

# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

**Report No.:** ISDSC12791

**Date ISDS Prepared/Updated:** 04-May-2015

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## I. BASIC INFORMATION

### A. Basic Project Data

<b>Country:</b>	Bangladesh	<b>Project ID:</b>	P154511
<b>Project Name:</b>	Dhaka-Chittagong IWT Corridor Project (P154511)		
<b>Task Team Leader(s):</b>	Diep Nguyen-Van Houtte		
<b>Estimated Appraisal Date:</b>	12-Oct-2015	<b>Estimated Board Date:</b>	17-Dec-2015
<b>Managing Unit:</b>	GTIDR	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	Ports, waterways and shipping (95%), Railways (5%)		
<b>Theme(s):</b>	Other trade and integration (50%), Trade facilitation and market access (50%)		
<b>Financing (In USD Million)</b>			
Total Project Cost:	300.00	Total Bank Financing:	270.00
Financing Gap:	0.00		
<b>Financing Source</b>			<b>Amount</b>
BORROWER/RECIPIENT			30.00
International Development Association (IDA)			270.00
Total			300.00
<b>Environmental Category:</b>	A - Full Assessment		
<b>Is this a Repeater project?</b>	No		

### B. Project Objectives

12. The development objective of the project is to increase the capacity, reliability and safety of inland water transport along the Dhaka-Chittagong Corridor.

### C. Project Description

#### A. Project Components

Component 1: Improved Inland Waterway Maintenance through long-term performance-based

contracts (PBCs) for channel maintenance and provision of visual Aids to Navigation for Class 1 routes between Dhaka and Chittagong Corridor, including branches to Ashuganj, Narayanganj and Barisal and the main river crossing routes (US\$170-180 million). This sub-component shall include work to maintain advertised depths and to mark channel routes through provision of long-term performance-based contracts. The size and terms of the PBCs will be determined during preparation. Although river channel maintenance will require river training works, channelization and dredging, BIWTA and the contractor will explore all methods to minimize dredging requirements and to maintain long-term river sustainability. Visual aids to navigation include light buoys (lateral marks, cardinal marks, isolated danger and other marks), radar beacons (for navigation during rain and fog), leading lines and other aids to assist day and night navigation. The work shall be centered on the main Class 1 river route between Dhaka and Chittagong, with branch routes to Ashuganj, Narayanganj and Barisal.

Component 2: Navigation Safety Improvements including Developing Hydrographic Surveying Capacity and Establishing a Search and Rescue Organization (US\$35 million)

a. Hydrographic Survey Improvements (US\$ 25 million). Hydrographic charts are the most fundamental need to aid navigation. This sub-component, which will benefit all IWT in Bangladesh, includes work to procure and disseminate nautical charts on all river routes. It includes the supply of new survey vessels (for operation in coastal and inland water areas), modern survey and charting technologies, new differential global positioning system (DGPS) system capacity, river gauge stations, and a system to produce and disseminate Electronic Nautical Charts (ENCs) for the main priority routes between Dhaka and Chittagong, including branch routes to Ashuganj, Narayanganj and Barisal as well as paper charts and river navigation notices on other important routes. This sub-component also includes possible development of crowd source technologies to obtain important (and changing) bathymetric information through procurement and installation of equipment on select commercial vessels regularly operating on various river routes; procurement of coastal survey vessels (with multi-beam survey capacity), procurement of inland survey vessels (with multiple single beam survey capacity), procurement of small speed boats (with single beam survey capacity for cross lining and bank survey works) and procurement of new topographic survey technologies for survey of banks, chars and other important navigation features.

b. Establishment of a Search and Rescue Organization (US\$ 10 million). The prevention of accidents is vital to avoid the loss of life. The best preventive measure is for ships to avoid getting into difficulties. The second best is for ships in difficult situations to avoid disaster. This sub-component, which will benefit all IWT transport in Bangladesh, includes work in capacity building and safety reform including: (a) Work to update laws and regulations regarding design, safety construction, safety operation, manning and maintenance of IWT vessels; (b) Work to restructure the various Ministries, Agencies and Departments dealing with IWT safety into harmonized units, including departments dealing with vessel registration, survey and inspections, licensing (of vessels and crews) and enforcement; (c) Training, which is critical if efficiency and safety are to be improved. The program will include a review of staff skills and the development of training programs that allow IWT to adopt best International Maritime Organization (IMO) practice; and (d) Establishment of a formal IWT Search and Rescue (SAR) Organization, including facilities for the reception and dissemination of Distress Messaging; searching for missing persons, IWT vessels; and, rescuing persons in distress on the IWT Routes. Design of the SAR organization shall be done so as to: incorporate the specific needs of women users; provide different tiers or levels of response at the local, district and national levels, and; link into State disaster planning to raise the tiered response level where the situation demands and to call upon the assistance of other agencies of Bangladesh.

Component 3: Improvements to Selected Inland Waterway Ports (US\$ 30 million). This sub-component includes work to improve common user cargo and passenger terminals using design-build contracts at important existing inland ports on the Dhaka-Chittagong route (no land acquisition is required). The design of the terminals will specifically incorporate the facility needs of women users and small traders (such as toilet facilities for women, women-only waiting rooms) and address safety-related issues for women users. BIWTA will also make suggested changes to operational guidelines to improve women's safety and experiences using inland water transport services.

- a. Development of a new common user terminal with last mile connectivity access infrastructure at Pagla (on the Dhaleswar river near Dhaka opposite the Pangaon container terminal) for vessels carrying construction materials in general cargo form, including cement, sand, rock and other cargo carried in bagged or break-bulk form;
- b. Rehabilitation and modernization of the existing general cargo terminal at Narayanganj, including provision of cargo handling equipment, construction of yard space and upgrading of last-mile connectivity access infrastructure;
- c. Rehabilitation and modernization of the existing cargo terminals at Ashuganj and Bharab;
- d. Rehabilitation of the main Dhaka passenger terminals, including provision of new floating pontoon mooring arrangements, new pile (retaining structures), linkspan bridges, new bank protection, new terminal structures and upgrade of connecting infrastructure (road and parking access);

Component 4: Institutional Capacity Development and Improvements (approx. US\$5 million), including studies and technical assistance to (i) improve sustainable maintenance of river navigation channels, monitoring of maintenance contracts/works and improved institutional arrangements for navigation channel maintenance; and, (ii) facilitate transport of containers on inland waterways including incentivizing private sector investment in the sector. Even though there is considerable potential for the transport of containers along the Dhaka-Chittagong IWT route, and Chittagong Port Authority and BIWTA have built the container river terminal at Pangaon near Dhaka, for various reasons the service has not been operationalized. The barriers to operationalization need to be studied in detail and addressed.

Component 5: Studies to Improve Chittagong Port Capacity (approx. US\$10 million). Detailed Feasibility, Design and Environmental and Social Safeguards Studies for another Container Terminal at/near Chittagong Port, e.g. Bay Terminal or another site as identified by the final Chittagong Port Master Plan and CPA.

Contingency (US\$10 million)

#### **D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

The contract(s) for performance-based dredging and provision of visual Aids to Navigation will be done on the Class 1 routes between Dhaka and Chittagong Corridor, including branches to Ashuganj, Narayanganj and Barisal and the main river crossing routes as follows:

Route 1: Dhaka-Munshiganj-Gajaria-Chandpur-Chittagong (on the Buriganga, Dhaleswari, Meghna

and Karnafuli Rivers). Both the Buriganga and Dhaleswari rivers are on average 10m-15m in depth. They are meandering tidal-influenced rivers, fixed by the resistant clays marking the southern edge of the Madhupur Tract. At the confluence with the Meghna just north of Shatnal, the river is approximately 5km in width. Sixteen kilometers south of Shatnal, the combined flow of the Ganges and Brahmaputra-Jamuna, known as the Padma, meets the Meghna at a 11 km wide confluence near Chandpur. From this point southwards the Meghna is known as the Lower Meghna, becoming one of the broadest rivers and largest estuaries in the world. It flows into the Bay of Bengal through the Shadbazpur and Hatia Channels, which are encumbered by numerous shoals and bars. Navigation limiting conditions are dictated by the presence of these mouth bars, though the semidiurnal nature of the tide can mitigate draft constraints. The full route is approximately 300km long, of which the required dredging length is estimated at 40km.

Route 3: Chandpur – Char Prakash - Hijla – Barisal (on part of the Lower Meghna, part of the Arial Khan and Kirtonkhloa Rivers). While the main channel of the lower Meghna river is on average 15m in depth, new sediment deposition and erosion are constantly taking place on the margins, continuously altering the shape of numerous chars (and the channels) on the western bank. Accordingly, much of the dredging (or river engineering) tasks should be focused on developing the channels leading from the Lower Meghna to Barisal, including the Jayanti, Azimpur, Tetulia and Dharmaganj. The full route is approximately 88 km long, of which the required dredging length is estimated at 10km.

Part of Route 11 Narsingdi-Marichakandi-Salimganj-Bancharampur-Homna from Shatnal to Ashuganj (on the Upper Meghna River). The full route is approximately 73 km long, of which the required dredging length is estimated at 23km.

Ferry crossing routes between: i) Chandpur and Shariatpur; ii) Lakshmpor and Bhola; and iii) Beduria and Laharhat.

The development and rehabilitation of the four river ports (Component 1(c)) will be based on existing sites which do not are not expected to require land acquisition, as follows:

- a. Development of a new common user terminal with last mile connectivity access infrastructure at Pagla (on the Dhaleswar river near Dhaka opposite the Pangaon container terminal). This site is an existing port managed by BIWTA but currently used for VIP visits.
- b. Rehabilitation and modernization of the existing general cargo terminal at Narayanganj which is an existing terminal.
- c. Rehabilitation and modernization of the existing cargo terminals at Ashuganj and Bharab.
- d. Rehabilitation of the main Dhaka passenger terminals, including provision of new floating pontoon mooring arrangements, new pile (retaining structures), linkspan bridges, new bank protection, new terminal structures and upgrade of connecting infrastructure (road and parking access);

## **E. Borrowers Institutional Capacity for Safeguard Policies**

The Bangladesh Inland Water Transport Authority (BIWTA) within the Ministry of Shipping will implement the majority of Project activities. BIWTA last implemented a World Bank-financed project for inland waterways during 1991-2000. The Implementation Completion Report noted the weak capacity of BIWTA, although achievement of project outcomes was rated Satisfactory by both the ICR and IEG.

The Project Management Unit in MoS has already been established, and has been implementing a Recipient-Executed Trust funded project conducting preparation studies and activities for the proposed Project as well as other projects to facilitate trade and transport for Bangladesh. The PMU is in the process of hiring an Environmental Specialist and a Social Safeguards Specialist. Selection process of environmental and social specialists and safeguards documents quality will be monitored by the World Bank and institutional capacity enhancement measures will be provided if necessary.

The civil works themselves will be concessioned to private operators. The concessionaires will be responsible for implementing pre-approved environmental and social management plans, maintain appropriate in-house staffing, and demonstrate effective environmental and social performance as part of their disbursement-linked indicators.

#### **F. Environmental and Social Safeguards Specialists on the Team**

Leanne Farrell (GENDR)

Mridula Singh (GSURR)

## **II. SAFEGUARD POLICIES THAT MIGHT APPLY**

<b>Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	Yes	<p>The IWT routes selected for dredging are already being dredged, however inefficiently and irregularly. While the specific methodologies to be employed for maintaining the river channel depth will be up to the concessionaires to determine, in all cases the key environmental issues to be managed will include disposal of dredged material, as well as disturbance of aquatic and benthic habitats caused by dredging operations or other river works which may potentially be employed (which might for example include limited use of river training structures to influence sediment deposition patterns). River port construction and rehabilitation works will meanwhile entail minor, site-specific construction impacts. Environmental Assessment (OP/BP 4.01) is thus triggered.</p> <p>All works will be concessioned out to private operators – likely to consist of one for river ports, and one to two for IWTs -- on a performance-based contracting scheme. The river ports concession will follow a design-build structure, while the IWT concession(s) will be based on maintaining specified river depths along the designated routes, with detailed methodologies for how this is achieved to be selected by the concessionaires. As such, detailed EIAs and EMPs cannot be developed at this stage by BIWTA. Rather, they shall be carried out by the concessionaires, during the design process for river</p>

		<p>ports, and during definition of dredging and/or other river depth maintenance methodologies, technologies and timelines by the concessionaire(s) for IWTs. Since the IWT dredging component is expected to be Category “A” level, the route-specific EIAs and EMPs to be completed by the concessionaire(s) will be subject to independent review and approval by BIWTA as well as the World Bank, before dredging operations can begin.</p> <p>Prior to appraisal, an Environmental and Social Management Framework (ESMF) will be prepared, which will include: (a) an initial environmental and social screening of the project areas (IWT routes and river ports) and study of current dredging practices along the specified routes to identify current known environmental and social risks and issues associated with existing maintenance dredging activities, (b) detailed TORs for the activity-specific EIAs/EMPs to be carried out by the concessionaires during project implementation; (c) specific criteria (such as avoidance of specific sensitive zones or areas of human habitation or livelihood use in selecting locations for dredge disposal) as well as minimum / generic environmental, social, health and safety (ESHS) management measures and/or Environmental Codes of Practice that the concessionaires will be required to uphold, consistent with international standards and good practices for dredging and river port works (such as PIANC --World Association for Waterborne Transport Infrastructure -- environmental guidelines, World Bank EHS Guidelines on Ports, Harbors and Terminals, and other relevant international guidelines and standards); (d) institutional arrangements, responsibilities, and systems for various aspects of ESHS management under the project, including procedures for carrying out and independently reviewing detailed EIA/EMP work within the context of the concession agreements, and roles/ responsibilities/staffing on ESHS aspects for both concessionaires and BIWTA during all phases of project implementation; (e) reporting requirements on ESHS aspects, including any performance indicators related to ESHS management that will be considered part of the Disbursement Linked Indicators for the concessionaires; and (f) capacity</p>
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		assessment and necessary capacity building measures for BIWTA. The ESMF will also specify that studies to be carried out under the project for a new container terminal at or near Chittagong Port will include also environmental and social assessments in accordance with World Bank safeguard policies and national legislation.
Natural Habitats OP/BP 4.04	Yes	This policy is likely to be triggered, due to the potential impacts to aquatic habitats from dredging operations, and potentially also by construction or rehabilitation activities at the 4 river ports. The ESMF will include screening and initial assessment of natural habitats in the project areas, as well as requirements for further detailed baseline assessments to further identify and delineate any areas of critical habitat and ensure application of the mitigation hierarchy in accordance with this policy for all project works, to be developed under the detailed EIAs/EMPs during project implementation and implemented by the concessionaires.
Forests OP/BP 4.36	No	This policy is not expected to be triggered, given that project components focus on improvement of inland waterway transportation, and on-land activities will be limited to the riverbank areas.
Pest Management OP 4.09	No	This policy is not expected to be triggered given that project components focus on improvement of inland waterway transportation. No pesticides are expected to be procured by the project, and the project will not affect agricultural activities or practices. Nonetheless, the ESMF will specify that river port EIAs should verify whether any measures to manage rodents or pests (such as in areas of cargo storage) are required, and that if so, the provisions of this policy will be followed.
Physical Cultural Resources OP/BP 4.11	TBD	The applicability of this policy will be assessed during the environmental and social screening process under the ESMF, and addressed as required in more detail under the detailed EIAs/EMPs to be completed by concessionaires during project implementation. The ESMF will also specify chance finds procedures in the event of encountering any cultural artifacts during dredging or river port construction activities, to be referenced in concession contracts.
Indigenous Peoples OP/BP 4.10	No	Project sites are not located near populations of indigenous people.

Involuntary Resettlement OP/ BP 4.12	No	No land acquisition is expected to be required for any of the four river ports, as all four are constructed on existing ports or port sites already under the jurisdiction of BIWTA. Nonetheless, all concession agreements -- for dredging works as well as river port upgrading activities -- will furthermore specify that no land acquisition for project purposes will be permitted if it would lead to displacement of households or economic livelihood activities. The ESMF will indicate that is determination must be documented in the baseline assessments of the detailed EIAs to be carried out by concessionaires.
Safety of Dams OP/BP 4.37	No	The project does not involve any new or existing dams.
Projects on International Waterways OP/BP 7.50	Yes	Some of the linked waterways are part of the Bangladesh-India Bilateral Protocol Route. Riparian notification will be carried out in accordance with this policy.
Projects in Disputed Areas OP/ BP 7.60	No	The project will not operate in any disputed territories.

### III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 01-Jun-2015

**B. Time frame for launching and completing the safeguard-related studies that may be needed.**

**The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:**

The ESMF will be prepared and disclosed before the appraisal of the project. Detailed Environmental Management Plans (EMPs) and Social Management Plans (SMPs) will be developed by the private sector firms who win the contracts for the implementation of the performance-based contracts for dredging, and by the firms that win the design-build contracts for the construction/rehabilitation of the river ports.

### IV. APPROVALS

Task Team Leader(s):	Name: Diep Nguyen-Van Houtte	
<b>Approved By:</b>		
Safeguards Advisor:	Name: Francis V. Fragano (SA)	Date: 07-May-2015
Practice Manager/ Manager:	Name: Karla Gonzalez Carvajal (PMGR)	Date: 14-May-2015

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.