### **SERBIA**

### **COMPETITIVENESS AND JOBS PROJECT**

(Hereinafter the Project)

**DRAFT** 

# ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

March 13, 2015

#### **OVERVIEW**

This Environmental and Social Management Framework (ESMF) describes procedures that will be in place during the implementation of the Serbia Competitiveness and Jobs Project to meet requirements of the WB Safeguard Policy on Environmental Assessment OP/BP 4.01. The purpose of this framework is to specify the procedures that the Project will have in place during implementation, with the objective that all investments and reforms, supported under the Project will be environmentally and socially sound and sustainable, and consistent with WB Safeguard policies and Serbian national legislation.

The ESMF applies to the Eligible Expenditure Programs under the Project with national or sub-national implication. It provides guidance to ensure all Project activities supporting the development of reforms and institutional capacities include consideration on environmental protection based on best international practices in this regard. It also outlines beneficiaries' obligations in screening and categorizing activities according to their possible environmental and social impacts, mitigating the associated risks, and defining monitoring activities, if and when required. The ESMF describes the kind of exclusion activities that will not be financed under the Project and its Eligible Expenditure Program.

#### PROJECT DESCRIPTION

The Project Development Objective is to create an environment that is more conductive to job creation for firms and workers by improving government programs related to investment and export promotion, innovation and services and benefits for the unemployed and inactive workers.

The Project consists of the following components:

- 1. Umbrella Component: Supporting **Results-Based Management and Policy Coordination** development through increased ability for government's planning, coordination and measurement of jobs and competitiveness policies
- 2. Component 1: Supporting institutional environment for spurring **investment climate and export promotion** through redesigning enterprise support programs and inspection reforms
- 3. Component 2: Continuum in supporting **innovation** activities through facilitating technology transfer activities, consolidating the public research sector for efficiency, establishing competitive applied research financing and enabling the innovation ecosystem
- 4. Component 3: Supporting the National Employment strategy through enhancement of service delivery capacity of the currently over-stretched National Employment Service, improvement of the design, provisioning, and targeting of active labor market programs and improvement of incentives for formal jobs for a targeted subset of disadvantaged workers

The main environmental concern deals with the grant programs under Pillar 2 of the Project, which will support the development of new or significantly improved technologies, products and processes. It is

proposed that these grants will be administered by the existing Innovation Fund<sup>1</sup> (IF) and its independent Investment Committee. Possible indirect environmental and social impacts may result from Technical Assistance provided under the Project, particularly as part of the Umbrella Component and Component 1 on Investment Climate and Export Promotion, which will support business inspection reform and better coordination of government programs. No environmental impacts are expected as a result of Component 3 on Labor, which will provide capacity support of the National Employment Services and improve the cost effectiveness of labor market policies.

#### Umbrella Component Results based management and policy coordination

Result based management and policy coordination directly addresses two of the main challenges identified in the Serbia Systematic Country Diagnostic: lack of strategic planning and very weak policy coordination. Serbia has a range of policies and programs spread across several ministries that aim to address the competitiveness and jobs challenges described above. These initiatives are not well-coordinated and in many cases their effectiveness is not known. Resources are not necessarily channeled to the policy measures and investments with the highest potential impact.

This component aims to increase the effectiveness of government spending targeting competitiveness and jobs by introducing a pilot results-based management framework within the ministries that are participating in the Project. This is expected to lead to better designed and better coordinated policies, since they will become part of a clear, strategic framework with a robust monitoring and evaluation system.

#### **Component 1: Investment climate and export promotion**

This component aims to provide an environment for firms in Serbia that is more conducive to job creation. It covers interventions aimed at stimulating new investment and exports and making interactions between businesses and the state more transparent, predictable, and efficient.

There are three subcomponents:

- a) Results-based management in the Ministry of Economy; This subcomponent is a placeholder for developing supporting methodology for coordination, planning and measurement Ministry's enterprise support programs. These cover investment and export promotion (SIEPA), access to finance (Development Fund), export credit and insurance (AOFI), and micro and small enterprise support (National Agency for Regional Development).
- b) Upgrading of select Ministry of Economy programs; This subcomponent is a placeholder for supporting redesigning Ministry of Economy agencies, SIEPA, Development Fund, AOFI and National Agency for Regional Development). Current procedures are not transparent and do not fulfill needs of enterprises, especially in access to finance.
- c) Inspections reform.

<sup>&</sup>lt;sup>1</sup> The IF was established under the World Bank financed Serbia Innovation Project (2011-2016).

The subcomponent will support the implementation of the Ministry of Public Administration and Local Self-Government's inspection reform action plan. The main principles of the proposed reform are based on significant improvement in coordination between different inspections, clearly delineate responsibilities of various inspections, introducing risk-based inspections and significantly increase the capacity of inspectorates by continuous training of inspectors.

#### **Component 2: Innovation**

This component will leverage the institutional capacity built at the Serbia Innovation Fund (IF) and the enterprise innovation programs piloted under the 2011 EU Instrument for Pre-Accession Serbia Innovation Project (EU IPA SIP).

There are five subcomponents of this activity:

- a. Scaling-up enterprise innovation
  - The IF's matching R&D grant programs are a cornerstone of a strong innovation system, and critical to build Serbia's pipeline of innovative startups and technology-based enterprises that create high value jobs in Serbia and will attract the attention of international investors interested in financing technology ventures.
- b. Facilitating technology transfer and commercialization activities

  Under SIP, the World Bank team initiated support to RDIs to commercialize existing research, which has proven to be extremely challenging given that most Projects are in basic science and still at early technology readiness levels and far from market readiness. Based on these recent exercises conducted at the participating RDIs, it has been estimated that the current Project pipeline could absorb as much as US\$10 million annually. Therefore, the funding available to the TTF via SRITTP (EUR1.18) is insufficient to demonstrate a strong tech transfer pipeline at this stage. This proposed Project could seamlessly build on the capacities built and activities piloted under the TTF and ensure that Ministry of Education, Science and Technology Development financing supports the transaction preparation process in the coming years
- c. Consolidating the public research sector for efficiency
  The Serbian RDI landscape is highly fragmented, with as many as 60 RDIs, and several with overlapping scientific/research mandates and others with little or no critical researcher mass.
  Currently, RDIs' operating costs are financed entirely through research Projects financed by MOESTD, with no core institutional funding allocations. The reform would revamp the current RDI financing model from Project financing only, to a combination of core/institutional funding and Project financing. Sufficient basic institutional funding will enable sustainable institutional excellence, conditioned upon the market performance of commercially oriented research, or peer
- d. Establishing competitive applied research financing In the enterprise innovation support sphere, a successful shift between policy making and implementation has been achieved through the establishment of an implementing entity, the Innovation Fund. The Government of Serbia wishes to emulate this successful institutional building approach and adapt it to modernize the financing of basic and applied research. In this new model of scientific research financing, the Ministry would create and govern scientific

reviewed international excellence for basic research.

policy, while a newly-created National Science Foundation (NSF) would facilitate implementation, which is line with good practice in most scientifically advanced societies

e. Enabling the entrepreneurship, and innovation ecosystem

The enabling environment for innovation in Serbia continues to be seriously constrained by financing and relevant professional management expertise, beyond the structural factors discussed above. This activity aims to support the existing Belgrade Technopark, by identifying a professional management team, providing budget support, and raising the occupancy rate of the Technopark by attracting organizations and technology firms. This will help establish the importance of a multitude of ecosystem support actors and programs—including but not limited to tech transfer, business angels, Diaspora, incubation, acceleration—that can contribute to networking the Serbian innovation ecosystem both domestically and internationally, and one in which the comparative advantages of both public and private actors are leveraged.

#### **Component 3: Labor**

This component will guide implementation of Ministry of Labor, Employment, Veteran and Social Affairs (MoLEVSA) National Employment Strategy. The strategy should guide the key policy reforms in the labor sector in the years to come, and offer a priority list of actions to direct recurrent spending of the MoLEVSA and future investments.

There are three subcomponents:

- a. Enhancing the capacity of the National Employment Service
  - The reforms supported under this subcomponent will consist of developing a system of results-based management and key performance indicators (KPIs) related to the various tasks of the NES. The Project will support the improvement of the NES' performance on the KPIs. Key indicators will include e.g. increasing the quality of employer services (e.g. through more frequent contact with employers), improving the quality of case management for active jobseekers (e.g. by increasing the number of successful job matches), and reducing variance in case load per case worker across NES offices.
- b. Improving the cost effectiveness of Active Labor Measures Policies (ALMPs) Improving the cost-effectiveness of ALMPs will require reforms in two areas: (i) in the way ALMPs are targeted to beneficiaries, and (ii) in the way ALMPs are designed, piloted, monitored, and evaluated—and how evidence is used to re-design ALMPs.
- c. Aligning incentives toward formal employment
  - The Project will support the improvement of work incentives for the poor by supporting a new cash transfer conditional on having a formal job for recipients of social financial assistance. The conditional cash transfer, an in-work benefit—will be designed in a way so as to partially reimburse eligible workers for their lost benefits (for reduced social financial assistance) and social security contributions.

#### **EXCLUSIONS**

The Project has the overall B category as per the World Bank Environmental Assessment safeguard policy. The Project will not finance:

- Any activities which would have an irreversible and substantial environmental impact, or correspond to a World Bank Category A Project. This means that the Project will not finance activities for which a Full Environmental Impact Assessment is required as per the Law on Environmental Impact Assessment (Official Gazette of RoS No. 135/2004 and amended in 2009 36/2009) or as per WB Safeguard policy on Environmental Assessment OP/BP 4.01.
- Any activities that would trigger any World Bank Safeguard policies other than OP/BP 4.01 on Environmental Assessment. This means that the Project will not finance activities that would, e.g. affect natural habitats, forests, finance experiments or production of pesticides, or cause economic and social displacement.
- Any activities which involve land acquisition or any form of resettlement.
- Any of the activities listed in the World Bank Group -IFC Exclusion List given in Annex A.
- Any construction and rehabilitation activities, including very small, refurbishment or renovation activities or any scope of civil works.

A comprehensive exclusion list is given in Annex A.

An Independent Environmental and Social Expert will be engaged through the Project, who will be responsible for screening sub-projects/grants selected for financing to ensure: (1) compliance with the World Bank Group (IFC) exclusion list, (2) that no sub-projects with significant impacts of a Category A type are supported, (3) that sub-projects/grants will not necessitate involuntary land acquisition or any form of resettlement, and (4) no World Bank Safeguard policies other than OP/BP 4.01 on Environmental Assessment are triggered. Any activities corresponding to the World Bank category B Projects will be required to have an Environmental Management Plan in place prior to approval that would identify potential environmental impacts and provide adequate mitigation measures.

In addition the Independent Environmental Expert will be responsible to ensure that any Technical Assistance (TA) outputs supported under the Project are consistent with World Bank Safeguard policies and that any support/reimbursement for Research & Development (R&D) under the Eligible Expenditure Programs is post-reviewed for potential environmental impacts.

### ENVIRONMENTAL AND SOCIAL SCREENING PROCEDURE FOR MINI AND MATCHING GRANTS PROGRAM

The procedure is made up of five steps listed below:

- Screening
- Disclosure and Public Consultation
- Review and Approval
- Conditionality

Monitoring and Reporting

Details of procedures required for each of these steps are subsequently described and shown in Annex B.

The grant awardees will be required to comply with Serbian environmental laws and regulations (http://www.eko.minpolj.gov.rs/dokumenti/).

#### **Screening**

An *Environmental and Social Screening Questionnaire* (ESQ) will be required for every Project submitted for financing and will be part of the Project application.

The applicant will be responsible for ensuring that all of the adequate documentation has been submitted and filed, including: (a) all of the Serbian Environmental Assessment (EA) documentation; (b) official approvals for the documentation from responsible authorities for protection of environment, and (c) copies of the environmental permit. The applicants will be responsible to meet all of the legally prescribed requirements and to submit proof of doing so – through the documentation listed above. The incomplete applications will not be considered for financing.

The Independent Environmental and Social Expert will categorize activities based on the World Bank system, in accordance with the following three screening categories.

 Category I (Low Risk): grant activities whose environmental impacts are expected to be negligible, for which no environmental evaluation will be required, corresponding to a World Bank Category C.

#### Category I activities have no further environmental assessment requirements.

- Category II (Intermediate Risk): grant activities with impacts that can be readily identified and standard preventative and/or remedial measures can be prescribed without a full EIA as per the Law on Environmental Impact Assessment (Official Gazette of RoS No. 135/2004 and amended in 2009 36/2009). Mitigating measures are standard and are usually just good housekeeping or good engineering practice. This category corresponds to World Bank Category B.
- Category III (Not Eligible for Financing): activities which may have potential and highly significant or irreversible environmental impacts, the magnitude which are difficult to determine at the Project identification stage (these will probably be identified in the first step) corresponding to World Bank Category A. In addition, activities which involve resettlement or land acquisition, any type of construction and rehabilitation activities including simple renovation or small construction works, as well as those that include activities on the IFC exclusion list are not eligible for financing.

For grant applications corresponding to Category II (or WB Category B) an Environmental Management Plan (EMP) will be required. Pre-selected Applicants will be notified about the results of the ESQ if their Project related activities are deemed to fall under Category II and an EMP will be needed. The format for a comprehensive EMP is presented in Annex C. The applicant is responsible for preparing the EMP prior

to the final approval of the related grant. If the Grant Applicant/Beneficiary refuses to prepare the EMP, the activity/application would be ineligible to access funds from the Project.

If a Request for an Environmental Permit was prepared by the applicant to meet Serbian Environmental Assessment requirements this documentation should be used to prepare the EMP. The Independent Environmental Expert, to be engaged through the Project, should check the Request and the EMP to insure, as a minimum, consistency in terms of: (a) identifying the same priority environmental issues, mitigating measures and implementing responsibility, (b) monitoring program and (c) institutional arrangements for environmental management.

#### **Disclosure and Public Consultation**

The Grant Applicant/Recipient is responsible for disclosing the EMP (both the draft EMP used for consultations and the final EMP revised following comments received during consultations) in a public place (library, municipal or government building etc.) near the Project site and on the enterprise website, and place a notification in the local media (e.g. newspaper) as to where the EMP may be viewed, with a suitable feedback mechanism in place for comments or queries (both on-line and hard copy). Data on where and how the EMP was disclosed should be a part of the Final EMP.

Within the Serbia and Competitiveness and Jobs Project the grant funds will be provided for innovation purposes. Innovation and technological development are very sensitive issues with regards to disclosure of details related to the processes and activities involved. As such, the Grant Applicant/Recipient reserves the right to abbreviate the EMP in a manner where information disclosed will not give away any of the confidential information related to the innovation process itself but will sufficiently explain how the financed activities will mitigate any of the associated environmental impacts. Due to the nature of the Project, the Grant Applicant may not be required to hold a public consultation meeting, if the disclosed EMP on a website provides for an adequate feedback mechanism for comments or queries. This decision will be made by the Independent Environmental and Social Expert (upon request by the Grant Applicant) in consultation with the Evaluation Committee of the Mini and Matching Grants Program.

#### **Review and Approval**

The Independent Environmental and Social Expert, to be engaged through the Project, is responsible for the preliminary screening of the proposed grant, or for checking the screening questionnaire already filled in by the applicant. The IF will transfer this obligation to the Independent Environmental and Social Expert, to be engaged through the Project, for review of the Checklist and for review of the EMP forms. The IF does not bear any liability for information that may be untruthfully and intentionally provided by the applicant.

The Independent Environmental and Social Expert will also be responsible for reviewing and approving the EMP.

#### **Conditionality**

The IF will include Grant Applicant/Recipient commitment to obey requirements set forth in the EMP into any grant agreement. The Grant Applicant/Recipient will be required to show best effort to ensure that the funded activity is carried out with attention to good environmental management. The Applicant/Recipient will be held responsible for all mitigation measures that have been listed in the EMP.

#### Monitoring and reporting

As part of normal monitoring activities the Serbia Innovation Fund (IF) and the Independent Environmental and Social Expert, to be engaged through the Project, will perform desk monitoring functions (based on quarterly Progress Reports submitted by the Grant Recipients) and field-based monitoring functions for all grants that were required to prepare an EMP to assure compliance by the Grant Recipients with overall as well as environmental and social obligations specified in the grant agreement. The performance reports will contain details on supervision of potential environmental impacts and report on implementation of EMPs for all of the grants that were required to prepare an EMP. Through this report the IF and the Independent Environmental and Social Expert, to be engaged through the Project will verify whether or not environmental requirements as detailed in the grant agreement have been met. If requirements have not been met, the IF will provide recommendations for further action to insure compliance. Depending on the severity of a compliance failure, the IF may terminate the Project financing.

#### PROCEDURE FOR ENVIROMENTAL ASSESMENT OF TECHNICAL ASSISTANCE

For proposed Technical Assistance (TA) under the Project, such as support for reforms proposed under the Umbrella Component or Component 1, the Independent Environmental and Social Expert will conduct a preliminary screening in accordance with the 2014 "Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank-Financed Projects and Trust Funds Administered by the Bank" to identify TA which might require an Environmental Impact Assessment and/or a simple Environmental Management Plan. The screening will also allow for identifying possible areas and recommendations for improving environmental performances of proposed activities. The Independent Environmental and Social Expert will ensure that Terms of References (TOR) for and TA provided as part of the Project will incorporate provisions that ensure that the TA processes and outputs are consistent with WB Safeguard policies.

### PUBLIC CONSULTATION DETAILS AND MINUTES OF MEETINGS FOR THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

#### [TO BE ENCLOSED AS ANNEX F]

#### The final version of the ESMF will contain:

- Manner in which notification of the consultation was announced: media(s) used, date(s), description or copy of the announcement
- Date(s) consultation(s) was (were) held
- Location(s) consultation(s) was (were) held
- Who was specifically invited (Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office)
- List of Attendees (Name, organization or occupation, contact details)
- Meeting Agenda
- Summary Meeting Minutes (Comments, Questions and Response by Presenters)
- List of decisions reached, and any actions agreed upon with schedules and deadlines and responsibilities.

#### ANNEX A

#### **EXCLUSIONS**

#### IFC Exclusion List:

- Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, polychlorinated biphenyls (PCBs), wildlife or products regulated under CITES
- Production or trade in weapons or munitions
- Production or trade in alcoholic beverages (excluding beer and wine)
- Production or trade in tobacco
- Gambling, casinos, and equivalent enterprises
- Production or trade in radioactive materials (this does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where the IFC considers the radioactive source to be trivial and/or adequately shielded).
- Production or trade in unbounded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.
- Drift net fishing in the marine environment using nets in excess of 2.5 km in length
- Production or activities involving harmful or exploitive forms of forced labor/harmful child labor
- Commercial logging operations for use in primary tropical moist forest
- Production or trade in wood or other forestry products other than from sustainably managed forests
- Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals (includes gasoline, kerosene, and other petroleum products)
- Production or activities that impinge on the lands owned, or claimed under adjudication, by indigenous peoples, without full documented consent of such peoples

### SERBIAN LEGISLATION – "LIST FOR WHICH FULL EIA IS MANDATORY"

| Срб  | Eng  |
|--|--|
| Постројења за:   | Installations for  |
| 1) прераду нафте, нафтних деривата и природног гаса                            | (a) refinement of crude-oil, derivates or natural gas                              |
| 2) гасификацију и топљење угља, или битуменских шкриљаца, тешких               | (b) the gasification or liquefaction of coal or bituminous shale, heavy residues   |
| остатака сирове нафте  | of crude oil   |
| Постројења:  | Installations  |
| 1) за производњу електричне енергије, водене паре, топле воде,                 | (a) for the production of electric energy, steam, hot water, technological steam   |
| технолошке паре или загрејаних гасова, употребом свих врста горива, као        | and warm gas, using all kinds of fuels, as well as installations for driving       |
| и постројења за погон радних машина (термоелектране, топлане, гасне            | working machines (thermoelectric plants, heating plants, gas turbines, facilities  |
| турбине, постројења са мотором са унутрашњим сагоревањем и остали              | with combustion motors and other appliances with combustion) including steam       |
| уређаји за сагоревање укључујући и парне котлове) са снагом од 50 MW           | kettle) with a heat output of 50 megawatts or more, and                            |
| или више   | (b) nuclear reactors including the dismantling or decommissioning of such          |
| 2) нуклеарни реактори, укључујући демонтажу или искључење из погона            | reactors (*) except scientific research installations for the production and       |
| таквих реактора <u>1</u> , изузев научноистраживачких постројења за производњу | conversion of fissionable and fertile materials, whose maximum power does not      |
| и конверзију фисионих и обогаћених материјала, чија укупна снага не            | exceed 1 kilowatt continuous thermal load  |
| прелази 1 кW сталног термалног оптерећења                                      |  |
| Постројења:  | Installations  |
| 1) за прераду истрошеног нуклеарног горива                                     | (a) for the processing of irradiated nuclear fuel                                  |
| 2) предвиђена:   | (b) designed:  |
| - за производњу или обогаћење нуклеарног горива                                | - for the production or enrichment of nuclear fuel                                 |
| - за прераду истрошеног нуклеарног горива или високо радиоактивног             | - for the processing of irradiated nuclear fuel or high-level radioactive waste    |
| нуклеарног отпада  | - for the final disposal of irradiated nuclear fuel                                |
| - за трајно одлагање истрошеног нуклеарног горива                              | - for the final disposal of nuclear waste  |
| - за трајно одлагање нуклеарног отпада   | - for the processing, storage and disposal radioactive waste                       |
| - за прераду, складиштење и одлагање радиоактивног отпада                      |  |
| Постројења:  | Installations for  |
| 1) за печење или синтеровање металне руде (укључујући сулфидну руду)           | (i) roasting and sintering of metal ore including sulphide ore                     |
| 2) за производњу сировог гвожђа или челика (примарно или секундарно            | (ii) production of pig iron or steel (primary and secondary liquefaction including |
| топљење) укључујући континуално ливење, са капацитетом који прелази            | continuous casting, with capacities over 25 t/h                                    |
| 25 t/h   | (iii) for processing of ferrous metals:  |
| 3) за прераду у црној металургији:   | - hot-rolling mills with capacity over 20 t/h crude iron                           |
| - топле ваљаонице са капацитетом изнад 20 t/h сировог челика                   | - smitheries with automatic hammers with energy exceeding 50 kJ for one            |
| - ковачнице са аутоматским чекићима чија енергија прелази 50 kJ по             | hammer where the calorific power used exceeds 20 KW                                |
| једном чекићу, код којих употребљена топлотна снага прелази 20 MW              | -installations for applying metal protecting coating using liquefying baths with   |
|  |  |

 постројења за наношење металних заштитних слојева на металне површине помоћу топљених купки, са улазом који прелази 2 t/h сировог материјала

- ливница црне металургије са производним капацитетом преко 20 t/dan
- 5) Постројења: за производњу обојених сирових метала из руде, концентрата или секундарних сировина путем металуршких и/или хемијских процеса и/или електролитичких процеса
- за топљење укљућујући и израду легура од обојених метала, као и израду корисних нуспроизвода (рафинација, ливење итд) са капацитетом топљења од преко 4 t дневно за олово и кадмијум или 20 t дневно за све остале
- 6) за површинску обраду метала и пластичних материјала коришћењем електролитичких или хемијских процеса, где запремина када за третман прелази 30 m

inputs over 2 t/h raw materials

- (iv) ferrous metal foundries with over 20 t/day
- (v) Installations:
- -for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes -for smelting including alloying of non ferrous metals, as well as recovered products (refinement, casting) with smelting liquefaction capacities of over 4 t/day for Mercury and Cadmium or 20 /day for all other metals
- (vi) for surface treatment of metal and plastic materials using electrolytic and chemical processes, where the volume of baths for treatment exceeds 30 m

#### Постројења за:

- 1) екстракцију, производњу, прераду и обраду азбеста и производа који садрже азбест
- 2) производња цементног клинкера, цемента и креча у ротационим или другим пећима капацитета преко 500 t дневно за производњу цементног клинкера или креча капацитета преко 50 t дневно у ротационим пећима

Комбинована хемијска постројења, тј. постројења за индустријску производњу супстанци код којих се примењују поступци хемијске промене и у којима се поједини погони налазе један поред другог и функционално су повезани, а намењени су за производњу:

- основних органских хемикалија
- основних неорганских хемикалија
- вештачких ђубрива на бази фосфора, азота или калијума (проста или сложена ђубрива)
- основних (базних) производа за заштиту биља, као и биоцида

#### Installations for

- (a) the extraction, production, processing and transformation of asbestos and for products containing asbestos
- (b) for production of cement clinker, cement and lime; in rotating and other furnaces with a capacity of 500 t/day for the production of cement clinker and lime; for 50 t/day in rotating furnaces

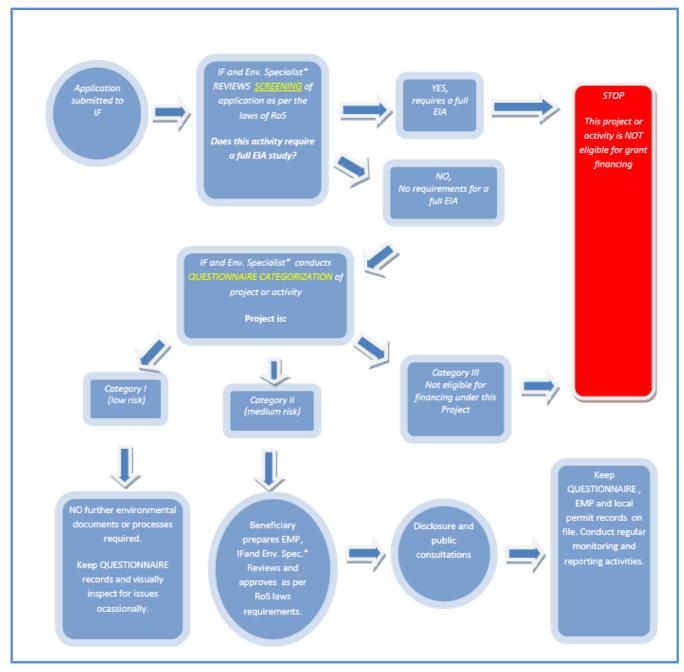
Integrated chemical installations, i.e. those installations for the manufacture on an industrial scale of substances using chemical conversion processes, in which several units are juxtaposed and are functionally linked to one another and which are for the production:

- (i) of basic organic chemicals
- (ii) of basic inorganic chemicals
- (iii) of phosphorous-, nitrogen- or potassium-based fertilizers (simple or compound fertilizers)
- (iv) of basic plant protection products and of biocides

| - основних фармацеутских производа уз примену хемијских или биолошких поступака<br>- и/или прераду и/или обраду експлозива   | (v) of basic pharmaceutical products using a chemical or biological process (vi) for the processing or treatment of explosives   |
|--|--|
| Изградња   | Construction of  |
| 1) магистралних железничких пруга укљућујући припадајуће објекте (мостове, тунеле и станице) 2) магистралних аутопутева и путева са четири или више трака, или реконструкција и/или проширење постојећег пута са две траке или мање, са циљем добијања пута са четири или више трака, у случају да такав нови пут или реконструисана и/или проширена деоница имају непрекидну дужину од преко 10 km или више, укључујући припадајуће објекте, осим пратећих садржаја магистралног пута | (a) major lines for railway traffic including adjoining infrastructure such as bridges, tunels and stations (b) major express roads and roads of four or more lanes, or reconstruction and/or widening of an existing road of two lanes or less, so as to provide four or more lanes, where such new road, or realigned and/or widened section of road would be 10 km or more in a continuous length including adjoining infrastructure, except service and rest areas (c) airports for public transport (1) with a runway length of 2 100 m or more |
| з) аеродроми за обављање јавног авио-транспорта <u>2</u> чија је полетна писта   | (c) anports for public transport (1) with a ranking rengal of 2 100 in or more   |
| дужа од 2 100 m  |  |
| Унутрашњи пловни путеви на којима важи међународни или међудржавни режим пловидбе, као и луке и пристаништа које се налазе на унутрашњем пловном путу на којем важи међународни или међудржавни режим пловидбе регулациони радови на унутрашњим пловним путевима којим се омогућава пролаз пловилима објектима од преко 1.350 t  | Inland waterways with an international navigation regime and ports and piers on inland waterways with an international navigation regime river regulation for inland waterways which permit the passage of vessels exceeding 1350 t  |
| Постројења за третман опасног отпада спаљивањем, термичким и/или   | Installations for inceneration, thermal and/or mechanical, mechanical-chemical,  |
| физичким, физичко-хемијским, хемијским поступцима  | chemical treatment of hazardous waste as defined in Annex IIA to Directive   |
| као и централна складишта и/или депоније за одлагање опасног отпада <u>3</u>   | 75/442/EEC (1) under heading D9,   |
|  | as well as central storehouses or landfills for disposal of hazardous waste (i.e. waste to which Directive 91/689/EEC (2) applies)   |
| Постројења за третман отпада који није опасан спаљивањем или   | Waste installations for the incineration or chemical treatment as defined in   |
| хемијским поступцима <u>4</u> капацитета више од 70 t на дан   | Annex IIA to Directive 75/442/EEC under heading D9 of nonhazardous waste   |
| депоније комуналног отпада за преко 200 000 еквивалент становника  | with a capacity exceeding 70 tonnes per day<br>municipal landfills exceeding 200 000 equivevalent inhabitatits   |
| Експлоатација подземних вода или обогаћивање подземних вода код којих  | Groundwater use or groundwater recharge where the annual volume of water   |
| је годишња запремина експлоатисане или обогаћене воде једнака<br>количини од 10 милиона м <sup>3</sup> или више.   | used or recharged is equivalent to or exceeds 10 millioncubic metres   |
| Објекти:   | Structures   |
| 1) Хидротехнички објекти за пребацивање вода између речних сливова,  | (a) hydrotechnical structures for the transfer of water resources between river  |
|  |  |

| намењени спречавању могућих несташица воде код којих количина                   | basins where this transfer aims at preventing possible shortages of water and         |
|---|---|
| пребачене воде прелази 100 милиона кубних метара годишње                        | where the amount of water transferred exceeds 100 million cubic metres/year           |
| 2) У свим другим случајевима, објекти намењени за пребацивање вода              | (b) In all other cases, objects for the transfer of water resources between river     |
| између речних сливова код којих вишегодишњи просек протока у сливу из           | basins where the multi-annual average flow of the basin of abstraction exceeds 2      |
| ког се вода захвата прелази 2 000 милиона м³ годишње и где количина             | 000 million cubic metres/year and where the amount of water transferred               |
| пребачене воде прелази 5% од овог протока, осим у преноса воде за пиће          | exceeds 5 % of this flow. Transfers of piped drinking water are excluded              |
| цевоводима  |   |
| Постројења за пречишћавање отпадних вода у насељима преко 100 000<br>становника | Waste water treatment plants with a capacity exceeding 100 000 population             |
| Вађење нафте и природног гаса   | Extraction of petroleum and natural gas   |
| Бране и други објекти намењени задржавању и акумулацији воде код којих          | Dams and other installations designed for the holding back or permanent storage       |
| вода која дотиче, или додатно задржана, или акумулирана вода прелази            | of water, where a new or additional amount of water held back or stored               |
| количину од 10 милиона м <sup>3</sup>   | exceeds 10 millioncubic metres  |
| Цевоводи за транспорт гаса, течног гаса, нафте и нафтних деривата или           | Pipelines for the transport of gas, liquified petrolium gas, oil and oil derivates or |
| хемикалија пречника већег од 800 mm и дужине која прелази 40 km                 | chemicals with a diameter of more than 800 mm and a length of more than 40            |
|   | km  |
| Објекти за интензиван узгој живине или свиња са капацитетом преко:              | Installations for the intensive rearing of poultry or pigs with more than:            |
| - 85.000 места за производњу бројлера   | (a) 85 000 places for broilers  |
| - 40 000 места за живину у узгоју и експлоатацији                               | (b) 40 000 places for poultry in rearing and use                                      |
| - 2000 места за производњу свиња (преко 30 kg тежине)                           | (c) 2 000 places for production pigs (over 30 kg) or                                  |
| - 750 места за крмаче   | (d) 750 places for sows   |
| Индустријска постројења за производњу:  | Industrial plants for the produciton of:  |
| 1) целулозе из дрвне масе, сламе или сличних влакнастих материјала              | (a) pulp from timber, straw or similar fibrous materials                              |
| 2) папира и картона са производним капацитетом који прелази 20 t/dan            | (b) paper and board with a production capacity exceeding 20 tonnes per day            |
| Површински копови минералних сировина чија површина прелази 10 ha,              | Open-cast mining of mineral ore where the surface of the site exceeds 10              |
| или вађења тресета кад површина терена за експлоатацију прелази 100 ha          | hectares, or peat extraction, where the working surface of the site exceeds 100       |
|   | hectares  |
| Изградња надземних далековода чија волтажа износи 220 kV или више и             | Construction of overhead electrical power lines with a voltage of 220 kV or           |
| чија дужина прелази 15 km   | more and a length of more than 15 km  |
| Активности и постројења за које се издаје интегрисана дозвола у складу са       | Activities and installations requiring a permit based on the Regulation on            |
| Уредбом о врстама активности и постројења за које се издаје интегрисана         | activities and installations requiring an integrated pollution prevention and         |
| дозвола ("Сл.Гласник РС" бр 84/05)  | control permit (Official Journal of Serbia, No 84/05)                                 |

ANNEX B
Environmental Screening Procedure under the Project\*



<sup>\*</sup> This environmental screening procedure was established under the World Bank Serbia Innovation Project and will continue to be used under this Project to ensure continuity.

### ANNEX C GRANT ACTIVITY ENVIRONMENTAL SCREENING QUESTIONNAIRE

| Name of Project (Reference number):   |   |     |    |
|---|---|-----|----|
| City/Municipality:  |   |     |    |
| Name of applicant:  |   |     |    |
| Contact:  |   |     |    |
|   | ND SOCIAL CHECKLIST QUES<br>d out and filed for every applicati |     |    |
| CRITERIA  | 4   | YES | NO |
| Does the proposed activity require a FULI Assessment as per the Serbian Law on En (list of Projects for which full EIA is mandabe financed.       | vironmental Impact Assessment                                   |     |    |
| Does the existing enterprise have valid or approvals etc.? If not, please explain. Per construction permit, operational/use per management permit | mits to screen for include:                                     |     |    |
| If not, will the grant financing be used to   | correct this condition?   |     |    |
| Does the existing enterprises have a valid<br>the procedure of obtaining an environme<br>laws) and does the proposed activity fall<br>was issued? | ental permit as per the Serbian                                 |     |    |
| Does the existing enterprise have a valid calls for special investments or measures releases (or is in the procedure of obtainings)?              | for the enterprise's wastewater                                 |     |    |
| Does the existing enterprise need to follor regulations regarding air emissions, water and solid waste management?                                | -   |     |    |
| Are there any significant outstanding envi<br>penalties or any other environmental liab<br>proceedings involving environmental issu               | oilities (e.g. pending legal                                    |     |    |
| If so, will the grant financing be used to coexplain?   | orrect this condition and please                                |     |    |

| Have there been any complaints raised by local affected people or groups or NGOs regarding conditions at the facility?   |  |
|--|--|
| If so, will the grant financing be used to remedy these complaints?  |  |
| Proposed Activity  |  |
| Will the proposed activity require acquisition of land <sup>2</sup> , e.g.   |  |
| <ul> <li>Encroachment on private property</li> <li>Relocation of Project affected persons</li> <li>Involuntary resettlement</li> <li>Impacts on livelihood incomes</li> <li>If yes, this activity cannot be financed.</li> </ul>   |  |
| Will the activity generate water effluents (wastewater) that may require special treatment, control or the water management permit?  |  |
| Will the activity generate air emissions which would require special controls in order to ensure compliance with the Serbian standards?  |  |
| Will the activity generate noise levels that would require control measures to ensure compliance with the Serbian standards?  Will the noise levels impact particularly sensitive receptors (natural habitats, hospitals, schools, local population centers)?  |  |
| Will the activity consume, use or store, produce hazardous materials that:   |  |
| <ul> <li>require special permits or licenses</li> <li>require licensed or trained personnel</li> <li>are outlawed or banned in EU or Western countries</li> <li>are difficult, expensive, or hard to manage</li> <li>are inconsistent with PPAH recommendations</li> <li>may cause soil and water pollution or health hazards if adequate control measures are not in place</li> <li>Will the activity generate solid waste that may be considered hazardous,</li> </ul> |  |
| difficult to manage, or may be beyond the scope of regular household waste?  (This may include, but not be limited too, animal carcasses, toxic  |  |
| materials, pesticides, medical waste, cleaning materials, flammables etc.)  Will the activity be located within or close to natural habitats or areas under consideration by the Government for official protection status? Will the activity potentially impact areas of known significance to local, regional or national cultural heritage?   |  |
|  |  |

<sup>&</sup>lt;sup>2</sup> Land acquisition includes: displacement of people, change of livelihood encroachment on private property that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

| Will the activity involve import of living organisms, e.g. saplings, insects, animals, etc. or works that can impact sensitive environmental receptors?   |  |
|---|--|
| Has the local population or any NGOs expressed concern about the proposed activity's environmental aspects or expressed opposition?   |  |
| Is there any other aspect of the activity that would – through normal operations or under special conditions – cause a risk or have an impact on the environment, the population or could be considered as a nuisance (e.g. use of pesticides)? |  |

The applicant, in signing this form proves that the grant activity will not involve land acquisition, any form of construction, or will promote any activities on the World Bank Group IFC exclusion list. In addition, the applicant is aware of the EIA requirements as per the Serbian Law and certifies that there are no Full Environmental Impact Assessment reports required.

| Form filled | d out by (Applicant): |
|-------------|-----------------------|
| Date:       |                       |
| Name:       |                       |
| Title:      |                       |
| Sign:       |                       |
|             |                       |
| Stamp:      |                       |
|             |                       |
|             |                       |
|             |                       |
|             |                       |

| Form checked by (Independent Environmental and |                 |  |  |
|--|-----------------|--|--|
|  | Social Expert): |  |  |
| Date:  |                 |  |  |
| Name:  |                 |  |  |
| Title:   |                 |  |  |
| Sign:  |                 |  |  |
|  |                 |  |  |

## ANNEX D SAMPLE ENVIRONMENTAL MANAGEMENT PLAN FORMAT

#### I. MITIGATION PLAN

| Phase        | Issue | Mitigating<br>Measure | Cost of<br>Mitigation<br>(If Substantial) | Responsibility* | Supervision observation and comments (to be filled out during supervision) |
|--------------|-------|-----------------------|---|-----------------|--|
| Construction | •     |                       |   |                 |  |
|              | •     |                       |   |                 |  |
|              | •     |                       |   |                 |  |
|              | •     |                       |   |                 |  |
|              | •     |                       |   |                 |  |
| Operation    | •     |                       |   |                 |  |
|              | •     |                       |   |                 |  |
|              | •     |                       |   |                 |  |
|              | •     |                       |   |                 |  |
|              |       |                       |   |                 |  |
|              |       |                       |   |                 |  |
|              |       |                       |   |                 |  |

<sup>\*</sup> Items indicated to be the responsibility of the contractor shall be specified in the bid documents

#### II. MONITORING PLAN

| Phase     | What  parameter is  to be  monitored? | where  is the parameter to be monitored? | is the parameter to be monitored/type of monitoring equipment? | When  is the parameter to be monitored- frequency of measurement or continuous? | Monitoring Cost  What is the cost of equipment or contractor charges to perform monitoring? | Responsibility | Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports) |
|-----------|---------------------------------------|--|--|---|---|----------------|---|
| Construct |                                       |  |  |   |   |                |   |
| Operate   |                                       |  |  |   |   |                |   |

# ANNEX E SAMPLE ENVIRONMENTAL MANAGEMENT PLAN

#### **EXAMPLE ONLY: USE OF SOLAR PANELS IN ELECTRICAL POWER PRODUCTION**

| Phase        | Issue   | Mitigating<br>Measure  | Cost of<br>Mitigation<br>(If Substantial)  | Responsibility *       | Supervision observation and comments (to be filled out during supervision) |
|--------------|---|--|--|------------------------|--|
| Design phase | Certain solar cells may require<br>more energy and raw materials<br>to produce, or may use<br>hazardous and harmful materials<br>in their production  | Obtain sufficient information from producer  Look for certificates or statements how the panels are produced  Select the more "environmentally friendly option"  | Variation in costs<br>of panels may be<br>incurred   | The Grant<br>recipient |  |
| Design phase | Placement of solar panels on rooftops or buildings in populated areas may have an aesthetic impact or may impact a monument or protected building   | Careful sitting of the panels  Ensure that the building is not a historical site, that there are no special instructions as to the façade and appearance, and ensure approvals are received by all designated and responsible local authorities                    | N/A  | The Grant<br>recipient |  |
| Design phase | Placement of solar panels in natural areas needs to be carefully designed in order to minimize the aesthetic impact and land disturbance, including impacts from high temperature or magnetic fields from the panels/wiring | Ensure the solar panels are placed in a remote area that is barren and not under use of any kind. In addition, ensure the site is not close to any protected areas, grazing lands or important habitats as well as sensitive recipients/groundwater, surface water | This may have an impact on the overall design of the Project and may therefore incur some additional costs | The Grant<br>recipient |  |

| Phase               | Issue   | Mitigating<br>Measure   | Cost of<br>Mitigation<br>(If Substantial)                                | Responsibility *                  | Supervision observation and comments (to be filled out during supervision) |
|---------------------|---|---|--|-----------------------------------|--|
| Construction        | Dust, noise, emissions and vibrations generated during construction activities may be a nuisance to nearby human or animal populations              | Ensure regulatory requirements to limit noise are followed and noise is kept to allowed working hours and intervals as per the relevant regulation  Do not allow machinery to idle  Water down working areas to limit dust generation   | Minor  Cost of water tank to come on site: 150-250 €                     | Contractor<br>/Grant<br>recipient |  |
| Construction        | Leaks or spills from machinery may negatively impact the soil and groundwater   | Spill control mechanism will be in place<br>Machinery used will not be serviced or<br>repaired on site  | Minor  | Contractor<br>/Grant<br>recipient |  |
| Construction        | Improper waste management may pollute the environment and pose a threat to the animals in the vicinity of the site                                  | Ensure rapid collection of wastes to avoid scattering All wastes generated will be disposed of at an authorized landfill site There will be no open burning of wastes   | Disposal at an authorized site for 1 ton (with 50 km transport):         | Contractor<br>/Grant<br>recipient |  |
| Operation           | Use of pesticides or other hazardous chemicals to treat or to clean the solar panels will impact the surrounding environment                        | Ensure compounds are evaluated for their environmental impact and potential for illness or injury due to single acute exposure;  Avoid hazardous compounds or replace with less hazardous substance, Ensure no leaks on the surrounding areas, Ensure proper storage of chemicals on leak-proof surfaces and use only by trained professional staff | May impose<br>additional costs<br>for more<br>expensive eco<br>solutions | Contractor<br>/Grant<br>recipient |  |
| Decommissioni<br>ng | Hazardous materials contained within the panels may be released into the nature and impact the environment (soil, ground and surface water) in case | Ensure workers are trained in adequate decommissioning procedures with spill control measures in place  | Not significant  | Contractor<br>/Grant<br>recipient |  |

| Phase | Issue                                      | Mitigating<br>Measure | Cost of Mitigation (If Substantial)  Responsibility  * |  | Supervision observation and comments (to be filled out during supervision) |  |
|-------|--|-----------------------|--|--|--|--|
|       | of breaks or decommissioning of the panels |                       |  |  |  |  |

<sup>\*</sup> Items indicated to be the responsibility of the contractor shall be specified in the bid documents

#### II. MONITORING PLAN

| Phase        | What   | Where  | How   | When  | Monitoring   | Responsibility         | Supervision   |
|--------------|--|--|---|---|--|------------------------|---|
|              | parameter is to be<br>monitored?   | is the parameter to be monitored?              | is the parameter to be monitored/ type of monitoring equipment?   | is the parameter to be monitored-frequency of measurement or continuous?                  | Cost  What is the cost of equipment or contractor charges to perform monitoring? |                        | observation and comments (to be filled out during supervision with reference to adequate measuring reports) |
| Design phase | Environmentally friendly production process of panels  | Through tech.<br>specifications<br>of panels   | Through receiving and keeping all specifications  | Prior to procurement  | May have an overall cost increase effect   | Grant recipient        |   |
| Design phase | Placement of solar panels needs to be approved by the designated and responsible local authority | Through<br>adequate<br>supporting<br>paperwork | Through receiving and keeping all of the necessary permits  | Prior to<br>construction<br>works and<br>preferably prior<br>to application<br>for grants | None   | Grant recipient        |   |
| Construction | Dust, noise,<br>emissions and<br>vibrations  | On Project site                                | Periodically check sound levels at the work site to ensure it is within legal limits and as per local permitting. Through complaints (if area is populated) | During<br>construction<br>works<br>constantly   | Minor – should<br>be included in<br>contract for<br>works                        | Contractor /Supervisor |   |

| Phase        | What   | Where                                   | How   | When  | Monitoring   | Responsibility  | Supervision   |
|--------------|--|---|---|---|--|---|---|
|              | parameter is to be<br>monitored?   | is the<br>parameter to<br>be monitored? | is the parameter to be monitored/ type of monitoring equipment?   | is the parameter to be monitored- frequency of measurement or continuous? | Cost  What is the cost of equipment or contractor charges to perform monitoring? |   | observation and comments (to be filled out during supervision with reference to adequate measuring reports) |
| Construction | Leaks or spills from machinery   | On Project site                         | Visually on<br>surrounding<br>areas, log of all<br>accidents on<br>site to be filled<br>out                         | During<br>construction<br>works –<br>constantly                           | Minor – should<br>be included in<br>contract for<br>works                        | Contractor /Supervisor  |   |
| Construction | Proper waste collection and management   | On Project site                         | Daily supervision of waste collection Ensure no open burning is taking place Keep receipts from authorized landfill | Daily   | Minor – should<br>be included in<br>contract for<br>works                        | Contractor/Supervisor   |   |
| Operation    | Use of less<br>hazardous<br>pesticides or other<br>chemicals to treat<br>or to clean the solar<br>panels | On Project site                         | Visual inspection of work site to ensure adequate protection from chemicals to be used is in place, safety          | Visual<br>inspection of<br>site after<br>maintenance<br>Records kept      | May have an overall cost increase effect   | Contractor/Supervisor  (in addition to self-monitoring by Operator / grant applicant) |   |

| Phase           | What  | Where                             | How  | When   | Monitoring   | Responsibility        | Supervision   |
|-----------------|---|-----------------------------------|--|--|--|-----------------------|---|
|                 | parameter is to be<br>monitored?  | is the parameter to be monitored? | is the parameter to be monitored/ type of monitoring equipment?  | is the parameter to be monitored-frequency of measurement or continuous? | Cost  What is the cost of equipment or contractor charges to perform monitoring? |                       | observation and comments (to be filled out during supervision with reference to adequate measuring reports) |
| Decommissioning | Hazardous<br>materials contained<br>within the panels<br>may be released<br>during<br>decommissioning | On Project site                   | data sheets reviewed and kept Ensure no breaks or spills In case of spills ensure spill management procedure is followed | Visual, log of all<br>breaks and<br>spills                               | Minor – should<br>be included in<br>contract for<br>works                        | Contractor/Supervisor |   |

#### **ANNEX F**

# MINUTES FROM THE PUBLIC DISCUSSION ENTITLED "PROJECT ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK"

#### [TO BE INCLUDED IN FINAL ESMF]

#### **ENCLOSURES:**

- 1: NOTIFICATION OF THE PUBLIC DISCUSSION IN THE DAILY NEWSPAPER 'POLITIKA'
- 2: INVITE LIST
- **3: LIST OF ATTENDEES**
- 4: PRESENTATION, ENVIRONMENTAL MANAGEMENT FRAMEWORK