I. Introduction and Context

Country Context

The Bank and the Croatian Government have established a successful cooperation in R&D and innovation through the Science and Technology Project. STP (closed in May, 2011) has served as the backbone of Croatia's science and technology policy since 2005. Its development objectives consisted of helping public research organizations commercialize research results and enabling SMEs to invest in R&D activities, raising the contribution of knowledge to economic development in Croatia. Almost all of the project target outputs have been met or surpassed and the project development objectives have been achieved, including:

- more research outputs and research capacity was commercialized by research and development institutions (RDIs), as measured by 69 research contracts with industry (exceeding the target of 55), concluded by Brodarski Institute (BI);
- Rudjer Innovations, a technology transfer office of Rudjer Boskovic Institute, has established five spillover companies, concluded 12 licensing agreements (thus exceeding the target of eight agreements), including with the Massachusetts Institute of Technology and Brown University;
- more innovation and private R&D was mobilized, as measured by the volume of R&D expenditures, amounting to EUR 13.7 million, invested by SMEs participating in sub-financing programs from Business Innovation Croatia (BICRO) and the Unity through Knowledge Fund (thus exceeding the target of EUR 9.2 million).

The effectiveness of the programs supported under STP has also been reviewed through an independent assessment prepared by the Zagreb Institute of Economics. The assessment showed, among others results, that the STP programs RAZUM (a conditional loan for later stage innovation) and SPREAD (a matching grant to support the collaboration between the academic and the private sector) have enabled companies to invest more in R&D, and helped them carry out more complex projects, in a shorter period of time (the "additionality," as opposed to "full substitution" effect). In fact, from 2006 to 2008, the share of Croatian SMEs that brought new or significantly improved products to the market raised from 7.2 percent to 10.8 percent (EU Community Innovation Survey).

The project would help prepare Croatia’s R&D and innovation institutions for successful absorption of structural funds expected to happen upon accession. This will help Croatia move towards achieving the EU competitiveness objectives, in particular the goals set under the Europe 2020 Strategy related to R&D expenditures targets.

The limitations in Croatia’s growth pattern were unveiled by the global economic crisis, and recovery will require a sustained increase in innovation and productivity. Croatia is an upper middle income country at the final stages of accession to the EU (the European Council gave the green light for Croatia to become the 28th country to join the EU on the target date of July 1, 2013). The country experienced relatively high rates of economic growth in the decade preceding the global crisis, driven by a boom in domestic investment and consumption financed by large inflows of foreign capital. The global crisis exposed important limitations of the pre-existing growth pattern, including widening current account deficits that reflected, at least in part, the limited productivity gains and the lack of competitiveness of Croatia’s exports. The global crisis severely affected the Croatian economy with real GDP shrinking by almost six percent in 2009 (and an estimated -1 percent in 2010) which in turn increased poverty levels.

To support recovery and mitigate social impact of the crisis, the Croatian Government, adopted an Economic Recovery Program (ERP) in April 2010. The crisis has provided an impetus and a broad consensus for the Government to move ahead with the medium-term reform agenda of reforms necessary to push the economy towards exports and productivity-based growth. However, in order to secure macroeconomic stability Croatia will have to reduce its primary deficit from 3.2 to 0.4 percent of GDP between
Proposed Development Objective(s)

The objectives of the proposed project are to (i) improve the capacity of Croatia's R&D and innovation institutions to implement Europe 2020 Strategy for increased investments in R&D through efficient absorption of EU funds, and (ii) develop a pipeline of public and private R&D projects, including research groups, that could qualify for financing through EU structural funds.

Key Results

Key results for the proposed Project would include:

1. Number of R&D infrastructure projects and Grant Schemes submitted to the structural funds.
2. Preparation of policy documents in R&D and innovation (National Science, Technology and Innovation Strategy and R&D Infrastructure Roadmap) as required by EU guidelines for use of structural funds.
3. MSES department accredited as intermediate body for implementation of structural funds.
4. Number of SMEs eligible to apply for upcoming R&D funds from the European Regional Development Fund through a Grant Scheme (based on BiCRO's pipeline).
5. Number of joint research projects eligible to apply for funding under the European Social Fund through a Grant Scheme and number of applications for funding from the Horizon 2020 (based on UKF pipeline).
III. Preliminary Description

Concept Description

STP II will have a dual approach, combining TA to the public sector and financing of risk-sharing programs supporting R&D in SMEs (sub-financing), using these instruments with a focus on preparing Croatia for efficient absorption of EU funds for R&D.

(i) Preparing selected institutions through Technical Assistance (TA): It is envisaged that the TA component of the proposed STP II will focus on building capacity in the Government to efficiently manage the applications and disbursement of EU structural funds and implement the objectives of the Europe 2020 Strategy. The component is expected to include the following activities: (i) preparation of the strategic frameworks explaining the links between policy priorities and country needs (ii) training of government staff on EU procedures for project preparation and implementation; (iii) and strengthening of institutions of the National Innovation System - improve the quality of public expenditures through better design, management, monitoring and evaluation of policies, programs and research organizations in conformity with Europe 2020 goals.

(ii) Developing a pipeline of public projects for EU funds. It was agreed that at least five projects will be fully prepared during the implementation of STP II and will be ready for submission when funds become available. Two of these projects refer to the preparation of the "Grant Schemes" to finance R&D by SMEs during the different phases of the innovation process, and R&D for public research organizations oriented towards strengthening the country's R&D human capital. The Grant Schemes to be prepared will consist of the adjustment of three existing BICRO programs (RAZUM, SPREAD and Proof of Concept) and selected UKF programs to EC regulations and procedural norms. The other three projects are in the field of R&D infrastructure, mainly associated with preparation of prototypes and updating of equipment used for research and development.

(iii) Developing a pipeline of private projects. According to the Government request, STP II will provide financial support to existing programs that are expected to be financed by the EU structural funds (possibly BICRO's RAZUM, SPREAD and POC; and UKF). This will help build a credible number of innovative SME projects and research projects expected to absorb the funds from the future Grant Schemes. Some funds would be reserved for a running pilot of programs under the structural fund guidelines.

By focusing on strengthening the absorptive capacity of EU funds, the project will contribute to mitigating fiscal bottlenecks for the development of an innovation policy. That could significantly shift Croatia's growth pattern. The proposed structure of STP II will fit into a comprehensive innovation strategy for Croatia by helping the Government update the 2006-11 Science and Technology Policy and develop complementary regulations in conformity with the Europe 2020 Agenda. The Strategy will be complemented by a European Research Infrastructure Roadmap, which will ensure appropriate use of structural funds for investments in research infrastructure, consistent with Croatia's research priorities. In addition, STP II will support the Croatian Government in improving the governance of the National Innovation System, through technical support for capacity building in selected institutions.

In terms of sustainability, all BICRO's programs and the UKF program will be adjusted to structural funds regulation so that they could be financed by those resources available from 2014 through the technical assistance supported by STP II. Through its technical assistance activities, the project will also explore opportunities to expand and complement BICRO's programs that may exist within the structural funds framework. However, EU structural funds will not fully replace budgetary sources and a need to mainstream innovation policy within Croatia's administration will remain necessary. The project will also identify the areas where budget support will continue to be required to cover areas of Croatia's needs that cannot be addressed by structural funds due to regulatory issues or limitations in the scope of activities. In addition, it has been envisaged that the financing ratio for the sub-financing programs would initially be increasingly funded from the loan proceeds and then the ratio would gradually shift towards more funds from the state budget.

Key risks and issues: A risk to the proposed project relates to a further tightening of fiscal policy and the reduction of government co-financing for project implementation. Yet, the experience of STP proved that despite the recent public expenditure cuts resources for co-financing STP activities were made available as needed. Moreover, the fact that STP II is essentially a preparatory tool for the efficient absorption of structural funds even further reduces the fiscal risk, in the team's views. Another risk is that, with the upcoming elections, the project could be delayed. Although the project is also likely to have support from the opposition, implementation could be delayed due to practical and administrative constraints in the first months of a new administration.

IV. Safeguard Policies that might apply

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### VI. Contact point

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