



REGIONAL OFFICE FOR SEE
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INFRASTRUCTURE DEPARTMENT

Company Profile and Selection of Project References

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Leaders in Consulting and Engineering Services in Southeast Europe

Together for a better future



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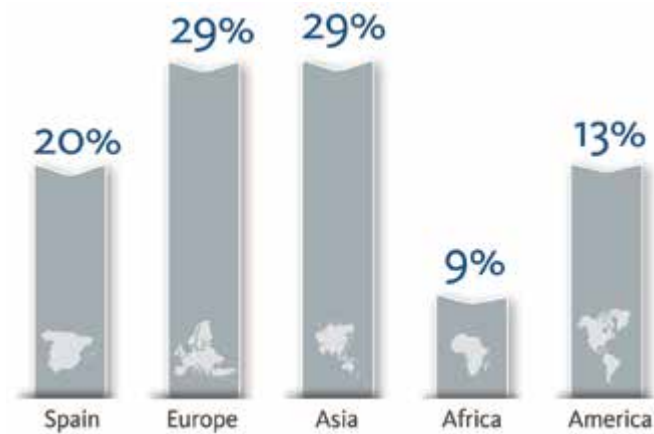
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ABOUT EPTISA

Founded in 1956, EPTISA is considered one of the soundest and most relevant **consulting, engineering, architecture, and information technology** companies from Spain. In the course of more than 60 years of operation, EPTISA has become a synonym for quality and professionalism, demonstrating its ability to respond to the demands of an increasingly complex and challenging market.

With 110 million Euros income in the last year and with more than 100 projects under implementation in over 45 countries worldwide, EPTISA can fulfill the requirements of every public or private entity. Our commitment to comprehensive and client-oriented services make us a global player in the fields of **Transport Infrastructure, Water and Environment, Building and Architecture, Energy, Health, GIS and Information Technologies, and Socioeconomic Development and Public Administration Reform**, applying state-of-the-art technologies in order to simultaneously advance towards sustainable development.

GEOGRAPHIC DISTRIBUTION



With a presence in over 45 countries and a network of 25 well established local offices, Eptisa is a **global company that acts locally, close to the client and the civil society in which we intervene.**

Experience

• Ongoing projects • Experience

Europe

- Albania
- Armenia
- Azerbaijan
- Belarus
- Bosnia & Herzegovina
- Bulgaria
- Croatia
- FYROM
- Georgia
- Greece
- Ireland
- Italy
- Kosovo
- Montenegro
- Moldova
- Portugal
- Romania
- Serbia
- Spain
- Turkey
- Ukraine
- United Kingdom

America

- Argentina
- Bolivia
- Brazil
- Canada
- Colombia
- Costa Rica
- Chile
- Dominican Republic
- Ecuador
- El Salvador
- Guatemala
- Haiti
- Honduras
- Nicaragua
- Mexico
- Panama
- Peru
- Uruguay
- USA
- Venezuela

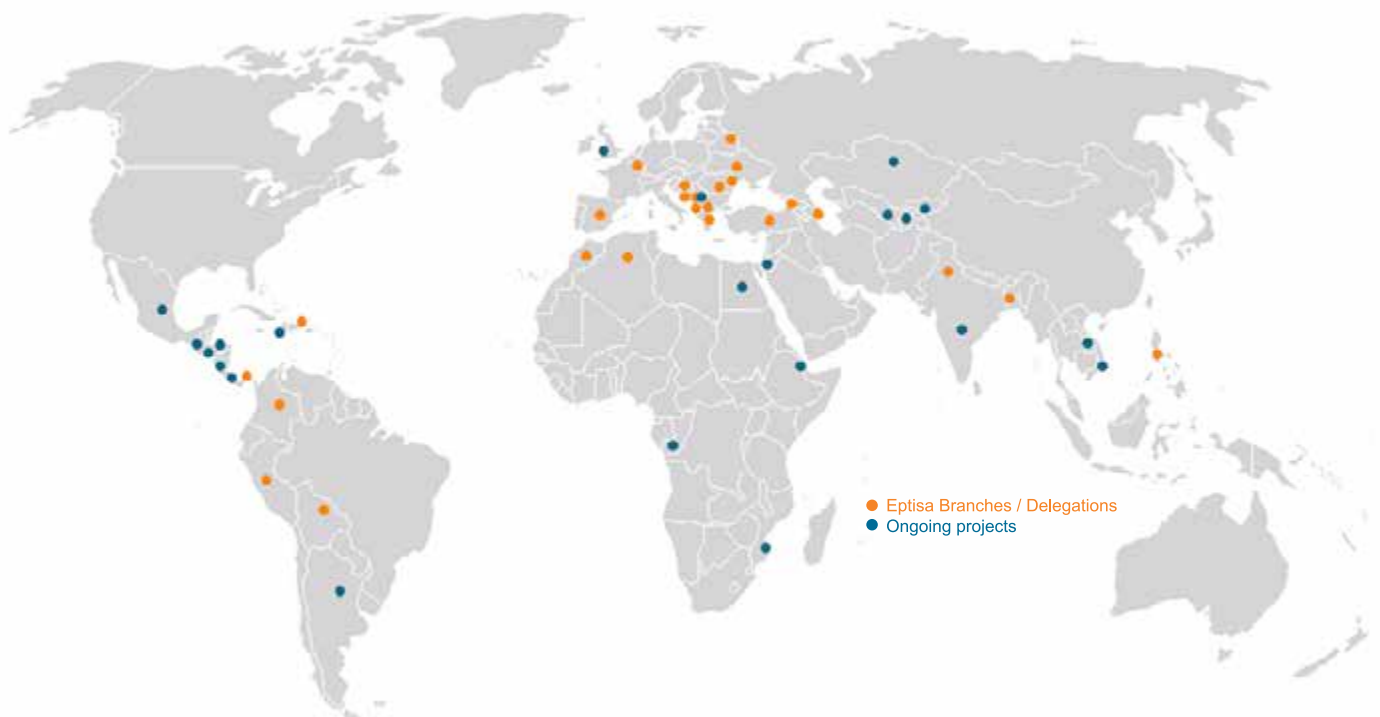
Asia

- Bangladesh
- China
- India
- Jordan
- Kazakhstan
- Kyrgyzstan
- Laos
- Palestine
- Philippines
- Qatar
- Syria
- Tajikistan
- Uzbekistan
- Vietnam

Africa

- Angola
- Algeria
- Congo
- Djibouti
- Egypt
- Equatorial Guinea
- Mauritania
- Morocco
- Mozambique
- Namibia
- Senegal
- South Africa
- Sudan
- Tunisia

EPTISA WORLDWIDE



KEY FIGURES IN OUR INTERNATIONAL ACTIVITY



Eptisa's Timeline

- 1956 ● **EPTISA HEADQUARTERS**
Madrid, Spain
- 2004 ● **EPTISA ROMANIA SRL**
Bucharest, Romania
- 2005 ● **EPTISA SERBIA (SOUTHEAST EUROPE REGIONAL OFFICE)**
Belgrade, Serbia
- 2007 ● **EPTISA MUHENDISLIK LTD**
Ankara, Turkey
- 2008 ● **EPTISA GREECE BRANCH**
Athens, Greece
- 2011 ● **EPTISA GEORGIA BRANCH**
Tbilisi, Georgia
- 2011 ● **EPTISA UKRAINE**
Kiev, Ukraine
- 2012 ● **EPTISA INDIA PVT LTD**
Gurgaon, India
- 2012 ● **EPTISA HAITI BRANCH**
Port au Prince, Haiti
- 2014 ● **EPTISA ARGEL BRANCH**
Algiers, Algeria
- 2015 ● **EPTISA PHILIPPINES**
Manila, Philippines
- 2015 ● **EPTISA MIDDLE EAST ***

Over **700** in-house professionals



1000 professionals dedicated to international projects

TECHNOLOGY

The introduction of the latest technologies has allowed the reinforcement of our leadership by combining experience and innovation towards projects with high added value. In our daily activities, we use the latest technologies and have our own software development department with skillful technicians who create top quality internal-use software as well as commercial packages, always meeting the requirements of our most demanding clients.

QUALITY

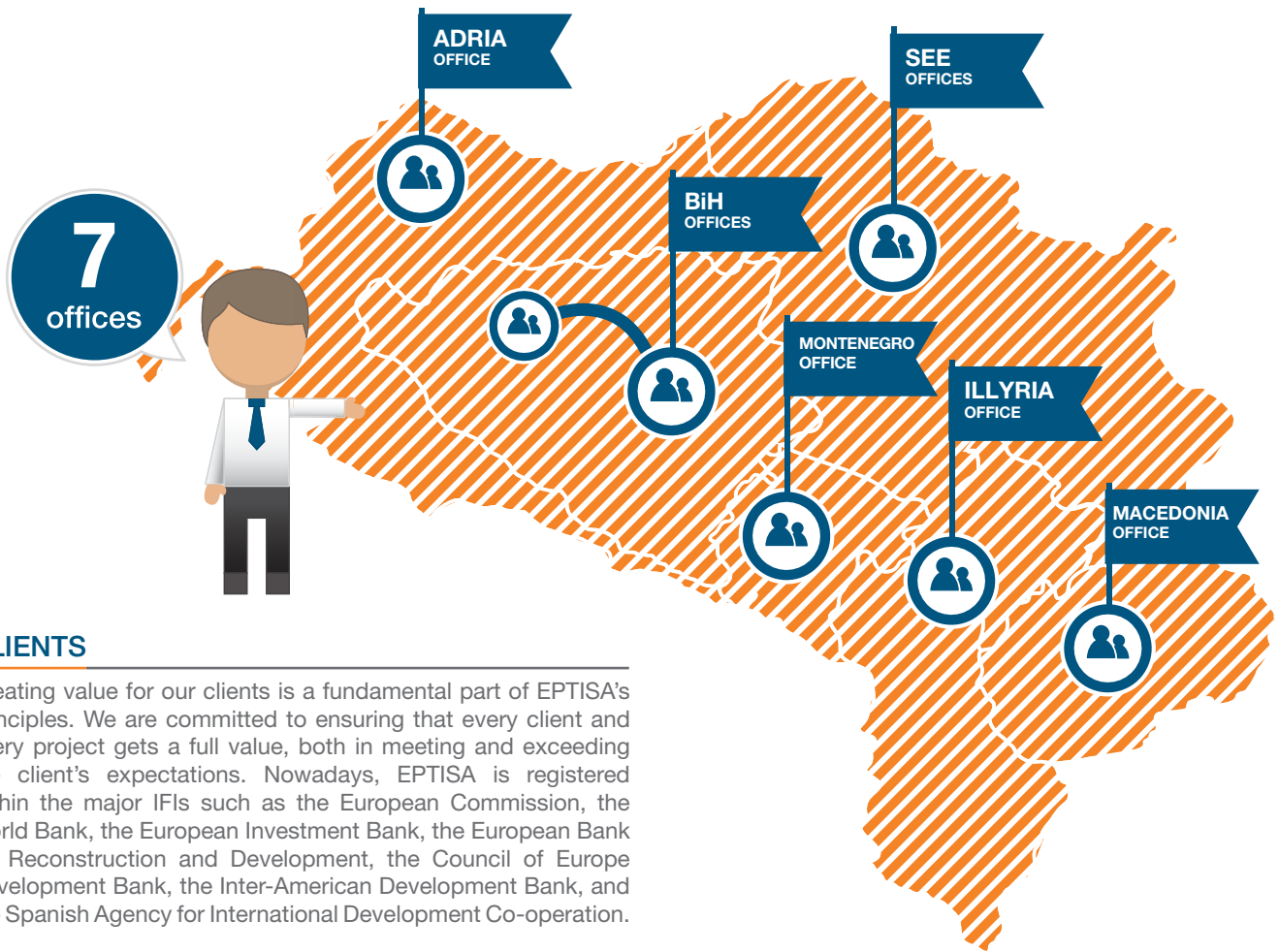
Our permanent commitment towards the highest quality standards and environmental damage minimisation allowed us to be awarded in the early 90's with the quality and environmental standards certifications ISO 9000 and ISO 14000, both issued by the competent Spanish authority (AENOR). Moreover, EPTISA is accredited by the ENAC (National Accreditation Body) as an Authorised Inspection Entity under norm EN4504 in the environmental field for water, air and noise. We were also recently awarded with the ISO 9001 management system standards certificate issued by Bureau Veritas.



DISTRIBUTION BY SECTOR



*expected year of opening a regional office for Middle East



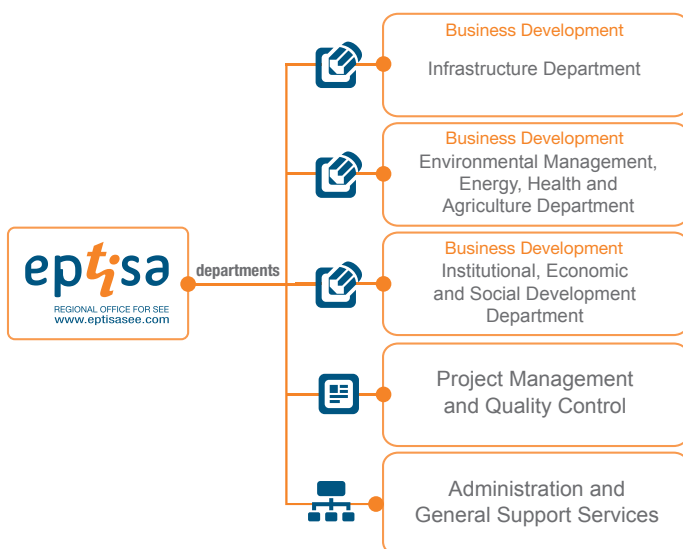
CLIENTS

Creating value for our clients is a fundamental part of EPTISA's principles. We are committed to ensuring that every client and every project gets a full value, both in meeting and exceeding the client's expectations. Nowadays, EPTISA is registered within the major IFIs such as the European Commission, the World Bank, the European Investment Bank, the European Bank for Reconstruction and Development, the Council of Europe Development Bank, the Inter-American Development Bank, and the Spanish Agency for International Development Co-operation.

EPTISA'S PRESENCE IN THE REGION

For twenty years EPTISA is positioned in the countries of Southeast Europe as one of the largest and soundest consulting, engineering, architecture, and information technology companies. Nowadays, EPTISA operates subsidiary companies in Albania, Bosnia and Herzegovina, Croatia, Kosovo*, the FYR of Macedonia*, Montenegro and Serbia.

efforts of EPTISA in the region. Composed of a multidisciplinary team of national and international staff, the Office is organised in three Competence Units (Infrastructure, Environmental Management, Health, Energy and Agriculture, as well as Socio Economic Development and Public Administration Reform), and is specialised in the provision of technical assistance services to public institutions and to the private sector of countries in the Southeast Europe region.



In 2012 EPTISA sets up a subsidiary company in the Republic of Croatia and in 2013 in the FYR of Macedonia and in Bosnia and Herzegovina. The new companies, named EPTISA Adria d.o.o., EPTISA Macedonia and EPTISA Bosnia and Herzegovina coordinate all the commercial efforts and undertakes the project management for all the assignments implemented by EPTISA in this countries. In 2014 EPTISA continued its expansion in the region with the opening of an office in Montenegro. Completing the network of country offices, in 2015 we will set up EPTISA Ilyria, covering the territories of Albania and Kosovo.

With more than 100 relevant projects implemented in the last decade, nowadays EPTISA is recognised as one of the leading consulting and engineering groups in the region, being characterised for its proximity to the client, for its understanding of the regional peculiarities, and for its strong project management capabilities.

Since 2002, the activities of EPTISA in the Southeast Europe (SEE) experienced a enormous growth, leading to the establishment of a permanent structure in the area. Thus, the opening in March 2005 of our Regional Office for Southeast Europe in Belgrade, Serbia, leveraged even more the commercial and management

* EPTISA takes a neutral position vis-à-vis the political issues within the region of the Western Balkans. The designation for Kosovo is without prejudice to the positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.



ENVIRONMENTAL INFRASTRUCTURE

Selection of Project References



Supervision of the Sewerage Systems Construction in Velipoja and Shkodra



Client: EU Delegation to Albania **Origin of funding:** EU-IPA

Description:

The overall objective of the project is to contribute to the improvement of the health and environmental conditions in the coastal regions through the construction of an adequate and sustainable sewerage infrastructure while encouraging economic growth through improved services.

The following Works Contracts will be supervised:

- Construction of sewerage system in Velipoja: The work includes a part of the sewerage collection system for Pulaj- Reç Pulaj (Coastal area), first functional line of the waste water treatment plant and discharge pipeline to Buna River.
- Construction of sewerage system in the industrial area of Shkodra: Main sewer collector, length 3,000 m; Secondary and tertiary sewerage system. length 7,855 m; 402 House connections; Cleaning of secondary and tertiary existing sewerage system in total length cca 3,000 m.

Activities:

- Participation in Works Tender Evaluation;
- Start up and Mobilisation (Checking the Contractor's Bonds, Guaranties, Insurances; Issuing the Commencement order);
- Carry out on-site supervision, co-ordination, and administration of contracts;
- Review and approval of the Contractor's working drawings and possible modifications to the detailed design;
- Preparation of a Site Procedures Manual which shall specify the requirements, procedures and guidelines for all main activities necessary for the Works to run smoothly, as well as preparation of a Supervisor's Quality Assurance Manual;
- Approval of the Contractors Works Programme;
- Environmental Management / Health and safety monitoring;
- Quantity and Cost Control, Measurement and Payment;
- Overall Project Management and Backstopping.

Supervision of Construction and Supplies for Sewerage System and Wastewater Treatment Plant in Velipoja Area – Phase III



Client: EU Delegation to Albania **Origin of funding:** EU-IPA

Description:

The overall objective of the project is to improve the living conditions of the population of Albania through alignment with the EU standards of the treated sewerage water discharged into rivers, lakes and the sea. In order to alleviate the existing serious deficiencies in the water supply and sanitation sector, the Government of Albania has decided to improve drastically the water supply and sewerage collection and treatment services, mainly in the touristic coastal areas.

The Project is aimed to achieve its objective by performing:

- Supervision services for the implementation of one works and three supply contracts related to the construction of over 30 km of gravity pipes, 1.15 km of main transmission pipe, manholes, house connections and 6 pumping stations;
- Supervision of Supplies, including installation of machinery and equipment;
- Monitoring of Defects Notification Period for all works and supply contracts.

Activities:

- Daily supervision and coordination of the implementation of the works and the three supplies contracts;
- Verify and approve the works contractors' construction equipment;
- Prepare and submit a Quality Assurance & Quality Control Manual;
- Verify, comment, and approve all certificates, insurances, securities, etc.;
- Monitor and approve (or reject) the quality of used materials, workmanship and executed works;
- Provide technical and other advice to the works and supplies contractors if required;
- Assist and give advice to the DEUA and the municipal and state authorities with regard to all relevant meetings and correspondence.

Provision of Feasibility Study for Wastewater Treatment Plant (WWTP) in Bihac



Client: EU Delegation to Bosnia and Herzegovina **Origin of funding:** EU - CARDS

Description:

The overall objective of the project is to solve the problems which the population of Bihac encounters in wastewater collection and treatment and improve the quality of BiH's surface waters through the implementation of sewage and wastewater treatment infrastructure in the selected municipality of Bihac.

The results to be achieved by the Consultant were:

- To increase the population served by sewer networks;
- To increase the proportion of the population whose wastewater receives full treatment;
- To reduce the direct discharge of untreated wastewater to surface waters by the construction of WWTP;
- To prepare a Master Plan for future investments in the sewage system in the Bihac municipality (wastewater collection and treatment system);
- To prepare all necessary project documentation: Feasibility Study and Preliminary design to allow for construction of the defined works.

Activities:

- Design and preparation of Master Plan for the wastewater sector in Bihac (design to cover the period of next 20 years);
- Revision and assessment of the present wastewater collection system in the service area of the future WWTP;
- Identification and preparation of prioritised list of investment measures;
- Evaluation of technical administration of the system, manpower, organisation, availability of technical equipment, operation and maintenance concepts;
- Feasibility study for the priority investment measure;
- Preparation of summary of the technical scope of work of investment measure;
- Analysis of the environmental impact of the works undertaken within the project.
- Preparation of the preliminary design of the approved priority investment measure.

Project Supervision Services for Water and Sanitation Project in Republika Srpska



Client: Ministry of Finance of Republika Srpska **Origin of funding:** EIB / EU

Description:

The overall objective of the Water and Sanitation Project in Republika Srpska is aimed at supporting the improvement of the existing living conditions of population, providing adequate hygienic conditions related to water supply and wastewater removal, and implementing environmental protection measures in accordance with the imminent obligations arising from the accession to the EU and harmonization with the EU legislation, in this specific case with the Framework Water Directive, Drinking Water Directive and Urban Wastewater Directive. Overall Project and Supervision services will include a number of municipalities throughout Republika Srpska. The Programme will be headquartered in Banja Luka during the entire duration of the Project. EPTISA will supervise the design, construction, testing and commissioning in a variety of disciplines ranging from technical to financial and environmental, and where appropriate, recommending changes where deficiencies are detected.

Activities:

- Preparation of Overall Work Programme;
- Support to PMU in the establishment of project database;
- Cooperation with local authorities and pertinent water management bodies;
- Act as an “Engineer” according to FIDIC Conditions of Contract;
- Approval of the Contractor’s design for the design and build contracts;
- Approval of the materials, equipment and workmanship;
- Observing the issued building permits, relevant standards and legislative requirements.

Capljina Water Supply Project - Contract Supervision for Works



Client: Municipality of Capljina **Origin of funding:** EBRD / EU-IPA

Description:

The overall objective of this assignment is to ensure that the Project is successfully implemented within the planned time schedule, within the budget and to an acceptable quality. EPTISA will endeavour to assist to achieve these objectives by rendering support to the Public Utility Company (PUC), Municipality, Contractors and Sub-contractors in the implementation of the Project as the Contract Supervisor. Furthermore, EPTISA will contribute to the smooth, economic and lawful manner of the Project implementation. It will perform the role of “the Engineer” in accordance with FIDIC Conditions of Contract. In addition, this Project will support an improvement of actual living conditions and realisation of environment protection measures, in accordance with local laws and European Legislation.

Activities:

- Supervision of the contractors to carry out works in an effective and timely manner in accordance with the Contract terms and conditions;
- Provision of timely recommendations and reporting to the Employer on the contract administration process;
- Quantity surveying, Time schedule control, Issuing of orders and Issuing of Payment Certificates;
- Supervision of Works, including final inspection and issuing of Performance Certificate;
- Reporting.

Capljina Water Supply System – Financial and Operational Performance Improvement Programme and Public Service Agreement



Client: Client: PUC “Komunalno” Capljina **Origin of funding:** EBRD

Description:

The overall objectives of Eptisa’s assignment are:

- Assist the Capljina Municipality and the PUC “Komunalno” with preparation of a detailed Financial and Operational Performance Improvement Programme - FOPIP;
- Prepare a Public Service Agreement (“PSA”) between the Capljina Municipality and the PUC that would specify the rights and responsibilities of its parties
- Assistance with Restructuring of the PUC which shall undertake the following, inter alia:
 - Make recommendations on the most appropriate form of legal incorporation for the PUC in the short, medium and long term;
 - Advise on and assist with drafting any legal acts or statutes necessary for the restructuring of the PUC;
 - Assist the PUC in developing a rolling 5-year Corporate Development Plan (“CDP”) that includes financial projections, a capital budget and required tariff changes.

Activities:

- Eptisa shall identify priority areas for potential improvement in the quality of water related services, and the financial and operational performance of the PUC. The focus of improved performance should be: (i) quality of services; (ii) unaccounted for water production; and (iii) cost control and increasing revenue. Eptisa will define detailed performance indicators for the PUC.
- In developing the FOPIP, Eptisa will review the current state of affairs in the PUC and propose the measures for the improvement of financial and functional aspects in the following areas:
 - Organisational structure and efficiency;
 - Management information and accounting systems;
 - Rationalization of staff resources;
 - Revenue collection and administration;
 - Tariff Policy;
 - Financial management;
 - Unaccounted for water;
 - Consumer relations.

Sisak Wastewater Programme - Supervision of Design and Construction



Client: Hrvatske Vode **Origin of funding:** EU - IPA

Description:

The overall objective of this project is to reduce the regional disparities in Croatia, by contributing to social stability through infrastructure construction, as well as the construction of a waste water treatment plant. Moreover, the purpose of this assignment is improved sewerage infrastructure, treatment of waste water and protection of water resources in the City of Sisak and surrounding area of Sisacko-Moslavacka County.

The following Works Contracts will be supervised:

1. Supervision services during “Construction of Sewerage System”, includes the construction of a new sewerage system in the city of Sisak;
2. Supervision services during “Construction of 2 River Under-Crossings”, includes the construction of two river crossings underneath Kupa river;
3. Supervision services during “Construction of Waste Water Treatment Plant”.

Activities:

- Mobilisation of staff at site at the location agreed with the works contractors or with the Contracting Authority if such works contracts have yet to be signed;
- Preparation of a concise Manual of Supervision Procedures;
- Assisting the Contracting Authority/Employer with the review and approval of all necessary certificates, guarantees, insurance policies etc.;
- Checking the Design-Build Contractor’s major designs, shop and installation drawings to ensure that the Contractor follows the intensions of his design and the performance specifications;
- Reporting for financial control and programme management in line as agreed with the Contracting Authority;
- Supervision of the general implementation activities of the Contractors;
- Review of Health, Safety and Environmental Plan and any proposed deviations or amendments to the HSE Plan;
- Overall Project Management and Backstopping.

Works Supervision for the Construction of County Waste Management Centre Marišćina in Primorsko-Goranska County



Client: Environmental Protection and Energy Efficiency Fund, Croatia **Origin of funding:** EU-IPA

Description:

The overall objective of this project is to develop an environmentally and financially sustainable solid waste management system in Primorsko-Goranska County and establish the County Waste Management Center, thereby assisting Croatia in the implementation of the *acquis communautaire* in the environment / waste sector

The purposes of this contract are as follows:

- To provide designs review and its approval;
- To provide technical and financial supervision and ensure the completion of works under the Phase 0-2, 1, 2 and 3 defined in the Location Permit and in accordance with Building permits and Employer's Requirements, within the specified time-frame and within the contracted budget;
- To provide supervision service during the Trial Run of MBT Plant and WWTP; and
- To provide supervision services during the Defect Notification Period.

Activities:

- Review and approval of Contractor's Documents in accordance with FIDIC Yellow Book;
- Preparing a Manual of Supervision Procedures;
- Checking the adequacy and authenticity of all certificates, insurance policies, securities, guarantees, indemnities, ownership of plant etc. for which the Contractor is liable;
- Reviewing and approving the Contractor's Health and Safety (HS) Plan and Environmental Management Plan;
- Final review of the Main and Detailed Designs;
- Supervising the construction works in accordance with the Building Permits, Main and Detailed Designs relevant regulations and other project documentation;
- Control, update and signing of the Contractor's Site Diary;
- Continuously monitoring the Contractor's Work Programme and progress, quality of work, site safety, equipment/material orders and deliveries, including the mobilization of personnel, equipment, etc.

Supervision of Construction of the Water Supply and Sewerage System with Wastewater Treatment Plant for Slavonski Brod



Client: Hrvatske Vode **Origin of funding:** EU - IPA

Description:

The overall objective of the project is to reduce regional disparities in Croatia, by contribution to social stability through infrastructure construction as well as wastewater treatment plant;

Specific objectives include improved water supply and sewerage infrastructure and the treatment of waste water in the area of Slavonski Brod; protection of water resources in the area of Slavonski Brod; implementation of the obligations laid down in the Stabilisation and Accession Agreement; implementation of the EU environmental acquis governing the water management.

The Contract consists of:

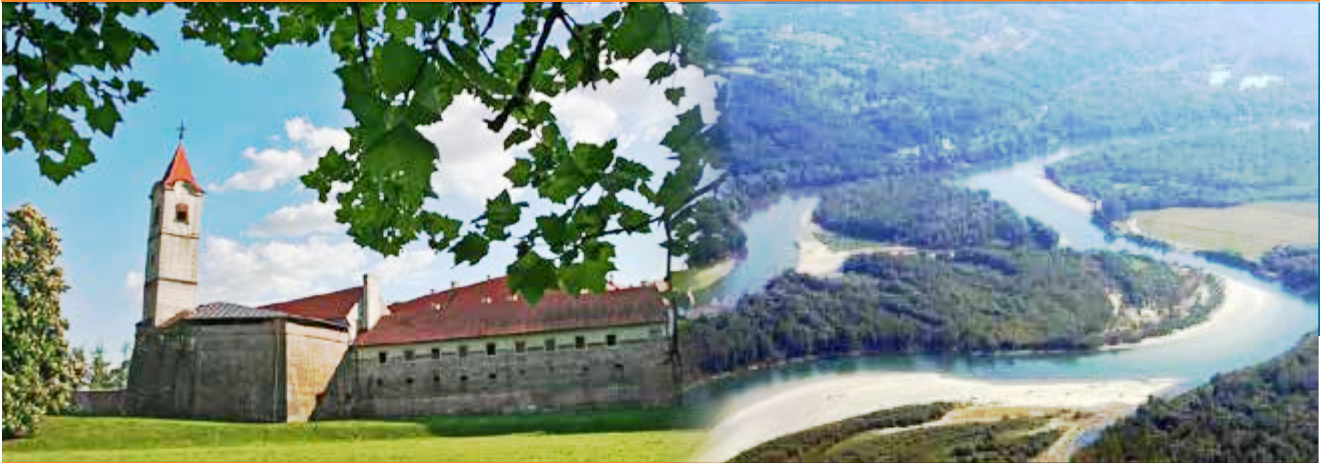
- Supervision Services during “Construction of Water Supply and Sewerage System”;
- Supervision Services during “Construction of Wastewater Treatment Plant”.

Supervision is performed in accordance with FIDIC Conditions of Contract Plant and Design-Build Conditions, (Yellow Book – Activity 1), FIDIC Conditions of Contract for Construction (Red Book – Activity 2).

Activities:

- Checking of Contractors’ insurances, securities, guarantees;
- Development of Supervision Procedures Manual;
- Review Contractors’ work programmes and methods;
- Review Contractors’ health and safety, QA and environmental plans;
- Carry out co-ordination and administration of contracts;
- Conduct regular site inspections to check the quality of the workmanship and health and safety practice;
- Checking of the Design-Build Contractor’s major designs, shop and installation Drawings;
- Completion inspection and issue of Taking-Over Certificate;
- Final inspection and issue Performance Certificate;
- Review of the Design of the Works to secure the full compliance with the Contract (in particular with the Contracting Authority/Employer’s Requirements).
- Overall Project Management and Backstopping.

Supervision Services For Water Collection System And Wastewater Treatment - Agglomeration Cakovec



Client: Medjimurske vode d.o.o. **Origin of funding:** EU co-financed (OP Environment 2007 - 2013)

Description:

The overall objective of this project is the supervision of Water Collection System and Wastewater Treatment of Agglomeration Cakovec. Works will include construction, mechanical, technological, electrical and other works, according to the Building Act (OG 153/13) and the Physical Planning Act (Official Gazette 153/13) and FIDIC Red Book and FIDIC Yellow Book.

This contract consists of supervision over the execution of construction of wastewater collection and control of the design and construction of the wastewater treatment plant and sludge treatment, which more specifically consists of the following activities:

- Activity 1 - Supervision services during the Reconstruction and Modernization of the Waste Water Treatment System;
- Activity 2 - Supervision services during the Construction of a new Sewerage networks;
- Activity 3 - Supervision services during the Reconstruction and rehabilitation of the existing system.
- Supervision will be carried out in accordance with the FIDIC Conditions of Contract for Plant and Design and Construction (FIDIC Yellow Book - Activity 1) and FIDIC conditions of contract for construction (FIDIC Red Book - Activity 2 and 3), the Building Act (NN 153/13) and Physical Planning Act (Official Gazette 153/13).

Activities:

- Supervision of reconstruction and modernisation of WWTP;
- Supervision of preparation of detailed design;
- Provide necessary liaison and coordination between all parties involved in project;
- Efficient administration of the Project according to FIDIC;
- Daily supervision of construction works;
- Verifying and approving As-Built documents and other construction records;
- Preparation of all necessary reports;
- Supervision of the general implementation activities of the Contractors;
- Issuing the final performance certificate at the end of the Defects Notification Period;
- Reporting for financial control and programme management in line and agreed with the Contracting Authority;
- Supervision of work activities performed in accordance with FIDIC Conditions of Contract and other relevant Croatian legislation;
- Backstopping.

Feasibility Study for Dam Construction in Leposaviq



Client: European Union Office in Kosovo **Origin of funding:** EU - IPA

Description:

The overall objective of the project is to support a more balanced regional development in Kosovo through increasing municipal social and economic infrastructure, the quality of life and economic development potential of Kosovo municipalities. The project will be funded under the IPA 2013, II Annual Programme and managed by the European Union Office in Kosovo and is designed to improve social and economic infrastructure in municipality of Leposaviq, to provide improved conditions and better water supply facilities to residents.

The project will be implemented in the municipality of Leposaviq. The area where the dam is envisaged to be built is village Mosnička, in the foothills of Kopanik mountains. The dam should supply with water settlement of Sočanica, Leshak and Leposaviq.

The Contract consists of:

- Preparation of feasibility study for construction of dam in Leposaviq municipality;
- Preparation of preliminary design and cost estimate for construction of dam in Leposaviq municipality.

Activities:

- Feasibility study of the project of supply in drinking water for Leposavic municipality;
- Preliminary design of the project with cost estimation;
- Descriptions of the further steps to undertake, following the preliminary design;
- Preparation of ToR(s) of the services to contract following the preliminary design;
- Preliminary topographic survey of the terrains where the dam will be constructed once the dam is localised and where the dam's materials are to be extracted;
- Preparation of preliminary bill of quantities and cost estimation;
- Preparation of the preliminary proposal including all necessary works like abstraction works, pumping station if necessary, trunk mains for delivery of water to the treatment plant, a reservoir with capacity of about 500m³ if necessary access road, fence etc.

Preparation of Project Studies (FSs, EIAs, CBAs), Design and Tender Documentation for Establishing of an Integrated and Financially Self-Sustainable Waste Management System in East and Northeast Region



Client: Central Financing and Contracting Department (CFCD), within the Ministry of Finance
Origin of funding: EU

Description:

The overall objective of the project of which this contract will be a part is to achieve an integrated and financially self-sustainable waste management system in East and Northeast Region. In order to achieve this goal, the focus will be on preparation of necessary project studies and technical and tender documentation for construction of the selected waste treatment and disposal facilities including preparation of Feasibility Studies (FSs), Cost-Benefit Analyses (CBAs), Environment Impact Assessments (EIAs), Detail Designs and assistance with preparation of Volume 3, 4 and 5 of the Tender dossiers for works contracts for construction of selected waste treatment and disposal facilities for both East and Northeast Regions.

Main objectives:

- Result N° 1: Prepared and approved Feasibility studies, Environmental Impact Assessment Studies and Cost-benefit Analyses for establishing of an Integrated and Financially Self-sustainable Waste Management System for both East and Northeast regions;
- Result N° 2: Prepared and approved IPA Application, Detail designs and Volume 3, 4 and 5 of the tender dossiers for the works contracts for construction of selected waste treatment and disposal facilities for both East and Northeast regions.

Activities:

- Preparation of Feasibility studies and Environmental Impact Assessment studies;
- Preparation of Cost Benefit Analyses;
- Detail designs and cost estimation;
- Preparation of financial analyses, financial modelling and calculations;
- Assessment of the overall socio-economic impact of the project based on the prepared CBA;
- Project management and backstopping.

Supervision of the Construction Works for Rehabilitation and Extension of Sewerage Network in Prilep (II phase)



Client: Central Financing and Contracting Department, (CFCD) within the Ministry of Finance
Origin of funding: EU

Description:

The overall objective of this project is to improve environmental protection through investments in environmental infrastructure, and create conditions for environment friendly sustainable development, with prevention of surface and underground waters pollution and to assist in works contract management and successful implementation of the investment measures through Supervision of the construction works for rehabilitation and extension of the sewerage network in Prilep (II phase).

Main objectives:

- Construction of 32 km new sewer lines with pipe diameters from DN/OD 250 to DN/OD 500 for extension of the sewer network;
- Construction of 8 km of new sewer lines with pipe diameters from DN/OD 200 to DN/OD 400 and in streets where is required rehabilitation of hydraulically under-sized and structural defective sewers;
- Construction of about 1,200 sewer manholes;
- Construction of about 2,450 property connections;
- Supply and installation of 3 Pump Stations;
- Reinstatement Works

Activities:

- Supervision of the timely and in good quality completion of all stages of the investment project, from the commencement date up to commissioning, tests on and after completion, taking over procedures, presentation of hand-over documentation, implementation of health, safety and environmental protection plan;
- Administration and coordination of Works Contract, providing proper implementation of work programmes, achievement of the required quality, and all related parameters as defined in the Work Contract documents;
- Supervision, control and approving of unforeseen activities related to the implementation of construction works;
- Checking that the Project visibility complies with the EU Visibility Guidelines, etc.

Reform in the System for Water Supply, Collection and Treatment at Local Level



Client: Central Financing and Contracting Department (CFCD) **Origin of funding:** EU

Description:

The purpose of this contract is to assist the relevant authorities in reforming the existing system, concerning organisational, managerial, financial and operational aspects at local level (City of Skopje and in the Municipalities of Tetovo, Gostivar, Bitola, Kavadarci, Strumitsa, Debar, Radovish, Kichevo, Berovo and Kumanovo) in order to enable an effective and efficient management of the water supply, collection and waste-water treatment.

Main objectives:

- Options for reorganisation of municipal services (separation water & wastewater from other services; national institutional framework, legal aspects, operational conditions) have been studied and proposals for its implementation prepared;
- The implementation of selected internal organisational measures (business plans, internal organisation improvement, data and information management and improvement of financial management and collection rates) has been supported;
- A system of performance monitoring has been introduced and is functional.

Activities:

- Assessment of the present functioning of the selected municipal (and the City of Skopje) enterprises in technical, operational and financial sense and preparation of plans for implementation of improvements;
- Studying of the options for reorganisation of municipal services (separation water & wastewater from other services; national institutional framework, legal aspects, operational conditions) and preparation of proposals for its implementation;
- Supporting the implementation of selected internal organisational measures (business plans, internal organisation improvement, data and information management and improvement of financial management and collection rates);
- Developing a system of performance monitoring;
- Quality Assurance of Project Outputs;
- Backstopping support.

Technical Assistance for Preparation of Investment Project for Wastewater Collection and Treatment in Prilep



Client: EU Delegation to the FYR of Macedonia **Origin of funding:** EU - IPA

Description:

The overall objective of the project is to assist the Ministry of Environment and Physical Planning, the Central Finance and Contracts Department in the Ministry of Finance as well as the PUC “Vodovod i kanalizacija” Prilep in preparation of the design and tender documents for the sewerage network rehabilitation and extension and the construction of Waste Water Treatment Plant (WWTP) on a green field site (design Population 95,000 P.E) for the city of Prilep.

The contract has two specific objectives:

- Preparation of the design and the tender dossiers for works covering the rehabilitation and extension of the sewerage network and construction of a WWTP.
- Preparation of the tender dossier for the construction supervision of works.

Activities:

- Review of the existing situation, implementation of additional studies, modeling and analysis of alternative solutions;
- Development of the Preparatory Phase Survey and selection of the best option;
- Detailed design for rehabilitation and extension of the sewerage network;
- Outline design for the WWTP;
- Tender dossier for works for rehabilitation and extension of the sewerage network following the FIDIC 1999 edition “Redbook”;
- Tender dossier for works for construction of a WWTP following FIDIC 1999 edition “Yellow book”;
- Preparation of the tender dossier for the construction supervision of the rehabilitation and extension of the sewerage network and construction of a WWTP according to the requirements of PRAG.

Preparation and Implementation of Solid Waste Strategic Master Plan



Client: EAR **Origin of funding:** EU - CARDS

Description:

The overall objective of the project is to assist the Government of Montenegro in formulating a sustainable institutional development plan and an infrastructure investment strategy.

The project specific objectives are to:

- Facilitate the implementation of a Strategy for Solid Waste Management at country level;
- Improve Solid Waste collection and transport capacity to adequate level of service;
- Enhance the capacity of the Government to attract IFI investment in Solid Waste Management;
- Establish an effective institutional structure relating to Solid Waste legislation, regulation and service provision.

Activities:

- Assess generation volumes and composition of solid and hazardous waste and the potential for future change;
- Analysis and review of Solid and Hazardous Waste legislation;
- Institutional strengthening and capacity building to Solid Waste Management Authorities;
- Assessment of the Solid Waste Collection Systems;
- Recycling opportunities and constraints assessment;
- Enhance public consultation and participation;
- Identification of new sites for landfills;
- Restoration of affected areas;
- Formulation of the National Solid Waste Management Plan;
- Formulation of investment plan regarding Solid Waste infrastructure.

Support to the Development of Environment Sector Phase 1 & 2



Client: EU Delegation to Montenegro **Origin of funding:** EU - CARDS

Description:

The overall objective of the project is to strengthen and improve the institutional capacity of Montenegro's environmental management administration at national and local level to operate effectively within an improved institutional framework, emphasising a separation of the policy and legislative responsibilities on the one hand and executive responsibilities on the other.

The project specific objectives are to:

- Establish an Environmental Protection Agency (EPA) to allow the separation of the two responsibilities (policy and legislative);
- Provide closer approximation of Montenegrin environmental framework legislation to the Acquis;
- Make a draft of the secondary environmental framework legislation;
- Improve institutional capacity within Ministry of Environmental Protection and Physical Planning;
- Assist the Government to establish Project Implementation Unit (PIU) in order to improve environmental infrastructure.

Activities:

- Organisational and legal changes necessary for the establishment of a Project Implementation Unit within the Ministry of Environment;
- Support to the EAR and EIB capital investment programme;
- Building the project pipeline and endorsement of - Beneficiaries' needs in the field of the municipal infrastructures;
- Management Support in the Implementation of Environmental Infrastructure Projects, mainly in the fields of water supply and wastewater treatment;
- TA to secure sound management and successful implementation of the capital investment programmes;
- Preparation of Works and Supplies of Tender Dossiers and Provision of Procurement Support in Compliance with FIDIC and the PRAG;
- Assistance with the supervision and monitoring of infrastructure projects and training of PIU staff.

Municipal Infrastructure Support Programme Phase 1, 2 and 3



Client: European Agency for Reconstruction/EU Delegation to the Republic of Serbia
Origin of funding: EU-CARDS / EU-IPA

Description:

The overall objective of the Municipal Infrastructure Support Programme (MISP) for the Republic of Serbia, initiated by the European Commission in early 2008, is on the one hand to provide technical support to all Serbian municipalities in the planning and implementation of municipal infrastructure projects, mainly related to water supply, wastewater treatment, and the collection and disposal of municipal solid waste, and, on the other, to provide legal, managerial and technical support to the Public Utility Companies in charge for the delivery of municipal infrastructure services.

All together, the three phases of MISP represent a technical assistance of €18.5 million, reflecting the European Union's solid commitment to assist Serbia in the improvement of its municipal infrastructure services, in the enhancement of the human capacities of its local governments, and in the improvement of its people's living standards.

Activities:

- Assistance to the authorities in preparation and prioritisation of municipal and socio-economic infrastructures;
- Preparation of procurement strategies, assisting in tender procedures, providing clarifications, taking part in tender evaluations, contract awards, reporting based on EU standards;
- Preparation of feasibility studies for environmental infrastructure (WWTPs, landfills and water supply networks);
- Works Supervision in compliance with FIDIC and the Serbian Construction Law of two regional landfills;
- Monitoring of works for sludge line, a Wastewater Treatment Plant and a Water Treatment Plant;
- Assign professional team of supervisors;
- Revision of the training needs analysis prepared by previous MISP projects and preparation of appropriate training activities;
- Provide technical, contractual and financial administration of the three Works Contracts in accordance with PRAG Conditions of Contract and applicable Serbian Laws and Regulations.

Technical Assistance for Hazardous Waste Management Facility



Client: EU Delegation to the Republic of Serbia **Origin of funding:** EU - IPA

Description:

The overall objective of the project is to assist the Ministry of Environmental and Spatial Planning (MESP) in the preparation of the planning and tender documentation that will lead to the first hazardous waste treatment facility being built in Serbia.

Operation of this facility will ultimately result in a cleaner and safer environment as hazardous waste will be collected, treated and disposed of according to EU best practice, which should help reduce pollution of air and groundwater.

This project will be implemented in two phases:

Phase I - Consists of the tasks that can be undertaken before the final site for the facility is chosen and confirmed, including preparation of a Feasibility Study and Cost-Benefit Analysis.

Phase II - This phase is contingent upon a suitable site being selected and the outline planning consent and approval being granted; it finalises the design and triggers the Environmental Impact Assessment and preparation of tender documents.

Activities:

- Inception report and review of existing situation including hazardous waste flows;
- Preparation of outline design;
- Financial and economic analysis: determination of a suitable tariff structure and breakeven analysis;
- Awareness raising campaign;
- Review of administrative and legislative requirements for the effective operation of a hazardous waste management system;
- Production of a training needs assessment and delivery of the training programme;
- Finalising of the main project of the facility (Detailed design, Specification, Engineers estimate, bill of Quantities, Drawings etc.) taking account of site-specific factors and contract choice, to the extent that tender documentation can be drafted Environmental Impact Assessment of the selected site;
- Prepare tender documentation, participate and assist in the tender evaluation and awarding process.

Supervision of Construction and Commissioning of the New Waste Water Treatment Plant at TPP Nikola Tesla B



Client: Electric Power Industry of Serbia (EPS) **Origin of funding:** EU - IPA

Description:

The overall objective of this project is to supervise the works contract with the aim to assist EPS to obtain an integrated permit (under IPPC Law) for further operation of thermal power plants and for their performance of activities after the year 2015. Moreover, the aim of this project is to align emissions and introduce the best available techniques (BAT) for water emission reduction.

Specific objectives of the project:

- Provide EPS with the necessary assistance in the coordination, supervision and project and site management of Design-Build contract for construction under FIDIC rules, following the PRAG procurement procedure;
- Assistance during procurement process for the main works contract;
- Civil Works, clearance of existing buildings;
- Design and Construction of a New Wastewater Treatment Plant;
- Manufacturing and supply of all the necessary equipment;
- Installation of new civil, mechanical and electrical parts, power supply and monitoring system;
- Commissioning.

The project will be located in Obrenovac, at Nikola Tesla B Power Plant, in Serbia.

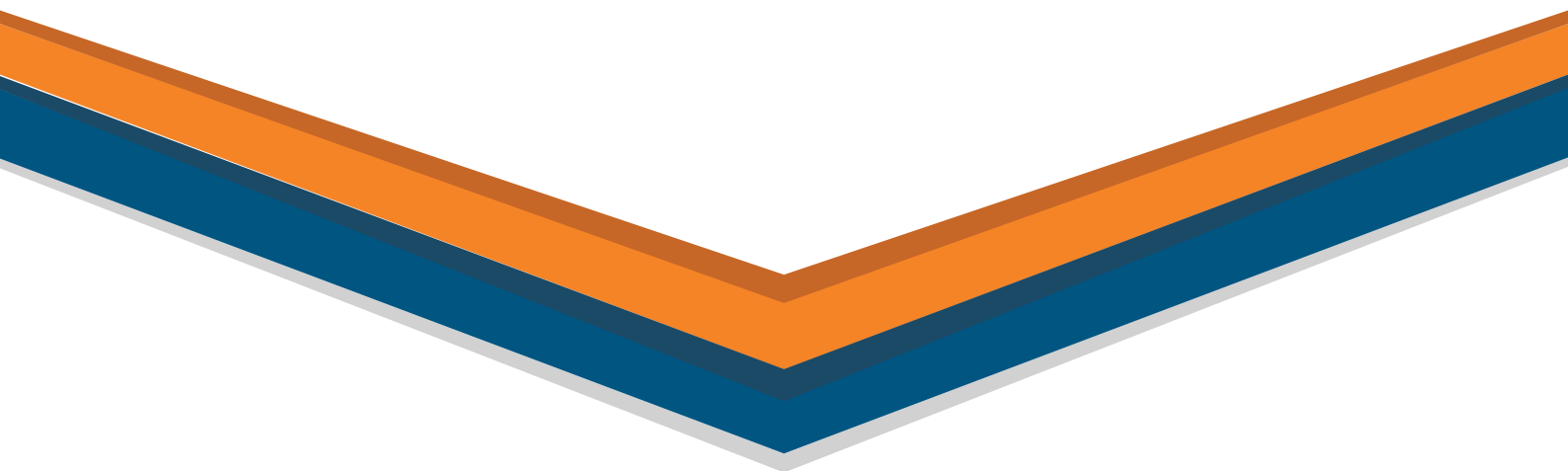
Activities:

- Technical Assistance throughout tender evaluation procedure;
- Supervision of work activities performed in accordance with FIDIC Conditions of Contract (Plant and Design-Build Conditions, Yellow Book), Physical Planning and Construction Act (Official Gazette 72/09 and 24/11), and other relevant Serbian Legislation;
- Check Contractor's design, drawings and Bills of Quantities;
- Efficient administration of the Project according to FIDIC;
- Daily supervision of construction works;
- Overall quality control;
- Financial control in accordance with contract documents and 'best practice';
- Review of time scheduling and assuring completion of the works contract within estimated budget;
- Review of Contractor's Quality Assurance Plan;
- Supervision of preparation of detailed design;
- Establish and assist in QA/QC procedures through certification of acceptance testing;
- Provide necessary liaison and coordination between all parties involved in project;
- Project Management.



TRANSPORT INFRASTRUCTURE

Selection of Project References



Supervision of Secondary and Local Roads Project



Client: ADF - Albanian Development Fund **Origin of funding:** Co-financed EBRD/EIB/KfW

Description:

The main objective of this consulting assignment is the supervision of the contracted civil works for the upgrade of 1,500 km of Secondary and Local Roads in Albania, including monitoring, inspection and reporting supervision activities.

The following Works Contracts will be supervised:

1. Construction Period

- Review and approval of Final Designs;
- Checking Contractor's inputs concerning Quality Control and Final Technical Inspection and other obligations of the Contractor in regard to the local regulations;
- Checking and approving the Contractor's payment requests supported by documentation containing, inter alia, all the quality control test results;
- Executing all the necessary administration as required and implied under the international best practice Works Contract.

2. Defects Notification Period

- Issuing of the Taking Over Certificate;
- Issuing of the Performance Certificate.

3. Supervision services during "Construction of Waste Water Treatment Plant".

Activities:

- Overall management and supervision of the works contract;
- Ensure an orderly start-up and timely execution of the works;
- Coordination with road works stakeholders;
- Contract Administration:
- Financial management of the civil works Contracts and follow-up of Contractors' work program and monitoring cash-flow in relation to the planned schedules;
- Day-to-day measurement and recording of quantities of Works;
- Verification of Interim Monthly Payment Certificates;
- Assist in preparation of completion and handing over certificates, defects notification and acceptance certificates in accordance with conditions of contract.
- Administer the Civil Works contracts, approve the materials and quality of the works in accordance with the contract;
- Overall project management and backstopping.

Consultants Services for Technical Assistance to PIT/ARA



Client: Ministry Of Public Works And Transport/Albanian Road Authority **Origin of funding:** EIB-WBIF

Description:

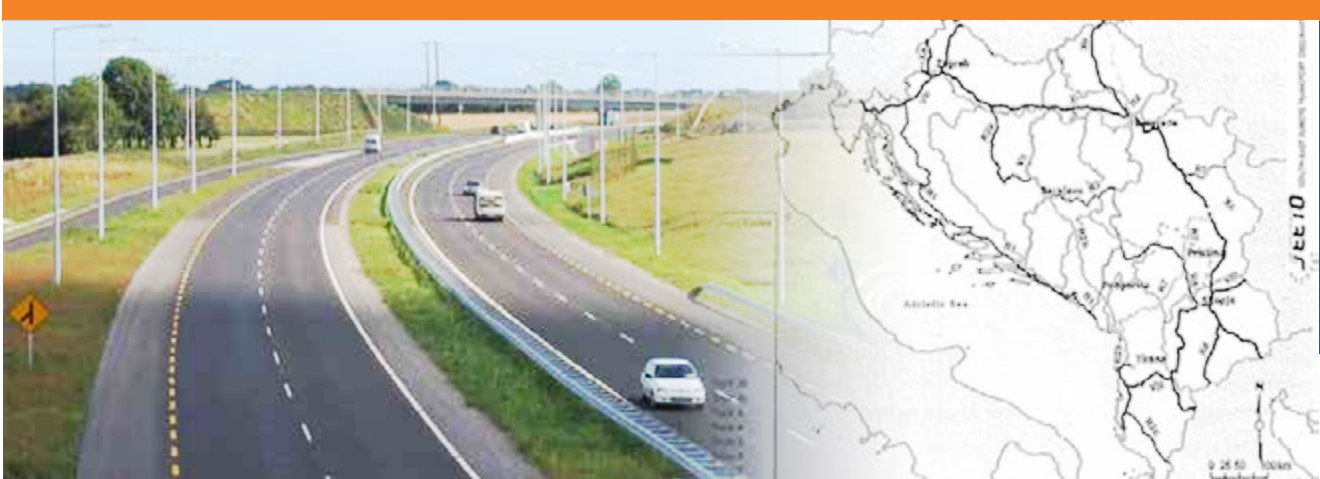
The overall objective of the Consultant's Technical Assistance and support to the Albanian Road Authority is to:

- Provide expert advice and assistance on project implementation and contract management related to roads investment and construction projects.
- Provide continued on the job training to project managers in the PIU tasked with project implementation.
- Assist in the preparation of future road investment projects.

Activities:

- Assistance to the Project Implementation Team (PIT) to manage the procurement cycle - advertising, issuing tender documents, receiving tenders, opening and evaluation;
- Assistance in preparation of tender documents including technical specifications and cost estimates, and other procurement documents;
- Assistance in preparation of invitation packages for selection of consultants, including requests for expressions of interest, requests for proposals, terms of reference, evaluation reports and draft contracts;
- Assistance to the Project Implementation Team with:
 - reviews of contract technical documentation (drawings, specifications, BoQs etc.) and environmental impact assessment reports prepared by other consultants;
 - preparation of reports for the government and foreign Donors on implementation of the Projects;
 - Consultancy in the fields of highway design techniques, required standards, construction procedures and environmental issues.

Preparation of Preliminary Studies and Designs for Improvement of the Road on the SEETO Route 2a: Lašva – Jajce – Ugar (inter-entity boundary line – IEBL) – Banja Luka – Banja Luka Bypass



Client: Procurement Team, Delegation of the European Union to Bosnia and Herzegovina
Origin of funding: EU

Description:

The overall objective of this Project is to assist in improving economic and social development in Bosnia and Herzegovina (BiH) through improvement of the transport infrastructure in line with the priorities of the SEE Comprehensive Transport Network and enable creation of a functioning infrastructure regulatory framework for all transport sub-sectors. This would enable better connection and the adequate levels of service for the central region of Zenica and Sarajevo with the regions of Banja Luka, Prijedor and Lijevo (Laktasi and Gradiska), but in particular the EU (Croatia), and with candidate countries (Serbia and Montenegro).

Project consists of two main components:

Component 1: For the section of the SEETO Route 2a Lasva- Jajce- Ugar- IEBL:

- Conceptual design and preliminary studies for the betterment - reconstruction/construction of the respective road section,
- Technical documentation required for the tender procedure for provision of the Preliminary and the Main Design.

Component 2: For the section of the SEETO Route 2a IEBL- Ugar- Banja Luka- Banja Luka Bypass:

- Conceptual design and preliminary studies for the betterment - reconstruction/construction of road sections,
- Technical documentation required for the tender procedure for provision of the Preliminary and Final Design.

Activities:

- Technical report on the current status of the road, expressed through the indicators concerning the specific road elements;
- Preliminary Solutions / Conceptual Designs with supporting studies that shall result in the first phase in development of a number of variants of the conceptual design;
- Traffic Study/Multi - Criterion Analysis/Pre-Feasibility Study;
- Preliminary Environment impact Assessment of each of the sections in case a new road section construction (new alignment) would be considered;
- Environment Management Plan, for each of the sections in case the existing road reconstruction (re-alignment) would be considered;
- Preliminary Socio-economic Impact Assessment for betterment and reconstruction of the road;
- Preparation of the Terms of Reference for provision of Preliminary and Main Design.

Supervision of Design and Construction Works on Banja Luka-Doboj Motorway, Section: Prnjavor-Doboj



Client: Public Company “Autoputevi Republike Srpske” **Origin of funding:** EBRD

Description:

The Project Purpose is:

To assist and advise the Employer in administration of the Contract for the Design and Build of new Motorway and all associated facilities, with all due diligence, by carrying out the duties of the Engineer assigned to him under the Supervision Contract in time and with satisfactory approval of the Contractors design and his completion of the Works, in accordance with the Construction Contract;

To perform the role of “the Engineer” according to the FIDIC Conditions of Contracts for Plant and Design-Build and the Particular Conditions as agreed under the Construction (Main Works) Contract and administer the Works Contracts, managing any variations and claims occurring during the implementation of the project;

To ensure the smooth implementation and the satisfactory completion of the Works Contracts within the allocated budget, the environmental requirements, quality standards and according to the time-scale stated in the Contract.

Activities:

- Review Contractor’s design proposals and make recommendations to the Employer as to their compliance;
- Contract Administration;
- Acceptance and/or approval of Contractors’ programmes, construction techniques and materials;
- Perform day-to-day construction supervision of construction works (in accordance with FIDIC Yellow Book Conditions of Contract):
- Inspection of the Works (technology and quality) to check whether performance complies with specifications and drawings;
- Regularly visit all construction work in progress to observe the Contractor’s progress for compliance with required environmental standards, quality, safety in construction and good working practices;
- Issuance of variation orders, advising on any claims or contractual problems arising during the works, indicating potential delays, preventing the claims, settling of any dispute, etc.

Supervision for Renewal with Reconstruction of the Railway section Bitola Kremenica, as part of XD of Corridor X



Client: Central Financing and Contracting Department (CFCD), within the Ministry of Finance
Origin of funding: EU-IPA

Description:

The overall objective of the project is the rehabilitation of railway link along the TEN-T- Corridor X, branch Xd, increasing its capacity for better cohesion with the EU Member States and neighbouring countries, and promoting sustainable development through minimizing the adverse effects of transport on the environment and through improving transport safety.

Eptisa is responsible for providing supervision services for reconstruction of the non-electrified single-track railway section Bitola–Kremenica of a length of approx. 17 km, as part of Xd of corridor X in accordance with FIDIC 'Conditions of contract for building and engineering works designed by the employer', first edition 1999 — FIDIC 'Red Book'.

The civil works, which will extend during the next 38 months will comprise:

- Earth works on cuts and embankments with an increased bearing capacity;
- Enhanced safety measures in 10 level crossings;
- 6 existing bridges to be demolished and reconstructed;
- 3 existing bridges to be demolished and replaced with culverts;
- New signalling, telecommunications and ERTM;
- Track speed increased to 100 km/h;
- Construction of a new station in Zabeni and a halt in Kravari, including new track alignments (sidings).

Activities:

- Provide oversight directly the implementation of the works and ensure the conformities of the works to be done in accordance with the valid legal basis;
- Supervise and check construction works in accordance with FIDIC Red Book 1999 conditions of contract;
- Verify and check all necessary documents for issuing of Taking-Over and Performance Certificates;
- Complete civil works with the specified scope and quality, and according to the approved programme/time schedule;
- Ensure all financial safeguards for the Contracting Authority/Employer are in place and remain valid, including guarantees and insurances;
- Variations in works are minimal, only done when necessary and processed with the approval of the Employer when there is a cost implication or any change in specification;
- Financial and quantity related oversight ensuring the works remain within budget, or if the works are likely to exceed the budget early warning is given and the Employer is adequately advised on how to manage the shortfall;
- Project management and backstopping

Railway Corridor VIII - Supervision Services and Project Implementation Unit Assistance



Client: Public Enterprise for Railway Infrastructure (PERI) **Origin of funding:** EBRD

Description:

This project is funded by EBRD and aims at supporting the rehabilitation of the first section from Kumanovo to Beljakovce which used to be operational until mid-1996. The section starts at the northern end of Kumanovo station up to Beljakovce station, with a length of approximately 30.8 km. The Consultant will be engaged according to EBRD's procurement policies and rules for consultancy services.

The Consultant will be responsible for administering the civil works contracts as the "Engineer" under the FIDIC Conditions of Contract for Building and Engineering Works Designed by the Employer (1999), subject to certain requirements for the Engineer to seek the approval of the Employer, prior to taking action under specified clauses of the Conditions of Construction Contract. The Consultant shall be required to establish and follow detailed construction supervision procedures based on sound international practice to monitor the completion of the project within the agreed programme and budget and to the quality standards and environmental provisions stipulated in the contracts.

Activities:

- Overall management and supervision of the works contract;
- Administer the civil works contracts as the "Engineer" under the FIDIC Conditions of Contract for Building and Engineering Works designed by the Employer;
- Checking and approving the Contractors' working and "as built" drawings;
- Supervising the implementation of environmental mitigation works and environmental monitoring;
- Issuing site instructions, variation orders, provisional sum orders and day works orders;
- Overall project management and backstopping.

Feasibility Study for the Eastern Section of Corridor VIII and ESIA



Client: Ministry of Transport and Communications **Origin of funding:** EBRD

Description:

The overall objective of the project is to undertake a feasibility study and Environmental and Social Impact Assessment (ESIA), in line with IFI, EU and Macedonian requirements, to assist the Macedonian Ministry of Transport and Communications in the preparation of the financing of the eastern section of Rail Corridor VIII (Kumanovo-Beljakovce-Kriva Palanka- Deve Bair, Bulgarian border).

Broader objectives of the Project in terms of the intended effects on the Macedonian economy are improvement of international, as well as national, transportation corridors.

Activities:

- Preparation of feasibility study;
- Review current situation of project implementation;
- Prepare traffic and revenue forecasts;
- Selection of preferred alternatives;
- Development of preferred alternatives, including preliminary design and cost estimates for the best option;
- Economic and financial evaluation for the selected alternative;
- Environmental and Social Impact Assessment (ESIA);
- Assisting in drafting the application for requesting the financial sources.

Framework Contract for Consultancy Services in the Transport Sector – Lots 1, 2 and 4

Multi
Country

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EU, Turkey, Western Balkans, Russia & Eastern neighbours, FEMIP, ACP, ALA, South Africa

Client: European Investment Bank (Mobility Department) **Origin of funding:** EIB

Description:

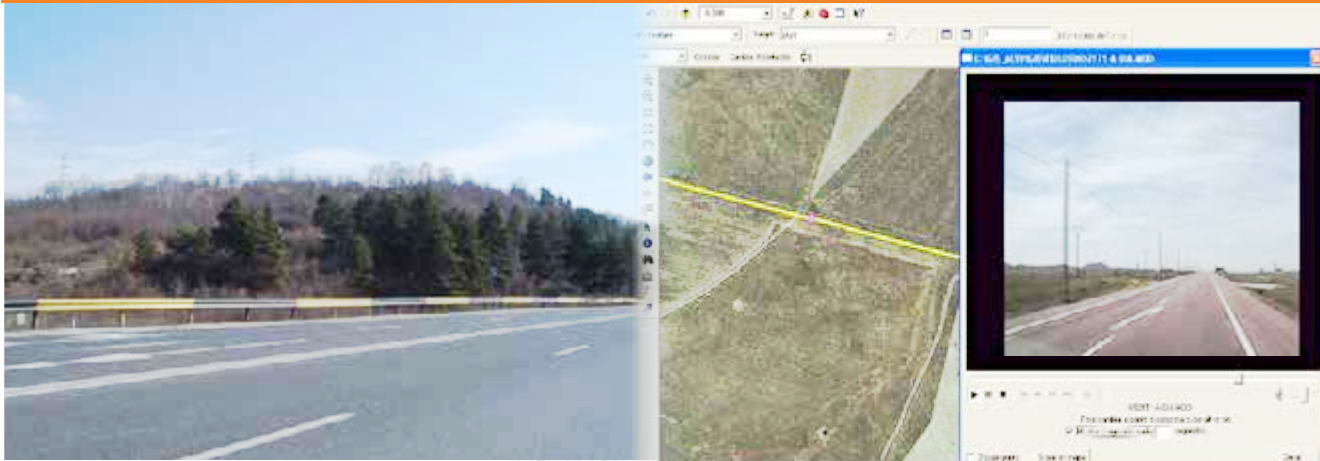
The primary aim of this agreement is to provide support to the Projects Directorate of the Bank, in particular the Mobility Department, over the next four years in its diversified portfolio of activities. These will mainly consist of rapid interventions referring to a wide array of tasks ranging from technical, economic, financial, environmental and social appraisal and monitoring of projects in one or more of the EIB countries of operation, primarily: EU, Turkey, Western Balkans, Russia & Eastern neighbours, FEMIP, ACP, ALA, South Africa.

A multidisciplinary team of international experts will offer provision of project preparation and implementation support to promoters including management of major technical assistance programmes. These can involve large one-off assignments in the areas of project preparation, project implementation and institutional support, including representing the Bank at project Steering Committee meetings. They will also offer provision of specific leading expertise in engineering and economics to undertake specific studies or research in a particular area or sub-sector of the transport sector.

Activities:

- Strategic and Project identification studies;
- Feasibility studies;
- Project preparation;
- Preliminary design assessment;
- Technical expertise & assessment;
- Environmental assessment;
- Social assessment;
- Climate change assessment;
- Economic cost-benefit analysis.

Technical Assistance for Implementation of Road Safety Measures along DN1 and in Bucharest



Client: CFCU and Ministry of Public Finance **Origin of funding:** PHARE

Description:

The overall objective of the project is to increase road safety in Romania;

Specific objectives of the project are:

- To improve the traffic safety and living environment in Bucharest and in localities crossed by the national roads with significant volume of traffic and accident recorded and promote the local awareness and initiative;
- To improve the road safety on the road sections outside localities effected by a significant number of accidents.

Activities:

- Road safety inspections and selection of final locations and measures;
- Determination of optimal road safety measures (effects on the road safety, consequences for the traffic quality, construction costs, construction time and temporary impairments of the traffic, acquisition of land, effects on the environment);
- Preparation of decisions;
- Detailed design (review of the feasibility studies of 20 projects, preparation of full detailed designs, engineering plans and reports, technical specifications, and bill of quantities for 20 infrastructure projects, selection of the appropriate FIDIC contract type, preparation of Schedules);
- Elaboration of tender documents Portfolio;
- Road safety public awareness campaign.

Supervision of Construction Works of Corridor X, E-75 Motorway - Tunnels Predajane and Manajle

Serbia

38



Client: EU Delegation to the Republic of Serbia **Origin of funding:** EU-IPA

Description:

The overall objective of this project is to contribute to enhancement of traffic flows on Corridor X and to improve environmental and safety conditions of the Serbian road transport network in line with EU standards. The responsibility for the successful construction of Corridor X, which will ease congestion, decrease journey times and reduce traffic accidents, lies with Koridori Srbije d.o.o. (KS), a special company set-up by the Government of the Republic of Serbia to construct the missing parts of Corridor X.

The tunnels to be supervised under this consultancy contract are divided into two distinct works Lots:

LOT 3 – Tunnel Predejane: 1,112 m long, designed with two separate tunnel tubes each for one traffic direction. Center-to-center spacing of tunnel tubes is variable and ranges from 35 m (in the portal area) to maximum of 65 m; and

LOT 4 – Tunnel Manajle: 1,804 m, composed of two tunnel tubes (one tube for each direction) distanced 30 - 35 m. The right tube length is L= 1,800 m and the left tube length L= 1,808 m.

Activities:

- Supervision of motorway construction works on the E-75 motorway Corridor X (Grdelica – Vladočin Han section) tunnel Predajane and tunnel Manajle, in accordance with national and professional standards carried out successfully;
- Approving the Contractor's Overall Work Programme and examination of his proposals for engagement, and mobilisation on site, of sub-contractors;
- Preparation of the Design Review Report with comments and preliminary approval of the Contractor's design changes (if any) and/or quality of shop drawings;
- Supervision of Environmental Management Plan implementation during construction works on motorway E75 (Grabovnica-Levosaje) and E80 (Prosek-Dimitrovgrad);
- Technical assistance in providing financial support in relation to lenders, and the provision of permits resulting in the Take-over Certificate and Final Acceptance Certificate for the roads;
- Initiating and chairing weekly site and monthly progress meetings, preparing and circulating the minutes of such meetings etc.

Feasibility Study for Road Novi Sad - Sabac - Loznica - Pozega



Client: EAR **Origin of funding:** EU - CARDS

Description:

The overall objectives of the project are to:

Analyse different scenarios for improvement of the road alignment mainly on sections where the traffic is more important and where series of dangerous road black spots should be eliminated.

Reflect the foregoing to ensure that the Feasibility Study concentrates on the actual problems of the road at the present time taking into account future requirements.

Demonstrate the feasibility of the proposed project, which would include a traffic forecast, an economic justification of the project, an environmental impact assessment and an analysis of the proposed alignment with regard to increasing the safety of the road.

Activities:

- Feasibility Study and Highway Design;
- Traffic Study and Traffic Safety Review;
- Technical Study;
- Environmental Impact Assessment;
- Economic Study including Cost Benefit Analysis;
- Prioritisation of the project into groups or phases based upon high, medium or low priorities;
- Overall project management and backstopping.

Supervision of Construction Works on Belgrade Bypass, Section A, Batajnica - Dobanovci



Client: EU Delegation to the Republic of Serbia **Origin of funding:** EU - CARDS

Description:

The overall objective of the project of which this supervision contract is a part, is the construction works of the Belgrade By-Pass Section A.

The Works are constructed under two separate Works Contracts as follows:

Lot A1 – Design and Construction of “Batajnica” Interchange, km 184+738 – km 188+680:

- Section is 3.9 km long. Road width is variable (from 7.0 m to 30.0 m);
- Executed works are: preliminary works, earthworks, paving, construction of five bridges with associated structures across railway, streets and local roads, road furniture and traffic signs as required;

Lot A2 – Design and Construction of Motorway E75 alignment, km 188+680 – km 194+782:

- Section is 6.1 km long. Total motorway profile, with dual carriageway, width is 30.0 m;
- Executed works are: preliminary works, paving, construction of five bridges and overpasses with associated structures, construction of service roads, road furniture and traffic signs as required.

Activities:

- Reviewing and approving or consenting of Contractor’s Documents in accordance with YELLOW FIDIC Sub Clause 5 and coordinated with the requirements of the Serbian Law in Construction;
- Verification of contractor’s quality assurance procedures, works, and working drawings;
- Supervision of works;
- Checking Contractor’s inputs concerning Quality Control and Final Technical Inspection and other obligations of the Contractor in regard to the local regulations;
- Issuance of variation orders, advice on claims and other contract;
- Issuing of completion certificates and taking-over documents. Compilation of operational and maintenance programme, carrying out of testing, inspection and commissioning;
- Executing the necessary administration as required under the FIDIC Works Contract.

Supervision of Construction Works on Highway E-80



Client: Koridor 10 (K10 DOO) **Origin of funding:** WB

Description:

The overall objective of the project is supervision of construction works on the highway E80, section Prosek-Dimitrovgrad (Corridor Xc), excluding subsection Cifiik-Pirot (East), in total length of 59,6 km in behalf of K10 doo.

A team of local and international engineers of EPTISA will supervise the works performed by several international contractors working in nine different works contracts in the section Dimitrovgrad - Prosek, all the way to the border with Bulgaria. The road, that will become a crucial part of the main transit road from Central Europe to Turkey, consists of 60 kilometres and includes 43 bridges and viaducts, 4 tunnels, and 3 interchanges.

Activities:

- Supervision of the Contractors in all aspects, with respect to carrying out and completing of the Works contracts (Engineer according to the FIDIC Red book);
- Assistance to the K10DOO, including its associated duties to the IFIs (determinations, financial control and reporting);
- Establishment of supervision methodology and systems that may be adopted as a standard for employment on future projects;
- Provision of necessary evidentiary records and analyses and acting as the expert witness on the side of the K10DOO if any dispute issues arise out of the Project;
- Co-operation with the Consultant for supervision of the Environmental Management Plan (EMP) implementation.

Technical Assistance for the Supervision & Inspection of the Construction Works for the New Subterranean Connection between Two Stations in Madrid Subway

Spain

42



Client: Ministry of Public Works **Origin of funding:** Ministry of Public Works

Description:

The overall objective of the project is the creation of a new underground connection between two of the most important Madrid Subway Stations: The northern, Nuevos Ministerios, and the southern Atocha.

Atocha, one of the three big train stations in Spain covers all the traffic departures towards the southern region of the country, and specially the high speed railway to Seville. Nuevos Ministerios station, located in the center of the city one of the most important hubs of the city, linking metro, train and bus stations. A particular feature of the station is the direct connection with the airport (12 minutes), and the possibility to do the checking for flights inside the station.

Technical data:

- Section length: 5 km of double track
- Length dug with tunneling machine (fullfacer): 4,582m
- Artificial tunnel length: 288 m
- Ventilation and emergency exits: 8
- Compression inspection tunnels: 4

Activities:

- Inspection and supervision for the construction works;
- Material inspection and laboratory testing;
- Detailed Design and Construction Project Elaboration of new and rehabilitation sections;
- Technical Assistance to the Works Direction Unit;
- Quality Control and Materials Assessment (including laboratory analysis);
- Quantitative control of works;
- Surveillance in the fulfillment of safety and health restrictions.

Supervision Works of the Extension and Development of Madrid Airport



Client: AENA (Spanish Airports and Air Navigation)
Origin of funding: AENA (Spanish Airports and Air Navigation)

Description:

The overall objective of the project is to supervise the construction of a new main runways and adjacent taxiways. The runway is planned to be equipped with airfield ground lighting and instrument landing system.

The main activities developed were:

- Construction supervision and qualitative follow-up of the works and the constructor's quality plan.
- Assessment and control in quality of materials and surveillance of the compliance of environmental impact restrictions and
- Elaboration of the environmental impact assessment, producing a mitigation plan comprising feasible and cost-effective measures that will reduce potentially significant adverse environmental impacts to acceptable levels specially regarding the above measures.

Activities:

- General Technical Assistance to the Works Direction Unit;
- Perform day-to-day construction supervision (in accordance with FIDIC Similar Conditions of Contract);
- Surveillance in the fulfilment of safety and health restrictions;
- Technical studies: on pavements, structures, drainage, signaling, and road alignment;
- Environmental impact assessment;
- Backstopping and Supervision.

Sector and Regional Plan for the Ports of the Basque Country

Spain

44



Client: Basque Regional Government **Origin of funding:** Public

Description:

The overall objective of the project is the elaboration of the Sector and Regional Plan for the Basque Ports.

This study revolved around three principal concepts:

- analysis of the current situation of the ports of the Basque Country in terms of economy, technology, level of service, users and environment in the regional framework of action.
- elaboration of a strategic document comprised of different alternatives and under different scenarios of market development and government directives.
- layout of an action plan that will enable the implementation of the objectives agreed between EPTISA, the different Port Authorities and the Basque Government.

Activities:

- Analysis and diagnose of current situation;
- Document revision;
- Previous studies;
- Legislation and administration procedures;
- Environmental assessment;
- Socioeconomic report;
- Port statistics and main uses.
- Port planning:
- SWOT analysis
- Economic evaluation regarding infrastructures, market share, competitors, opportunities of growth in a social and governmental context;
- Meetings, periodic reports, client management and interviews with all intervening entities.
- Strategy layout and actions plan:
- Elaboration of a clear and realistic document that is accessible to authorities, ports and final users.



BUILDING AND ARCHITECTURE

Selection of Project References



Basic Design and Project Management for Aeronautical Manufacturing Parts Plant in Harbin

China

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Client: Airbus & Harbin Aircraft Industry Group
Origin of funding: Airbus & Harbin Aircraft Industry Group

Description:

The overall objective of the project is the construction of the new Composite Manufacturing Centre in Harbin - 80,000 - square-metres manufacturing compound, comprising production, technical support, office areas and other services.

The work consists of the construction of a manufacturing parts plant for the Airbus A-320 programmes for the joint venture between Airbus and Hafei, which is an aeronautical company with Chinese government participation.

The new facilities will mainly be used to manufacture composite parts for the A350 XWB, Airbus' latest aircraft programme.

The Manufacturing Centre uses the world's most advanced equipment and technology, including automated-tape-laying, autoclave, automated trimming, and non-destructive test equipment. The facilities are built to the highest industry standards and eco-efficiency is a decisive factor when designing its buildings and processes.

Activities:

- Works management services which include the basic design engineering, together with purchase and construction management;
- Contractors coordination;
- Concept and detailed design;
- Technical survey of works together with safety and health supervision;
- Cost and schedule control;
- Procurement activities;
- Project management and backstopping.

Supervision of Construction Works for Infrastructure Schemes in North Kosovo



Client: European Union Office in Kosovo **Origin of funding:** EU

Description:

The overall objective of the project is to support a more balanced regional development in Kosovo through increasing municipal social and economic infrastructure, the quality of life and economic development of Kosovo municipalities. Consultant will assume the function of Supervisor as is set out in PRAG Conditions and rules, during the implementation of the Works Contracts in three municipalities in the north until the end of Defect Liability Period (issuing the Final Acceptance Certificate).

The Contract consists of:

- Acting as the Supervisor on behalf of the EU Office and providing daily supervision and coordination with regard to the implementation of the Works Contracts;
- Reviewing and approving the Works Contractor's documents in accordance with the provisions of PRAG Contract Procedures;
- Ensuring that the obligations of the Works Contractors specified in all contractual documents are met during all stages of the project implementation;
- Verifying and endorsing certificates, invoices, variations, claims and any other documents submitted by the Works Contractor(s) prior to their forwarding to the EU Office, etc.
- Producing all documents required for the correct implementation of the schemes;

Activities:

- Facilitate the implementation of the works contract(s) through effective supervision in order to ensure that the works are completed to contracted budget, time and quality and fully in accordance with all contractual provisions;
- Ensure successful handing over of the schemes/projects to the Beneficiaries after issuing the Certificate of Provisional Acceptance;
- Ensure through competent supervision that all defects are properly dealt with and remedied during the 12-month Defects Liability Period (warranty period);
- Issuing of Certificates of Final Acceptance after expiry of the 12-month Defects Liability Period;
- Issue Final Acceptance Certificates once the Works Contractor(s) has(have) completed all contractual obligations;
- Verify content and completeness of final documentation as for as-built drawings and provide a final statement of account to the EU Office, etc.

Design of Municipal Social and Economic Infrastructures Phase VIII - Kosovo



Client: European Union Office in Kosovo **Origin of funding:** EU

Description:

The overall objective of the project of which this contract will be a part is to support a more balanced regional development in Kosovo through increasing municipal social and economic infrastructure, the quality of life and economic development potential of Kosovo municipalities.

Results to be achieved by the Contractor:

Result 1: Revised programme, surveys, investigations and conceptual design for the extension and for the refurbishment of the existing municipal building of the municipality of Gjakova;

Result 2: Detailed design for the extension and for the refurbishment of the existing municipal building of the municipality of Gjakova;

Result 3: Unit price works tender dossier for the extension and unit price works tender dossiers for refurbishments of the existing municipal building of Gjakova;

Result 4: Finalised programme surveys, investigations and conceptual design for the high school centre in the municipality of Gracanica, with a teaching taking place in two shifts in a first stage;

Result 5: Finalised programme, surveys, investigations and conceptual design for the high school centre in the municipality of Gracanica, with a teaching taking place in one shift in a second stage;

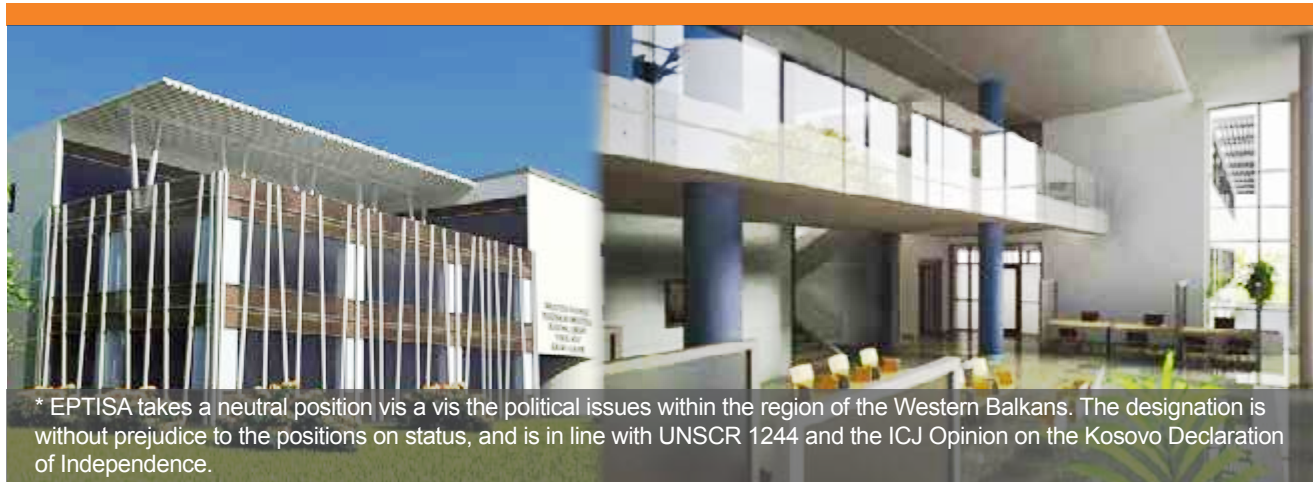
Result 6: Detailed design for the high school centre in the municipality of Gracanica, with a teaching taking place in two shifts;

Result 7: Unit price works tender dossier for the high school centre in the municipality of Gracanica.

Activities:

- Data collection;
- Topographic survey;
- Geotechnical Investigation;
- Conceptual Design and Programming Site Layout, Interior Space Layout, Exterior Elevations, Construction Drawings, Cost Estimation, Utility Services, Site Visit Report, Other Services;
- Detailed Design (including all phases: architectural, structural, wat/san, mechanical and electrical);
- Prepare of Technical Specification;
- Detailed Bill of Quantities and cost estimation;
- Prepare the dossier for the building permit requested by the beneficiary;
- Prepare the works tender dossier in accordance with the European Standards, norms and engineering practices.

Municipal Social and Economic Infrastructure



* EPTISA takes a neutral position vis a vis the political issues within the region of the Western Balkans. The designation is without prejudice to the positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

Client: EC Liaison Office to Kosovo **Origin of funding:** EU - IPA

Description:

The overall objective of the programme is to support the implementation of the status settlement and advance the reform and capacity building of local self-government in the context of the ongoing decentralisation process, through the improvement of municipal social and economic infrastructure;

The project specific objectives are:

- Familiarisation of the Municipal staff with the programme, the tender procedures and increasing their capabilities to identify, design and implement social infrastructure projects;
- Completion of the design and tender documents for the selected projects to agreed budget, time and quality;
- Facilitation of the Completion of Works Contracts through effective Supervision in order to ensure that the works are completed to contracted budget, time and quality.

Activities:

- Project Management;
- Undertake the information campaign, for all the municipalities;
- Drafting the criteria for the municipalities to bid for projects;
- Provide assistance in development of the project proposals to the relevant executive departments within the municipality structure;
- Topographic survey of the terrain and overall survey of existing facilities;
- Geotechnical investigations of the land where the treatment infrastructure projects should be constructed;
- Prepare the detailed design, (including all phases as architectural, structural, mechanical and electrical);
- Act as the Supervisor on behalf of the EC Liaison Office through day to day site supervision of all projects.

Management and Site Supervision of Works Financed under the PHARE 2005 Economic and Social Cohesion Programme

Romania

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Client: Ministry of Development, Public Works and Housing **Origin of funding:** EU - PHARE

Description:

The overall objective of this project was to facilitate the successful completion of infrastructure projects selected to be financed under the EU-PHARE 2005 Economic and Social Cohesion Programme.

The project aimed at supporting the Project Implementation Unit (PIU) at the MDPWH for the procurement, management and supervision of 10 works contracts concluded under the "Regional Infrastructure to Support Economic Development" from the PHARE 2005 Economic and Social Cohesion programme. One of the pre-conditions for the disbursement of these funds was the establishment of a PIU that would assure the observance of EU procurement and construction standards by providing project management support to the Employer in the construction supervision of all the works contractors.

Activities:

- Technical, legal and procurement support to the PIU for the tendering and implementation of infrastructure projects;
- Initial cost estimations, detailed procurement plans;
- Drafting of tender dossiers for services, supplies and works;
- Participation in tender evaluations;
- Reporting on legal and contractual potential conflicts;
- Review, adaption and refining of the communication and supervision management procedures;
- Review/update of the financial and management procedure, monitoring/control procedures, standards procedure for payments to the contractor etc;
- Formulate improvements to standard QA procedures on all works contracts;
- Act as "The Engineer" under the Conditions of Contract for Construction based on FIDIC Red Book (1999 Edition) for the 10 Works contracts, covering all 6 stages: pre-construction, mobilisation, construction, works contracts close out, defects notification period, contract completion;
- Provide training on FIDIC and infrastructure related administrative and financial procedures.

Technical Assistance to the Ministry of Justice for Consulting Services for the Site Supervision of Civil Works



Client: Ministry of Justice **Origin of funding:** WB

Description:

The overall objective of the project is works supervision for the Court Infrastructure Rehabilitation and support of the rehabilitation and limited new construction of prioritized court building and the development of uniform space planning and design standards for court facilities.

Project specific objectives:

- Renovate court building in order to provide better accommodation for trial, public access and security features;
- Set/ apply new design standards for courts buildings reflecting best international practices and cost efficiency principles.

The services provided are to ensure adequate supervision of the approximately 12 works contracts by providing project management support to the Employer, construction supervision of the Works as the Project Manager, as well as technical support to the DIEFPs teams.

- The 12 works contracts, located in 9 counties, are: Maramures Old Tribunal, Viseu de Sus Court, Vatra Dornei Court, Blaj Court, Orsova Court, Turda Palace of Justice, Saliste Court, Bolintin Vale Court, Ialomita Tribunal, Campina Court, Cluj Tribunal and Suceava Tribunal.

Activities:

- Activity 1- Act as faithful advisor to the MoJ in its role as Employer for the Works Contracts and support the DIEFP in the implementation of the Employer's obligation as delegated to it by the Employer:
 - Hold monthly Progress Meeting with the DIEFP;
 - Responsible for ensuring the effective liaison between all concerned parties;
 - Review and update the existing procedures to incorporate the latest modifications in the Romanian fiscal regulations for the Employer's use that ensure the effective financial management and control of the Works Contracts;
 - Review and adapt standard formats for draft Interim Payment Certificates for the Constructor's completed works and standard formats for formal Interim Payment Certificates and Final Payment Certificate;
 - Review, adapt and refine standard Quality Assurance procedures and use standard forms for issuing instructions, recording information and reporting;
- Activity 2 – Act as “The Project Manager” Condition of Contracts in accordance with Romanian regulation force.

Higher Education Teaching Infrastructure Programme

Serbia

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Client: EU Delegation to the Republic of Serbia **Origin of funding:** EU - IPA

Description:

The overall objective of the project is to ensure that EU and EIB standards and best practices are respected through support to the Project Implementation Unit in the implementation of the EIB R&D Infrastructure Initiative.

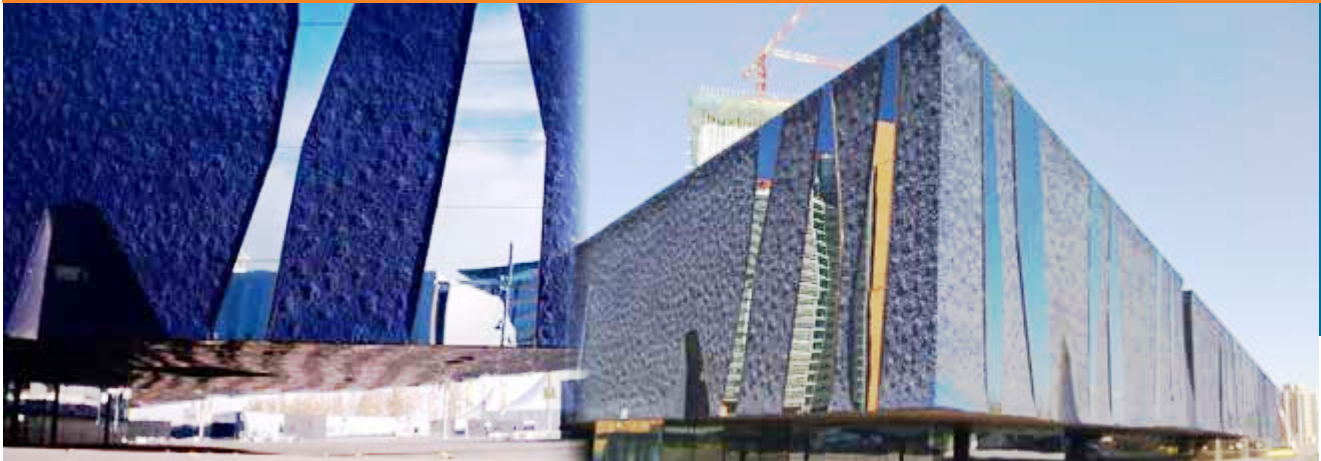
The project has specific objectives:

- Development of centres of excellence and academic research centres. The current organization and infrastructure predate the nineties and often do not offer a stimulating work environment for young researchers.
- Development of human capital. Serbia has only recently started seeing a slowdown in the massive brain drain of the nineties. There are currently about 8.000 researchers in Serbia, which is two times less per capita than recommended by the Lisbon agenda.
- Development of an information and communication technology infrastructure. Serbia intends to upgrade the Academic Computer Network in Serbia and launch a new Supercomputing initiative.

Activities:

- Drafting the organization of the PIU and assistance to the beneficiary with recruitment of management and staff;
- Supporting the PIU in drafting tender dossiers for Supply and Works contracts;
- Support to the PIU in drafting contract documentation for Supply and Works contracts under the loan to meet EU/EIB standards;
- Supporting the PIU in Supervision Activities;
- Assistance to the PIU in preparation and upgrade of reports to meet EU/EIB requirements;
- Preparation and delivery of promotional campaigns to raise public awareness regarding the new investments;
- Training of the PIU Staff;
- Support in successful and timely implementation of projects;
- Project management and backstopping.

Project Management for Forum Building - Barcelona



Client: Municipality of Barcelona **Origin of funding:** Municipality of Barcelona

Description:

The overall objective of the project is construction of the Forum building in Barcelona. A singular building with forceful triangular form, of 185 m of side and 25 m of height.

The Fórum, with a constructed surface of 43,500 m², concentrates the services required for an event that aims at attracting more than 6 million people: in the first plant, the auditory of 3,200 seats, exhibition areas, conference halls, restaurant and entrance hall; in the basement floor, part of the auditory and its support spaces (dressing rooms, etc), as well as a boulevard of connection between the Fórum Building and the Convention center.

Activities:

- Revision of the existing design and finalization of the final design, improvements (structural and costs), optimization;
- Project Management;
- Works management / Supervision of the construction works(similar to FIDIC RED conditions of contract for Construction);
- Works direction and coordination;
- Security and health studies;
- Contracting and purchasing management;
- Quality assurance;

Technical Assistance and Project Management for the all Infrastructure at the International Expo 2008 in Zaragoza “Water and Sustainable Development”



Client: Regional Government of Aragón **Origin of funding:** Regional Government of Aragón

Description:

The overall objective of the project is technical assistance and project management with a complex, integrated management system for control and follow-up of execution, deadlines and costs during construction of complex infrastructure project consisted of single buildings for EXPO 2008 in Zaragoza, covering an area of 40 hectares.

Some of buildings included:

- Trade fair park EXPO 2008;
- International stands, regional stands, Spanish stand, Stand for Aragón, Congress palace, Bridge Pavilion, Aquarium, River port;
- Bridge of the 3rd millennium, Canal “Aguas Bravas”, “Water Square” parking, Toilet facilities, Themed gardens, Ray Boulevard, Riverside groves and natural spaces, Botanic garden;
- Metropolitan area.

Activities:

- Coordination of the Project Managers and of the Central Technical Office;
- Reporting on legal and contractual potential conflicts;
- Review, adapt and refine the communication and supervision management procedures;
- Construction Management and Quality Assurance, including Internal Supervision of the Works;
- Direction and overall coordination of the works and study of security and health;
- Technical assistance to the client for the Investment planning;
- Consulting services;
- Profit engineering;
- Ensure the completion with the publicity requirements.

Consultancy Services for Design and Reconstruction Supervision of Etiler Police Vocational Academy Dormitory and 40 Schools in Istanbul



Client: Istanbul Seismic Risk Mitigation and Emergency Preparedness Project **Origin of funding:** EIB

Description:

The overall objective of the project is to demolish existing Dormitory Building (A,B,C blocks) at Etiler Police Vocational Academy and 40 schools to reconstruct new Dormitory Building having minimum 600 students capacity (Dormitory Building shall service for 400 male students and 200 female police students) - approximately 30.000 square meters construction area and 40 schools-approximately 240.000 square meters construction area.

The existing buildings are found economically infeasible to retrofit and also existing buildings do not functionally satisfy required demands of Directorate of Istanbul Etiler Police Vocational Education Centre , and Provincial Directorate of National Education.

Activities:

- Data Collection, topographic survey, geotechnical investigations –soil survey;
- Preparation and completion of all architectural and engineering designs (structural, mechanical, electrical, infrastructure connections, landscaping, etc.) of the buildings including all required calculations, drawings and specifications of the works,;
- Preparation of detailed bills of quantities, cost analysis and estimation which all to be included in the works bidding documents;
- Preparation of Tender Documents for Works Contract;
- Assistance to the Client for acquisition of all required documents for contractors' questions about the construction Works during tendering stage;
- Supervision of the works and engineering services during the construction period and during the Defects Liability / Maintenance period according to FIDIC Red Book Contract Conditions;
- Contract Management.



ENERGY INFRASTRUCTURE

Selection of Project References



TA Support to Meet the Requirements of the Energy Community Treaty with a Particular Focus on Energy Efficiency and Renewable Energies



Client: EU Delegation to Bosnia and Herzegovina **Origin of funding:** IPA

Description:

The overall objective of the project is to assist in the reform of the energy sector in BiH and to create a country wide energy market which is regulated and integrated into SEE and the European Union (EU) in line with commitments to the Energy Community Treaty (EnCT), Energy Charter Treaty, Kyoto Protocol and all aspects of the Acquis Communautaire relating to energy efficiency, renewables and energy sustainability.

The project aims to address the current policy and legal gap for EE/RE in BiH by supporting implementation of EE/RE measures and capacity building at a local level (within specific municipalities) providing models for implementation and replication in other municipalities and raising awareness about the potential for practical implementation of EE/RE measures on national and in municipal level.

The project includes the following 4 components:

- 1. Demonstration projects for EE/RES,
- 2. Institutional and technical capacity building,
- 3. Public Education, and
- 4. Legal Framework.

Activities:

- Component 1:
 - Selection of and Energy Audits for five municipalities;
 - Recommendation for choice of two municipalities and preparation of 2 feasibility studies;
 - Design and implementation of 3-7 low cost demonstration projects.
- Component 2:
 - Establishment of a Working Group ;
 - Identification of set of trainers and practicing engineers for “train the trainer” approach;
 - Development of Training Courses and provision of on the- job training.
- Component 3:
 - Public Education Strategy and Action Plan;
 - Information dissemination (leaflets, posters, etc).
- Component 4:
 - Gap analysis of BiH legislation to meet the EU Acquis and BiH’s international commitments in the field of EE and RES;
 - Preparation of the Legal Action Plans and Institutional Development Action Plan.

Preparation of Technical Specifications and Tender Dossier, Supervision for Supply Contract and Design & Works Contract for Construction of Substations 400/110KV Vranje-4 & Leskovac-2 and Accompanying Lines



Client: EU Delegation to the Republic of Serbia **Origin of funding:** EU - IPA

Description:

The overall objective of the project is to provide improved and reliable power supplies for the region as well as energy transfers to/from FYROM and Greece through the 400 kV OHL financed by EU with €28M under CARDS 2006 program, which is currently under construction.

The project consists of:

- Design and works contract for the construction of the substation Vranje-4 (400/110 kV) led in accordance with PRAG contract procurement conditions and FIDIC Yellow Book implementation rules, and includes: detailed design, delivery of materials and equipment, civil works, mechanical and electrical works and commissioning.
- Supply project (transformers for HV substations Leskovac-2 and Vranje-4) led in accordance with PRAG contract procurement conditions, and includes: supply of HV transformers (400/110 kV, 300 MVA) for each substation, installation, commissioning and testing of the transformers and training of operational staff for supervision and maintenance.

Activities:

- Preparation of Technical Specifications and Tender Dossier for the Supply Contract;
- Preparation of Technical Specifications and Tender Dossier for Design & Works Contract;
- Project supervision of Supply of HV Transformer 300/300/x MVA, 400/110/x kV for SS Leskovac 2 and HV Transformer 300/300/x MVA, 400/110/x kV for SS Vranje 4;
- Design and Construction supervision of Substations 400/110 kV Vranje-4 & Leskovac-2, with use of FIDIC Yellow Book (Design-Build) and of the local Law on planning and construction;
- Supervision of remaining works on construction of OHL Leskovac-Vranje-FYRoM border, with use of FIDIC Red Book (Construction);
- Assisting the Contracting Authority in the evaluation process for the selection of the contractor for the supply contract and for the works contract;
- Advising EMS on project and site management issues, progress assessment and verification issues.
- through witnessing and certification of acceptance testing at site and in workshops;
- Review of contractors' quality assurance plans for
- Design and procurement and works.

Promotion of Renewable Energy Sources and Energy Efficiency



Client: EU Delegation to the Republic of Serbia **Origin of funding:** EU - IPA

Description:

The overall objective of the project is to contribute to sustainable development in Serbia by enhancing capacities in the energy sector to use renewable energy sources and efficient usage of resources according to EU standards. The purpose of this project is to build the capacity in the energy sector which will lead to the implementation of the rational use of renewable energy sources and Combined Heat and Power (CHP) production.

The project comprises of the following components:

- Part A: Study of Geothermal Potential in Serbia, in-depth analysis of the low temperature geothermal resources, proposal of options for use of available geothermal potentials for different sectors and final users, preparation of feed in tariffs for hybrid biomass-geothermal facilities, identification of 3 potential sites for the development of geothermal energy (GHE) systems and preparation of pre-feasibility studies.
- Part B: Promotion of CHP generation and energy efficiency.

Activities:

Part A: Study of Geothermal Potential in Serbia:

- Technical Support to the Ministry of Mining and Energy;
- Best options for use of geothermal resources;
- Development of feed-in tariffs for electricity produced using GHE and for hybrid-geothermal facilities;
- Organisation and delivery of trainings and workshops;
- Identification of potential sites for the development of systems that use geothermal energy.

Part B: Promotion of CHP generation and EE:

- Analysis and systematization of information about existing data and studies on CHP potential;
- Operational Plan for CHP potential assessment;
- Report on possibilities for conversion of heat-only plants to CHP production;
- Definition of strategic objectives for increasing the share of CHP in Serbia's energy sector;
- Set measures and initiatives for enhancing CHP.

Renewable Energy Feasibility Studies

Serbia

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Client: EAR **Origin of funding:** EU - CARDS

Description:

The overall objective of the project is to assist Serbian authorities to increase share of renewable sources in the production of electricity.

The purpose of this project is to promote investment in renewable energy projects by:

Providing technical support to the Ministry of Mining and Energy to enable them to grant the concessions for renewable energy projects specified and prepare necessary secondary legislation, proposal feed-in tariff and model power purchase agreement; Project preparation for concrete investment projects in small scale hydro power generation.

Activities:

- Analysis of legislation and secondary legislation regarding renewable energy, concessions, etc.;
- Review of the EU directives concerning renewable energy generation and other antecedents that apply specifically to the Serbian case;
- Preparation of the secondary legislation;
- Feed-in tariff preparation;
- Preparation of model power purchase agreement;
- Preparation of concession package;
- Development of a list of potential SHPP locations and selection of sites to be studied in detail;
- Pre-feasibility studies including hydrological and geological studies and baseline civil and electromechanical design;
- Preparation of Preliminary Environmental Impact Assessment;
- Economic and Financial Analysis;
- Organisation of workshops with main stakeholders.

Together for a better future



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