

# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

**Report No.:** 91652

**Date ISDS Prepared/Updated:** 22-May-2013

## I. BASIC INFORMATION

### A. Basic Project Data

<b>Country:</b>	Afghanistan	<b>Project ID:</b>	P132944
<b>Project Name:</b>	Naghlu Hydropower Rehabilitation Project (P132944)		
<b>Task Team Leader:</b>	Richard Jeremy Spencer		
<b>Estimated Appraisal Date:</b>	00-undefined-0000	<b>Estimated Board Date:</b>	17-Sep-2013
<b>Managing Unit:</b>	SASDE	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	Hydropower (100%)		
<b>Theme(s):</b>	Infrastructure services for private sector development (90%), Other environment and natural resources management (5%), Other social development (5%)		
<b>Financing (In USD Million)</b>			
Total Project Cost:	77.50	Total Bank Financing:	0.00
Total Cofinancing:		Financing Gap:	0.00
<b>Financing Source</b>		<b>Amount</b>	
Borrower		0.00	
Afghanistan Reconstruction Trust Fund		77.50	
Total		77.50	
<b>Environmental Category:</b>	A - Full Assessment		
<b>Is this a Repeater project?</b>	No		

### B. Project Objectives

### C. Project Description

12. The project is proposed to consist of the following six components, with a total estimated cost of \$77.5 million.

13. Component 1: Mechanical, Electrical and Electromechanical Works (ARTF \$14 million). This component is aimed at finishing the ongoing rehabilitation of the mechanical, electrical and

electromechanical parts of the plant and ensuring their sustainable operation. It will consist of three sub-components:

- Rehabilitation of Unit 1 and balance of plant. Ongoing electromechanical rehabilitation work under an existing contract (Contract MEW/302, procured under Emergency Power Rehabilitation Project - Cr. 3933 and TF054718) will be completed, focused on Unit 1 and the balance of plant. In particular, the bent rotor shaft will be tested and either repairs undertaken, if possible, or a replacement ordered. Balance of plant rehabilitation, which is not yet complete, will also be finished.
- Spare parts and consumables. Although the original contract for the rehabilitation of the electromechanical works included spare parts, additional parts and consumables are required for the sustainable operation of the plant. A separate supply contract will be procured for the parts, aimed at covering a period of three years.
- Additional training for plant staff. Although some training in the rehabilitated plant has been undertaken, experience suggests that it has been inadequate to ensure sustained and safe operation of the plant. Further, more systematic and thorough training for plant staff will be undertaken in this component.

14. Component 2: Dam Safety Improvements (ARTF \$28 million). This component is aimed at ensuring the safe operation of the dam and will consist of three subcomponents to undertake new work as follows:

- Dam safety audit. Consultants will undertake an audit of the dam's structural and operational safety, and preparation of plans and bidding documents for civil works to improve safety to acceptable standards – though it should be noted that this will be done with the aim of ensuring sustainability in the Afghan context. This work will cover identified issues such as reactivating the bottom outlet, installation of auxiliary power and other systems, improvements to the headgates closing system, installation of instrumentation and clearance of unexploded ordnance from the dam structure. The subcomponent will also include studies on hydrological and seismological safety.
- Non-structural measures. Consultants will also support DABS to introduce modern dam safety measures that do not entail structural or other works. This will include setting up a procedure and staffing for independent dam safety inspections; preparation of dam safety plans including operations, maintenance and surveillance manuals for civil works, emergency preparedness plans, and post-earthquake response plans. The operating manuals for the electrical and electromechanical works will be revised. Training for staff in all aspects will be conducted.
- Structural and other works. Based on the findings of the safety audit, a contractor will be procured to undertake the improvements required to bring the dam to acceptable safety standards. Work to be included under this subcomponent includes reactivation of the low level outlet; introduction of independent operation of the power intake gates; installation of a standby generator for emergency opening of the spillway gates and closing of the power intake gates; and installation of essential instrumentation. Other work identified in the audit will be included.

15. Component 3: Feasibility and Design Studies on Increasing Reservoir Regulation Capacity (ARTF \$15 million). This component is aimed at examining the potential for increasing the active storage volume of the Naghlu reservoir. This would compensate for reductions caused by sedimentation and potentially increase the amount of energy produced by the dam. The component will consist of two subcomponents:

- Feasibility study. This will study the feasibility of raising the dam crest. Studies will include review of topography, geotechnical, hydrological and electricity generation, engineering and economic and financial aspects. Since raising the dam would increase the size of the reservoir, an ESIA will also be conducted by a separate consultant.

- Detailed design. Should the feasibility study return a positive result, a detailed design would be prepared. Based on the findings of the ESIA, resettlement and livelihoods restoration, environment management, health, and other action plans would also be prepared. These activities would then allow swift preparation of a follow-up investment project to raise the dam, should financing be available and security and other circumstances permit.

16. Component 4: Environmental and Social Sustainability (ARTF \$7 million). This component will aim to ensure the environmental and social sustainability of the dam. It will consist of three subcomponents:

- Addressing legacy issues. Early consultations with people in the project area indicate that there are a number of social legacy issues from the project. They include land, buildings and other assets for which compensation was not provided and promises of provision of electricity and jobs which have not been fulfilled. The legacy dates back more than half a century, during which two land reforms and 30 years of conflict have taken place. Consultations have indicated that the residents - who are mainly descendants of those affected by the original project - are not interested in reopening land-related issues but primarily request access to electricity which the planned project will provide. As preparation proceeds, records of the original resettlement will be researched and further consultations will take place to see how the project could improve the livelihoods of people in the project area through benefit sharing. Studies/needs assessment and implementation plans based on them will also need to be prepared to address component 4 for provision of access to skills and training for employment at the plant. There will be full transparency in dealing with legacy issues.
- Environment management. This subcomponent will support (a) the monitoring of the existing environment management plan for Component 1; and (b) the preparation implementation and independent monitoring of an environment management plan for the structural and other works subcomponent of Component 2.
- Resettlement and livelihoods restoration. This subcomponent will support the preparation, implementation and independent monitoring of a resettlement and livelihoods development plan for the structural and other works subcomponent of Component 2. It will not finance land acquisition.

17. Component 5: Project Management (ARTF \$7.5 million). This component is aimed at ensuring that DABS receives advice on good international practice. It will consist of the consulting services needed to support implementation of the project by DABS. Consistent with the principle of “learning by doing” the consultant assignment will be designed to support and mentor concerned DABS staff, rather than implement the project. The component will also finance an Environment and Resettlement Advisory Panel, the duties of which will embrace the requirements of OP 4.01 for an independent environment panel of experts and an Engineering Advisory Panel, the duties of which will embrace the requirements of the dam safety review panel as set out in OP 4.37.

18. Component 6: Capacity Development and Scale-up (ARTF \$5.0 million). The Capacity Development and Scale-up Component will support early actions needed to develop the Kunar River hydropower cascade. It is expected to finance studies to complement existing feasibility studies on planning and implementation for social development; environment and health management, consideration of alternatives and mitigation measures; hydrological, geological, geotechnical, seismic and dam safety studies; project preparation and management and preparation of financial and economic documents.

19. A phased approach. The proposed project would be phased to allow build up of project implementation capacity in parallel with the technical work that must be undertaken. Three phases are envisaged:

- Preparation. In addition to the normal activities undertaken during preparation, the work currently being undertaken to rehabilitate the electrical and electromechanical works would continue. In addition the Environment and Resettlement Advisory Panel and Engineering Advisory Panel would be recruited. A project preparation grant not to exceed \$5 million will be requested to finance these costs.
- First phase. Upon completion of the preparation phase, ARTF financing will be sought to cover the costs of a first phase focused on the completion of Component 1, covering electrical and electromechanical works, the safety audit and non-structural subcomponents of Component 2, the feasibility study under Component 3, and Components 4 and 5.
- Second phase. When the scope and cost of the structural and other works planned under Component 2 have been identified, and if a decision to move to the detailed design for increasing the reservoir regulation capacity under Component 3 is made, additional ARTF financing will be sought.

20. The phased approach envisages project activities taking place during preparation and the first and second phases.

- Preparation. In addition to the normal activities undertaken during preparation, the work currently being undertaken to rehabilitate the electrical and electromechanical works would continue. In addition the Environment and Resettlement Advisory Panel and Engineering Advisory Panel would be recruited. A project preparation grant of \$4.97million will be requested to finance these costs..
- First phase. Upon completion of the preparation phase, ARTF financing of \$42.5 million will be sought to cover the costs of a first phase focused on the completion of Component 1, covering electrical and electromechanical works, the safety audit and non-structural subcomponents of Component 2, the feasibility study under Component 3, and Components 4, 5 and 6.
- Second phase. When the scope and cost of the structural and other works planned under Component 2 have been identified, and if a decision to move to the detailed design for increasing the reservoir regulation capacity under Component 3 is made, additional ARTF financing of \$30 million will be sought.

21. A solid monitoring and evaluation system will be key to successful outcomes at component and project levels. Close monitoring of the progress of the proposed project will be essential to ensure that preparation of the second phase of financing is triggered at the right time and set at the right level of financing.

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

22. The project is located on the confluence of the Panjshir and Kabul Rivers in Kabul Provinces approximately 70 kilometers east of Kabul. The dam was originally constructed with Soviet assistance, and was completed in 1967. The dam is served by an access road from the main Kabul to Jalalabad highway, and there is also a road that runs up the eastern side of the reservoir which may have been part of the original construction work. Six villages were resettled at the time of construction to various areas including Jalalabad, Kabul and some new sites near to the dam. There remain a number of communities in the project area (reservoir and downstream). There is some agricultural production in the project area, and some pastoral activity. There are no protected areas in the vicinity of the project and no known areas of cultural property or heritage. Approximately six kilometers downstream of the dam, the tail of the reservoir for the Surobi dam starts, with the dam a further two kilometers further downstream from that.

23. The plant occupies a significant area immediately downstream of the dam on the right bank,

formerly used as a lay-down area, for the concrete batching plant and other purposes during the original construction of the dam. It is currently partially occupied by an existing encampment housing the police who guard the dam, and a workers' camp housing the staff of the contractor undertaking the rehabilitation of the mechanical, electrical and electromechanical parts of the plant.

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

24. A review of the safeguards for hydropower in Afghanistan reveal that there is a reasonably well-structured legal and regulatory requirement for safeguards relating to environment. Laws relating to land management and expropriation, and the land record system are less strong. Based on the original experience at Naghlu, there is scope for improvement in resettlement, compensation and livelihood restoration as well as sharing of project benefits. The capacity of DABS for safeguards is assessed as weak although senior management has demonstrated commitment to improving its capacity by initially recruiting two safeguards specialists, who have worked with the Bank task team during project identification. Furthermore it has already undertaken two public consultations on the proposals to carry out further rehabilitation work on Naghlu as well as on the possibility of raising the height of the dam crest.

25. The project will be used as an opportunity to improve these and other aspects of environmental management, resettlement criteria and processes and consultation. During preparation, DABS and the World Bank have agreed to work together using technical assistance money and staff interaction to improve these practices using the project as an example for scaling up hydropower development in Afghanistan. To that end, DABS has requested a project preparation grant to help finance the costs of obtaining international expertise in hydropower-related safeguards

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

Asta Olesen (SASDS)

Mohammad Yasin Noori (SASDS)

Obaidullah Hidayat (SASDI)

**II. SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/ BP 4.01	Yes	The project is proposed as a category A based mainly on (i) the need to address the sedimentation issue at the dam site, including the disposal of any sediment that must be removed; and (ii) the proposal to investigate the raising of the dam crest in the second phase of the project. Both these, but particularly the latter are expected to require complex mitigation measures that will have to be designed. Among the key issues to be addressed are: (i) downstream and upstream impacts on water quality, hydrology, health, fish and fisheries; (ii) construction related impacts including management of construction work camps; (iii) complementary infrastructure including the transmission line; and, (iv) cumulative impact

		<p>on natural resources.</p> <p>Because the impacts from the civil works to improve safety and the raising of the dam crest cannot be assessed in advance of the project, an Environment and Social Management Framework, including a Resettlement Policy Framework will be prepared by DABS with support from international consultants. A detailed environment and social impact assessment (ESIA) and mitigation plans will be prepared for the dam safety improvement component, based on the findings of the dam safety audit. A separate ESIA for the different options for raising the dam crest will also be carried out, in parallel with the technical feasibility study. This ESIA is expected to include an assessment of the cumulative impacts on the Kabul River Basin, and of the downstream impacts within Afghanistan and with the riparian country, Pakistan. Based on the preferred option, mitigation plans will be prepared.</p> <p>An Environment and Resettlement Advisory Panel of international experts will be formed during project preparation, financed from the proposed project preparation grant.</p>
Natural Habitats OP/BP 4.04	TBD	To be informed by assessment.
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	
Physical Cultural Resources OP/ BP 4.11	No	There are no known areas of physical cultural property or heritage in the project area. Chance finds procedures will be incorporated into the construction contracts.
Indigenous Peoples OP/BP 4.10	No	Through consultations with communities it has been determined that there are no indigenous people in as defined by the Policy in the project area.
Involuntary Resettlement OP/BP 4.12	Yes	The activities to improve dam safety are not expected to require any relocation of people, but there may be minor land losses to create temporary or permanent roads for removal of sediment, and there may be impacts which

		affect the livelihoods of people living downstream of the dam. These impacts will be assessed as part of the ESIA following the dam safety audit. Mitigation plans will also be developed based on the findings of the ESIA. Similarly, mitigation plans for resettlement will be prepared based on the ESIA to assess the impacts of raising the dam crest.
Safety of Dams OP/BP 4.37	Yes	An Engineering Advisory Panel (EAP) will be formed during project preparation, financed from the proposed project preparation grant. The EAP's duties will encompass the requirements of OP 4.37 for a dam safety review panel.
Projects on International Waterways OP/BP 7.50	Yes	The Kabul and Panjshir Rivers rise in Afghanistan and meet at Naghlu. The Kabul River then flows eastwards, forming the border between Afghanistan and Pakistan for a short distance before entering Pakistan north-west of Peshawar. It then empties into the Indus River about 150km from the border. There is no agreement between Afghanistan and Pakistan on the Kabul River. Impacts of changed flows resulting from any changes in operation of the Naghlu plant (bearing in mind the downstream regulating capacity of Sarobi) and of possible raising of the dam crest will be notified to Pakistan as required under the policy.
Projects in Disputed Areas OP/BP 7.60	No	

### III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 30-Sep-2013

**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:**

Draft Environment and Social Management and Resettlement Policy Frameworks have been prepared which will be the safeguards instruments required for appraisal. They will be further refined during preparation. Detailed ESIA's, RAPs and other instruments will be prepared as needed during project implementation.

### IV. APPROVALS

Task Team Leader:	Name: Richard Jeremy Spencer	
<b>Approved By:</b>		
Regional Safeguards Coordinator:	Name: Zia Al Jalaly	Date: 5/22/2013

<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.

Sector Manager:	Name: Jyoti Shukla	Date: 4/15/2013
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