

# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

**Report No.:** ISDSC9778

**Date ISDS Prepared/Updated:** 30-Jul-2014

**Date ISDS Approved/Disclosed:** 31-Jul-2014

## I. BASIC INFORMATION

### A. Basic Project Data

<b>Country:</b>	Poland	<b>Project ID:</b>	P147460
<b>Project Name:</b>	ODRA-VISTULA FLOOD MANAGEMENT PROJECT (P147460)		
<b>Task Team Leader:</b>	Guy J. Alaerts		
<b>Estimated Appraisal Date:</b>	24-Mar-2015	<b>Estimated Board Date:</b>	02-Jul-2015
<b>Managing Unit:</b>	GWADR	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	General water, sanitation and flood protection sector (100%)		
<b>Theme(s):</b>	Water resource management (100%)		
<b>Financing (In USD Million)</b>			
<b>Total Project Cost:</b>	1300.00	<b>Total Bank Financing:</b>	260.00
<b>Financing Gap:</b>	0.00		
<b>Financing Source</b>			<b>Amount</b>
Borrower			65.00
International Bank for Reconstruction and Development			260.00
EC European Commission			130.00
EC Council of Europe's Social Development Fund			390.00
EC European Investment Bank			390.00
POLAND Polish ECOFUND			65.00
Total			1300.00
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

### B. Project Objectives

The project's objectives are to strengthen the institutional administrative capacity and technical

expertise of the government to address summer, winter and flash-floods more effectively; and develop such flood protection to selected areas of the Odra and the Upper Vistula river basins.

### **C. Project Description**

The project would provide three distinct areas with flood management infrastructure and related measures: (i) the Lower Odra; (ii) the Nysa-Klodzka valley, a large sub-basin of the Upper Odra; and (iii) the Upper Vistula. The project would further strengthen the national flood forecasting and operational capability of south Poland, through more advanced equipment and mathematical simulation models that would be able to inform decision-makers faster and more reliably about the need to evacuate and take precautionary measures. The Components, with their specific sub-objectives are proposed as follows:

Component 1: Lower Odra. To protect Szczecin, Słubice, Gryfino, and other towns. Revitalize the Międzyodrza wetland upstream of Szczecin harbor.

Component 2: Nysa-Klodzka valley. To protect Klodzko town and other valley towns, as well as Bardo at outlet of valley. Protect the downstream Wrocław conurbation as the Nysa is the main tributary to the Upper Odra.

Component 3: Upper Vistula. To protect the Craców conurbation, the Sandomierz-Tarnobrzeg industrial and agricultural area, and selected towns on tributaries.

Component 4: Forecasting and operational water management capacity. To improve the protection level of South Poland by enhancing the preparedness along the main rivers and their tributaries. Improve early-warning for flash-floods.

Component 5: Project management and studies. The studies will notably cover the preparation of flood risk management plans (i.a. for the Cracow area), and the strategic plans to manage flood risks by creating more "space for the river", simultaneously enhancing the natural values.

The range of activities that will be funded under the Project broadly encompass the following: (i) within the Component 1: dyke rehabilitation and protection; bank stabilization and rehabilitation of revetments; rehabilitation of groins; restoration of partially silted flood plane; minor dredging to ensure continuing navigability into Donbicz lake. (ii) within Component 2: dyke rehabilitation and modernization; construction of 4 overflow dry polders to retain high water wave. (iii) within Component 3: construction of up to 5 dry polders to retain high water wave; dyke rehabilitation; embankment stabilization; modernization of the pumping stations for drainage. The greatest majority of the activities within components 1, 2 and 3 will include rehabilitation of the already existing infrastructure, which would have neutral to beneficial impact on environmental conditions, particularly those related to restoration of the flood plains, bank stabilization and dredging. Existing level of information indicates that these works are to be executed in areas that are not under any regime of nature protection, and are not physically connected to known cultural heritage sites. Additional information are shown in section D, and part II of this document.

The PCU of the Odra Flood Project will initiate and coordinate the preparation activities. It will work with the prospective Implementing Agencies, that will need to appoint their PIUs. For all the activities in the Components 2 and 4, and for some of those in Component 1, the PIUs will be the same as under the on-going Odra project, providing continuity, and ensuring that lessons from the current project will be used in the new project. The PCU and the prospective PIUs have prepared preliminary Concept Notes for the above Components. The nature of the activities to be financed was determined based on these Concept Notes and the discussions and field visits during the mission, where additional technical documentation was reviewed. A Table is attached outlining, for each Component, and for each main type of flood, the types of activities, the likely Implementing Agencies, and the estimate of cost.

The identification of overflow areas and dry polders that are capable of absorbing a significant part of the floodwave in a cost-effective manner is complex and requires ample study. The Upper Odra basin has benefited from such studies over the past century and a reasonably complete assessment is available of suitable sites, of which some are in use (such as the Bukow dry polder upstream of Raciborz, the Olawa polder upstream of Wrocław, and the Wilkanow and Ladek Zdroj dry polders built before WWII in the Nysa-Kłodzka Valley), while others are under construction (the large Raciborz dry polder) or planned (four medium-sized dry polders in the Nysa-Kłodzka Valley). In the Middle and Lower Odra, several natural areas alongside the river still give the river space to expand; immediately upstream of Szczecin the vast Międzyzdrze wetland, situated between the two parallel Odra Channels, fulfills the same function. On the other hand, the studies on the Vistula, being a larger and more complex hydrological system, will need to be continued to identify all required and cost-effective options. The project would fund investments in medium-scale overflow polders that are located in strategic locations, but will not yet provide the final required space for flood wave absorption; thus, the project will also support further in-depth studies to identify and prepare additional overflow areas.

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

The project would provide three distinct areas with flood management infrastructure and related measures: (i) the Lower Odra; (ii) the Nysa-Kłodzka valley, a large sub-basin of the Upper Odra; and (iii) the Upper Vistula. The project areas are partly in hilly regions (Nysa-Kłodzka, and most of the Upper Vistula), and partly in flat landscapes, with meandering rivers (Lower Odra). The landscapes have a low to moderate population density featuring, however, a few large cities and industrial centers (Wrocław, Szczecin, Cracow). While the basins feature numerous Natura2000 sites and protected nature areas and forests, none of the proposed works are in the proximity of such sites or would otherwise affect such sites. (This is substantively different from the situation in the on-going Odra Flood Project where several of the works are located inside Natura2000 sites or will affect protected forests).

The activities and measures that would be funded under the project comprise notably the following:

- “Passive” infrastructure, such as dikes and river bank stabilization works (revetments, foundations, parapets, etc.), through rehabilitation, modernization or expansion of existing structures.
- “Active” infrastructure, such as dry polders and overflow areas (wetlands, agricultural lands) to allow absorption and temporary retention of the peak of flood waves.
- River training, such as the rehabilitation or re-construction of groynes and breakwaters in the river to create and maintain specified water depths to allow floodwater to discharge rapidly, and icebreakers to navigate; dredging (to allow floodwater to discharge rapidly); and related measures such as increasing the vertical clearance under bridges (to allow modern-class icebreakers to pass underneath).
- Improvement of the forewarning time and accuracy in the forecasting capability for high waters, and enhanced remotely controlled operation of infrastructure (weirs, locks, reservoirs, dry polders, etc.) in such ways as to mitigate high water levels.

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### E. Borrowers Institutional Capacity for Safeguard Policies

The Bank conducted an assessment of the country systems in 2011-2012 and found the country systems largely acceptable, but expressed some reservations. However, use of the country system for Poland has not been approved (in accordance with OP 4.0), so the Project preparation activities will be governed in full by application of relevant World Bank safeguards policies. The Bank team has good experience with the safeguards application and enforcement in the on-going Odra Flood Project and will use these experiences, skills and procedures to develop a training, monitoring and continuous support system to become mainstreamed across all IAs, and, from there, across the national system. The PCU will collaborate in this effort, during preparation and implementation. Importantly, the safeguards complexities in the new project are less challenging than those in the on-going Odra Flood Project. In reference to safeguard-related documentation, a project-specific ESMF will be prepared and disclosed before Appraisal, as by that time all the specific investments will not be identified yet.

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

Jorge E. Villegas (GURDR)

Nikola Ille (GENDR)

## II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	In order to adequately assess the possible environmental impacts of the proposed project and plan to mitigate possible negative environmental impacts of proposed investments, the Environmental Management Framework (EMF) will need to be prepared and disclosed. Beside the project-scale EMF, separate site-specific Environmental Management Plans (EMPs) would need to be prepared for all identified investments. It is likely that material to be dredged from the river bed, notably in the Dąbie Lake near Szczecin, is suitable for further use and is not contaminated, but this would need to be reconfirmed during the preparation of EMF.
Natural Habitats OP/BP 4.04	Yes	Based on the available information, the project is expected to have significant positive environmental impacts in terms of protection of floodplains, aquatic ecosystems and surrounding areas. At the same time, the main potential threats are related to change of water regime and consequently impact on flora and fauna in the periodically-flooded areas, which, if not properly managed could create significant changes to local habitats. According to the available information, most of the investments

		which include rehabilitation of the already existing structures would have a neutral to beneficial impact on environmental conditions, particularly those related to restoration of the flood plains and bank stabilization/dredging. However, activities related to the construction of dry polders would need to be carefully evaluated in both positioning, sizing and impacts, to ensure that possible adverse effects are minimized and adequately mitigated.
Forests OP/BP 4.36	TBD	Impact on forests is unlikely, but will be assessed more closely based on further concept design information during preparation.
Pest Management OP 4.09	No	
Physical Cultural Resources OP/ BP 4.11	TBD	Physical cultural resources are not expected to be encountered as nearly all works would be within the confines of the river bed and banks. However, near old cities such as Cracow, it cannot be confirmed as yet that no physical cultural resources could be encountered; this will be ascertained based on more complete survey and design during the preparation.
Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	Yes	The project's key potential adverse social impact would likely relate to land acquisition and resettlement. Some of the works under consideration would involve the rehabilitation of existing infrastructure in mostly government-owned lands located in sparsely populated peri-urban and rural areas (e.g., rehabilitation of existing dikes and groynes). In these cases the impacts related to land acquisition would be limited. However, other interventions under consideration, such as construction of new structures and dry polders, particularly in the Nysa-Kłodzka Valley and some locations in the Upper Vistula, would require land acquisition involving economic displacement (e.g., from agricultural lands) and resettlement of a number of households that likely will be small. In order to adequately plan and manage this impact the Borrower will prepare a Land Acquisition & Resettlement Policy Framework (LA&RPF) for the whole project, and, once they are identified, site-specific Land Acquisition & Resettlement

		Action Plans (LA&RAPs) for sub-projects. The LA&RPF will be based on Polish regulations, the WB's policy on Involuntary Resettlement (OP 4.12) and lessons learned from the Odra Flood Protection Project. For those sub-projects that are defined, and for which land acquisition is required, the GoP will prepare Land Acquisition & Resettlement Action Plans (LA&RAPs) following the parameters defined in the LA&RPF and in line with Polish regulations and WB's OP 4.12 and will include comprehensive consultations with project-affected people.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	Yes	About 160km of the Odra's 854km of total length is the so-called Border Odra (a sparsely populated part of the Lower Odra) which is shared by Poland and Germany. The Odra river basin measures 122,000km <sup>2</sup> , of which 90% lies on Polish territory, and 5% each on German and Czech territory. A Polish-German Government Commission for Cross-Border Cooperation is active at Ministerial level, with involvement of, on the Polish side the Vojevodes, and on the German side, the Länder representatives. In parallel, the trilateral Odra River Commission addresses the technical aspects of the river issues of common interest. The Odra Commission has agreed on the technical specifications of flood protection along the Border Odra. For the project's purposes, the Polish government would soonest initiate the procedure of Notification of the riparians to inform them of the project.
Projects in Disputed Areas OP/BP 7.60	No	

### III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 31-Dec-2014

**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:**

- Environmental Management Framework, due by December 2014
- Environmental Management Plans of works for implementation starting in 2016, due by September 2015
- Environmental Management Plans of works for implementation after 2016, due by (TBD) as sub-projects are detailed and designs completed.

<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.

- Resettlement Policy Framework, due by (TBD)
- Pre-Appraisal Resettlement Action Plans by (TBD)
- Post-Appraisal RAPs to be prepared as sub-projects are identified

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#### IV. APPROVALS

Task Team Leader:	Name: Guy J. Alaerts	
<b><i>Approved By:</i></b>		
Regional Safeguards Coordinator:	Name: Agnes I. Kiss (RSA)	Date: 29-Jul-2014
Practice Manager:	Name: Jonathan S. Kamkwalala (PMGR)	Date: 31-Jul-2014

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