressBriefings/Pages/31-India-HKC.aspx> (accessed 19 December 2020).

13.3.2 Eventually, the bill was passed by the two houses, received the presidential assent on 13 December 2019 and was published in the official gazette on 16 December 2019, hence promulgated as an act.*

13.4 Municipal incorporation of Hong Kong Convention and IMO 2012 Guidelines

13.4.1 Hong Kong Convention vis-à-vis ISRA 2019

13.4.1.1 The Hong Kong Convention stipulates general obligations upon the parties, intending to undertake full and complete effect to its provisions to prevent, reduce, minimize and, to the extent practicable, eliminate accidents, injuries and other adverse effects on human health and the environment caused by ship recycling, and enhance ship safety, protection of human health and the environment throughout a ship's operating life.† Accordingly, the Recycling of Ships Act 2019 (ISRA) was framed to provide regulation for recycling of ships, especially by setting standards and laying down the statutory mechanism for enforcement, connected therewith or incidental thereto.

13.4.1.2 The objective of ISRA clearly reflects the light refracted from the undertakings of the Hong Kong Convention. A summary of ISRA mapped against the Hong Kong Convention, can be found in schedule 2 to this report.

13.4.2 IMO Guidelines incorporated into ISRA 2019

13.4.2.1 IMO adopted the Hong Kong Convention in 2009, and soon thereafter MEPC adopted six sets of guidelines in form of resolutions,‡ for implementation of the Hong Kong Convention. Consideration of these guidelines are the obligatory part of the Convention as they method a way to implementation of Hong Kong Convention.§ Every guideline therein states its desideratum and refers to the respective article(s) and regulation(s) of the Convention.

13.4.2.2 Each of these resolutions subsumed in the IMO 2012 Guidelines have been incorporated in the Indian legislation in conjunction with abiding by the Hong Kong Convention, as explained in the following provisions.

13.4.3 Resolution MEPC.210(63): 2012 Guidelines for safe and environmentally sound ship recycling

13.4.3.1 ISRA provides for a comprehensive SRFMP¶ that encompasses worker safety and training, protection of human health and the environment, roles and responsibilities of personnel, emergency preparedness and response and systems for monitoring, reporting and record-keeping proving itself to be much compliant with the Hong Kong Convention and its resolutions.

13.4.3.2 ISRA has adopted the provisions of the MEPC guidelines.

13.4.3.3 In ISRA, section 14 provides that every ship recycler shall maintain adequate measures for emergency preparedness and response as per the provisions of Factory Act, 1948. Section 15 provides that every ship recycler shall maintain adequate measures for workers' safety, health, instruction, supervision, training and welfare as per the provisions of Factory Act, 1948. Section 21 prescribes certain obligations on the part of ship recycler for safe and environmentally sound management of hazardous materials. Clause 22 prescribes certain obligations on the part of ship recycler for taking measures for protection of environment. All aforementioned provisions are as per the provisions of the Hong Kong Convention.

* Press Information Bureau, "The Recycling of Ships Bill, 2019 becomes an Act after receiving assent of President of India", 17 December 2019. Available at <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1596730> (accessed 20 December 2020). See also ISRA 2019 at <http://egazette.nic.in/WriteReadData/2019/214694.pdf> (accessed 19 December 2020)

† Hong Kong Convention, art. 1.

‡ International Maritime Organization, "Recycling of Ships", IMO [website], 2019b. Available at <https://www.imo.org/en/OurWork/Environment/Pages/Ship-Recycling.aspx> (accessed 20 December 2019)

§ Ahmed, "Ungovernable Ships at the End of their Lives and the Response of the Hong Kong Convention", 167.

¶ ISRA 2019, sec. 12.

13.4.4 *Resolution MEPC.223(64): 2012 Guidelines for the inspection of ships under the Hong Kong Convention*

13.4.4.1 Paragraph 2.1.1 of Resolution MEPC.223(64) states: after boarding and having been introduced to the master or responsible ship's officer, the port State control officer (PSCO) should verify that there is on board the International Certificate on Inventory of Hazardous Materials (IHM) (regulation 11.1) or the International Ready for Recycling Certificate (IRRC) (regulation 11.11), both supplemented by IHM. The PSCO should also examine reports of previous port State control (PSC) inspections. India adopted this part in sections 27 and 28 of ISRA 2019.

13.4.4.2 ISRA mandates the inspection of the ship and has prescribed provisions in that regard. However the administration and details of procedure to conduct such inspections are sub-delegated to the rules and/or regulations that are intended to be incorporated under this act upon enforcement.

13.4.4.3 ISRA does not specifically refer to the term “non-party ships”, as provided in the Hong Kong Convention, in relation to survey and inspection of ships. However, subject to section 5,^{*} the act incorporates the relevant provision of the Convention by requiring necessary inspection of certain standard of all ships while at any port or within Indian waters, for the purpose of verifying that there is on board either a certificate of IHM[†] or an RRC.[‡] Given that SBC 2013 (Revised) is still in force, the inspection procedure framed thereunder covers PSC requirements. Further, for non-party ships, the PSC is empowered under other relevant maritime legislations, i.e. the Merchant Shipping Act 1958 (as amended), to give effect to the requirement of this regulation. The Director General of Shipping, as the administration, holds the PSC powers in India and is also declared the competent authority (CA), under ISRA. The Director General, who is constituted under the Merchant Shipping Act 1958, is the only authority in India, who holds the PSC mandate.

13.4.5 *Resolution MEPC.196(62); 2011 Guidelines for the development of the ship recycling plan*

13.4.5.1 ISRA recognizes the need and emphasis on a proper and authorized ship recycling plan (SRP) prior to the recycling of the ship.

13.4.5.2 Under the provisions of the ISRA, formulation of rules and regulations are required to be carried out, as prescribed, to be in strict compliance of the Guidelines. ISRA is presently at par with the Hong Kong Convention and the Guidelines.

13.4.6 *Resolution MEPC.211(63): 2012 Guidelines for the authorization of ship recycling facilities*

13.4.6.1 ISRA has incorporated provisions to designate a national authority[§] to administer, supervise and monitor all activities relating to ship recycling under this legislation and a CA for performance of specified duties in the prescribed geographical area or area of expertise. Therefore, India has nominated the Ministry of Shipping as the national authority[¶] concerned with the authorization of ship recycling facilities (SRFs), which shall be as prescribed by ISRA.

13.4.6.2 No such term as Document of Authorization for Ship Recycling (DASR) has been used in ISRA. However, the DASR is covered under the certificate of authorization for SRF and RRC in the act and lays down compliant procedures for issuance, withdrawal, amendment or cancellation thereof.

13.4.6.3 As per sections 41 to 43 of ISRA which provide the basis for crafting of rules and regulations in ancillary to the act in order to enhance and detail out the intricacies of implementation and enforcement, the requisite documentation for such certification to authorize ship recycling shall be duly dealt with under such rules and/or regulations as and when it is prescribed. In the meanwhile, the requirement shall be implemented, administered and enforced under the provisions of the SBC 2013 (Revised).

* Section 5 of ISRA 2019 has excluded the survey requirement of new and existing warships, naval auxiliaries and government-owned ships.

† ISRA, sec. 8.

‡ ISRA, sec. 16.

§ ISRA, sec. 1(f).

¶ Edit Desk, “Shipping Ministry Notified National Authority for Ships Recycling”, SME Street. Available at <https://smestreet.in/sectors/logistics/shipping-ministry-notified-national-authority-for-ships-recycling/> (accessed 10 December 2020).

13.4.7 *Resolution MEPC.222(64): 2012 Guidelines for the survey and certification of ships under the Hong Kong Convention*

13.4.7.1 ISRA precluded the application of its Chapter III, related to survey and certification of ships, to all new and existing warships, naval auxiliary or other ships owned or operated by the government for the time being and all ships below 500 gross tonnage.* This is compliant with Resolution MEPC.222(64) and consistent with the article 3 of the Hong Kong Convention.

13.4.7.2 ISRA empowers the national authority, or the person or organization authorized by central government, to conduct different types of surveys of the ships as detailed in this resolution.†

13.4.7.3 The act not only provides for conducting surveys but also mandates its certification by the prescribed authority.

13.4.7.4 However, the intricacies of the resolution are not mentioned herein as section 42 categorically provides that the central government may, by notification, make rules for carrying out the provisions of this legislation and the detailed provisions as incorporated in the resolutions shall be the subject matter of the rules prescribed under the act upon enactment. On the other hand, given that the SBC 2013 (Revised) is still in force and has established an administrative structure with the other aligned ministries who are responsible for maritime activities concerning ship surveys and inspections, the requirements of the resolution are well implemented.

13.4.7.5 Thus, ISRA adopted the guidelines with scope for making more stringent rules or regulation as detailed in the guidelines.

13.4.8 *Resolution MEPC.269(68): 2015 Guidelines for the development of the Inventory of Hazardous Materials*

13.4.8.1 ISRA 2019 has been drafted as a very comprehensive legislation to enact provisions as to facilitate safe and environmentally sound recycling, without compromising the safety and operational efficiency of ships. The act is not exclusive as yet but shall further craft the relevant ancillary rules and regulations to aid in enforcement and implementation of the residual provisions, if required. Thus, as defined categorically in clause 2(h), the implementation of this act shall be guided by the prescribed rules, as formulated under the relevant provisions of ISRA.

13.4.8.2 The act understands the need to provide ship-specific information on the actual hazardous materials present on board, in order to protect health and safety and to prevent environmental pollution at SRFs has incorporated essential requirements for the practical and logical development of the inventory.

13.4.8.3 The definition clause itself describes “Certificate on inventory of hazardous materials”, inferring the mandates to enlist the hazardous materials as defined therein in the inventory and to maintain the said purporting the furtherance of the proposed enactment.

13.4.8.4 ISRA specifically mandates, as under clause 8(2), the terms and conditions, the format and the manner for granting the certificate on IHM shall be such as may be prescribed, thereby implying that there must be an IHM and that such inventory shall be certified in accordance with the provisions of the law.

13.4.9 *Summary*

13.4.9.1 ISRA 2019 has integrated the requirements under the six IMO resolutions, discussed earlier, into its primary legislation. This legislation has also drawn out the requirement, process and powers to draft appropriate secondary and or ancillary legislation, by way of rules and regulations.

13.4.9.2 Given that under ISRA, no rules and regulations have yet been framed, the SBC 2013 (Revised), even as the secondary legislation, is still in force and implements, administers and enforces the requirements of the said IMO resolutions.

* ISRA 2019, sec. 5.

† ISRA 2019, sec. 7.

13.4.9.3 Moreover, the strict compliance of the guidelines shall only be mandatory upon the entry in force of the Hong Kong Convention, until then, the Indian legislative provision in force and those sought to be enforced are in surplus of compliance of international standards and requirements.

14 Administrative and implementation analysis of Hong Kong Convention under the domestication process

14.1 Agencies administrating the shipbreaking process

14.1.1 Various agencies are involved in the process of shipbreaking in India and Indian national regulatory framework. For the better execution of SBC 2013 (Revised), it is equally vital to ascertain all the agencies that associate itself with the working and process of shipbreaking, which are:

- .1 The State pollution control board - the Board or Committee constituted under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
- .2 Atomic energy regulatory board (AERB) under Department of Atomic Energy;
- .3 State maritime board (SMB) constituted by the state governments under official gazettes as per the role and functions stipulated under the Indian Port Act, 1908 and all the authorities entrusted by and empowered thereunder;
- .4 Port trust/authority;
- .5 Directorate general of the Factory Advice Service & Labour Institute, which is a technical arm of the Ministry of Labour and Employment;
- .6 The authority constituted under the provisions of Merchant Shipping Act (44 of 1958), 1958;
- .7 The officers and authorities appointed and empowered by the Factories Act, 1948;
- .8 The Petroleum and Explosives Safety Organization (PESO);
- .9 National Institute of Occupational Health (NIOH) or Indian Council of Medical Research (ICMR) institutions, involved for facilitation of health compliances (optional);
- .10 Registered recyclers/MoEFCC-approved agencies such as key centres of shipbreaking industry in India: Alang & Sosiya and Sachana (Gujarat); Tadri and Maipe (Karnataka); Baypore, Cochin, and Azhical (Kerala); Visakhapatnam (Andhra Pradesh); Valinokan and Tuticorin (Tamil Nadu); Ministry of Steel; and
- .11 Director General of Shipping.

14.2 Introduction of the administration of Ship Recycling

14.2.1 Ship recycling, during the early stages in the 1980s, followed their own systems of breaking ships, with no organized framework or planned strategy. Gradually, due to various prevailing factors, ranging from better technology, public outcry on human rights, the IMO initiative on safe, secure and efficient shipping, to the initiative of the Supreme Court of India to prescribe national standards for recycling vesting on grave issues such as environmental safety, labour safety security, human rights, among other issues, India has come a very long way, in consolidating its ship recycling industry.

14.2.2 Alang is one of the world's largest shipbreaking sites and accounts for more than 90% of ship recycling volume in India.*

14.2.3 The Indian recycling industry has successfully graduated from an unorganized shipbreaking industry, to being compliant with the requirements of the Hong Kong Convention.†

* S. Basu, "South Asia: world's ship scrapping yard", *Down to Earth*, 4 July 2015. Available at <https://www.downtoearth.org.in/news/south-asia-worlds-ship-scrapping-yard--40995> (accessed 20 December 2020).

† R. Agarwal, "Ship Recycling in Alang – The Changing Scenario", *Safety4Sea*, August 2018. Available at <https://safety4sea.com/ship-recycling-in-alang-the-changing-scenario/> (accessed 19 December 2020).

14.2.4 To explain administration and implementation, the following process of Alang Ship Recycling has been used as an example:

- .1 The recycling process is administered by GMB also described as the board.*
- .2 Pursuant to the Indian Ports Act 1908, the responsibility for the development of so-called minor ports[†] in one of the maritime states of India, vest with the concerned state government. No permission is required from the central government to establish a minor port.
- .3 They are placed in the Concurrent list of the Constitution and are administered under the Indian Ports Act, 1908.
- .4 Most states have established the so-called maritime boards at the state level – the SMBs are responsible for formulation of waterfront development policies and plans, regulating and overseeing the management of minor ports, attracting private investment in the development of such ports, enforcing environmental protection standards etc.
- .5 For the maritime states the maritime boards have become the dominant public port management model.
- .6 The maritime boards have their legal basis in various state acts such as the Gujarat Maritime Board Act, 1981 (the first maritime board in India; GMB Act).

14.3 Gujarat Maritime Board

14.3.1 This section highlights the administrative structure of GMB; its establishment; structure; various departments, roles, powers and functions of the board; various laws affiliated with its daily functioning; legal and policy framework; details of infrastructure development by the board and an overview of the ship recycling yard.

14.3.2 Alang has seen a major changeover as far as environmental protection and safety standards are concerned. On implementing the directions of the Hon'ble Supreme Court of India, based on the guidelines of the Hong Kong Convention, the concept of "green ship recycling" has come into existence, which focuses on the environment and safety of workers.

14.3.3 The concept of green ship recycling looks into environmentally sound management (ESM) of parts of the ships which may cause harm and endanger both marine and human lives and to conserve, protect and prevent the marine ecosystem from deteriorating by properly discarding shipbreaking-related wastes among other purposes.

14.3.4 The recycling process is administered by GMB, which is known for the following:

- .1 It is a well-recognized leader in the Indian maritime scenario, with its expertise entrenched into port development, ship-building, ship recycling, privatization, specialized cargo handling etc.[‡]
- .2 GMB is also the first maritime board of the country established in 1982,[§] with a vision to enhance and harness ports and international trade as a means of economic development.
- .3 With anticipatory thinking and strategic location at a long coastline of 1,600 kms, GMB charted a different and unexplored route of port development in the 1980s. This was the era when major ports enjoyed a monopoly over sea freight, with very little or no port capacity with state governments.
- .4 Over the next three decades, GMB institutionalized the concept of integrated port-led development of its minor ports, supported by last-mile rail/road connectivity. This was effectively implemented by bringing the right private partners through several pioneering models of privatization such as privatizing port services, private jetties, joint venture ports and Greenfield ports.

* Bare Acts Live. Available at <http://www.bareactslive.com/Guj/guj335.htm> (accessed 19 December 2020).

[†] "Major port means any port, which the central government may by notification in the official Gazette declare or may under any law for the time being in force have declared to be a major port. Ports other than major ports are classified as minor ports". See G. Kuntoji and S. Rao, "A review on development of minor ports to improve the economy of developing country", *Aquatic Procedia* 4 (2015): 258.

[‡] Gujarat Maritime Cluster [website], 2020. Available at <http://maritimecluster.org/gmb/introduction-gmb/> (accessed 20 December 2020).

[§] Gujarat Maritime Cluster.

- .5 GMB has effectively implemented a unique business model, which has shown the pathway to growth and has successfully placed the non-major ports (also known as minor ports) of Gujarat as benchmark for other states to follow.

14.4 *The power of the board to execute works and provide appliances*

14.4.1 GMB is empowered to execute such works within or without the limits of ports and provide such appliances as it may deem necessary or expedient.

14.4.2 Such work and appliances may include:

- .1 Wharves, quays, docks, stages, jetties, piers, place of anchorage and other works within the port or port approaches or on the foreshore of the port or port approaches in the state, with all convenient arches, drains, landing places, stairs, fences, roads, bridges, tunnels and approaches, and buildings required for the residence of the employees of the board as the board may consider necessary.
- .2 Buses, locomotives, rolling stock, sheds, hotels, warehouses and other accommodation for passengers and goods and other appliances for carrying passengers and for conveying, receiving and storing goods landed, or to be shipped or otherwise.
- .3 Moorings and cranes, scales and all other necessary means and appliances for loading and unloading of vessels.
- .4 Reclaiming, excavating and raising any part of the foreshore of the port or port approaches which may be necessary for the execution of the works authorized by the GMB Act.
- .5 Break waters and other works as may be expedient for the protection of the port.
- .6 Dredgers and other machines for cleaning, widening, deepening and improving any portion of the port or port approaches or of the foreshore of the port or port approaches.
- .7 Lighthouses, lightships, beacons, buoys, pilot boats and other appliances necessary for the safe navigation of the port and the port approaches insofar as it relates to state functions.
- .8 Vessels, tugs, boats, barges and launches and lighters for the use within the limits of the port or beyond those limits, whether in territorial waters or otherwise, for the purpose of towing or rendering assistance to any vessel, whether entering or leaving the port or bound elsewhere and for the purposes of saving or protecting life or property and for the purpose of landing, shipping or trans-shipping passengers or goods.
- .9 Sinking of tube-wells and equipment, maintenance and use of boats, barges and other appliances for the purpose or the supply of water at the port.
- .10 Engines and other appliances necessary for the extinguishing of fires.
- .11 Land abutting the seacoast including creeks.
- .12 Ferry boats and other works and equipment appertaining to the running ferry service or between the ports.
- .13 Construction of models and plans for carrying out hydraulic studies.
- .14 Dry docks, slipways, boat basins and workshops to carry out repairs or overhauling of vessels, tugs, boats, machinery or other appliances.

14.5 *Infrastructure development by GMB*

14.5.1 GMB undertook the development of the following infrastructure:*

- .1 **Road facility** – A service road having rigid pavement on a stretch of 10 km has been developed to facilitate the shipbreaking plots.

* Gujarat Maritime Board, "Ship Recycling Yards" [website], 2020. Available at http://gmbports.org/ship_recycling_yards (accessed 25 December 2020). Note that these (and the related) statistics were captured as presented on the website on the date it was accessed. These statistics and numbers will likely have changed. The numbers, therefore, are just indicative of the work carried out by GMB. This applies to data listed in the further subsections.

- .2 **Housing Project** – A labour colony under phase I has been constructed for 1,008 labourers working in the yard. Facilities such as canteen, office, shops and internal roads are also provided along with accommodations that have basic provisions such as water supply, sanitation and electrification.
- .3 **Sanitation facility** – Adequate sanitation units at different places have been constructed for labourers working in the shipbreaking yards in India.
- .4 **Water supply facility** – A hydraulic grade line sump of 2.5 million litre capacity has been constructed at Trapaj Headworks to draw water from Mahi-Pariej line to Alang-Sosiya yard through express pipeline. Separate storage and internal distribution system have been developed for water supply network for shipbreaking plots in both yards.
 - .1 Alang: Overhead tank of 1.2 million litres and underground sump of 1 million litres.
 - .2 Sosiya: Overhead tank of 0.7 million litres and underground sump of 0.6 million litres.
- .5 **Public water stand-post** – Stand-posts for potable water have been provided to labourers working in the Alang-Sosiya yard.
- .6 **Fire station** – A fire station has been provided in the Alang-Sosiya shipbreaking yard.
- .7 **Safety training institute** - A building for a safety training institute to educate the labourers for shipbreaking skills and Labour welfare activities have been constructed.
- .8 **Electrification** - Necessary road lights illumination along with other required facilities have been provided.

14.6 Alang-Sosiya Ship Recycling Yard

14.6.1 The Alang-Sosiya Ship Recycling Yard began operating in the year 1982/83 with 5 ships and 24,000 light displacement tonnage (LDT). By the year 2011/12, it had 415 ships and 3.85 million light displacement tonnage (MLDT).^{*} Basic features:

- .1 Blessed with high tidal range, long beach with gentle slope and firm ground facilitating beaching of ships just at the threshold of the plot.
- .2 153 plots[†] developed on 10-km long coast.[‡]
- .3 Serves the society by offering employment opportunity to people (direct: @ 15,000 and indirect: @ 5 lakh people) with net positives environmental impacts.
- .4 Total plot area of yard - 398,803 sq. m.[§]

14.6.2 Marine Features^{*}

- .1 Current: 3.5 knots approximately.[¶]
- .2 Waves: No significant wave disturbance has been observed near the shore approximately.
- .3 Beaching Ground: Firm and sandy; suitable for beaching of scrap vessels.

^{*} On the day observed.

14.6.3 Anchorage

- .1 Vessel size: Up to 12 M draft and DWA can anchorage.^{**}
- .2 Position: 5.1' × 250 (T) from Ghogha Light House.^{††}

^{*} Gujarat Maritime Board, "Ship Recycling Yards".

[†] J.M. Baxi Group, "Demolition of Vessels at Alang: A Brief Look", Tidings, Issue XXII. Available at <http://jmbaxigroup.com/newsletter/issue-xxii/demolition-of-vessels-at-alang-a-brief-look> (accessed 20 December 2020).

[‡] T. Talaja, "Environmental Impact Assessment and Environmental Management Plan", Gujarat Maritime Board. Available at https://www.jica.go.jp/english/our_work/social_environmental/id/asia/south/india/c8h0vm00009ulddw-att/c8h0vm0000ahd7tr.pdf, p 1 (accessed 23 December 2020).

[§] Gujarat Maritime Board, "Ship Recycling Yards".

[¶] Gujarat Maritime Board, "Ship Recycling Yards".

^{**} Gujarat Maritime Board, "Ship Recycling Yards".

^{††} Gujarat Maritime Board, "Ship Recycling Yards".

- .3 The holding ground, stiff mud and sand is good, while at anchor at DWA due care must be exercised especially during spring tide.

14.6.4 Pilotage is not compulsory.

14.6.5 Location Reference Chart: Admiralty Chart No.: 208 /1564

14.6.6 Port limit is covered under extended port limit of Talaja Port, as per the Government of Gujarat, Ports & Fisheries Department Notification, dated 8 September 1995.

14.6.7 Reference Point: Alang Lighthouse: Lat. 210°21' N, Long. 720°12' E

14.6.8 Road connection: Linkage to Bhavnagar-Veraval State Highway by two lane road via: Tarapaj (about 10 km) and also via Sanodar-Kukad village (about 23 km).*

14.6.9 Rail Links: Nearest railway station is Bhavnagar (55 km).†

14.6.10 Nearest airport/godown: Bhavnagar City

14.6.11 Tidal data‡

Tide	Height above chart datum [CD]
Mean high water spring tide	(+) 7.80 m
Mean low water spring tide	(+) 1.60 m
Mean high water neap tide	(+) 6.30 m
Mean low water neap tide	(+) 3.00 m
Mean sea level	(+) 4.70 m

14.6.12 Important features of the yard

- .1 Asia’s largest well-established ship recycling yard.
- .2 S.T. Mont was the largest ship ever recycled with 83,598 LDT in December 2009.
- .3 Serves the nation by producing about 4.5 million tons per annum of re-rollable steel without exploiting natural resources.

The process of ship recycling itself is an ecology- and environment-friendly industrial activity, which is not only generating re-rollable steel but also facilitate society by direct and in direct employment.

* Gujarat Maritime Board, “Ship Recycling Yards”.

† Gujarat Maritime Board, “Ship Recycling Yards”.

‡ Gujarat Maritime Board, “Ship Recycling Yards”.

14.6.13 Number of ships & LDT

Year	Ship in no.	LDT in MMT
From 1982 to 2011	5,509	39.61
2011-2012	415	3.85
2012-2013	394	3.84
2013-2014	298	3.05
2014-2015	275	2.49
2015-2016	249	2.43
2016-2017	259	2.76
2017-2018	253	2.43
2018-2019 (Up to 31 Jan. 2019)	193	1.52
Total	7,845	62.01*

14.6.14 Safety awareness management

- .1 To bring awareness among the labourers working in the yard, GMB developed a safety training and labour welfare institute at Alang, in 2003, where every person related to any type of work in Alang Yard is given safety training by the qualified safety officers of GMB and only after that becomes eligible for employment in the yard.
- .2 Every person needs to have “basic safety for all” training of 6 days to work in Alang. A specialized safety training course on “gas cutter safety training” of 2 days for persons engaged in cutting operations is also conducted. These trainings from the GMB are free of cost and all trainees are provided with free breakfast and evening snacks during the training. Certificates are also given at the end of the training. More than 120,000 workers have been given safety training as of 25 December 2020.
- .3 Safety indicated banners and posters are affixed in the plots as well as at various places along the roads of the yard.

14.6.15 Welfare activities

	Programme	For	Persons benefitted
1.	Medical camp (every month)	Workers, women and children	600-800
2.	Complete school kit (uniform, shoes, socks, notebooks, bags, sports dress, sports shoes, complete compass box, tiffin and bottle)	School children	400
3.	15 August/26 January celebrations	Workers and children	1,000
4.	Movie show (during school visits)	Children	200
5.	Movie show (every Saturday night)	Workers	500-1,000
6.	Gandhi Jayanti celebration	Children and women	500
7.	Cricket tournament	Workers	150 (12-14 teams)
8.	New Year celebration	Workers	2,500-3,000
9.	Kite festival	Children	300
10.	Safety week celebration	Workers	1,000

* Gujarat Maritime Board, “Ship Recycling Yards”.

14.6.16 Health management

- .1 Local hospital run by Indian Red Cross Society, which is financially assisted by the GMB.
- .2 Dedicated 108 ambulances operational from January 2013.
- .3 One mobile hospital with a doctor is operated by the Ship Recycling Association.
- .4 Fully fledged hospital with 30 beds was constructed by the GMB and to be made operational shortly by the Employees' State Insurance Corporation (ESIC).
- .5 About 15,000 labourers are registered with the ESIC and the smart card to be issued by ESIC to each labourer.

14.6.17 Firefighting

- .1 Firefighting arrangements in the yard are being looked after by the GMB. The firefighting force headed by a fire officer is equipped adequately.
- .2 The following equipment is available to the force:
 - .1 Water browser 16 kL – 2 Nos
 - .2 Multipurpose Fire tender – 4 Nos
 - .3 High pressure mini tender – 1 Nos
 - .4 Water tanker 2 – Nos
 - .5 Ambulance van – 1 No.
- .3 The firefighting force has the following operational structure:
 - .1 Station Officer – 1
 - .2 Pump Operator cum Driver – 2
 - .3 Fire Jamadar 2
 - .4 Fireman – 13

14.6.18 Allied services

- .1 Facilities in the form of building of land is provided by GMB to the following institutes for working at Alang:
 - .1 Housing facilities
 - .2 Fire station
 - .3 Police station
 - .4 Post office
 - .5 Bank
 - .6 Telephone exchange
 - .7 Hospitals
 - .8 108 ambulances
 - .9 Community sanitary complexes
 - .10 Customs/excise office
 - .11 Assistant Labour Commissioner
 - .12 Dy. Director of Industrial Safety & Health
 - .13 Notified area officer
 - .14 Bhavnagar blood bank (AIDS Cell)
 - .15 Red Cross Hospital
 - .16 Training cum welfare institute

- .17 Solid waste management facility
- .18 Lighthouse

14.7 Structure of implementation of ISRA in ship recycling in Alang

14.7.1 Alang has a well-laid-down system and requirements for implementing the legal and administrative requirements, as covered in the following provisions.

14.7.2 Initial process of recycling:

- .1 Memorandum of Agreement between buyer and seller
- .2 Payment protocol
- .3 Notice of readiness for delivery

14.7.3 Pre-arrival of vessel: Documents and information are required to be furnished to the relevant authorities, at least 4 days prior to arrival of the vessel at Alang, as mentioned below:

- .1 Agency appointment letter on the letterhead of registered owner
- .2 Relevant pages of trim and stability booklet showing light ship of vessel
- .3 General arrangement plan (GA plan)
- .4 Crew list
- .5 Personal effects of crew with currency declaration
- .6 Last 5 cargoes and names of last 5 ports of the vessel
- .7 Ships currency list
- .8 Copy of last port clearance
- .9 Copy of valid Protection and Indemnity Clubs (P&I Clubs)
- .10 Copy of certificate of insurance or other financial security in respect of liability for the removal of wrecks
- .11 Provision list
- .12 Pyrotechnic signal list
- .13 Gas cylinder list (CO₂/O₂/acetylene/Freon™/halon/others) (with details full / empty / half and kg)
- .14 Bond store list and bunker figure
- .15 Hull number of the vessel
- .16 Tank plan
- .17 Copy of the following certificates:
 - .i Registry certificate
 - .ii Safety radio certificate
 - .iii Safety equipment certificate
 - .iv Safety construction certificate
 - .v Load line certificate
 - .vi De-ratting certificate
 - .vii IOPP certificate
 - .viii International tonnage certificate
 - .ix Minimum safe manning certificate

14.7.4 Beaching requirements:

14.7.4.1 Bill of entry: Letter to customs for the purposes of assessment for bill of entry, for the vessel, intended to be recycled. This will be accompanied by:

- .1 Memoranda of Agreement
- .2 Letter for provisional duty assessment
- .3 Undertaking for submission of original Memoranda of Agreement.
- .4 Letter assigning importers code number & IGST Code No. & bank A.D. code
- .5 GMB permission letters, pollutions NOC & AERB.
- .6 Physical delivery, NOR
- .7 LDT proof, ship Rg. last P.C., rummaging report, master certificates and others
- .8 Letter of credit dated 26 February 2018, opened in Indian Overseas Bank, Bhavnagar
- .9 Declaration and undertaking I & II (on stamp papers)
- .10 Undertaking for gas cylinder
- .11 Undertaking – III & IV
- .12 Provision inventory and bunkers report
- .13 Survey report dated 26 February 2018
- .14 Declaration form in duplicate as per Rule 11 of Customs Valuation Rules, 2007
- .15 Provisional assessment bond
- .16 Work sheet (B.E.)

14.7.4.2 Beaching permission: After the bill of entry is filed, the importer of the ship will need to request that GMB them the necessary permission to beach the ship at the negotiated plot of the ship recycling yard, at the specific time, tide on and date.* The following are all documents required for seeking the permission:

- .1 Application for beaching permission
- .2 GMB Charges paid by Ch. No, amount and date
- .3 Copy of customs duty paid challan and custom beaching permission letter
- .4 GPCB authorization
- .5 Memorandum of Agreement
- .6 Physical delivery
- .7 Notice of readiness
- .8 Survey report
- .9 Master certificates as under:
 - .i Ammonia gas and other dangerous gases free certificate
 - .ii CO₂ declaration
 - .iii No hazardous material certificate
 - .iv No dues certificate
- .10 Undertaking of seller & buyer
- .11 Inventory of potentially

* Bare Acts Live.

- .12 NOC from Ship Recycling Industries Association (SRIA) (India) plot holder in case width of vessel is greater than width of plot
- .13 Member's certificate from Gujarat Enviro Protection and Infrastructure Ltd (GEPIL)
- .14 Copy of explosive licence

14.7.4.3 Pre-phase plan document: A letter is addressed to GPCB, submitting the following documents for the public-private partnership (PPP) document:

- .1 Survey report (Xerox copy)
- .2 Cranes and winches certificate (Xerox copy)
- .3 General arrangement plan / fire plan of ship
- .4 GMB allotment letter / renewal letter (Xerox copy)
- .5 Authorization from GPCB (Xerox copy)
- .6 Approval of recycling facility management plan (RFMP) from GPCB (Xerox copy)
- .7 Explosives licence (Xerox copy)
- .8 Receipt of factory licence (Xerox copy)
- .9 Memorandum of Agreement (Xerox Copy)
- .10 All manifest of ship (Xerox copy)
- .11 GMB beaching permission of ship (Xerox copy)
- .12 GEPIL certificate (Xerox copy)
- .13 List of trained labourers
- .14 AERB certificate (Xerox copy)

14.7.5 Process involved for procuring beaching permission: Permission from the GMB is sought to remove of oil and loose items. The following documents are submitted:

- .1 Preparation phase plan
- .2 GMB beaching permission
- .3 Man entry certificate
- .4 Oil survey report
- .5 Custom inventory
- .6 Hazardous wastes inventory
- .7 Master certificates on:
 - .i CO₂/firefighting system declaration
 - .ii CO₂ release
 - .iii No hazardous chemicals
 - .iv No nuclear waste/radioactive material
- .8 ESIC certificate
- .9 Radio room panchnama
- .10 Police panchnama for pyrotechnic
- .11 Calibration certificate for gas analysers
- .12 RFMP approval from GPCB

14.7.6 Decontamination certificate: After the ship is beached, a letter is addressed to GPCB to inspect the ship, for the issuance of the decontamination certificate, attaching the following documents:

- .1 Authorization and RFMP from GPCB
- .2 GEPIL Certificate
- .3 Manifest from GEPIL
- .4 Survey report
- .5 Custom inventory
- .6 Pollution hazard inventory
- .7 Memorandum of Agreement
- .8 Beaching permission from GMB and customs
- .19 Master certificate
- .10 Undertaking
- .11 Oil removal:
 - .i Oil removal started on: DT
 - .ii Oil removal completed on: DT
 - .iii Oil sale/disposed bills and manifests:
 - .iv Date of GPCB visit for oil removal:
- .12 Man entry and naked light certificate
- .13 Compliance report

Part C: Recommendations for the Government of Bangladesh for Accession to the Hong Kong Convention

15 Recommendations for the Government of Bangladesh (GoB) for accession and for implementing the provisions of the Hong Kong Convention in its domestic jurisdiction

15.1 India is one of the largest ship recycling States and the closest competitor of Bangladesh.* On 29 November 2019, India acceded to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009 (the Hong Kong Convention).† The accession to the Convention by India signifies a major step forward in the campaign for safe and environmentally sound shipbreaking in the world. Bangladesh, China, India, Pakistan and Turkey are the world's top five shipbreaking countries, representing more than 98% of the global shipbreaking in LDT measurement.‡ Notably, the Hong Kong Convention will only enter into force when:

- .1 at least 15 States have ratified or acceded to it;
- .2 the combined merchant fleets of the States (paragraph (1) above) constitute not less than 40 per cent of the gross tonnage of the world's merchant shipping; and
- .3 the combined maximum annual ship recycling volume of the States mentioned in paragraph (1) above during the preceding 10 years constitutes not less than 3 per cent of the gross tonnage of the combined merchant shipping of the same States.

15.2 As of the date of this document, the Hong Kong Convention has been ratified or acceded to by 15 States, namely Belgium, the Republic of the Congo, Denmark, Estonia, France, Germany, Ghana, India, Japan, Malta, the Netherlands, Norway, Panama, Serbia and Turkey. The combined merchant fleets of these States constitute 29.62% of the gross tonnage of the world's merchant fleet and their combined ship recycling volume constitutes 13.94 million gross tonnage (about 2.6% of the gross tonnage of the 40% of world merchant fleet).

15.3 It appears that fervent responsibility exists among the larger shipbreaking States to come forward and contribute to the early entry into force of this convention and guarantee a safe, healthy, clean environment and sustainable jobs for the shipbreaking workers. The Hong Kong Convention sets out a minimum and the first step towards creating a level playing field for a sustainable future of ship recycling on a global level. Ratification by Bangladesh would therefore not only help achieve the objective of this convention but also assist this giant ship recycling State to operate sustainably, remain competitive in the global market without compromising its profitable operations. To achieve this objective the following actions may be recommended. These recommendations may necessitate inclusion and/or amendment of several provisions in the domestic legislations as currently enforced in Bangladesh.

15.4 The opinion of the consultants is focused on mandatory provisions of the Hong Kong Convention which should be reflected in the domestic regime of Bangladesh before ratification by the government.

15.5 The recommendation and way forward are suggested under seven headings:

- .1 Substantive legal provisions
- .2 Provisions related to definition and terminology
- .3 Provisions related to administration
- .4 Provisions related jurisdiction
- .5 Provisions related to practice of ship recycling & procedure

* I. Ahmed, "The Origin and Evolution of the Shipbreaking Regime in India: A Critical Perspective", vol. 36, *Ocean Yearbook*, (forthcoming June 2022).

† I. Ahmed, "Safe & Environmentally Sound Recycling of Ships: A Stocktaking of the Current State of International Law", 31 *Fordham Envtl. L. Rev.* 63 (2020a). University of Fordham School of Law, USA. Available at <https://ir.lawnet.fordham.edu/elr/vol31/iss1/7>.

‡ Global Integrated Shipping Information System (GISIS), "Status of Treaties", IMO. Available at <https://gisis.imo.org/Public/ST/Treaties.aspx> (accessed 22 December 2020).

- .6 Provisions related to implementation of guidelines of the Hong Kong Convention
- .7 Provisions related institutional reform

15.6 *Substantive legal provisions*^{*}

15.6.1 In accordance with the Hong Kong Convention, a ship recycling facility (SRF) authorized by a party can accept and recycle party- and non-party ships if the ships meet the requirements of the Hong Kong Convention. On accession to the Hong Kong Convention, the Bangladesh ship recycling regime should ensure equal treatment to both party and non-party ships and ensure that non-party ships fulfil the same stringent requirement as party ships where those are recycled in Bangladesh.[†]

15.6.2 The Ship Breaking and Recycling Rules 2011 (SBRR 2011) should incorporate provisions ensuring that the inventory of hazardous material (IHM) is updated regularly by shipowners and verified by flag States in regular interval. The checks should be carried out as far as practicable for shipowners instead of only visual and sampling check currently applicable.[‡]

15.6.3 Demonstration of clear and a substantial degree of discrepancy in preparing the IHM should be made a prerequisite for the inspection of end-of-life (EoL) ships by a port State control (PSC) in Bangladesh. SBRR 2011 should incorporate provisions on avoiding a ship being unduly delayed and compensations payable to EoL shipowners for the loss or damage caused by the IHM inspection as prescribed in the Hong Kong Convention in relation to such inspection by the PSC (Article 11).[§]

15.6.4 SBRR should ensure that a third party who is not an owner of an authorized SRF but operates the SRF on rental basis may assume responsibility of a facility owner and would remain fully responsible for all recycling activities. The responsibility of the ship recycling company needs to be made clear in law.[¶]

15.6.5 SBRR 2011 should review and set the standard of personal protective equipment (PPE) and material handling equipment (MHE) in clear terms. The law should ensure that the minimum standard is enough to cover the special risk of health and safety generally involved in ship recycling works.^{**}

15.6.6 SBRR 2011 should require the ballast water to be disposed of by churning the mass first in order to prevent the entry of ceresin organisms into the local environment before taking the ships to the facility. The International Convention for the Control and Management of Ships' Ballast Water and Sediments (Ballast Water Management Convention; or BWM Convention) has been enforced internationally since 8 September 2017 and in Bangladesh since 7 September 2018.^{††} The IMO 2012 Guidelines requires ballast water to be handled in accordance to with relevant national requirements.^{‡‡} The disposal of ballast water of EoL ships should therefore be in line with the obligation for Bangladesh under the BWM Convention.^{§§} There should accordingly be a sanction for not following this rule while de-ballasting of EoL ships in the coastal territories of Bangladesh or a requirement to show justification for making any exception to this rule.^{¶¶}

^{*} References hereunder in the section are to articles of, regulations of, and annex to the Hong Kong Convention, unless specified otherwise.

[†] Hong Kong Convention, reg. 17.

[‡] Hong Kong Convention, reg. 5.

[§] Hong Kong Convention, art.11.

[¶] Hong Kong Convention, art. 2.12.

^{**} Hong Kong Convention, reg. 22.2.

^{††} See International Maritime Organization, "Status of IMO treaties". Available at <https://wwwcdn.imo.org/localresources/en/About/Conventions/StatusOfConventions/Status%20-%202021.pdf> (accessed 22 January 2021).

^{‡‡} IMO 2012 Guidelines, clause 3.4.3.5.

^{§§} Noting that the domestic courts do not ignore the obligations of international laws. If there is no appropriate domestic law in a matter of dispute, the Courts may take resort to the provisions and principles of international instruments. In a recent case, the Appellate Division of the Supreme Court of Bangladesh has pragmatically held the principle that unless provisions of international instruments are contrary to the domestic laws, the beneficial provisions of such instruments may be referred to and implemented in appropriate cases. See Hasanat, "Using International Law in National Courts", 50.

^{¶¶} IMO 2012 Guidelines (resolution MEPC.210(63)), clause 3.4.3.5.

15.6.7 The domestic law of Bangladesh should require flag States to ensure that both EoL and existing ships coming to the territory of Bangladesh are surveyed and certified as prescribed in the annex to the Hong Kong Convention.*

15.6.8 On accession to the Hong Kong Convention, the domestic law of Bangladesh should incorporate the duty of the competent authority (CA) to cooperate with other party States in the detection of violations by ships flying its flags and the SRF operating under its jurisdiction and incorporate a duty to report promptly measures taken against the ships flying the Bangladeshi flag or SRF operating in Bangladesh. This should include incorporating a duty upon the CA to initiate proceedings and impose sanction against a ship flying its flag or SRF operating under its jurisdiction.†

15.6.9 Bangladesh law should incorporate a duty to prohibit installation or use of hazardous material listed in appendix I on ships flying its flags. In addition to EoL ships the prohibition should extend to the new building and operating ships while in ports, shipyards, ship repair yards and offshore terminals.‡

15.6.10 On ratification of the Convention, the domestic law of Bangladesh should incorporate a commitment or duty to cooperate with other State parties to the Convention for the purpose of effective implementation of, compliance with and enforcement of this Convention.§

15.6.11 Bangladesh law should recognize that each new ship being built in Bangladesh should carry an IHM certificate which shall be verified and issued by its flag State administration or recognized organization (RO).¶

15.6.12 On accession to the Hong Kong Convention, Bangladesh law should recognize that all existing ships should comply with the IHM documentation requirements in no later than 5 years after the convention enters into force.**

15.6.13 Sections 38, 167, 168, 169 and 170 of the Petroleum Rules 1937 have been referred as the required standard for hot work certification under SBRR 2011. It is evident that only two provisions among the five cited, i.e. sections 167 and 169, are relevant to ship dismantling,†† which govern the procedure for entry into the tanks and dismantling of tank respectively. For entry into the tank, as per the Petroleum Rules 1937, a certificate from the inspector is not necessary for a person entering the tank if a safety helmet of a description approved by the chief inspector is worn‡‡. Second, for dismantling of a tank, unlike the IMO 2012 Guidelines (resolution MEPC.210(63)), the inspector does not need to issue a hot work permit or a certificate but only to certify the use of an instrument to carry out hot work which does not seem to be consistent with other relevant provisions of the SBRR 2011, or the IMO 2012 Guidelines (resolution MEPC.210(63)) on this matter.§§ Under the SBRR 2011, there is also no requirement to certify the tank as gas free by the Department of Explosives (DoEx) officials before beaching, unless the ship is a petroleum tanker.¶¶ After the arrival of the ships on the beach, it is the SOs who remain in charge of hot-work-related tasks.*** So, for ships other than tankers, certifying the instruments of cutting as per the Petroleum Rule 1937 by the DoEx inspectors at the point of anchorage does

* Hong Kong Convention, regs 10 to 14.

† Hong Kong Convention, art. 9.

‡ Hong Kong Convention, reg. 4.

§ Hong Kong Convention, art. 13.

¶ Hong Kong Convention, reg. 11.

** Hong Kong Convention, reg. 5.2.

†† Other requirements of Petroleum Rules 1937 include rule 168, which deals with tank repair; and rule 170, which deals with petroleum storage, handling, transporting, refining, blending, reclaiming and recycling. Rule 38 applies to the master of the vessel who is chiefly responsible for ensuring certification of man entry in the tank either with a safety helmet of a description approved by the chief inspector or if the chief inspector certifies the tank as safe for entry after testing the tank with vapour testing instrument. According to the Petroleum Rules 1932, Rule 30 applies to carriage of petroleum across the river by a recognized wagon ferry, and does not appear to be very relevant to shipbreaking.

‡‡ Petroleum Rules 1937, rule 167.

§§ Petroleum Rules 1937, rule 169.

¶¶ SBRR 2011, annexure II.

*** SBRR 2011, rule 17.6.

not seem to be helpful as the cutting operations do not begin until the ship arrives at the beaching facility.* Compared to the IMO 2012 Guidelines (resolution MEPC.210(63)), the provisions of Petroleum Rules 1937 are quite limited in scope on hot work. The required standard for hot work certifications under the Petroleum Rules 1937 should therefore be amended. Clause 17.6 of SBRR 2011 refers to the Petroleum Rules 1937. Currently sections 167 and 169 of Petroleum Rules 1937 seem only relevant to the procedure for entry into the tanks and dismantling of tank respectively.†

15.6.14 SRFs should have systems in place for preventing fires and explosions and for firefighting, by controlling any outbreak of fire quickly and efficiently and by quickly and safely evacuating all personnel from the facility. SBRR 2011 is currently relying only on a limited number of portable fire extinguishers, sandbox, bucket and two portable fire pumps to combat large scale fire oftentimes occurring at the SRF.‡

15.6.15 SBRR 2011 should mention the eligibility or certification requirement of safety supervisors and other technical staffs working in the facility.§ It is worth noting that currently, the Ministry of Industry (MoI) is working on developing a generic organogram of the yard with the terms of reference (ToRs) and qualifications of the different technical positions.

15.6.16 Use of necessary emergency equipment in the event of crisis and relevant provisions for regular firefighting exercises such as fire drills and drills on oil spillage should be adequately addressed in SBRR 2011.¶

15.6.17 The SRF zone should be a segregated zone based on a fire risk assessment or any other hazards they may produce. SBRR 2011 should explicitly require additional precautionary measures on the prevention of fire in those identified fire ambient zones.**

15.6.18 Emergency contingency plans should be implemented in all SRFs which should ensure that the SRFs possess the capacity to deal with developing situations, for example, plans and contingency arrangements in case of fire, explosion and pollution incidents.††

15.6.19 In order to avoid grievous bodily harm and reduce casualty at the SRF the highest category and grades of PPE should be made available at the workplace.‡‡

15.6.20 The SBRR 2011 should require that cranes, winches, chain rope, shackles are installed, maintained and validated yearly following the legal norm by refereeing specific statutes applicable to this matter. SBRR 2011 should specify the clear list of qualifications required for the operators of such instruments. The specific category should be prescribed in the guidelines prepared by the CA following clause 3.3.4.6 of the IMO 2012 Guidelines.§§

15.6.21 The SBRR 2011 should ensure that detailed procedures or guidelines for testing and inspecting ropes, chains, slings, hooks, chain-falls and hoisting and hauling equipment are available. This should include description of operations using cranes, machines, mobile equipment and aerial and man-lift systems and a clear list of qualifications required for the operators.¶¶

15.6.22 To help detect early biological effects of surreptitious hazardous substances in human bodies and to allow efficient and rapid response to these problems arising from shipbreaking activity, the availability of adequate and advanced surveillance system should be prescribed in law.***

* SBRR 2011.

† Hong Kong Convention, reg. 8.

‡ Hong Kong Convention, reg. 19.

§ Hong Kong Convention, reg. 22.

¶ Hong Kong Convention, reg. 21.

** Hong Kong Convention, reg. 20.

†† Hong Kong Convention, reg. 21.

‡‡ Hong Kong Convention, reg. 22.2.

§§ IMO 2012 Guidelines, clause 3.2.1 and appendix 2.

¶¶ IMO 2012 Guidelines, clause 3.2.1 and appendix 2.

*** Hong Kong Convention, reg. 19.

15.6.23 For the effective management of training programmes and to ensure that workers gain the ability to claim most of the benefits from the training provided to them, an amendment of the labour law should be considered by discouraging appointment of casual workers in heavy industries such as shipbreaking.*

15.6.24 SBRR 2011 should incorporate a duty to consult the workers' representatives while conducting a job-hazard assessment along with a representative of management with appropriate level of expertise.†

15.6.25 Under regulation 1.12 of the Hong Kong Convention, contractor personnel are placed on an equal footing to the SRF owners and are in a direct employment relationship with the workers recruited by them. To ensure optimum employers' liability towards their workers/employees the financial threshold or security to register a contractor in the shipbreaking industry in Bangladesh should be increased.

15.6.26 Bangladesh should ensure that an IHM certificate is issued for a period specified by the flag State administration, which shall not exceed five years. The International Ready for Recycling Certificate (IRRC) shall be issued for a period specified by the administration that shall not exceed three months.‡

15.6.27 As a State party, Bangladesh should be required to encourage continued development of technologies and recycling practices which contribute to safe and environmentally sound ship recycling. The legal mandate to encourage continued development of technologies and recycling practices should not be limited to but include the beaching method of recycling.§ Vide section 6 of the Bangladesh Ship Recycling Act 2018 (BSRA 2018), GoB has been entrusted with the power to take necessary steps for the development of technologies and recycling practices but this does not in any way mandate the government to do it or consider it. Otherwise, this could be interpreted as a discretion given to the government and not an obligation to consider. However in Hong Kong Convention, there is a general obligation upon the parties to encourage improved practices (article 1).

15.6.28 Bangladesh law should incorporate provisions where a certificate issued under the authority of a party should be accepted by the other parties and regarded for all purposes covered by the Hong Kong Convention as having the same validity as a certificate issued by them.¶

15.6.29 There is a minimum list of hazardous material that should be included in the SBRR 2011.**

15.6.30 Bangladesh law should ensure that while carrying out a final survey and issuing the IRRC, the flag State will be required to verify the authorization of the SRF issued by the CA.††

15.6.31 The flag State administration of Bangladesh should incorporate provisions regarding IHM survey of existing ships and IHM survey and IRRC for EoL ships into the relevant domestic legislation.‡‡

15.7 Competent authority of ship recycling State

15.7.1 Bangladesh should ensure that relevant information on the condition for authorization of SRF by the CA in Bangladesh is exchanged between State parties and IMO in a swift and timely manner, if requested by other parties.§§ On accession to the Hong Kong Convention, Bangladesh law should incorporate the duty of the CA to notify IMO of the specific responsibilities and conditions under which the task of authorization of SRF may be delegated to an RO as well as a duty to circulate such information among other parties.

* Hong Kong Convention, reg. 22.

† Hong Kong Convention, reg. 17, read with clause 3.3.3 of the IMO 2012 Guidelines.

‡ Hong Kong Convention, regs 11 and 14.

§ Hong Kong Convention, art. 1.4.

¶ Hong Kong Convention reg. 11.12.

** Hong Kong Convention, reg. 4, appendices 1 and 2.

†† Hong Kong Convention, reg. 11.11.

‡‡ Hong Kong Convention art. 3.1.1.

§§ Hong Kong Convention, art. 7.

15.7.2 Availability at all times of a health management staff with supervisory capacity should be ensured in SBRR 2011.*

15.7.3 SBRR 2011 should clarify the corresponding roles and responsibilities of the safety officer (SO) appointed internally by the SRF owners and the SO external to the facility designated directly by the CA.†

15.7.4 Occupational health and safety management should be dealt under independent statutory provisions instead of mere regulatory compliance policy of the company and to be appended in the ship recycling facility plan (SRFP).‡

15.7.5 Under section 15.6 of the SBRR 2011, as a condition of seeking authorization of an SRF, the ship recyclers are required to provide a future undertaking (in addition to other conditions that must be fulfilled before the approval) to ensure implementation of certain goals and safety and environmental management system as per Labour Act 2006 (LA 2006) and the Environmental Conservation Act 1995 (ECA 1995) (as amended in 2010) without setting any deadlines to meet these objectives. The SBRR 2011 should therefore clarify specific standards to be achieved by each SRF after being authorized by the CA including setting a clear deadline to comply. Notably, the necessary conditions are not limited to, but include, the designing of training programmes, emergency preparedness and system of control and monitoring, reporting system, identification of roles and responsibilities of the supervisor, contractors, workers and reporting requirement.§

15.7.6 Following the International Labour Organization 2004 Guidelines (ILO 2004 Guidelines) and the IMO 2012 Guidelines (resolution MEPC.210(63)), the SRFP approved by the CA should identify one or more key personnel who may possess the level of expertise and training necessary to effectively ensure that safe conditions are maintained during operations at the SRF, including one or more CP for the performance of specific work. Depending upon the size of the SRF and the number of workers, the SRFP should include a hierarchy of safety management staff, including an overall manager or supervisor on a full-time basis.¶

15.7.7 A chain of command should be established to minimize confusion and ensure that workers do not have any doubt about what to do and who has the authority to make decisions during the application of the contingency plan. Responsible individuals should be pre-selected to coordinate the work of emergency response team (IMO 2012 Guidelines (resolution MEPC.210(63)), section 3.3.2).

15.7.8 SBRR 2011 used the term SO for the same task to be done by the competent person (CP) as used in both Hong Kong Convention and IMO 2012 Guidelines (resolution MEPC.210(63)). SBRR 2011 should clarify if the SOs external to the SRF, if any, can replace the CP, internal to the facility in the certification process as mentioned in regulation 1, regulation 22.3 of the Hong Kong Convention read with clauses 3.3.2, 3.3.3, 3.3.4.1 and 3.3.4.1.2 of the 2012 *Guidelines for safe and environmentally sound ship recycling*. Safety officers, as per the SBRR 2011 are persons external to the facility where as CP as per the Hong Kong Convention and the IMO 2012 Guidelines (resolution MEPC.210(63)) are persons internal to the SRF, i.e. employees of the SRF. Notably, as per clause 3.3.4.1.2 of the IMO 2012 Guidelines, the SRF should ensure that no hot work commences in any of these spaces until a safe-for-hot-work certification has been issued by a CP.

15.7.9 The power of authorization of an SRF may be delegated by the CA in Bangladesh to an RO. If such a delegation is allowed, the CA in Bangladesh should undertake a duty to notify the organization of the conditions of the delegation of authorization for circulation to other parties.** Notably, the Bangladesh Ship Recycling Board (BSRB) will be designated as the CA as per the 2011 rule and 2018 act. The task of authorizing the SRF can be given by the BSRB to the RO. The RO includes an organization recognized by an Administration in accordance with IMO resolutions A.739(18) and A.789(19). An organization which meets the relevant conditions set forth by resolution A.739(18), as amended by resolution MSC.208(81), and resolution A.789(19), and has been authorized by the flag State administration to provide the necessary statutory services and certification to ships entitled to fly its flag.

* IMO 2012 Guidelines, clause 3.3.2.

† Hong Kong Convention, reg. 1.1 and IMO 2012 Guidelines, clause 3.3.

‡ Hong Kong Convention, reg. 18 read with IMO 2012 Guidelines, clause 3.

§ Hong Kong Convention, regs 15, 16 and 18.

¶ IMO 2012 Guidelines, clause 3.3.2.

** Hong Kong Convention, reg. 16.

15.7.10 Close physical supervision of workers and constant monitoring of potentially hazardous activities in the SRF should be ensured. The SBRR 2011 should incorporate a clear mandate ensuring the uninterrupted engagement of a full-time CP, internal to the facility, who will take charge of the overall safety affairs of the facility.* Safety officers, as per the SBRR 2011, presumably are persons external to the facility whereas CP as per the Hong Kong Convention and the IMO 2012 Guidelines (resolution MEPC.210(63)) predominantly are persons internal to the SRF, i.e. employees of the SRF.

15.7.11 Regulation 1 makes it clear that a CP is needed to be present at the SRF. The justification for this position lies in the fact that a CP has suitable qualifications, training and enough knowledge, experience and skill, for the performance of the specific work. The SBRR 2011 has used the term SO interchangeably with the CP. Therefore, the criteria of appointment of an SO should be based exclusively on personal skill and qualifications of a natural legal person. The appointment should not be delegated to any third party/agency/company or an artificial legal entity by the CA.

15.7.12 An appointment of an SO by the BSRB should be task specific and specific to a set of tasks hazardous in nature such as firefighting or safe-for-entry or safe-for-hot-work condition or oil pollution.†

15.7.13 The CA should ensure a minimum number of visits or a minimum time an SO should spend in each yard to supervise ongoing cutting activities. The BSRB should ensure regular and frequent supervision of all SRFs.‡

15.8 Provisions related to jurisdiction on the scope and application of the Convention

15.8.1 The SBRR 2011 currently does not apply to new ships or ships under construction unlike the Hong Kong Convention. The Bangladesh ship recycling regime should apply to ship design, construction and operation, including survey and certification of the IHM and the ready for recycling certificate (RRC) for EoL ships.§ Both the ship recycling and ship-building activities are included in the allocation of business of the Mol in 2011. To avoid conflict, the relevant provisions of Bangladesh Merchant Shipping Ordinance 1983 may be amended to incorporate the relevant content of the Hong Kong Convention on ship design, construction etc. The SBRR 2011 and SRA 2018 are non-exhaustive provisions for ship recycling. For example, so far as the governance of maritime affairs, governance of labour administration or environmental governance is concerned, the relevant agencies of the government will be responsible to enforce their own laws. Notably, this would take away the power of Mol to authorize and cancel a licence or punish a violator SRF. In fact, the jurisdiction of Mol is subject to no objection from other departments of the government.

15.8.2 The Bangladesh ship recycling jurisdiction should encompass not only the ships imported for recycling but also new and existing ships.¶

15.8.3 Ships less than 500 MT and warships and naval auxiliaries may be excluded from the jurisdiction of SBRR 2011. Recycling activities of such ships may be covered by separate but equivalent jurisdiction ensuring safe and environmentally sound recycling as far as reasonable and practicable.**

15.9 Provisions related to practice of ship recycling and procedure

15.9.1 Bangladesh law should declare if a ship recycling plan (SRP) can be approved by the CA tacitly in default of a response provided expressly by the CA on the outcome of the application of SRP filed by an SRF.††

* Hong Kong Convention, reg. 1.1 and IMO 2012 Guidelines, clauses 3.3.4.1.7 and 3.3.4.2.3.

† IMO 2012 Guidelines, clauses 3.3 and 3.4.

‡ Hong Kong Convention, regs 1.9 and 15.3 and IMO 2012 Guidelines, clause 3.3.4.8.

§ Hong Kong Convention, regs 2, 3, 4 and 5.

¶ Hong Kong Convention, art. 3.

** Hong Kong Convention, art. 3.

†† Hong Kong Convention, art. 16.6 and reg. 9.

15.9.2 The IHM should be verified by the flag States in Bangladesh law and not by the master of the ship and a ship-specific RRC should be issued by the flag State of the party to the Hong Kong Convention.*

15.9.3 Bangladesh law should require that an SRF should submit a statement of completion of recycling to the CA and the CA should forward a copy of the same to the flag State within 14 days of the recycling is completed including information on incidents and accidents and any damage to health and environment if any.†

15.9.4 The final permission for beaching should be granted by the CA not the port authority in Bangladesh as stipulated in SBRR 2011.

15.9.5 Maritime lien is an issue that should be resolved before the beaching of ship is carried out. Beaching is an irreversible process and after beaching the maritime lien is extinguished,‡ i.e. no more claims exist against the shipowners. This leads to an injustice for the maritime lien claimants. On the other hand, a maritime lien assessment is a highly technical process and even if this is not registered in the ship registry of which the ship is registered, a valid claim may still exist and be filed before the Mercantile Marine Department (MMD) of the recycling State. Therefore, it is important for the MMD to interfere before the final beaching permission is given to beach a ship. The port authority therefore through the MMD has been placed in the final stage of beaching permission. Notably, if any registered lien or mortgage exists this can be resolved at the end of boarding of ship by the shipbreaking board officials§ but for an unregistered mortgager or maritime lien this is not necessary be registered at all time so there remains a gap or loophole if MMD is avoided in the permission process of beaching a ship. For example, as per section 477(1) of the Merchant Shipping Ordinance 1983 (MSO 1983), a seaman shall have a lien on the ship, and shall not by any agreement forfeit his lien on the ship, or be deprived of any remedy for the recovery of his wages to which in the absence of the agreement he would be entitled. He shall not by any agreement abandon his right to wages in case of the loss of the ship or abandon any right that he may have or obtain in the nature of salvage. Every stipulation in any agreement inconsistent with any provisions of this Ordinance shall be void. Additionally, vide section 478(1) of MSO 1983 the master of a ship shall, so far as the case permits, have the same rights, liens and remedies for the recovery of his wages as a seaman has under this Ordinance or by any law or custom. So, if as per the Hong Kong Convention requirement, the BSRB is to be placed at the final arbiter of the beaching permission then the involvement of the MMD can be ensured through the issuance of a no objection certificate (NOC) at the boarding stage at anchorage.¶ The issuance of the no object certification can be streamlined with other departments such as DoE, DoEx or customs.

15.9.6 If the SBRR 2011 permits the CA to choose any other alternative standard than the IMO Guidelines on enclosed space, it should provide helpful reference to judge their equivalency. The SBRR 2011 should ensure that the person who physically enters the enclosed space is trained specifically for that task.**

15.9.7 The RRC should be issued by the CA after beaching and the SRP should be approved by the CA before non-reversible beaching.††

15.9.8 Bangladesh law should incorporate a duty to report to the organization about the list of SRFs, contact details of the CA, list of ROs, nominated surveyors, ships to which an RRC has been issued, names of the recycling companies, names of SRFs and their locations including any violation(s) of the Convention obligations, if applicable, and actions taken against such ships and recycling facilities.‡‡

* Hong Kong Convention, regs 10.1.4 and 11.11.

† Hong Kong Convention, reg. 25.

‡ SBRR 2011, rule 1.1.4.

§ SBRR 2011, rule 7.1(b)(2)(iii).

¶ SBRR 2011, rule 7.

** Hong Kong Convention, reg. 19.

†† Hong Kong Convention, reg. 25.

‡‡ Hong Kong Convention, art. 12.

15.9.9 The SRF should have the SRFP approved by the CA after it is adopted by its board of governors. Violation of the terms of the SRFP may result in suspension or outright cancellation of the operating licence of the SRF by the CA.*

15.10 Provisions related to implementation of the six sets of the Guidelines of the Hong Kong Convention

15.10.1 The SRF, SRFP, IHM, IRRC should be authorized by the CA or the administration following strictly, the Guidelines to be developed by BSRB circulated time to time to the relevant stakeholders. A technical guideline customized for Bangladesh should be prepared by MoI/BSRB following six sets of voluntary guidelines as adopted by the IMO for the implementation of the Hong Kong Convention. While preparing these guidelines for Bangladesh, the relevant guidelines prepared by the ILO and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention) should be considered. BSRB has been used as the shorter form of Ship Building and Ship Recycling Board (SBSRB). There is an anomaly here. As per SBRR 2011, it is called SBSRB and as per BSRA 2018, it is BSRB. This should be streamlined when making the next revision of SBRR 2011.

15.11 Provisions related institutional reform

15.11.1 The BSRB should begin necessary measures to work as one-stop service provider by hiring personnel from other government agencies, such as DoEx, DoE, Department of Inspection and Fisheries, Department of Inspection for Factories and Establishments (DIFE), Atomic Energy Commission, National Board of Revenue and Bangladesh Navy.†

15.11.2 The SBRR 2011 should ensure the existence of a State-authorized treatment storage and disposal facilities (TSDF) before an SRF can operate in a recycling State. The SRFP should have detailed description on the matter.

15.11.3 To implement the single-contact service point by the CA as propounded in the Hong Kong Convention, accountability of the government officials coming from other departments or regulatory agencies of the government and working under the disposal the BSRB should remain under their respective governmental authorities except sharing common logistical services provided by the BSRB.‡ As mentioned in the Activity 1 Report to ensure enhanced cooperation and avoid unnecessary bureaucracy in authorizing the process involved in ship recycling a single point service mechanism has been introduced in Hong Kong Convention. Other associated departments of government will work in concert with the CA. The SBRR 2011 has incorporated this concept by setting up a body under the MoI, namely the BSRB, who in all matters of administration of the ship recycling in Bangladesh will work as a CA providing a single point service specifically for issuing clearances and can hire required number of employees to the BSRB from various other departments including DoE, DoEx, Department of Labour (DoL), DIFE. The recommendation has been made given there might arise controversy against making such an executive order usurping the power of other Departments of the Government by the MoI contrary to the article 55(6) of the Constitution of Bangladesh.

15.11.4 The issue of assigning a dedicated contact point from different government agencies with a dedicated office and support staff within the BSRB will have to be done after a detailed interministerial consultation (regulation 15).

15.11.5 The decision pertaining to the interministerial consultation should be referred to the cabinet for approval of the prime minister to comply with the Allocation of Business Rules of Bangladesh as promulgated in 1996, revised in 2014. Following this procedure will help avoid any conflict with the constitution of the country. Even if there is any departure from the rules of business, by virtue of the above rules of business of Bangladesh, the cabinet retains the necessary power to ratify any exception if necessary.

* Hong Kong Convention, reg. 16.

† Hong Kong Convention, reg. 15.

‡ Hong Kong Convention, reg. 15.4.

16 Institutional structure

16.1 According to the provisions of the BSRA 2018 and the SBRR 2011, MoI is required to form BSRB with representation from all concerned ministries and departments as mentioned in these legislations.

16.2 The BSRB will work independently and be the CA to govern ship recycling activities in Bangladesh, in line with the Hong Kong Convention. On the other hand, each of those ministries or departments has their own act or rules, on ship recycling, environmental management and occupational health and safety.

16.3 The government may appoint the required number of employees to the board on-deputation, from different departments, such as, DoE, Bangladesh Customs, DoL, DIFE and DoEx.

16.4 The officials of the said departments necessarily inherit power of execution of duties from the respective act/rules, ordained upon them, from their designated departments/ministries. In addition, the BSRA 2018 shall be considered as the additional instrument, without impeding the provisions of the acts for the time being in force. Therefore, considering the current structure of the act, this act presently does not enjoy precedence over other relevant acts, such as ECA 1995, MSO 1983 and the Explosives Act 1957.

16.5 The report has highlighted the ways and means for the BSRB officials and officials of other agencies/department and ministries of government to be vested with and exercise their powers, for the discharge of their respective duties, without encroaching the boundary of jurisdiction and curbing the responsibilities of other relevant line/aligned departments/ministries.

16.6 Under the current rules of business of Bangladesh, the matter of deputation or assignment can be addressed by an interministerial consultation. In case of dispute, the matter could be referred to the cabinet for approval of the prime minister to avoid any constitutional issue if arises.

16.7 This report concludes that the rules of business of Bangladesh have given ample power to the Cabinet in this matter. The detailed report is available in Activity 1 marked in this report as annex I: "Hong Kong Convention vs Domestic Ship Recycling Legislations of Bangladesh - GAP Analysis", by Ishtiaque Ahmed.

Part D: Road Map for a Gradual and Planned Administration and Implementation of The Hong Kong Convention in Bangladesh

Time frame (tentative)	Institutional/administrative/legislative actions	HKC* article / regulation	Industry/infrastructure actions	HKC article/ regulation
Year 0-2	1 Adoption of National Guidelines to implement the standard of the HKC in Bangladesh while authorizing SRF, SRFP, IHM and IRRC considering the IMO Guidelines as adopted.	R15, R 5, R5.2, R5.4, R9, R10.2, R11, R14, R15, R16, R17, R18, R20	1 Establishing workers' training centres including training for workers and contractors' personnel	R18, R21, R22
	2 Revision and amendments of identified provisions of SBRR 2011 and BSRA 2018 as recommended in the SENSREC Phase II Final Report	R15.1, Clause 3.4.3.5 of the IMO 2012 Guidelines (resolution MEPC.210(63))	2 Making BSRB functional to implement the necessary obligations under the HKC as recommended in the Final Report	A2
	3 Review and setting the standard of PPE and MHE in clear terms.	R22	3 Making available of systems for preventing fires and explosions and for firefighting, by controlling any outbreak of fire efficiently including ensuring necessary emergency equipment in the event of crisis.	R19
	4 Adoption/Amendments of the relevant provisions of the domestic laws incorporating the BMW Convention in Bangladesh	Clause 3.4.3.5 of the IMO 2012 Guidelines	4 Implementation of Emergency Contingency Plans in all SRFs with adequate supply of necessary emergency equipment.	R21
	5 Adoption /Amendments of the relevant provisions of the Merchant Shipping Ordinance, 1983 as recommended in the Final Report	R4	5 Making available the highest category and grades of PPE at workplace	R22
	6 Adoption /Amendments of relevant provisions of the Petroleum Rule 1937 as recommended in the Final Report	R8	6 Installing cranes, winches, chain rope, shackles with system for adequate yearly maintenance following the legal norm by refereeing specific statutes applicable to this matter. Specifying clear list of qualifications required for the operators of such instruments.	A1.4, A13.2 read with Clause 3346 and 3348 of IMO 2012 Guidelines
	7 Setting eligibility or certification requirement of safety supervisors and other technical staffs working in the facility	R22	7 Establishing an inspection and monitoring system on health safety and environment	R15.3

* HKC: the Hong Kong Convention.

† References hereunder are to the articles and regulations of the Hong Kong Convention unless provided otherwise.

Time frame (tentative)	Institutional/administrative/legislative actions	HKC* article / regulation	Industry/infrastructure actions	HKC article/ regulation
Year 0-2	<p>8 Implementing effective management of training programme</p> <p>9 Setting a clear deadline to comply with the conditions of authorizing an SRF. The necessary conditions are not limited to but include designing training programmes, emergency preparedness, system of control and monitoring, reporting system, identification of roles and responsibilities of the supervisor, contractors, workers, reporting requirement and so forth.</p>	R22	<p>8 Making availability of health management staff with supervisory capacity</p> <p>9 Establishing interim measures for TSDF</p>	R19
	<p>10 Establishing hierarchy of safety management staff, including provisions for an overall manager or supervisor on full-time basis with establishment of a chain of command within the safety management staff</p> <p>11 Establishing a system of Reporting on incidents, accidents, occupational diseases and chronic effects</p> <p>12 Preparing the criteria and standard for the authorization of SRF based on approved SRFP taking into consideration of the IMO Guidelines as adopted.</p>	IMO 2012 Guidelines, Section 3.3.2		R20
	<p>1 Establishment of laboratory specially constituted to test water/air/soil contaminated from shipbreaking works in beaching areas with semidiurnal tidal environment.</p> <p>2 Ensuring authorization of all SRFs based fully on approved SRFP considering IMO Guidelines as adopted.</p>	R23		
	<p>1 Authorizing all SRF based on SRFP implemented fully as per the HKC considering the relevant IMO Guidelines as adopted.</p> <p>2 Deposition of the instrument of the HKC for accession</p>	R18		
Year 2 -3	<p>1 Establishing of laboratory specially constituted to test water/air/soil contaminated from shipbreaking works in beaching areas with semidiurnal tidal environment.</p> <p>2 Ensuring authorization of all SRFs based fully on approved SRFP considering IMO Guidelines as adopted.</p>	R18 read with Clause 3.3.4.1.6 and 3.4.4.1 of the IMO 2012 Guidelines	<p>1 Introducing reporting, notify the organization</p>	R24
	<p>2 Ensuring authorization of all SRFs based fully on approved SRFP considering IMO Guidelines as adopted.</p>	R18	<p>2 Establish fully functional management system to protect workers and coastal environment.</p> <p>3 Upgrading facilities to HKC standard as certified by the Recognized Organizations to at least 20 % of the total capacity in the country.</p>	R17
Year 4	<p>1 Authorizing all SRF based on SRFP implemented fully as per the HKC considering the relevant IMO Guidelines as adopted.</p> <p>2 Deposition of the instrument of the HKC for accession</p>	R 18	<p>1 Ensuring existence of a State-authorized TSDF before an SRF can operate in a recycling State. SRFP should have detail description on the matter.</p> <p>2 Upgrading facilities to HKC standard as certified by the recognized organizations to at least 40% of the total capacity in the country.</p>	R 20
		A 16		A 11

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The Main Report of the Safe and Environmentally Sound Ship Recycling in Bangladesh Project – Phase II (SENSREC Phase II) describes the institutional and legislative gaps in Bangladesh with respect to the provisions of the Hong Kong Convention (HKC).

The gap analysis focuses on the provisions of the HKC and those of applicable domestic laws of Bangladesh regarding the jurisdiction, practice and procedure on ship recycling, occupational health and safety practices and environmentally sound management in ship recycling industry. The findings of the gap analysis have been supported by the Indian legislative experiences as an example on ship recycling practices, and the system of administration of the ship recycling, those had been explored through a case study on Indian ship recycling industry. Finally, the SENSREC Phase II Main Report suggests detailed recommendations and road-map for the Government of Bangladesh for accession to and effective implementation of the HKC.