

**INTEGRATED SAFEGUARDS DATA SHEET  
APPRAISAL STAGE**

**Report No.: ISDSA9793**

**Date ISDS Prepared/Updated:** 18-Sep-2014

**Date ISDS Approved/Disclosed:** 19-Sep-2014

**I. BASIC INFORMATION**

**1. Basic Project Data**

<b>Country:</b>	Kazakhstan	<b>Project ID:</b>	P150402
<b>Project Name:</b>	Kazakhstan: Fostering Productive Innovation Project (P150402)		
<b>Task Team Leader:</b>	Karen Grigorian		
<b>Estimated Appraisal Date:</b>	18-Sep-2014	<b>Estimated Board Date:</b>	31-Oct-2014
<b>Managing Unit:</b>	GTCDR	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	General industry and trade sector (100%)		
<b>Theme(s):</b>	Other Private Sector Development (100%)		
<b>Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?</b>			No
<b>Financing (In USD Million)</b>			
Total Project Cost:	110.00	Total Bank Financing:	88.00
Financing Gap:	0.00		
<b>Financing Source</b>			<b>Amount</b>
Borrower			22.00
International Bank for Reconstruction and Development			88.00
Total			110.00
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

**2. Project Development Objective(s)**

The Project Development Objective (PDO) is to promote high-quality, nationally relevant research and commercialization of technologies.

**3. Project Description**

Building on the visible achievements under the TCP project, the new operation would expand and adapt the range of instruments used in the TCP and offer new programs for financing innovation to

complement similar pilot innovation programs introduced by the government in recent years.

Project consists of five components:

Component 1 - Development of the Knowledge Base for Innovation (\$40 million): The objective is to assure appropriate R&D deal flow and advanced human capital for the Innovation Consortia and Technology Commercialization Cycle Components. The component will finance grants for young researchers and internationally recognized researchers (\$30 million), and PhD training abroad in technical areas strategic for Kazakhstan's economy (\$10 million).

Component 2 – Technology Consortia for Inclusive Innovation (\$35 million): The objective is to promote collaboration among the existing scientific research institutes and design bureaus, scientific and engineering profile laboratories and between these research centers and world's innovation leaders through R&D and technology consortia and to take the effort to the commercialization stage. The component includes two windows of Calls for Proposals: (a) Productive sector consortia (agriculture, extractive industries, manufacturing; and (b) Inclusive innovation consortia (health, education, water, urban and rural infrastructure).

Component 3 – Consolidation of the Technology Commercialization Cycle (\$24million): The objective is to complement the existing financial instruments and solutions suitable to different stages of startup company development. The four sub-components finance: (a) Public Support to a Funding Facility for technology-based enterprises and for providing a demonstration effect of commercial viability of these investments (\$10 million); (b) Innovation brokerage to generate deal flow (\$2 million); (c) Technology Acceleration Offices Abroad (\$2 million); and (d) Network of Technology Transfer Offices (TTO) at major Kazakh universities (\$10 million).

Component 4 - Innovation Council (\$6 million): The objective is to assure better coordination between key stakeholders of the NIS, including mainly the MOES, Ministry of Industries and New Technologies (MINT), Ministry of Agriculture, and Ministry of Oil and Gas.

Component 5 - Project Implementation (\$5 million). The Component will finance project management, monitoring and evaluation, awareness raising and capacity development.

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

The project is expected to cover entire country with matching grants and SME support, including equity investments for all eligible entities in Kazakhstan. The project would target work and R&D that addresses strategic problems related to key sectors such as energy, minerals, metallurgy and agriculture. Project would also include developing and providing public funds for a private-public venture fund for technology companies all around the country. The project will provide grants to upgrade the chosen facilities (laboratories) to international standards.

#### **5. Environmental and Social Safeguards Specialists**

Lola Ibragimova (GSURR)

Natasa Vetma (GENDR)

<b>6. Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/	Yes	The Environmental Management Framework has

BP 4.01		<p>been prepared prior to appraisal and defines environmental procedures and due diligence for the project as a whole. The EMF builds on existing TCP and Croatian Science and Technology Project II, which covers similar types (wide range) of research activities.</p> <p>For Component 1, Grants to research teams, Component 3, Innovation matching grants to provide early stage support for commercialization of R&amp;D, and for Funding program for innovative SMEs to provide matching equity, an EMF has been developed focusing on variety of environmental impacts that come from R&amp;D sectors. Sub-projects might range from low to high category B projects, implying possible preparation of various due diligence documents like: EIA, EMP, EMP checklist for which criteria are defined in EMF. Category A projects will be excluded, as well those listed on IBRD non-eligible project list. For smaller rehabilitation expected under category 1-3, EMP checklist for rehabilitation will be prepared and template is part of the EMF. The EMF makes sure that the implementation of the project complies with both National and WB safeguards procedures.</p>
Natural Habitats OP/BP 4.04	No	The project will not support R&D activities in protected areas or natural habitats of high value.
Forests OP/BP 4.36	No	The project will not support R&D activities in / on forests.
Pest Management OP 4.09	No	
Physical Cultural Resources OP/ BP 4.11	No	
Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	No	The borrower will exclude any activities that would involve land acquisition and do not meet "willing buyer/willing seller" criteria. The PMU would be responsible for confirming (as part of sub-project screening) that in any such case the seller was free to decline selling the land and also that any land purchased in this way was free of 'encumbrances" that could include informal occupants. The screening checklist is integrated in the operational manual. Verification spot check will also be required by the monitoring officers.

Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

## II. Key Safeguard Policy Issues and Their Management

### A. Summary of Key Safeguard Issues

<p><b>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</b></p> <p>Environmental Assessment Policies will apply to the proposed project. The project triggers Environmental Assessment (OP/BP 4.01). The project calls for B environmental category.</p> <p>The project will not have any potential large, significant or irreversible environmental impacts. Only EA Category B and C sub-projects (includes grants for research and rehabilitation works) will be eligible, and projects having large scale impacts (Category A) or those identified on the non-eligible project list are excluded as described in Environmental Management Framework (EMF).</p> <p>Environmental due diligence will be applied through the procedures for the selection and implementation of sub project agreed between the Bank, the Borrower and MoES. The EMF outlines the guiding principles of environmental screening, assessment, review, management, and monitoring procedures for two distinctive types of sub-projects: a) grants supported through Components 1 and 3 and b) for smaller rehabilitations expected under Category 1-3. In addition, it describes roles and responsibilities in carrying out the environmental work during the project implementation. The environmental due diligence procedures identified in the EMF comply both with Kazakhstan national and World Bank environmental safeguards procedures. The EMF was prepared, according to the Bank guidance, by the Borrower. The Bank, more specifically, the safeguards team reviewed procedures proposed in EMF for both grants and rehabilitation sub-projects and found them adequate and compliant with the World Bank safeguards policies.</p> <p>Any land acquisition which does not meet willing buyer/ willing seller criteria is precluded from financing under the project. In addition, the PIU at the initial pre-screening stage, will also exclude all sub-projects supporting any activities which result in the loss of assets or access to assets and means of livelihood.</p>
<p><b>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</b></p> <p>The project will support wide range of sub-projects in science and research and it is not expected that any proposed activities will cause multiple, significant, irreversible, and long-term adverse environmental and/or health impacts. The screening procedures specified in the EMF are designed to eliminate any sub-projects (including both sub-financing investments and TAs) which present these types of risks.</p> <p>As the project will finance scientific research sub-projects, cancerogenic, mutagenic agents might be used, as well as trace radioactive materials and practices with ethical issues like testing on laboratory animals. The EMF calls for detailed description of procurement, supply, use, handling,</p>

storing and disposal of such agents and testing animals. Description of these practices should be submitted with all relevant permits in the sub- project application period. These projects will be prior reviewed by team in MoES and WB environmental specialist.

**3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.**

Despite a low likelihood of occurrence, sub-projects which would qualify for environmental Category A are excluded from the activities eligible for the project support as stated in EMF.

For the rehabilitations of laboratories and science buildings, generic EMP checklist for has been prepared as part of the EMF. For each rehabilitation sub-project a site specific EMP checklist will be prepared and disclosed. EMF as well includes a list of international good laboratory practices.

Grant sub-projects categorized as Category B may vary on their potential impacts and therefore are divided in two sub categories:

B+ mainly related to new construction / addition or activities for research purposes (not expected under the project), which are recognized as one that might have significant, negative and/or short term environmental impacts, of the magnitude of which are difficult to determine at the sub-project identification stage and/or are activities of 3rd or 4th category according to national legislation, i.e. The Ecological Code; and

B - involving smaller research investments, which may have intermediate levels of regular and accidental emissions and typical simple construction related impacts.

Approval of higher risk Category B sub projects (B+) will require prior review by PMU and WB environmental specialist. The status of environmental compliance will be reported by sub-project beneficiary to PMU on regular basis and the PMU will provide this information to the Bank as a part of general progress reporting.

**4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.**

As part of the project Operational Manual the MoES, more specifically PMU has prepared an environment section, which serves as the Environmental Management Framework and defines the environmental screening and assessment procedures for the project and sub-projects (grants and rehabilitation works).

Environmental screening of sub-project proposals will be essential to ensure that sub-projects are properly categorized and respective environmental review is carried out for them. This mechanism of environmental screening, review, approval, and supervision of sub-projects, including roles and responsibilities of all agencies involved in the process, is described in the EMF and included in the Operations Manual of the project. According to the established EMF, sub-project applicants will be required to carry out adequate type of environmental assessment of the proposed sub-projects according to the WB safeguards procedures and to obtain environmental permits as prescribed by the national legislation.

MoES and its PMU will be responsible for environmental screening of sub- projects applications, assigning relevant environmental categories to them, reviewing environmental assessment reports for sub – financing submitted by applicants, approving them, and carrying out environmental supervision and monitoring in the course of sub-project implementation.

Depending on the assigned environmental category, the sub-project application package would include one of the following: a) EIA and EMP; b) EMP alone; c) simplified (checklist) EMP alone; d) material EMP; and e) explanation why no EA or EMP is required.

If required, Environmental Management Plans (EMPs) and / or other due diligence documents defined in EMF, will be developed to provide guidance on the application of mitigation measures and a system of monitoring will be introduced to ensure compliance of sub-project implementation with EMPs.

The existing PMU of the MoES for the ongoing TCP, will be responsible for day-to-day project administration, including environmental safeguards management. Currently, the PMU has a person in charge for environmental issues. Nevertheless, the capacity of project institutions and applicants for implementation of the EMF will be constantly built during the project cycle to successfully follow project implementation. For all technical PMU members and other stakeholders working or associated with the project and first round of applicants, the World Bank environmental specialist will organize workshop on environmental compliance and implementation of the EMF. The World Bank environmental specialist will closely monitor screening process to support the client. The training will be repeated during the course of the project if required and other types of training would be offered to the PMU staff.

**5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.**

The key stakeholders are the MoES and scientific and research community. The implementation agency is MoES which will also carry on environmental screening of the sub-projects.

EMF, as well as the invitation to a public consultation have been published on September 10, 2014 on the official web pages of the MoES: <http://edu.gov.kz/ru/uvedomlenie-ob-obshchestvennom-obsuzhdenii-ramochnogo-plana-prirodoohrannyh-meropriyatiy-po-proektu> . In addition to public announcement, the invitation was sent directly to e-mail addresses of key counterparts and relevant people from the Kazakhstan scientific, business and public sector.

Public consultation will be held on September 19, 2014 in Astana. Comments will be reflected in the slightly revised EMF and the document will again be published on the above mentioned web-pages for additional public commenting.

**B. Disclosure Requirements**

<b>Environmental Assessment/Audit/Management Plan/Other</b>	
Date of receipt by the Bank	25-Jun-2014
Date of submission to InfoShop	12-Sep-2014
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
<b>"In country" Disclosure</b>	
Kazakhstan	10-Sep-2014
<i>Comments:</i> URL of the EMF announcement on MOES website: <a href="http://edu.gov.kz/ru/uvedomlenie-ob-obshchestvennom-obsuzhdenii-ramochnogo-plana-prirodoohrannyh-meropriyatiy-po-proektu">http://edu.gov.kz/ru/uvedomlenie-ob-obshchestvennom-obsuzhdenii-ramochnogo-plana-prirodoohrannyh-meropriyatiy-po-proektu</a> Date of public hearings: September 19, 2014.	
<b>If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/</b>	

<b>Audit/or EMP.</b>
<b>If in-country disclosure of any of the above documents is not expected, please explain why:</b>

### ***C. Compliance Monitoring Indicators at the Corporate Level***

<b>OP/BP/GP 4.01 - Environment Assessment</b>	
Does the project require a stand-alone EA (including EMP) report?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>The World Bank Policy on Disclosure of Information</b>	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>All Safeguard Policies</b>	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Have costs related to safeguard policy measures been included in the project cost?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]

### **III. APPROVALS**

Task Team Leader:	Name: Karen Grigorian	
<b><i>Approved By</i></b>		
Practice Manager/ Manager:	Name: Paloma Anos Casero (PMGR)	Date: 19-Sep-2014