## REPUBLIC OF CROATIA MINISTRY OF SCIENCE AND EDUCATION Donje Svetice 38, Zagreb 10000, Croatia

### DIGITAL INNOVATION AND GREEN TECHNOLOGY (DIGIT) 9558-hr

# TERMS OF REFERENCE FOR CONSULTANCY SERVICES

# **PROGRAM DESIGN AND IMPLEMENTATION SPECIALIST**

#### 1. Background

The Government of Croatia and the International Bank for Reconstruction and Development (IBRD) have signed the Loan Agreement (Loan No. 9558-HR) for the Digital Innovation and Green Technology Project (DIGIT) in the amount of EUR 106 million. The Project seeks to advance research and innovation with a digital and green focus through enhancing institutional infrastructure and research performance of research organizations and firms. The Project will be managed by the Ministry of Science and Education (MSE) of the Republic of Croatia.

The Project comprises two components over a duration of 5 years. Component 1 (*Enabling institutional conditions for digital and green research and innovation*) provides technical assistance and financing to strengthen institutional capacities and support the effectiveness of research, development and innovation (RDI) financing. Component 2 (*Programs for digital and green research and innovation*) provides sub-financing to cover gaps in existing RDI funding and improve the targeting of research and innovation support to digital and green technology.

The MSE established a Project Implementation Unit (PIU) to assist with day-to-day Project implementation and is responsible for (i) planning, coordination, implementation, and monitoring and evaluation of Project activities, (ii) procurement and financial management, (iii) social and environmental standards compliance, and (iv) reporting. The PIU also undertakes responsibility for implementation of Project activities in accordance with the Project Operations Manual, Croatian legislation and regulation, and relevant World Bank procedures. It also prepares and submits reports and information on the project to the MSE, Project Steering Committee, World Bank, and potential auditors, as well as keep the business documentation of the Project and all other duties connected to the Project.

#### 2. Objectives

The MSE require support to ensure that programs are designed and implemented to a high standard, research organizations and firms conducting research need to have an appropriate incentive structure to strive for research excellence and state-of-the-art facilities that support research. Besides initiating programs that would address gaps in the policy mix, MSE will conduct so called "complementary" investments to increase the quality of forthcoming and past EU funded activities. For this reason, Program Design and Implementation Specialist is envisaged to draft Programs and Calls for Proposals under Component 1 and Component 2. This work would require: (i) analyzing needs and gaps to be addressed, (ii) identifying stakeholders and target beneficiaries, (iii) defining program goals and

objectives, (iv) identifying program activities, (v) developing program timeline, (vi) defining program evaluation etc. The specialist will work on the following programs:

## • Research, technology and innovation infrastructure projects

This activity will finance investments in the modernization and upgrade of research and technology infrastructure and in projects that align with national strategies and contribute to the development of technological and scientific capacities essential for Croatia's competitiveness. Improving the quality and accessibility of these infrastructures will attract top researchers, strengthen international collaboration, and stimulate innovation in key sectors. Financed projects are also expected to support the development of digital and/or green technologies.

### • Technology Transfer Fund

The purpose of the Technology Transfer Fund is to advance projects coming from the proof-of-concept stage, focusing on technology readiness levels (TRL) 5 to 6. The Proof of Concept (PoC) program is one of the longest-standing innovation support programs in Croatia providing support for precommercial testing of innovative concepts. PoC projects focus on testing whether the research concept can lead to a tangible commercial outcome. The Technology transfer fund will pick up successful projects coming from the PoC pipeline and finance the continuation of project activities.

### • Technology scouting

This program is designed to boost innovation by bridging the gap between industry and academia. It begins with a comprehensive mapping process to identify potential scouts and beneficiary companies. Following this, scouts go through an intensive training program where they are equipped with the necessary skills in innovation management, technology scouting, and effective collaboration techniques. Once trained, these scouts assist companies and researchers in developing project proposals. These connections will help build better industry-research linkages and associate the private sector with existing research capacities and infrastructure. Finally, once projects proposals are prepared, they will be able to obtain financing through a competitive process.

#### • Professionalization of research centers

This program will provide funding for sub-grants to public research organizations to engage individual consultants and outstanding researchers to improve public research centers' quality and business orientation. The funding encourages effective use of existing research infrastructure investments and collaboration with the private sector. The funding will enable public research organizations to set up stronger research capacities and more professional management mechanisms, encouraging efforts to design and deliver services according to the specific needs of different stakeholders.

#### • Pre-commercial digital and green R&D support

Grants or matching grants will directly support pre-commercial applied R&D related to green or digital innovation. Grants will target sub-projects conducted in cooperation between research organizations and firms for pre-commercial applied R&D. The grants will focus exclusively on R&D projects for green and digital solutions in early TRL stages. The instrument will support early-stage applied research in digital or green technologies, products, and processes. The main objective of these grants will be to develop transformative innovation and help unlock opportunities for early-stage, innovation-driven businesses that are still developing their products and defining their market niches. In this manner, beneficiaries will receive funding to minimize risks associated with pre-commercial R&D and strengthen their operations, facilitating their access to private financing for further growth.

#### • Challenge program

This grant program will be established to support creating solutions related to specific digitalization and/or green transition challenges. The purpose of the Challenge program is to support the development of solutions to large-scale and complex challenges that require a mission-driven approach. The mission-driven approach entails setting an ambitious and inspirational target with wide societal relevance that catalyzes innovation across sectors and economic actors. A mission-oriented project includes any new or improved technological, social, and organizational solution (product, process, or service) contributing to achieving the mission. The program will support innovative proposals from consortia of firms and research organizations that address specific digitalization and greening challenges.

#### • Synergies program

Synergies Program in connection with the Horizon Europe program will be established in order to increase the quality of research in the Republic of Croatia. The Synergies Program will support Croatian applicants who received a Seal of Excellence at the Proof of Concept Grant program of the European Research Council and the Marie Skłodowska-Curie Actions, MSCA Postdoctoral European Fellowship within Horizon Europe, which could not be funded due to budgetary constraints. Given that these are very competitive Calls, the Republic of Croatia will benefit by financing excellent projects by taking advantage of the well-established and high-quality Horizon Europe evaluation process. Supporting synergies with Horizon Europe will deliver gains in terms of better innovation results, converging to EU's innovation performance, and promoting economic growth.

### 3. Scope of Work

To support the design and implementation of the described programs and investments, the Specialist will:

- (i) prepare analysis on the needs and gaps to be addressed by the program,
- (ii) conduct desk research and consultations on program design, as needed,
- (iii) prepare program design defining theory of change, including objectives, outcomes, outputs, and activities, and identifying target beneficiaries and stakeholders,
- (iv) prepare result frameworks with appropriate indicators, definitions, and data collection protocols,
- (v) design monitoring and evaluation protocols,
- (vi) draft calls for proposals and any related documents,
- (vii) monitor implementation progress and regularly report to the PIU,
- (viii) perform other tasks related to program design and implementation as requested by the MSE.

## 4. Deliverables

The Specialist works under the direct supervision of the PIU Project Manager and will need to provide the following:

- Draft programs design, including draft Calls for Proposals with complete related documentation;
- Implementation monitoring reports.

# 5. Qualifications and Experience Required

Required professional requirements:

- Completed graduate university study or graduate professional study (European Qualification Framework Level 7 or higher);
- At least eight (8) years of general work experience, five (5) years of work experience in research and innovation policy design, implementation or management. Experience in developing programs focusing on digitalization or green transition will be considered an advantage;
- Excellent knowledge of the English language;
- Excellent digital literacy and command of computer tools and applications, such as MS Office.

# 6. Rights

The Specialist will have the following rights:

- Work as an equal partner in the Team (PIU), having access to necessary information, resources, documentation, administrative and other support, including support of other Team members to ensure the due performance of his/her tasks, responsibilities and duties;
- Presentation to the World Bank, Project manager, and MSE staff attributable to the duties under this job description for their consideration.

## 7. Duration of the Contract

The Specialist will be hired under a time-based contract, for a period of 1 year (which includes 3 months of probation period) with possible extensions, depending on business needs and satisfactory consultants' performance.

The assignment will be full-time. One working day consists of eight (8) working hours a day.