



epzsa

ANNUAL REPORT
2014

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LETTER FROM LUIS VILLARROYA

In 2014 Eptisa achieved an income of € 120 million. Our backlog at the end of the year stood at € 176 million in the more than 40 countries in which we currently develop projects.

Around 2,000 professionals work with us, half of which are developing projects outside Spain.

eptisa

In 2014 the Spanish engineering market has experienced a slight growth compared to 2013 due to an increase in public works investment. However, the slight increase started from the minimum possible after an accumulated falls of 85% in the last six years.

2014 has been a year of change for us to face new challenges and to consolidate as a multinational company. The markets in the different locations in which we operate have behaved erratically. Our presence in Asia and Africa has grown considerably while the Spanish market has remained steady.



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+40

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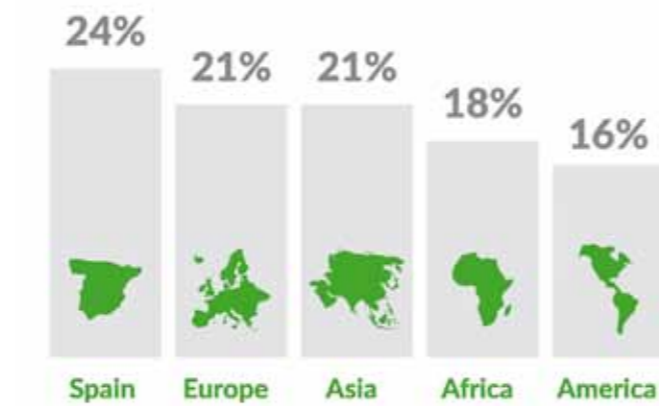
A multinational company with local presence

Our consolidated branch and offices network now covers 25 countries and we are developing projects in 46 nations throughout America, Africa, Asia and Europe. The key factor of our progress is a geographic expansion plan that provides the guidelines for our approach to emerging markets.

In 2014 our engineering market increasingly focused on Central Asia, India and Bangladesh. Our subsidiary in India has materialized its consolidation with a contracting amount over € 30 million in major transport infrastructure projects and with bright future expectations. In Central Asia we work recurrently in Uzbekistan, Kyrgyzstan and Kazakhstan and we have started an important project in Tajikistan.

We increased our presence in North African countries with the awarding of major projects in the water sector in Morocco and Algeria. In the field of specialized consulting for Institutional, Economic and Social Development we initiated a major project in Egypt to develop a sustainable urban development strategy for the city of Cairo and a major project to strengthen environmental institutions in Algeria.

In America, a subsidiary in Bolivia to develop the recent projects awarded in the country has joined the delegations of Haiti, Mexico, Colombia and Peru. Eptisa will design the country's



largest hydropower plant in the watercourse of the Río Grande River, we are implementing the PACSBio sustainable project and we were recently awarded the development of Urban Cadastral Information System.

We have achieved good positions in the Balkans, Romania, Caucasus and Turkey, competing in local tenders against domestic companies. This enables us to create opportunities for other Spanish companies in the area.

We maintain our commitment to support Spanish companies in the international markets research and development. We offer our services for the development of international tender projects; we collaborate in bidding processes and work as specialized engineering in resulting PPP projects. In the United Kingdom we are part of the design team of a large road infrastructure in Liverpool, the Mersey Gateway Project, where FCC is a member of the construction consortium. In the industrial sector we took part in the construction of a building in Romania for the Spanish company Antolin.

Once again in 2014 we led projects funded by the European Commission, World Bank, Asian Development Bank and other multilateral financing Institutions in more than 46 countries where we have projects at present.

Activity sectors

Our added value proposal is based on the specialization and diversification of sectors, providing consultancy, engineering and turnkey projects

The **water and environment** activity has reached 27% of total, consolidating our experience in the design of water infrastructure with important contracts in Bolivia and Morocco. The experience acquired in Spain, Romania and the Balkans has enabled us to consolidate as a benchmark in the sector in Central Asia, America and Southeast Asia. Our consultancy services and technological solutions based on GIS and SCADA tools have been added to our traditional engineering services, providing integral solutions. In environment, we are a benchmark in the design and construction of waste management plants and in specialised consultancy for decontamination of soil and materials.

The **transport infrastructure** sector represents 24% of our total income in 2014. In India, Serbia, Kyrgyzstan and United Kingdom we participate in major projects of the main road network, offering our experience in the design and works supervision of road infrastructure and the know-how in geotechnical, pavement, tunnels and hydrogeology. In the railway sector in Macedonia, we provide supervision, management and quality control services of works on the main corridor of the country, and in Spain in the High Speed Railway lines in Galicia and Basque Country.

Eptisa is a leader in the **institutional, economic and social development** sector. In 2014 it grew until reaching 22% of the total. The European Union and the main international development agencies trust our professionals to undertake cooperation development projects in America and Africa. In 2014 we received significant awards in Egypt, Haiti, Algeria and Mozambique, and we consolidated ongoing projects in Central America and Africa. The European Union renewed its confidence in us to monitor the cooperation projects financed with European funds in the African, Caribbean and Pacific countries.

In 2014, **Information Technologies** represents 17% of the total. The specialisation of our services and the development of vertically integrated solutions have enabled us to export our know-how and consolidate the activities in the subsidiaries of Peru, Dominican Republic and Colombia. This has also enabled us to participate in international projects in the water and land use planning sectors in Panama, India, Bolivia, Mozambique and Kyrgyzstan.

Industry, energy and buildings sector has grown to 10% of our activity. In the sector we have provided engineering services to the main service companies offering services from integrated project management of construction and refurbishment works, instrumentation and monitoring services of infrastructures and facilities to the execution of turnkey projects.

Innovation is the key factor to create sustainable and competitive advantages

In this new competitive environment innovation is the key factor to create sustainable competitive advantages. The capacity of learning and innovation are catalyst to growth in competitiveness and development of new products, services and processes that satisfy the market needs and ensure a bright future to our professionals. In 2014 we initiated several R&D projects and continued to work on those already under way.

Within the Smart cities sector, Eptisa is part of the initiative "eTopia" of the Zaragoza City in the Urban Milla Lab, intended as an R&D+i laboratory. We develop the digital infrastructure inventory project and the dashboard system for the citizen's participation.

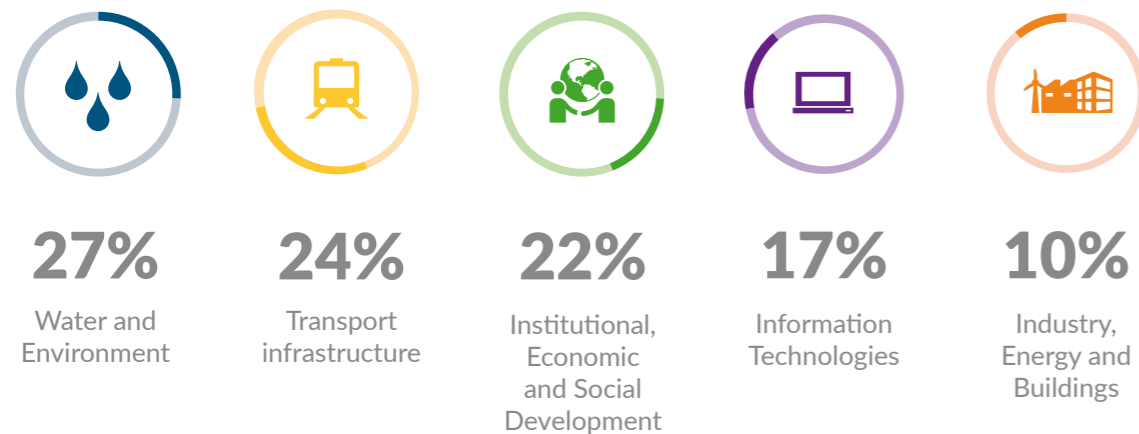
In the water sector, the SmartDam project is the development of a set of solutions that allow improving the management of superficial water resources and flood abatement, operating on the dams safely and accurately.

Eptisa participates in the Giro Project, aimed to design new architectural solutions for a new Gerontological Care Person-Focused Model. The new gerontological model will be able to offer a homely feel, as well as encourage the feeling of control the immediate environment and of the activities of daily life, where the affective relationships are cultivated.

We have been actively collaborating in the research of decontaminating photocatalytic pavements for several years. In the road sector we have joined our knowledge on pavement management to SIG tools to offer the market a unique technological solution for the management and maintenance of infrastructure. As well as the development of a pavement management system, that is an automatic tool accessible through an on-line platform that enables visual inspections of the pavement to create an inventory of their pathologies.

In the energy sector, Eptisa works in the development of a R&D project aimed to design an auscultation system to monitor solar energy collectors in thermo-solar plants. This project joins the other that we've been developing in recent years that consists of a system that enables control, from the design to the operation and maintenance phase, the behaviour of the static elements (foundations, ferrules and towers) of wind turbines in wind farms.

EPTISA IS A REFERENCE IN HIS OPERATING SECTORS





SPAIN

In Spain we worked on the major transport infrastructure, water and environment projects, providing our engineering, consultancy and information technology services. We took part in nation-wide, regional and urban projects to improve mobility, water management, environmental conservation and urbanization of our cities and application of technology to improve the quality of life of people.

We apply knowledge in designing solutions that improve mobility, water management, environmental conservation and sustainability of our cities, and thus, improving the quality of life of people by applying the latest technology.





Quality control during the earthworks and underground works for sanitation and galleries, in the Gran Vía street of the Los Berrocales southern, Madrid



Technical assistance to quality control of the works for the extension of the FGC railway line in Sabadell



TRANSPORT

In the **railways** sector Eptisa provides design, technical support, quality control and auscultation services. Throughout the year we provided technical assistance services for construction supervision on the major Spanish high-speed lines.

In the **Basque Country** we provide technical assistance for the control of the track platform construction on the Hernialde-Zizurkil section of the Basque "Y" in Guipuzcoa. And in **Galicia**, we provide technical assistance for the quality control of construction materials during the construction of the track platform on the Prado-Porto and Prado tunnel sections.

In the **hydrogeology** field, we continue working for ADIF, the Spanish Railway Infrastructures Authority, on hydro-geological studies and surveys of high-speed railway infrastructures.

We implement **road** projects from the planning phase with feasibility studies through the drafting phase with layout and detailed design, the construction phase with

technical assistance for works supervision and quality control and ending in the operational phase with technical consultancy on road safety issues.

In **Catalonia**, Eptisa is carrying out several projects for designing to improve the road network. Among which we highlight the Reus-Perafort section of the new highway from Reus to the Camp de Tarragona AVE station, and the road improvement and road safety project for the Berga-Guardiola de Berguedà section of the C-16.

Thanks our network of accredited laboratories, we were able to meet our clients' requirements across the country and continue to work on **quality control** and industrial safety in road construction projects.

In the **Basque Country** we are working in the quality control of the

works of the Uretamendi section within the project of the Ermua's Southern turnoff, and the quality control of the materials during the works of the Gerediaga Elorrio highway, and the Antzuola-Bergara junction of the GI-632 turnoff, and the connexion roundabout of AP-68 and BI-625 Arrigorriaga highways.

In the field of **instrumentation and control** the Gipuzkoa Provincial Council entrusted Eptisa with the inclinometer management system installed in the functional road network until 2016.

In the **pavement** field Eptisa has a solid track record in design, study and evaluation. During this year, the General Directorate of Public Roads of the Madrid City Council has awarded Eptisa four contracts to carry out technical assistances and consultancies about different techniques to improve the pavement of the Region of Madrid.

In 2014 we participated in the IX National Event of the Iberian Road Association, which this year was focused on the consequences for the citizens of the appropriate state of preservation of the pavement of the Spanish roads. We also participated in the conference on Decontaminating Buildings and Pavements organized by the Iberian Photocatalysis Association (AIF) in Barcelona. During this conference were exposed the results of the first public tenders about large-scale pavements, international decontaminating experiences, other uses of photocatalysis such as water purification or reduction of building maintenance and conservation costs, and the presentation of the photocatalytic activity certification.

In the **field of R&D+i** Eptisa is working on P@vement Check, a comprehensive pavement management system, a prototype to measure the effectiveness of photocatalytic materials and development of ROMA technology for the inventory and maintenance of road infrastructures.

In the field of **urban transport**, Eptisa carries out the quality control of the works promoted by the Directorate General of Roads and Public Spaces in the City of **Madrid**.

In the **ports** sector, after drafting the construction design for the subterranean road from the Marina dock in the city of **A Coruña**, Eptisa carries out the quality control of materials, geological and geotechnical characterization of materials that forms the subsoil, installation of piezometers and the subsequent analysis of hydrogeological data, inclinometer and topographical auscultation of the road, water column characterization and noise control during execution of the works. The work is aimed to leave the surface completely free of traffic, as well as improve traffic flow in this high intensity zone.

In the **Palma de Mallorca** port we are working in the supervision, control and monitoring of the works for the extension of the Northern side of the platform attached to the Western dock to allow the berth of the world's largest cruise ship "Oasis of the Seas" (Royal Caribbean) with 362 meters in length and its sister ship.

In **Galicia** we worked in the geotechnical characterization of materials of the seafloor, where will lay the foundation of a new berth structure to be used as basis in drafting the enlargement project of the mooring line by adding dolphins in the Bouzas Ferry Terminal. In A Coruña port, Eptisa has also carried out a marine geotechnical investigation for the construction of a transverse dock.

In **Andalusia**, Eptisa performs the construction management and control and supervision of the works of the railway junction in the sector 2 of the outer port of Huelva, which includes geometric, quantitative, qualitative, as well as terms and cost control.

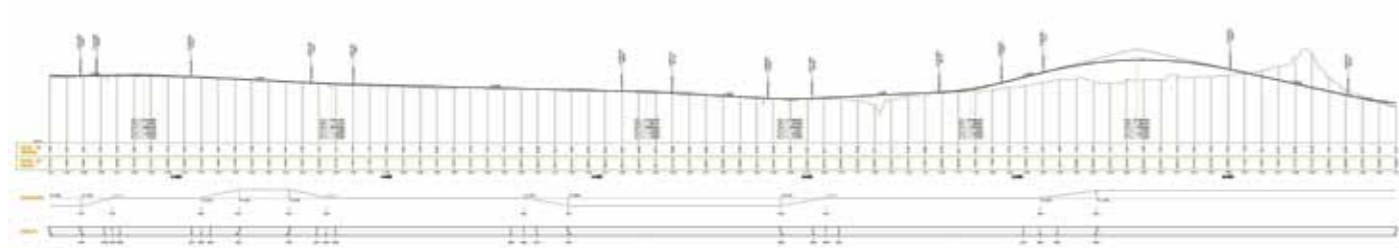
In the **A Coruña airport** we continue providing technical assistance for the control and works supervision of the enlargement of the runway. We are drafting the update of the project to adapt the taxiways of the **Barcelona-El Prat** airport to the regulations. In Teruel, we drafted the design of the new parking.



Technical assistance for the control and works supervision of the Hernalde-Zizurkil section of the new railway network of the Basque Country

The Hernalde-Zizurki section is 5,870 metres long of which 5,149 metres (88%) are in tunnel, 498 meters on a viaduct and 223 meters on an embankment. It begins at the northern mouth of the Montezkue tunnel, which belongs to the Tolosa-Hernalde section.

The most significant elements include the 25 metre-long Hernalde viaduct, the Anoeta tunnel with a length of 1,397 metres, the Alkiza viaduct of 69 metres, the 2,065 metre-long Asteasu tunnel, the 268 metres of the Ugarte cut-and-cover tunnel, the Asteasu viaduct of 404 metres and the 879 metre-long Zizurkil tunnel.

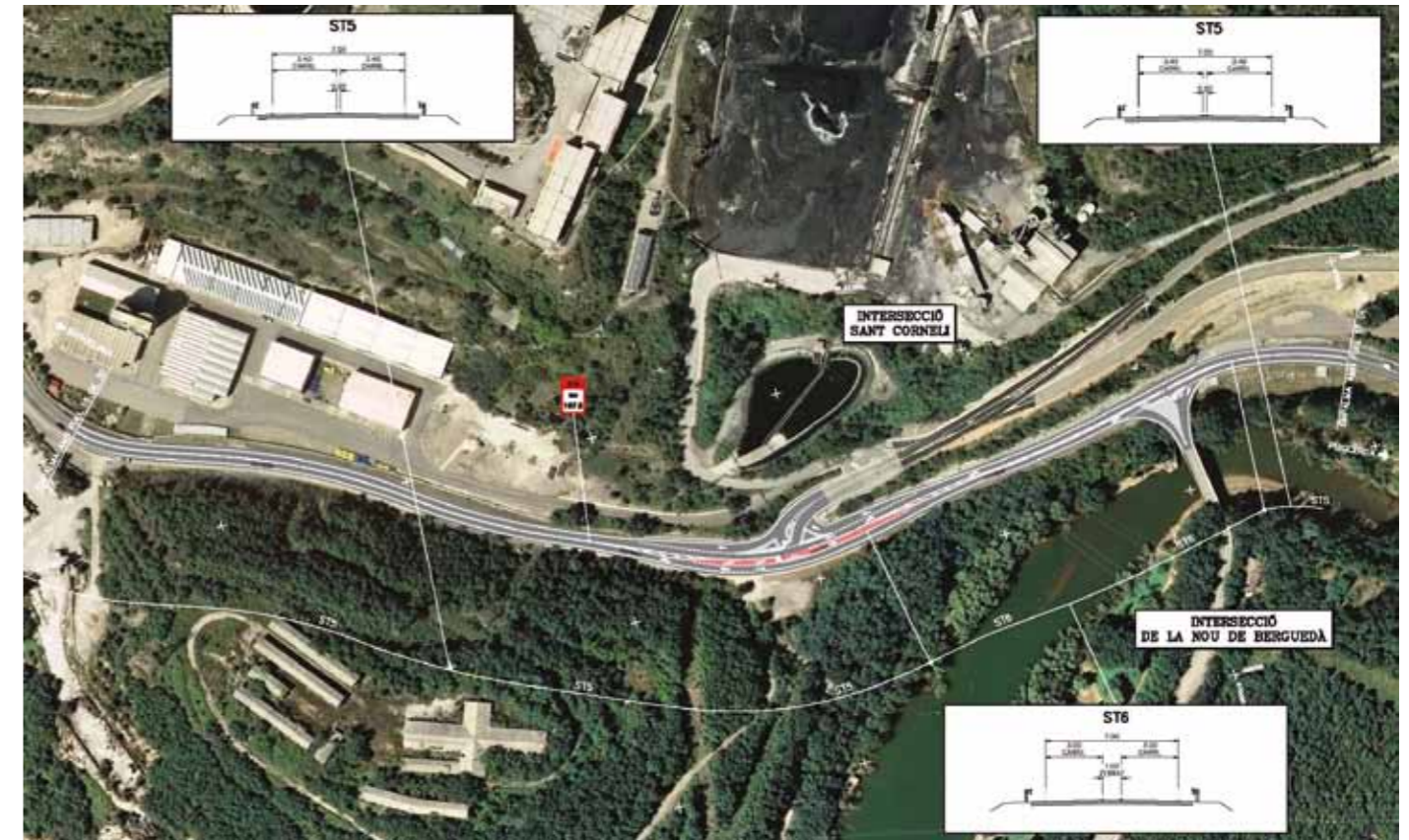


Detailed design of Reus-Perafort section of the new road from Reus city to the Camp de Tarragona high speed railway station

Three options were studied: the South 1 alternative, starting at the intersection of the T-11 road with the TV-7211 and which harnesses practically the entire current layout of the TV-7211; the South 2 alternative, also starting at the intersection of the T-11 with the TV-7211 and which alternates newly built sections with current TV-7211 sections, and northern alternative which begins at the TP-7225 just after the intersection with the T-11 and harnesses the current layout of the TP-7225 to finish with a newly built section.



The project includes hydraulic dimensioning of the transversal and longitudinal drainage works on the road, and the removal and replacement of existing utilities. It is particularly important designing the route avoiding the land belonging to the petrochemical of Tarragona. The pavement design and the analysis of structural types with special attention to the Francoí river viaduct are also done. The layout of the alternatives takes into account the numerous existing infrastructures in the territory such as the A-27 highway, the High Speed Railway to Camp de Tarragona and the N-240 road, among others. For this reason, different junctions, overpasses and underpasses are also designed in this project.



Road safety project of the C-16 road. Section: Berga - Bagà

The current project aims to resolve detected problems that affect the security of users of the infrastructure in the C-16 road. The studied section generally has a high traffic of vehicles and has located 5 points of accident concentration. During the winter high season it is the axis that connects Barcelona with Puigcerda and Pyrenees, so the traffic intensity is increased in this season.

Based on a statistical review of the information related to accidents rate within the studied section, different proposals of design are analyzed and designed, including: layout improvements, cambers improvement, placing median safety barriers to separate opposing traffic lanes and roadside barriers, restoration of pavement, application of anti slip treatments over the pavement surface, improvement of code and direction signs. The project includes the monitoring of the evolution of accidents rate related to the proposed improvements.



North-northwest high speed railway corridor. Madrid-Galicia high speed railway line

PRADO-PORTO SECTION: The activities carried out by Eptisa in the tunnel of 7,606 meters long consist of the quality control of materials during the execution of the works. Eptisa conducted laboratory tests (aggregates, steel, soils, rocks, concrete, etc.) and in-situ tests, such as tensile strength testing of studs, in-situ determination of density by radioactive isotopes, plate load, etc.

PRADO TUNNEL SECTION. LEFT VARIANT: In the tunnel of 7,487.5 meters long, Eptisa was involved in the quality control of materials during the execution of the works, carrying out the corresponding laboratory tests (aggregates, concrete, etc.) and in-situ tests (tensile strength testing of studs, etc.)

Projects for the improvement of the pavements of Madrid city

The first project, and within the framework of the contract named "Plan Barrios 2014", consist of the support to the Construction Management and the quality control in innovative and environmentally friendly mixtures, such as half-warm and warm bituminous mixtures, in order to improve the pavements in several areas of the City of Madrid.

We also prepared the consultancy report for the evaluation of the state of the roadholding tire-pavement in all tunnels longer than 100 meters in the City of Madrid, which includes the methodology of evaluation, the analysis and interpretation of results obtained during "in situ" tests, the proposal and assessment of corrective measures, as well as a proposal of final solution.

Eptisa is providing advice and support to the Construction Management (design criteria, technical specifications, methods of control, etc.), monitoring of execution and contrast testing of the actions of milling the existing wearing course and its replacement with SMA (Stone Mastic Asphalt), a type of bituminous mixtures, carried out during July and September, 2014 in exit sections from Madrid of the M-23, A-2 and A-5 roads. As part of this report, Eptisa will present the state of the art of using the SMA bituminous mixtures in Spain, a proposal for the technical specifications and SMA mixtures control methodology, as well as the results of the controls carried out in several actions in the M-23, A-2 and A-5 roads.

Finally, Eptisa is also involved in the project for the renovation of the Green Cycling Belt around Madrid, a 64 km longer circuit that bypasses the city, designed to be used by cyclists and pedestrians. The ring is 10 m wide, 6 paved meters (2m for cyclists and 4m for pedestrians) accompanied by two sidebands of 2 meters wide, fully landscaped with trees and shrubs.



Inclinometers management system for the road network of Gipuzkoa region

Since 1997, the Road Infrastructure Department of the Provincial Council of Gipuzkoa installed inclinometers at various points of the priority and secondary road networks. Until now, the measure of these inclinometers has been carried out without a systematic planning neither the information has been integrated in a database which includes the evolution of the movements registered by each instrument.

However, since 2004, it has imposed the need to implement an Inclinometer Management System of the Functional Road Network that allow to know the evolution of the devices installed, the installation of new devices and recovering those that are inoperative, as well as the establishment of a method to plan the frequency with which measurements should be made with each instrument.

Eptisa, upon request of the General Directorate of Roads of the Road Infrastructure Department of the Provincial Council of Gipuzkoa, is the responsible for the implementation of the new contract 2014-2018, developing the following activities:

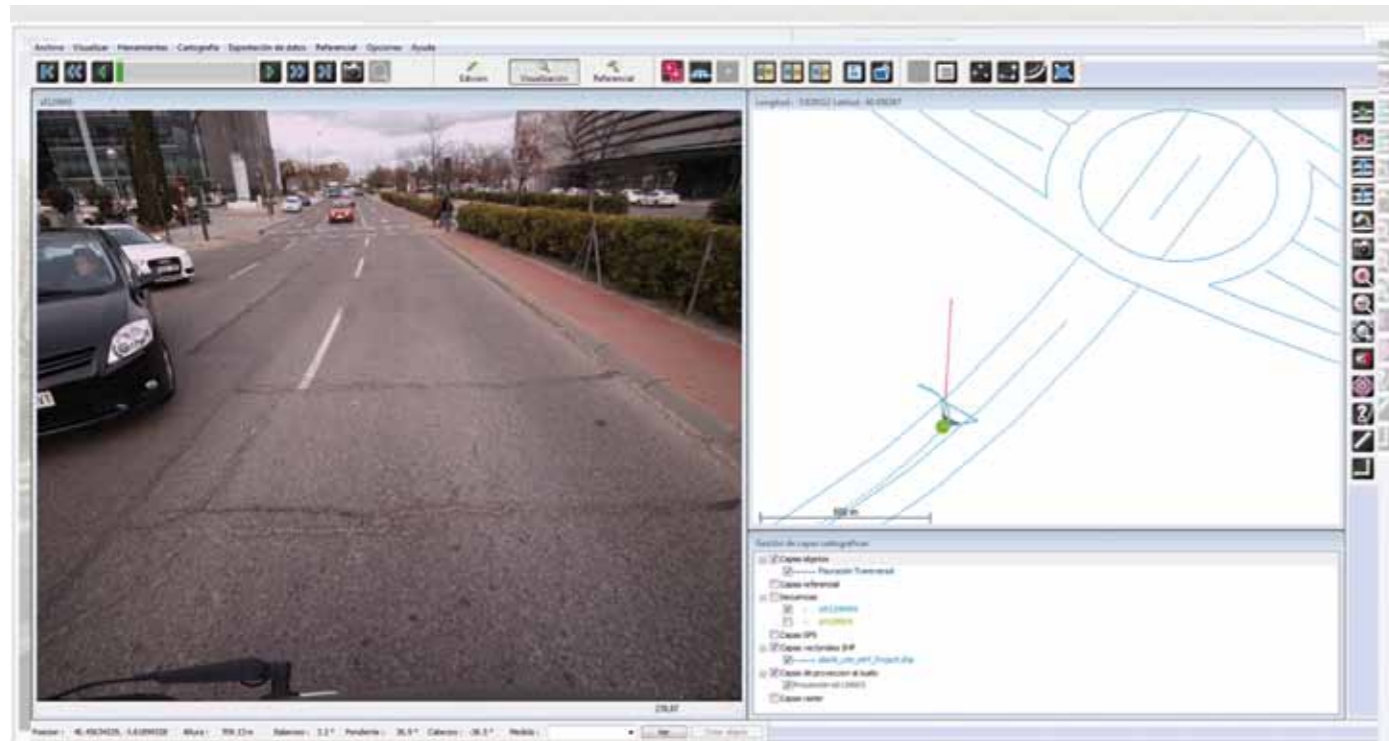
- Implementation of an inclinometer management system. Collection of existing information; in situ data collection; development of databases; inventory of inclinometers: location (municipality, road, P.K., UTM coordinates), references (year of installation, associated project), description (type, length), photography, necessary equipment, traffic conditions, displacement / depth charts, evolution of displacements in surface and in the depth of the sliding plane.
- Geotechnical investigation work. Field prospecting tasks, perforations, soundings, ground water level control, laboratory tests and geotechnical report.
- Installation of new inclinometers (35 units, 700 m long) in the Preference Road Network (A-15 in Elduain and N-I in Etxegarate, Itsasondo and Tolosa) and in the Basic Road Network (GI-632 in Beasain, Ormaiztegi and Antzuola and GI-627 in Arlaban).
- Reading campaigns of inclinometers. Quarterly average frequency (3 per year) in 80 inclinometer pipes.
- Reading campaigns management. As an important improvement over the system of recording, processing and presentation of data from reading campaigns, a program specifically designed by Eptisa for data management inclinometric is used. This allows directly downloading data from the reading units, identifying, store and control campaigns, study and present the curves of evolution, as well as updating the database in the computers of the Provincial Council, by phone connection.



Quality control of the materials during the works of the Gerediaga Elorrio highway

The section starts in the connection with the AP-8 highway up to Gerediaga and runs to the Western of Elorrio, where connects to the BI-632 road through a new junction, continuing Elorrio turnout. It has a total length of 6.44 km, with two-lane dual carriageway separated along its entire route. In the Muntzaratz area, a new junction connects this corridor with the N-636 road, facilitating to the Abadiño and Atxondo municipalities the access to the new axis.

Large part of the route runs in tunnel. The Gaztelua I and II tunnels consist of two tubes and have a length of 594 m and 1,141 m respectively. Between them there is the Gaztelua artificial tunnel with a total length of 216 m. On the other hand, it is the Atxondo cut-and-cover tunnel, with a total length of 95 m.



P@vement check: Solution for the management of the state of the pavement

P@vement Check is aimed to develop a solution for decision-making and supporting the transport management and its infrastructure, allowing to know the state of the pavements from the objective determination of its pathologies and the rehabilitation needs.

Developed by Eptisa, P@vement Check is an engineering and technological tool to provide a set of key points to the Infrastructure Manager for an efficient management from a technical and economical point of view:

- Knowing the state of the road through an inspection with a high performance camera using a generic vehicle, for its subsequent assessment and classification according to a series of criteria based on the experience of Eptisa in the roads operation sector and existing regulations.

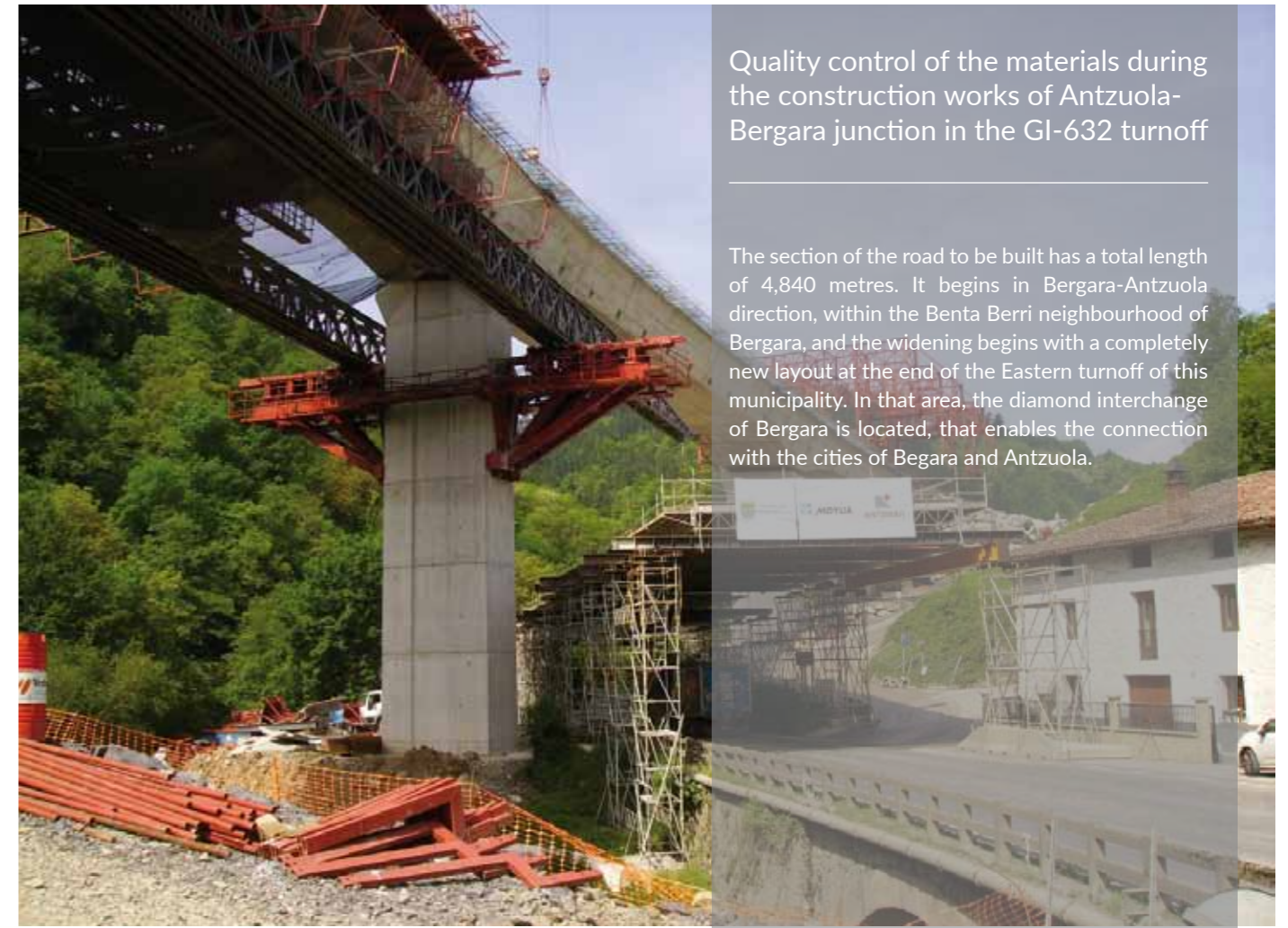
- Forecasting the future behaviour and evolution of the road, distinguishing between the different pathologies that have the pavements and its degradation as a result of multiple influencing factors.
- Establishing investment scenarios in conservation and maintenance, based on the above points and, mainly, based on available economic resources.

P@vement Check is funded by the Ministry of Industry and Tourism under the 2013-2016 National Plan for Scientific Research, Development and Technological Innovation. Its project identification number is TSI-100502-2013-10.

Quality control of the works of the Ermua's southern turnoff project. Section: Uretamendi

The North Roundabout is located in the North of the Mount Uretamendi and comprises, on the one hand, the works needed to build the roundabout intersection of Uretamendi tunnels with the current N-634. And on the other, the construction of a road access to Northern Uretamendi landfill, as well as the works to be performed in this landfill in order to place the surplus from excavation. The Uretamendi tunnels are two tubes of 590 meters long and two lanes with roundabouts paths at the entry and exit, connecting the new toll area and the Beko road (South Roundabout). The South Roundabout is located in the South of the Mount Uretamendi and its execution will connect the new toll and the aforementioned Uretamendi tunnels. Part of this South Roundabout is executed over a structure to save the railway.

The new toll is located about two kilometers from the current toll area in Bilbao direction. A new toll area will replace the existing and will allow access to Eibar and Ermua through a new junction with the A-8 runs (upcoming execution).



Quality control of the materials during the construction works of Antzuola-Bergara junction in the GI-632 turnoff

The section of the road to be built has a total length of 4,840 metres. It begins in Bergara-Antzuola direction, within the Benta Berri neighbourhood of Bergara, and the widening begins with a completely new layout at the end of the Eastern turnoff of this municipality. In that area, the diamond interchange of Bergara is located, that enables the connection with the cities of Begara and Antzuola.



Quality control of materials during the construction works of the roundabout to connect the roads AP-68 and BI-625 Arrigorriaga

The work involved the construction of a 70 meters diameter roundabout to connect the AP-68 and BI-625 roads, as much in Ugao-Miraballes direction as Basauri direction. This roundabout is located between the Arrigorriaga toll area and the BI-625 road, in a higher level of the current road layout.



Technical assistance and control and supervision of the runway enlargement works at A Coruña Airport

The works consist of lengthening the main runway of the A Coruña Airport by 400 metres to increase the capacity of the airfield. The runway will be 45 meters wide, with margins of 7.5 meters either side. The strip where the runway is located will have a width of 300 meters (150 meters each side of its centreline) extending 60 meters before each threshold. The new runway is designed over an embankment of average height of 35 m, which has been created with about 4 million m³ of material, as well as 27,000 m³ of surface and 23,000 tons of M.B.C. It is planned to continue the service road and design the perimeter road surrounding this enlargement, but at a lower bound.

The runway enlargement requires the demolition and dismantling of a number of buildings and elements of various kinds. The affected elements are classified in buildings, paved access, demolition of pipes and demolition of fences and walls.

The system of marking and signalling (visual aids) will be modified both in the enlargement area of 03 runway header and in the displacement of the beginning in the header 21, which will involve act on the precision approach path indicator (PAPI) of both

runway headers and the identifier lights. It has taken into account the replacement of the affected services in the area of airside and outside of the airport, as well as the design of the relocation of the CP-3104 road.

This project also includes the dismantling, relocation, reconstruction, restoration and rehabilitation of the elements that are listed as of cultural interest that appear in the Environmental Impact Statement (Pazo de Culleredo, Casa das de Ferrer and Casa Grande dos Carunchos, as well as three raised granaries called "hórreos" and one stone cross). In relation to the environmental aspects, a number of preventive and corrective measures are planned that, applied properly, should minimize and/or correct the environmental impact of the planned work.

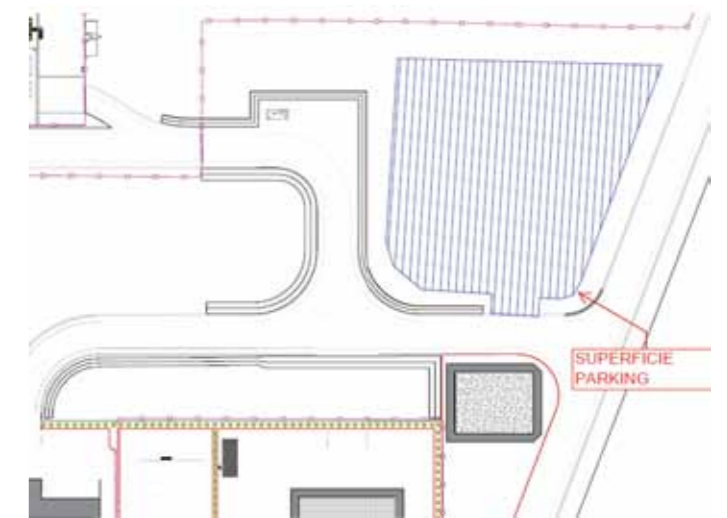
The services provided by Eptisa include works management in matters concerning execution works, economic and quality control, health and safety coordination, aeronautical safety audit, as well as monitoring the compliance with deadlines and provision of consultancy services to project management.



Drawing up the project for the adaptation to regulations of the taxiway in the platform of the Airport of Barcelona – El Prat

Aena contracted Eptisa to adapt the project for the adaptation to regulations of the taxiway in platform. The project update requires activities as required by the airport needs, procurement requirements, Guarantee Document of Operational Safety (DGSO) and airport security issues.

The detailed design will have the documents that will develop the best solution with the necessary detail to make possible its construction and subsequent operation.



Design of the new parking in the Teruel Airport

The new parking will have an approximate surface of 3,500 square meters and it is planned a total of 100 parking spaces, of which 3 will be reserved for disabled people. The dimensions for the standard parking spaces will be 5 m x 2.5 m, while in the parking spaces for disabled people the width will be extended up to 3.75m.

Drawing up of the project involves the creation of the report, plans, technical specifications and budget that will be part of the Construction or Execution Project.

Technical assistance to carry out geotechnical characterization services for the construction of dolphins in the Bouzas ferry terminal

With the aim of carrying out a geotechnical characterization of materials of the seafloor, where will lay the foundation of a new berth structure, geotechnical investigation was conducted to be used as basis in drafting the enlargement project of the mooring line by adding dolphins in the Bouzas Ferry Terminal.

The field works carried out by Eptisa consisted of four rotation mechanical boreholes with the extraction of a sample in the site and seven pressiometric tests. Taking advantage of the boreholes, standard penetration tests (SPT) were performed along the column and taking paraffin-embedded samples. The standard penetration tests were used to know in situ the compactness of the levels traversed during the drilling and were carried out with a bipartite spoon of standardized dimensions.



Extension of the northern side of the platform attached to the western dock in the Palma de Mallorca Port

The works consist of the adaptation of the existing dock in the Palma de Mallorca Port to allow the berth of the world's largest cruise ship "Oasis of the Seas" (Royal Caribbean) with 362 meters in length and its sister ship "Allure Of The Seas" with a capacity of 8.460 travellers. The investment is € 6.7 million and will last 9 months.

The extension of the berthing line will be done by anchoring 3 reinforced concrete caissons (22 x 15 x 19 m), 50 meters separated from each other and from the existing dock, acting as berthing dolphins to guarantee the mooring of the ship's bow. The caissons are equipped with 200 tons bollards and shield defences SC-2000H, with panels of 4.00 x 3.25 m.

The services include the control and supervision of the works from a qualitative, quantitative, economical and temporal point of view.



Construction of an underground road in La Marina dock in A Coruña

In 2013, the A Coruña Port Authority awarded Eptisa a new contract for drawing up the detailed design of an underground road in La Marina dock, aimed to extend the area without traffic in the surface, as well as improving the flow of traffic in an area of high traffic intensity.

The traffic will be eliminated in the surface, improving one of the main recreation areas for the population, as well as one of the most important touristic attractions of the city.

In general terms, the project consists of burying the road that currently passes beside the Dársena de la Marina dock, the main maritime front in the port area of A Coruña. To do this, an underground road will be built, which is approximately 530 metres long, and starts in the Alférez Provisional Avenue close to

the Los Cantones Village shopping centre and the NH Atlántico Hotel. This will connect with the underground road O Parrote, which is currently under construction, and the Maria Pita tunnel, also being remodelled.

The construction of the underground road is being carried out using concrete screens, constructing an upper slab of the tunnel and the subsequent excavation of filling materials. Finally, the lower slab will be constructed. Once the structure will be finalized, all the necessary elements and installations will be added in the underground road for its correct operation.

Currently, Eptisa is performing the quality control of materials, the geological and geotechnical characterization of materials that forms the subsoil, the installation of piezometers and the subsequent analysis of hydrogeological data, the inclinometric and topographic auscultation of this road, the characterization of the water column and the sound level control during the execution of the work.

Transverse dock of the outer harbour of A Coruña

The works carried out by Eptisa consisted of the performance of a marine geotechnical investigation, three soundings and the extraction of samples for their characterization, according to the recommendations for the management of dredging materials in the Spanish Ports of CEDEX.



Railway junction between PK 1+800 and 4+900 in sector 2 of the outer harbour of Huelva

The works consist of the railway infrastructure and superstructure renovation of the tracks in the Huelva Port, including removing the tracks and ballast, levelling the sub-ballast layer, as well as the execution of pavement layers according to characteristics required by current Renfe's regulations and the construction of a superstructure made of track E54 and concrete sleepers PR-01.

The technical assistances services to the construction management and control and supervision of the works include geometric control, quantitative control, qualitative control, as well as terms, cost and quality control.



Quality control of the works for increasing the depth of water and reinforcing the axpe dock at the port of Bilbao

The depth of water in this area has increased from 3 to 7 meters making it possible the entry of larger ships. It has also increased the surface of the dock in 2,300 m² for the storage of cargo before the shipment, associated to a new line of coastal shelf of 115 meters for ships up to 5,000 deadweight tons.





Auscultation of the San Andrés, La Granda y Trasona dams of Arcelor



WATER AND ENVIRONMENT

Our work in the **water** sector has focused on engineering services for the improvement and enlargement of water supply and sanitation infrastructure. Our water-related activity in domestic and international projects has positioned us as leaders in the sector.

In the **water infrastructure** sector, we are working on the **auscultation of 30 dams** of the Ebro-Pyrenees Hydro-electric Production Unit for Endesa Generación, and on the project for implement a semi-automatic auscultation system in the production infrastructures for Emasesa.

During 2014, Eptisa has worked for IBERDROLA GENERACIÓN-Explotación de Presas within the framework contract to repair breakdowns of the Automated Auscultation System in 30 dams during the years 2014, 2015 and 2016.

Arcelor Mittal España S.A. has commissioned Eptisa the project for the auscultation of the San Andrés de los Tacones, La Granda and Trasona dams, the technical assistance for the maintenance and operation thereof, and advice

and technical inspection of the structures that are part of the Narcea River hydraulic plant for the period 2014 - 2016. Eptisa has supplied and installed the necessary equipment for the implementation of an Automated Auscultation System in the Siles Dam.

In the field of **water supply and sanitation infrastructures** Eptisa has participated in the Sanitation and Drainage Master Plan of the right bank of the Guadalmedina River in Malaga, Andalusia. The technical assistance is aimed to establish and define, in a preliminary design, all actions and needed infrastructures related to sanitation and drainage in order to guarantee an appropriate service of the system in terms of flood protection, as well as its adaptation to comply with current waste regulations.

In **Huelva** we provide technical assistance to the project management of the water supply to the Huelva County and

the surroundings of the National Park of Doñana, as well as the project for the improvement and strengthening of the irrigations of the El Fresno Irrigation Community, in the Huelva County.

In **Galicia**, we worked in the technical assistance to construction management during the works for the water supply infrastructure of the city of Ourense.

In **Burgos**, and in order to improve the quality of the water of the receiving environment in the Burgos WWTP, Eptisa developed the detailed designs of the water infrastructures, aimed to collect from all the points of wastewater discharge, existing and future, located in the study area.

In **Extremadura**, the Zújar Irrigation Community throughout TRAGSA (Agrarian Transformation Company), awarded Eptisa the renovation and extension of the existing SCADA system in the

Don Benito Control Center for the remote control of the water infrastructure in the Channel of Zújar.

In the **water resource management** field, and within the field of **Flood Risk Prevention**, the Cantabrian River Basin Authority published the hazard and flood risk maps developed by Eptisa in the framework of the National Flood Prone Areas Cartographic System.

In **Galicia** we continue with the **groundwater monitoring** network project in the coastal Galicia catchment basins.

During 2014, Eptisa continued its activity as an engineering company specialized in installation and construction of **Waste Water Treatment Plants**. We provide service during the full cycle of a treatment facility from the design of the treatment process, detailed engineering construction, equipment and installation to commissioning.

In **Burgos**, Eptisa provides specialized engineering and consultancy services to Acuaes in all phases of the tendering process and subsequent execution of the works for the enlargement of the Burgos WWTP. And in **Cordoba** we work in the control and supervision of works of the wastewater collection tank of the Villa Azul DWTP.

In the field of **Industrial Environmental Protection** we continue working on the technical assistance to the works management of the Flix reservoir chemical pollution clean-up project in Tarragona. This project is an extremely complex decontamination treatment process. The operational phase of dredging and sludge treatment began in March 2013.

In **Galicia** we are carrying out environmental monitoring and supervision of the Areosa landfill, the environmental complex and the urban waste transfer plants.

In soil decontamination we work for the company ESPACIO ARPADA GESTIÓN in the integrated project management for decontamination of the soils and groundwater in a land affected by the discharge of transformer oils.

In **Andalusia**, FERTIBERIA, leading company of the fertilizer sector in the European Union, has hired Eptisa for the decommissioning project of the phosphogypsum ponds located in the Huelva municipality.



Technical assistance for the decontamination works of the FLIX reservoir in Tarragona



Modernization of the Irrigation Infrastructures of Toro Channel



Sanitation and drainage master plan of the right bank of the Guadalmedina river in Malaga

The technical assistance is aimed to establish and define, in a preliminary design, all actions and needed infrastructures related to sanitation and drainage in order to guarantee an appropriate service of the system in terms of flood protection, as well as its adaptation to comply with current waste regulations.

The area of study involves the right bank of the Guadalmedina River downstream of the Limonero reservoir. This river basin has an extension of around 1,600 hectares and affects both undeveloped area as a completely urban area. Inside the latter we have about 250 km of collectors, channelling and arched, with the corresponding wells and manholes, reaching 9,500 units.

In the first phase with the network survey, Eptisa develops the hydrologic and hydraulic models of the system using the Infoworks ICM software that simulates not only the 1D flow in the collectors but 2D flow of surface water along the streets, in order to analyze the possible alternative solutions to control discharges of sewage system to the receiving environment as well as the flood control in the urban system.

With the approved solutions, the Sewerage Master Plan will be developed and used as planning tool for investment.



Construction management of water supply infrastructures to Huelva county and Doñana Natural Park surroundings

The works consist of the construction of two impulsion pipes of 7,925 m (diameter 700 mm) and 10,381 m (diameter 600 mm), two pumping stations with an impulsion maximum flow of 504 l/s and 417 l/s with a total installed capacity of 1,260 Kvas and a reservoir of 100,000 m³ for water storage.

The services provided by Eptisa include the construction management, health and safety coordination, control and supervision of the works, geometric control, quantitative and qualitative control, as well as term, cost and quality control.

Project to improve and strengthen the irrigation system of the El Fresno Irrigation Community in the region of Huelva

Technical assistance services and support to the project management of the construction works for 36,413 m of PVC (140mm-500mm) and HACCP (600mm-800mm) pipes, a pumping station with a total installed power of 699.12 KW, an MT air electrical line of 66 kv and 7,050 m long, an mixed electrical substation of 66/MT Kv and a 20Kv power line of 7,200 m long.

Eptisa provides technical assistance for the works management, control and supervision of the works, geometric control, quantitative control, qualitative control, as well as term, cost and quality control.



Renovation and extension of the SCADA of the channel of Zújar

The Zújar Irrigation Community throughout TRAGSA (Agrarian Transformation Company) awarded Eptisa the renovation and extension of the existing SCADA in the Don Benito Control Centre for the remote control of the water infrastructure in the Channel of Zújar. It includes the supply and installation of software licenses required for the implementation of the new SCADA developed on Siemens WinCC commercial platform, installed in two redundant servers, whose power is assured by uninterruptible power supply (UPS) 6KVA of 3 double-conversion, all installed in a server rack cabinet of 19" height 42U.

The SCADA collects and manages the information from the remote control system installed in different water infrastructure distributed along 95 km of the channel that supplies the irrigation area which extends along the left bank of the Zújar River until its mouth in the Guadiana River and follows this until its confluence with the Matachel River. The main infrastructures are 10 pumping station, 6 regulating reservoirs, gates of the main channel and diversions, etc. The information from the sensors and equipment is collected in various data collectors connected to the Control Centre by an optical fibre network. In addition, the main values of electrical consumption of the installations are added to an evaluation system of energy efficiency.



Auscultation of the San Andrés, La Granda y Trasona dams of Arcelor

The Spanish company Arcelor Mittal España S.A. has awarded Eptisa the auscultation project of the San Andrés de los Tacones, La Granda and Trasona dams, the technical assistance for the maintenance and operation thereof, and technical advice and inspection of the structures of the hydraulic complex of the Narcea River for the period 2014 – 2016. With this new 36-months project, the monitoring started in 2011 is continued.

The works include taking readings and regular analysis of the instrumentation installed in dams. Two hundred and twenty-five instrumentation sensors and sixty one points of topographic control will be monitored. For the query and visualization of auscultation data, it is used a SCADA software for data processing and management of auscultation, developed by Eptisa, with data query via website (SAyTL 6.1). The data collection will be carried out manually and the database updating will be monthly from the servers located in the Eptisa's offices in Madrid. From the point of view of safety, the project includes conducting annual technical inspections of the dams and in the channel of Narcea.

Auscultation systems in dams of the Ebro-Pyrenees Hydroelectric Production unit for Endesa

During 2014 Eptisa has provided auscultation services for Endesa Generación in a total of 30 dams of the Ebro-Pyrenees Hydroelectric Production Unit. This is an extension of the services provided from January 2010 and extended until 2016, adding as a novelty the integrated management of automated auscultation systems. The dams of the Alto Pallaresa, Bajo Pallaresa, Alto Ribagorzana, Ebro, Garona, Segre and Ter areas are located in the provinces of Lleida, Zaragoza and Girona and all are currently operative.

All dams are equipped with auscultation and control systems adapted to the characteristics of each one that enables monitoring the behaviour of all of them in accordance with the agreed annual schedule. 4,000 manual tracking points (instrumentation and topographic) and more than 800 automated sensors are monitored.



Control and supervision of the works of the wastewater collection tank of the Villa Azul DWTP in Cordoba

The works include the adaptation of a 30,000 m³ wastewater collection tank in the header of the purification process in the DWTP of Villa Azul to complete the drinking water treatment of the city of Cordoba. The services provided by Eptisa consist of the construction management, health and safety coordination, control and supervision of the works, geometric control, quantitative and qualitative control, as well as term, cost and quality control.



Technical assistance to the construction management of the works for the water supply network to Ourense

The services included in the technical assistance to the construction management in the control and supervision of the works are the health and safety coordination and the environmental monitoring of the works for the water supply network to Ourense.

The works are aimed to improve the efficiency of the overall system and the degree of pressure of the service. The amount without VAT is € 5.4 million and the actions to carry out are reservoir piping of Caracochas - Industrial State of Seixalbo - South Ring closure: 5.3 km of FD DN500 pipe and reservoir piping of Caracochas - Ceboliño - Regoufe: 4.8 km of de FD DN300 pipe.



Implementation of a semi-automatic auscultation system in the production infrastructure of Emasesa

Design and implementation of semi-automatic auscultation system using recorders, including the installation of 96 instrumentation sensors, 39 dataloggers, control centre in the El Carambolo DWTP and Eptisa's SAYTL control and supervision software, SCADA type, and customized for the project.

It consists of the implementation of a system, in Distributed Control Network, based on automatic registration of sensors' readings by using dataloggers, with a wireless manual download via Bluetooth, through a tablet with a download software and a updating on the database of the Central Server also wireless manually, by a transfer software. This technique has the advantage of integrate the information of the auscultation data taken automatically with routes of visual safety inspections carried out by the staff responsible for the maintenance of the auscultation, allowing a great optimization of both material and financial resources.



Auscultation of the Siles Dam

Eptisa supplied and installed the necessary equipment for the implementation of an Automated Auscultation System in the Siles Dam. The installation of sectors on the dam body and foundation was executed during the first phase of the construction of the dam. Later they were automated together with the signals of the drain bodies and the meteorological station, once the construction thereof concluded.

Six acquisition stations were used for the automation of the system. These stations consist of a set of elements, PLC controllers and vibrating wire signal converters, and are designed and manufactured according to the number of signals required and the nature of thereof. The system linking the stations was accomplished by creating a communications network of optical fibre managed by six industrial switches with signal converters of optical fibre integrated.

All the system is managed from the control centre with SCADA software for auscultation data treatment and management

developed by Eptisa, with data query via website (SAyTL 6.1). The approximately number of signals managed by the implemented system is 250.



Enlargement of the Wastewater Treatment Plant of Burgos

Eptisa provides specialised engineering services and technical assistance to Acuaes in all phases of the tendering process and subsequent execution of the works for the enlargement of the Burgos WWTP. We worked in the RFQ for the detailed design and execution of the works, technical assessment of the technical tenders submitted by the bidders for the contract of the works, supervision and supporting the contract management during the drawing up of the detailed design, and finally we are providing control and supervision services of the works and the coordination of the Occupational Health and Safety plan.

Throughout 2014 the works have been developed and their completion is scheduled for December 2015. The final solution adopted includes an enlargement of the capacity of the WWTP, from current 100,000 m³/d, to 156,504 m³/d while complying with the discharge safeguards required by the currently applicable legislation. This flow rate and taking the expected contaminant concentrations into account, results in a design load of more than one million equivalent inhabitants.

The treatment process adopted includes the Villalonquejar water line which mostly treats industrial water from the Villalonquejar industrial Park; the main collector line that receives the extra flow; the storm water line and tertiary treatment line in which an additional new dual treatment line has been installed to treat rainwater or, in dry weather, provide additional treatment of the wastewater. Finally, the sludge treatment system that conditions the solid residues extracted from the two water lines have been modified and upgraded including innovative thermal hydrolysis sludge pre-treatment prior to anaerobic digestion.

The new facilities include a new combined biological treatment line for the general collector and dual storm water-tertiary treatment, the required water and sludge pumping systems and a bridge and walkway.



Corrective maintenance of the automated auscultation system in dams of Iberdrola

During 2014, Eptisa worked for IBERDROLA GENERACIÓN within the framework contract to repair breakdowns of the Automated Auscultation System in 30 dams during the years 2014, 2015 and 2016. This is an extension of the services provided from January 2000 and extended until 2016. The dams are in the operation areas of the Sil, Duero, Tajo, North and East and are located six in Sil, seven in Duero, six in Tajo, six in North and five in East, and all are currently operative.

All dams under this contract have automatic auscultation data acquisition systems, installed by Eptisa in the 80s and 90s of the twentieth century. Each dam have automated sensors installed during the construction of the dam and other sensors installed while automation, all of them connected to automatic acquisition stations EMA 80 manufactured by Eptisa.

The stations of each dam are connected to a PC located on site with a SCADA for auscultation named AGIL, also developed by

Eptisa, and which is currently being modernized. The repair works include 109 EMA 64 channel stations installed and a PLC with a total of 6,500 sensors.



Detailed design of the sewerage outlets connection system with the Burgos WWTP

The activities developed during this project are focused on achieving an improvement of water quality in the collector system. Therefore the main objective is to collect the output from all wastewater outlets, existing and future, located in the study area. For example, the project of the extension of sewer pipe from Vena to Quintanapalla.

The main sewer pipe designed has 1,440 m in length and begins its route at the current point of discharge from the city of Quintanapalla, located next to the right bank of the Arroyo de Fuente Romera River. At this point it has been designed an overflow channel to allow to drain the overflow in case of flood. The sewer pipe runs parallel to the right bank of said stream, next to a service road unpaved and following this route until approximately the PK 0+720, where the sewer pipe joins the Vena River. From this point the route of the sewer pipe runs parallel to the right bank of the Vena River and, at the crossroad with the Atapuerca road (BU-711), the sewer pipe is separated from the river to continue parallel to said road towards N-I highway, crossing the latter with a jacking pipe. From this point until the end of the route, the sewer pipe is once again parallel to the Vena River until the point of connection with the Vena sewer pipe, before crossing the river. In the dimensioning of the sewer pipe it has been also planned that the sewage outlet pipe collects the future discharge of a developable industrial sector, SUR I SE 1, located on the outskirts of the municipality.

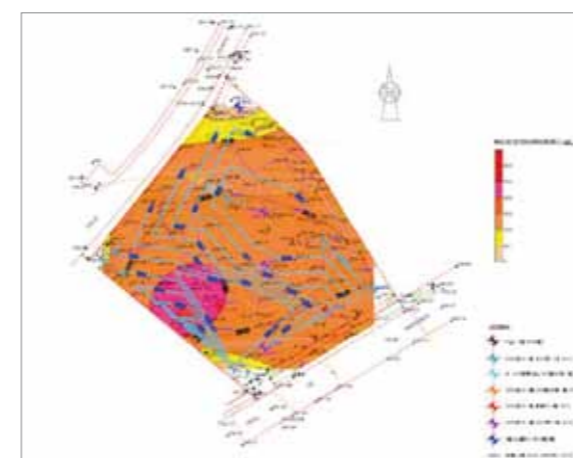
We also designed secondary sewer pipes, corresponding to the connection pipe with the existing sewerage and the overflow pipe of the regulation structure.



Decontamination of the soils and groundwater in a parcel in the street Avenida de los Madroños in Madrid

The contract carried out for the company ESPACIO ARPADA GESTIÓN consisted of the integrated project management for decontamination of the soils and groundwater in a land affected by the discharge of transformer oils, by the development of studies, projects and necessary administrative procedures for the decontamination works, as well as management of soils decontamination works, and the supply, installation, commissioning, operation and maintenance of the groundwater treatment facility using stripping.

The services provided by Eptisa include preliminary research studies about the quality of the soil and groundwater, Quantitative Risk Analysis for human health resulting from the concentration levels of detected contaminants, drawing up the site decontamination project, execution of the subsoil affected by PAHs, TPHs and PCBs, certification of the soils after the decontamination, management of waste generated from decontamination works, sanitation of groundwater affected by volatile organic compounds (VOC) by carrying out water pumping wells and its subsequent treatment by stripping, control of emissions and discharges in the stripping treatment facility and reporting on decontamination to competent authorities.





Decommissioning project of the phosphogypsum ponds in the production centre of Fertiberia in Huelva

FERTIBERIA, leading company of the fertilizer sector in the European Union, has contracted Eptisa for the decommissioning project of the phosphogypsum ponds located in the Huelva municipality. In late 2010 the manufacturing of phosphoric acid was definitively stopped and FERTIBERIA concluded the spilt of phosphogypsum, a by-product generated in the production process of phosphoric acid, in concessions granted for that purpose in the Rio Tinto marshes, occupying an area of approximately 720 hectares.

The decommissioning project includes the construction design of the disposal system of acidic waters dammed, the movement

of necessary gypsum to form roads and smoothing slopes mainly in the closing dam of reservoirs, the execution of internal water drainage infrastructure by catchment and drainage trenches in slopes, intermediate roadsides and foot slope, sealed of surface of the stackings by using different natural and synthetic materials, drainage infrastructure for the discharge of rainwater, replanting and landscape restoration of the site, implementation of the necessary infrastructure for the monitoring of the reservoirs during the works and during the post-closure period, and implementation of infrastructure to geotechnical monitoring of reservoirs.



Environmental monitoring and supervision of the Areosa landfill, the environmental complex of Cerceda (partially) and the urban waste transfer plants

The activities carried out by Eptisa consist of the inspection of wastewater discharges, control and supervision of surface and groundwater, leachate analysis, noise control, control and supervision of air emissions, topographic control and meteorological data collection. The work started in 2010 and it is being developed since then.



National Cartographic System of Flood Prone Areas of the Cantabrian River Basin Authority

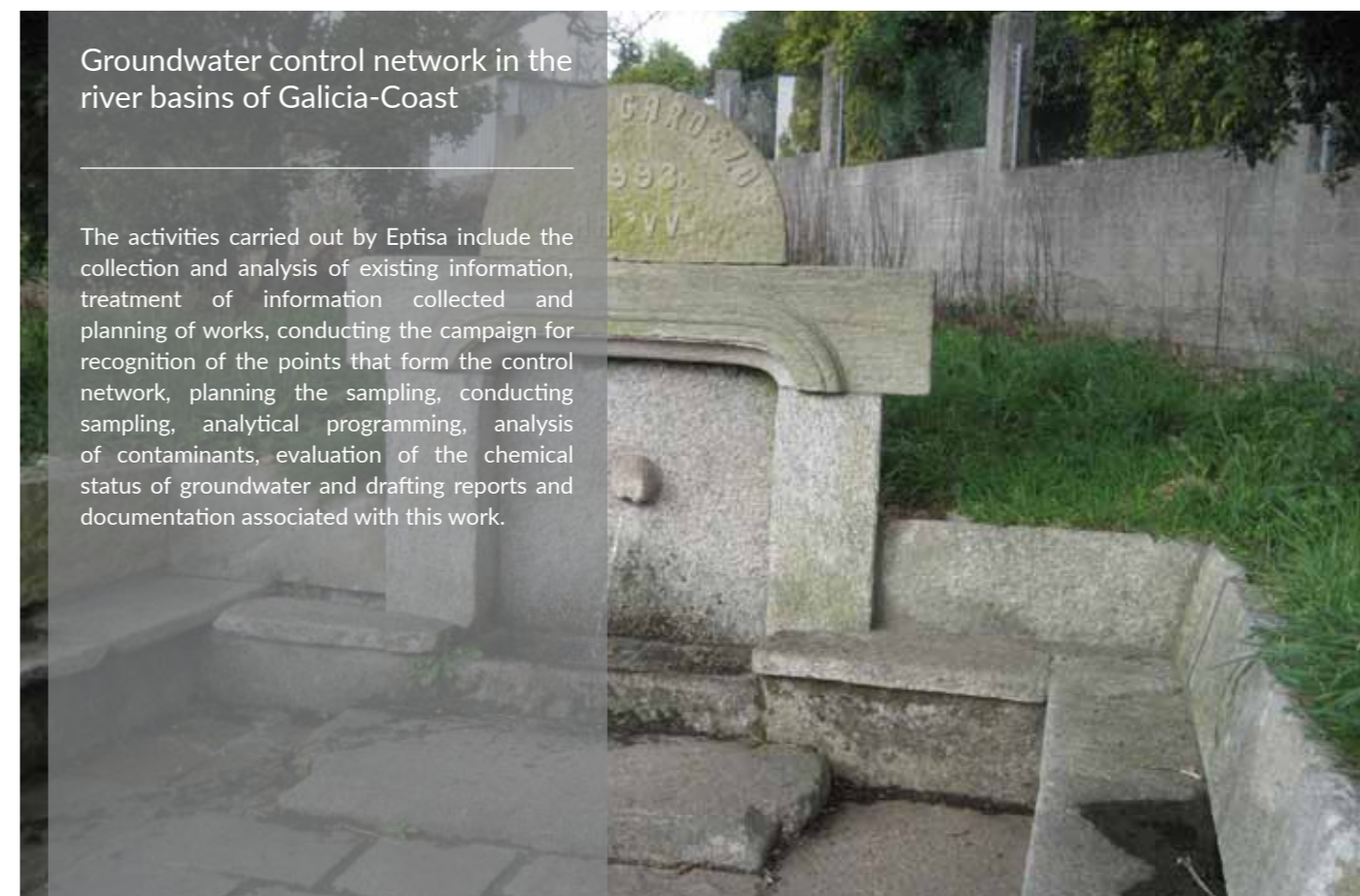
The Cantabrian River Basin Authority has published the hazard and flood risk maps developed by Eptisa in the framework of the National Flood Prone Areas Cartographic System.

For the sections of the river selected in the Preliminary Flood Risk Assessment, the Flood prone areas maps show the expected flood area and water depths according to the scenarios of low, medium and high probability of flooding or extreme event scenario.

The flood risk maps include an approximate number of inhabitants and type of economic activity that could be affected, industrial facilities, environmentally protected areas, and road infrastructure affected.

These maps have been developed using a cartographic base made with LIDAR, field characterization works of crossing infrastructures, orthoimagery, historical information collection, geomorphological analysis, hydrological studies and hydraulic studies using one-dimensional and two-dimensional models technology.

The flood risk management plans use these maps to establish the principles of coordination with other sector policies, respect for the environment and strategic planning with long term sustainability criteria. They also focus on reducing potential adverse consequences of the flood for human health, the environment, cultural heritage, economic activity and infrastructure.



Groundwater control network in the river basins of Galicia-Coast

The activities carried out by Eptisa include the collection and analysis of existing information, treatment of information collected and planning of works, conducting the campaign for recognition of the points that form the control network, planning the sampling, conducting sampling, analytical programming, analysis of contaminants, evaluation of the chemical status of groundwater and drafting reports and documentation associated with this work.



In the field of **renewable energies** Eptisa developed solutions for the optimisation of facilities and infrastructure in the wind power, photovoltaic and solar thermal sectors. We also expanded our energy consultancy services to provide advice to public authorities and private companies on the development of roadmaps, master plans and specific studies of the energy mix for the development of the renewable energy sector in various countries and markets.

In the field of wind energy, in recent years Eptisa developed a system that enables control the behavior of the static elements (foundations, ferrules and towers) of wind turbines from the design to the operation and maintenance phase, as well as a testing equipment for controlling the wind turbine foundations, in order to control the damage that frequently appear in the same. The main tool is the **SAYTL_{Dynamic}** software, a preventive system for intensive and continuous monitoring of conditions in wind turbines using continuous data acquisition equipment and a SCADA web for its display, management and alarms.

In the **Buildings** sector we have adapted our engineering and architecture services to the integrated management of construction and urbanization projects, including drawing up the design, project management, and even the execution of works.

At the end of 2013, the Management Company for Assets Arising from the Banking Sector Reorganization (SAREB), a company composed of public/private capital, awarded Eptisa the framework contract for the provision of integrated projects management services. Eptisa collects, in each of the assets, all available technical and administrative information, analyzing existing projects and the works executed, to conclude with an economical feasibility analysis and a promotion's sensitivity analysis. If executed, Eptisa starts the rehabilitation of licenses and administrative processing, and the selection and contracting of all those involved in the project (architectural teams, safety coordinators, quality laboratories, construction companies, insurance, etc.). And finally, Eptisa supervises and coordinates the constructions until the delivery of the buildings on time.

New museum "Cultures del Mon" in Barcelona



INDUSTRY, ENERGY AND BUILDINGS

In the **energy** sector we provide engineering services to the main domestic engineering companies providing integrated management of construction and refurbishment projects, as well as instrumentation and monitoring of infrastructures and facilities.

In Galicia, for the company Endesa, we continue working on the turnkey project of the adaptation work on the Saa Coalfield Park to enhance its environmental efficiency and integrate operation of the same with the As Pontes Thermal Production Unit. The turnkey project includes the engineering and the civil, mechanical and structural, electrical and control works and installation of peripheral systems associated with the conveyor belt.

In the **nuclear** sector we work on providing support to the technical office, reporting directly to ENRESA, of the monitoring and classification of materials for the dismantling and decommissioning project of the Jose Cabrera Nuclear Power Plant.

Within the framework of the works carried out in the municipality of Villar de Cañas in Cuenca for the construction of the future Villar de Cañas Centralised Temporary Storage (CTS) facility, constructed by ENRESA, we continue working on the geological characterization of the future storage location.

Also for ENRESA, Eptisa is carrying out the detailed engineering project for the closure of the section I and construction of section II of the cell 29 of the Storage Centre. El Cabril for the storage of waste of very low activity.

Quality control of the construction of a school in Toledo



In the Basque Country, we participate in the Giro project, aimed to find new architectural solutions for a new gerontological care model, focused on the person that covers the needs, tastes and expectations of elderly and favours the development of their capabilities, comfort and welfare.

In the city of San Sebastian we are providing integrated management of the construction project of the Cultural Centre in the old Tabacalera building for the International Contemporary Culture Centre.

In Barcelona we are working on the integrated renovation and rehabilitation of the residential home "Villa Joana" located in the Collserola Natural Park.

Throughout 2014 we worked on major projects to adapt and remodel certain **urban areas** in Barcelona.

The Illa Guinardó Project includes the construction of a primary healthcare centre, a day centre, a home for the elderly, a nursery, parking facilities, a municipal market, a retail area and 44 dwellings, among others, in addition to urban development, all in a 25,922 m² area. Eptisa provides integrated works supervision and technical architecture project management services.

Eptisa is providing technical assistance services to the public company Barcelona de Infraestructuras Municipales S.A. (BIMSA) in different works of in infrastructure and facilities in the city.

We also performed in Barcelona the works management for the Pei de la Marina urban development project and in Gerona the execution of the urban development works in the residential area of the Golf in Caldes de Malavella.

With respect to the building of **shopping centres**, we conducted in situ test of Mercadona's buildings in Guadalajara through the liquid penetrant inspection method in metal frame and the execution of the quality control plan of the concrete and steel in the new works with 4,500 m² of surface, 2500 m² of framing, and perimeter walls in the Mercadona c-4241 el Balconcillo, and in the perimeter walls and the enlargement of 1,200 m² of the Mercadona's building c-3118 in Aguas Vivas in Guadalajara.

Also in Guadalajara, we performed the quality control plan for the levelling, foundation, concrete pavements, metal frame and urban development in the second enlargement of the Primark store in Torija in Guadalajara.

In Toledo we carried out the quality control of the land, concrete and corrugated steel conditioning for the plant to elaborate and aging wine barrels and other properties in Villanueva de Alcardete in Toledo.



Quality control of construction materials for 96 residential housing in Leioa



Quality control of construction materials for 108 residential housing in Leioa



Quality control of construction materials for 64 residential housings in Goikoa in Derio



Turnkey project of adaptation works in the Saa Coalfield Park for ENDESA

Eptisa is carrying out a turnkey project for the Spanish electricity operator ENDESA consisting of the adaptation works on the Saa Coalfield Park to enhance its environmental efficiency and integrate operation of the same with the As Pontes Thermal Production Unit after the end of lignite extraction from the mine. This turnkey project includes the engineering and the civil, mechanical, structural, electrical and control works, as well as the installation of peripheral systems associated with the conveyor belt that connects the coalfield park with the Thermal Production Unit. Several local units businesses have been subcontracted to execute the work units.

The improvements carried out are intended to ensure a better control and greater security of the coal storage facilities of the park. Likewise, the facility will be upgraded to meet the most demanding safety and environmental protection standards. The coalfield also will be integrated with the thermal power station's systems. Its storage capacity is 350,000 tones.

With respect to environmental conditions, the works were focused on the collection of all liquid effluents of the park for their subsequent shipment to the Liquid Effluent Treatment Plant, where they will be treated before being spilled. And on the other hand, we have carried out specific measures in the park facilities as the suppression of dust in the galleries by installing a water mist equipment, or an improvement in the dust collection system in this gallery by a new collection system that includes installing a blower, extraction fan and a network of conduits and filters.

Regarding security issues, the park is provided with industrial water systems, fighting installation across the gallery and on the tape connecting the park with the Central. As far as mechanical part is concerned, it emphasizes the modernisation of the mineral handling and transport equipment, because the civil works include earthworks, embankments, channelling and a new electrical building among other improvements.



Material control and classification service for the dismantling and decommissioning project of the Jose Cabrera nuclear power plant

Since August 2013 Eptisa joined this department under the direct supervision of ENRESA, the public company in charge of the safe management, storage and disposal of the radioactive wastes produced in Spain. The objectives of this service include the implementation and/or consultancy of technical and administrative tasks involved, among which we highlight the following:

- Issuance of reports (monthly project activity reports, monthly monitoring reports and annual project activity report of the decommissioning and closure of the José Cabrera Nuclear Power Plant)
- Technical documentation (control of technical documentation, procedures, reports, etc.)
- Coordination of kick-off meetings and monthly monitoring
- Processing minutes/notes of meetings
- Updating the DMS (Decommissioning Management System)
- Updating the PMS (Project Management System)

It is also important to note the participation of Eptisa as a member of the working group of the Site Restoration Plan (SRP). It is a pioneer project in Spain, aimed to carry out all necessary restoration actions to transform the land of José Cabrera Nuclear Power Plant from its initial physical and radiological state known, to the new state defined for its future use.

As far as field work is concerned, Eptisa participates actively in:

- Declassification of surfaces and large pieces
- Activities corresponding to preparation of material for the workshop on decontamination of the plant in the future
- Carrying out activities related to the development of SRP



Preventive measure systems of pathologies in static components of wind turbines

Throughout 2014 we have developed a testing equipment for the monitoring of foundations of wind turbines, aimed to monitor the damages that appear with a certain frequency in the same. Despite of the quality controls carried out during the entire process of manufacturing of these elements, from the design to its construction, it is becoming more frequent the appearance of spaces between the foundations and the wind turbine tower. A methodical control of these elements through the systematic measurement with continuous data acquisition equipment, together with regular inspections, allow our clients properly planning the repairs, with sufficient time to avoid unscheduled stops or too expensive activities as usually happens when it is not carried out any control. The main tools of the system are the following: portable dynamic data acquisition system and data reports and pathologies monitoring report (inspections).



Specific SMS study for centralised temporary storage in Villar de Cañas in Cuenca

During 2014/15 we continue working on the geological characterization of the future Centralised Temporary Storage location that will be constructed in Villar de Cañas (Cuenca). The works carried out during the last year have mainly consisted of respond to the requests for additional information submitted by the Nuclear Safety Council, the organ responsible for approve the construction of the facility.

It has developed a Map of Exogenous Risks at a scale of 1:2,000, a geological block diagram of the basin at a scale of 1:2,000 and a geological block diagram of the site at a scale of 1:10,000. All

developed maps have been reviewed and updated with all surveys conducted in the vicinity of the store.

Together with ENRESA, the public company in charge of the safe management, storage and disposal of the radioactive wastes produced in Spain, and the other companies involved in the characterization, Eptisa has prepared various summary reports in which all the information generated by ENRESA over recent years has been included, site characterization report and the review of some aspects of the construction design for the main engineering.



Detailed engineering project for the closure of the section I and construction of section II of the cell 29 of the storage centre El Cabril for Enresa

Eptisa is carrying out the detailed design for the closure of the section I and the construction of the section II of the cell of the storage centre El Cabril for the waste storage of very low activity. During the first phase of the contract Eptisa is developing the construction design which will include the closure of the section I, once the available waste storage volume will be reached, and the design of the needed works for the construction of the section II that completes the total storage capacity of the cell 29. The detailed design will include all necessary infrastructures for the waste storage of very low activity of the storage centre El Cabril, including the adaptation of the section II by increasing the front dike until reaching a total height of 22 m, the implementation of waterproofing system in the base of the section, the system for collecting potential leachate, temporal coverage of section II during its operation, closure of both sections, drainage infrastructure of runoff water, access roads and the geotechnical instrumentation associated to waste storage. In the second phase, Eptisa will provide technical assistance services to ENRESA during the execution of works for the closure of the section I and the construction of section II.

Rehabilitation of the power plant building in Lazkao, Guipuzkoa

The project develops the modification and reform of the 2000 m² building of the former power plant of Lazkao to allocate it as offices for CAF. The modifications of the power plant involve the commitment of emphasising the value of the building, a faithful exponent of the industrial architecture of the mid-twentieth century in Guipuzcoa, and adapt its interior distribution and its outdoor area for its new use as Technical and Commercial Office.



Technical assistance to the infrastructure department of BIMSA in Barcelona

Eptisa is providing technical assistance services for monitoring deadlines, financial and quality control of the works carried out in the city and for the Integrated Maintenance Plan and the Barcelona Sports Institute. Eptisa also manages the relations between the construction company, works management, services companies and the people responsible for the Public Spaces (REP) of the Barcelona City Council; as well as the coordination of the works with the Mobility Department of the Barcelona City Council and the local police.

The following works are supervised: Urban development of the streets Avinguda Diagonal, Avinguda del Paral·lel, Antoni Capmany, Panorama, Ermengarda, Forn, Novell, Béjar, Eugeni d'Ors and Ronda del Mig, of the roof in the Sants Square, anti-aircraft batteries in the Turó de la Rovira, improving access to anti-aircraft batteries in the Turó de la Rovira and the Municipal Sports Centre Montjuïc. Also in the technical assistance it has been included the data updating and monitoring on the GestBimsa database and the data updating and monitoring in coordination with other departments of Bimsa.



Illa Guinardó urban development project in Barcelona

This project is aimed to the integrated project management of the construction of a set of equipment in the environment of the Guinardó Market, which includes five programs of different use in a building complex: a municipal market with 18 stores and associated retail space, a multi-storey car park with 144 parking

spaces, a primary healthcare centre, a home for the elderly with 99 beds with a day centre, a youth centre, as well as the construction of a building of 44 official protection housing and the urban development of the surroundings (interior, squares and adjacent streets).



Urban development works in the residential area of the golf in Caldes de Malavella in Tarragona

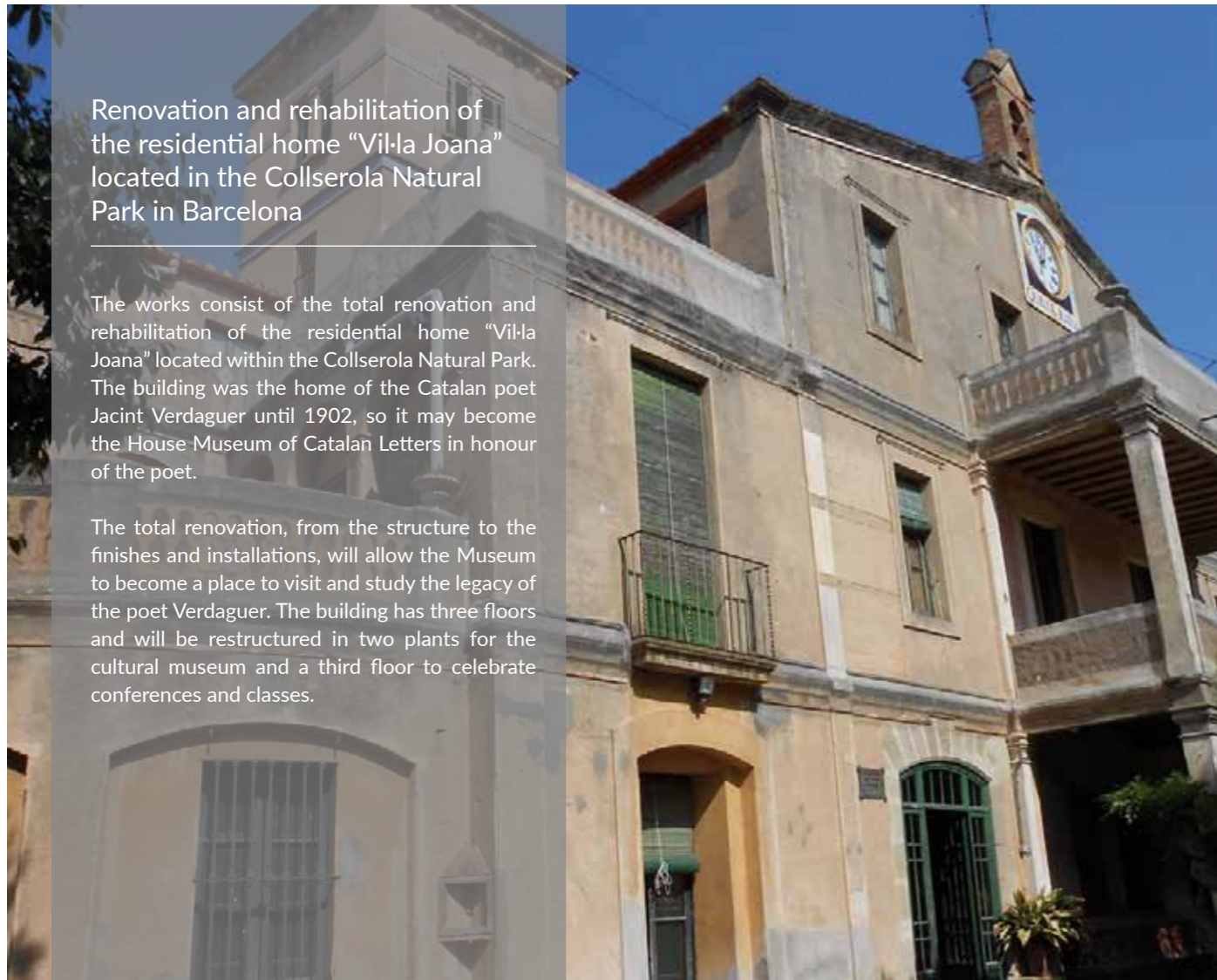
The project includes the urban development works in the residential area of Golf in Caldes de Malavella, which mainly consist of the sewerage and drainage network, lighting, telecommunications network and electricity, gas and water distribution, pavement and road signalling.



Renovation and rehabilitation of the residential home "Villa Joana" located in the Collserola Natural Park in Barcelona

The works consist of the total renovation and rehabilitation of the residential home "Villa Joana" located within the Collserola Natural Park. The building was the home of the Catalan poet Jacint Verdaguer until 1902, so it may become the House Museum of Catalan Letters in honour of the poet.

The total renovation, from the structure to the finishes and installations, will allow the Museum to become a place to visit and study the legacy of the poet Verdaguer. The building has three floors and will be restructured in two plants for the cultural museum and a third floor to celebrate conferences and classes.



Integrated project management and supervision for SAREB

At the end of 2013, the Management Company for Assets Arising from the Banking Sector Reorganization (SAREB), a company composed of public-private capital, awarded Eptisa the framework contract for the provision of integrated project management and works supervision services.

The purpose of SAREB is to assume real estate assets and loans to developer of a series of determinate banks (Abanca, LiberBank, CaixaCatalunya, Banco Ceiss, Bankia, Banco Valencia, etc.) by transfer costs established. Once the transfer of the mentioned assets was carried out, the next step was to identify, classify and categorize each one of them, to achieve the main objective of SAREB, which is settle them definitely, either by selling it to funds and/or private companies, through a network of Real Estate Agents.

The works to be undertaken by Eptisa in this contract are divided into three phases:

- During the first phase Eptisa collects, in each of the assets, all available technical and administrative information, analyzing existing projects and the works executed, to conclude with an economical feasibility analysis and a sensitivity analysis of the property development.
- Subsequently, depending on the asset and advised by SAREB, it is decided the suitability or not of executing it. If so, the second phase of our work begins and consists of the rehabilitation of licenses and administrative processing, and the selection and



contracting of all those involved in the project (architectural teams, safety coordinators, quality laboratories, construction companies, insurance, etc.).

- Once the different contracts have been awarded and the permits and licenses of the Administrations have been obtained, starts the third phase of Eptisa's services, which includes the supervision and coordination of the works until the delivery of the properties, as scheduled.

Eptisa is responsible for the assets of the North Area that include the regions of: Castile and Leon, Galicia, Asturias, Cantabria, Basque Country, La Rioja, Aragón and Navarra. In late 2014, SAREB also entrusted us the South Region.



Pei de la Marina Urban development project in Barcelona

Eptisa carried out the works management in the district of La Marina del Prat Vermell in the city of Barcelona, which consisted of the execution of all elements for the urban development of all area: sewerage, irrigation network, drainage system for the storm water management, telecommunications network, water, gas and

power grid; as well as the district heating and cooling network, pavement, lighting, traffic lights and signage. The urban furniture, landscaping and installation for future pneumatic collection of urban waste were included in the urban development project.

Giro Project: new architectural solutions for a new gerontological care person-focused model

The overall objective of this project is to create new products, environments and services to build and remodel efficient gerontological centres based on the Gerontological Care Person-Focused Model that cover the needs, tastes and expectations of elderly and favour the development of their capabilities, comfort and welfare. To do this, we take as basis the characteristics of the environment of the people that have special needs and live in residences for the elderly.

The Eptisa's work will be to search architectural solutions that improve the people's welfare. The new gerontological model will be able to offer a homely feel, as well as stimulus that encourage the feeling of control the immediate environment and of the activities of daily life, where the affective relationships are cultivated.

In this project it is intended to propose new architectural designs for:

- Promoting people's welfare: integral and friendly accessibility; creation of "large small spaces and small large spaces"
- Encouraging social interaction with open spaces and corridors that favour the meeting and exchange, combined with places from which they can observe the daily life



- Taking care over specific designs for caring for people with dementia: design appropriate spaces to facilitate and allow wandering
- Development of a new accommodation person-focused model with modular building solutions: the private room is not only "a bedroom" but "his/her new home".



INFORMATION TECHNOLOGY

In 2014 we have focused our effort in developing vertically integrated solutions for the water, road infrastructure and smart cities sectors

The trend has led to the development of new technologies for mobile devices, cloud computing software and social networks. Digital content and software as a service (SaaS) are the client's opportunity to access information and services in a simple, efficient and economical manner.

In 2014 in Spain we have focused our effort in offering system maintenance services to our clients, according to the new trends, and in developing vertically integrated solutions for the water, road infrastructure and smart cities sectors, which has allowed us to export our experience outside Spain.

Esri Spain, working towards its main objective of fostering and disseminating the use of GIS technology in society as a whole, has achieved to transfer the value of the ArcGIS Platform to the large organizations. The new paradigm of the GIS systems and, specifically, the Esri platform, allow the organizations to achieve their goal of bringing knowledge anywhere on any device.

Telefonica Spain or Iberdrola Renovables have been some of the organizations that bet for a comprehensive management of the technology. Esri Spain, Esri Inc. and Iberdrola Renovables signed a corporate agreement allowing Iberdrola Renovables an unlimited use of the Esri technology for the internal management globally.

Telefonica Spain and Esri signed a corporate agreement for the project *GIS&SBI Locations Management Module*, which will enable it to build the "Telefonica of the future" adding the data geographic variable in different systems and applications. From

now on, Telefonica Spain will have unlimited Esri technology to introduce geospatial content into its applications allowing it to make more efficient and quick decisions, both at technical advice and customer service level.

The Regional Water Company in Madrid, Canal de Isabel II, has unlimited access to the most advanced GIS platform thanks to a corporate agreement signed. And thanks to the new components of the platform and its strong commitment to the cloud, the Canal is able to evolve in the integration of its Expert Systems, making its operation more effective and improving the supervision and control.

In Andalusia, the public universities and research institutions of the Community of Andalusia have access to our licenses at a reduced price thanks to an agreement signed with the Scientific Computer Centre of Andalusia.

In the Smart Cities sector the value of the ArcGIS Platform has been reflected in the response obtained from the major cities of Spain. The IT Department of the Madrid City Council for the MINT project led by IBM, the Seville City Council, which is implementing the Smart City culture in its management, or the Mostoles City Council (Madrid), have been some of the public organizations that have banked on the platform to turn their municipalities into smart cities.

The Madrid City Council chooses the Esri technology to be the basis technology in the MINT project (Madrid Intelligent) that has

launched together with the IBM Group. This project will place the capital at the head of European cities in management of public utilities in this area (management of waste, cleaning, trees, pavements, lighting and fountains). In addition, it will help citizens acquire a greater role in the resolution of incidents in the city, by opening new communication channels with the Consistory.

The Seville City Council uses the ArcGIS Platform to develop activities in the field of Smart Cities. The integrated project "Seville Smart City" promotes the automatic, innovative and efficient management of public utilities of the urban infrastructure in the city, the reduction of public expenditure, and the improvement the quality of life of citizens, thereby achieving to attract the economy and generate progress and transferable knowledge.

One more year, the **Esri Spain User Conference** held in October was the major GIS event held in Spain with an attendance of 2,400 people.

Within the strategy to update and improve the **content** that Esri Spain provides for its clients through the "MAPABase" project, it was extended the mapping area. It was also developed a new system of symbology, more in line with the cartographic publication trends and standards on Internet and with the graphic representation used by Esri Inc.

In 2014 the Esri Spain **training** services held a new edition of the GIS Master. Students acquire the knowledge required to become experts in GIS technology, and this facilitates their entry into both the domestic and international labour markets.

The Spanish company SEGIPSA (State Society Heritage Property Management) has awarded Eptisa the technical assistance contract to carry out the checking, verification and data-clean of cadastral regulation reports.



Smart city platform in the Mostoles city council

The Mostoles City Council launched a solution absolutely in line with Smart City philosophy that allowed it to load all its information in a unique platform. In addition, it is adding sensors in different zones and services of the city, such as the lighting, in order to carry out an exhaustive monitoring of its situation and conservation. The city council, aimed to involve citizens, has developed an app named "Mejora Móstoles" (Improve Mostoles), which provides a collaborative environment within this large project and provides to the city council very useful information to provide the best municipal service.

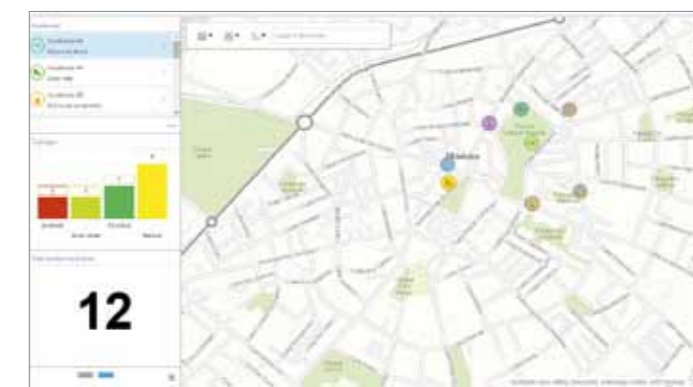
In the **emergency and public safety sector** Eptisa performs preventive, corrective and developmental maintenance of the geographic information systems for the Madrid Integrated Security and Emergency Centre (CISEM), the agency that coordinates the activities of the Fire Department, Municipal Police and SAMUR (the paramedical service) in cases of public alert.

In the **logistics** sector we worked on preventive and corrective maintenance of the corporate geographic information system for the Spanish Post Office, "Correos".

In the **private** sector we developed the migration and maintenance project for Repsol's GIS applications. This project aims to migrate the GIS applications developed on a propriety platform to the new corporate platform based on Esri's ArcGIS technology and its subsequent maintenance. For the Insurance Compensation Consortium, we have carried out the technical assistance for the maintenance and development of the Geographical Information System (GIS) based on ArcGIS platform version 10.2.

Eptisa is a benchmark company in the **water** sector. Our experience in the Canal de Isabel II and Txingudi projects, among others, supported the internationalisation of our network management applications through contracts in India, Kyrgyzstan, Dominican Republic and Peru.

We have the best experience in the development of projects in the **search business solution** of Google Search Appliance and in 2014 our clients have entrusted us with their installation and maintenance projects.



I+D tecnología

The goal of investment in technological R&D is development of **vertical solutions** that provide our clients access to technology. This highly competitive and constantly changing environment demands adapting the services to new trends in the digital economy and specialized vertical applications. This effort places us at the forefront of the latest technological advances and keeps our position in the domestic and international IT sector.

The **NILO** GIS solution for water network management is aimed to improve the efficiency and optimise network management for small and medium-sized services companies.

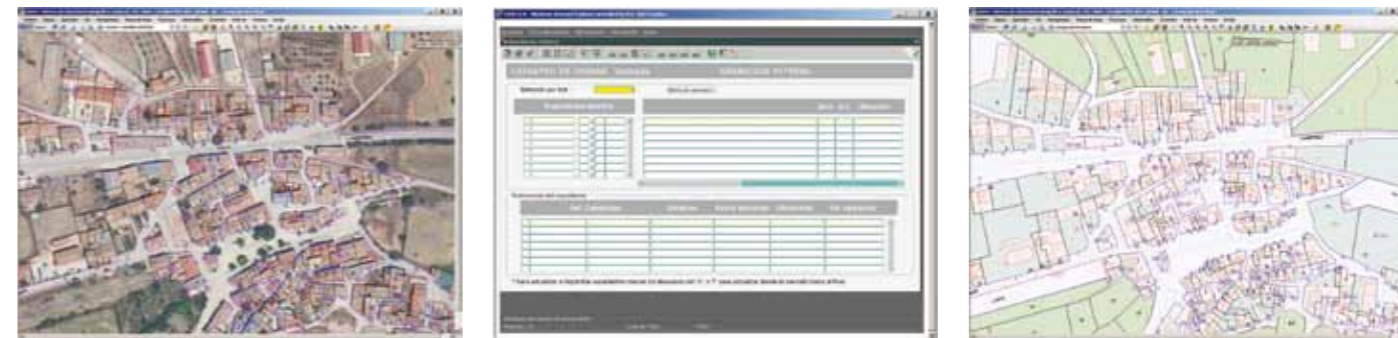
In conjunction with the Engineering Department, we implemented the **ROMA** solution (Roads Management System), the most comprehensive technological solution for treatment and professional management of information associated with linear infrastructures due to its advanced display, editing, search, management and information analysis capacities.

Eptisa is part of the **Urban Milla Lab**, an area within eTopia (Art and Technology Centre in Zaragoza) intended as a smart city R&D+i laboratory. We develop the digital infrastructure inventory project and dashboard system for the participatory city.

Esri Spain aims to promote the use of ArcGIS platform tools in the **Local Government** and specifically, reaching the maximum number of users and taking advantage of the new trends in mobile devices where the citizen participate actively within the local government, sharing opinion, suggestions and reporting from the mobile device. Esri is working on applications for city councils and regional governments.

In the **cartographic production** sector, with the new product ArcGIS Pro, Esri Spain aims to help the regional cartographic centres to evolve and prepare import and operation tools, accommodating the 3D naturally.

This highly competitive and constantly changing environment demands adapting the services to new trends in the digital economy and specialized vertical applications



Technical assistance for checking, verification and debugging of cadastral regularization records

Within the framework of the cadastral work related to the incorporation of real estates and their changes under the procedure of cadastral regularization 2013-2016, which consist of updating the cadastre by adding the real estates and their changes (extension and rehabilitation), the State Society Heritage Property Management, SEGIPSA, contracted Eptisa to carry out the monthly report, during the three months of the contract. This monthly reports include the results and conclusions of the services provided relating to the checking, verification and debugging of records and related to the allegations and appeals presented after notifying the person concerned of the result of the regularization procedure.

The report includes the analysis of the methods of control carried out by SEGIPSA, advice regarding the improvement of processes to be implemented and the description of the actions to undertake in relation to:

- Checking the motion for a resolution of the records, with particular emphasis on the cartographic updating, the recording of alphanumeric data in SAUCE and linking to the corresponding documentation
- Review of technical report that supports the incidence

- Review of solved regulatory records
 - Verification of the existence of the corresponding documentary information and, where appropriate, the reason of their inexistence
 - Crossing of graphic-alphanumeric data
 - Crossing cadastral maps and validation of FX-CC
 - Checking the coherence of the alphanumeric information recorded
- Review of the approved incident of return maps, due to its transcendence on opening the files of regularization.
- Detailed control of the records on which the applications of de DGC have some doubt or deficiency and on a statistical sampling of all on which these applications determine their correction.
- Checking the correct resolution of the records generated during the process of regularization
- Commissioning of the reviewed records and have passed the controls
- Detailed report of data on both the reviewed records that have passed the controls and the singular records and with special importance.
- In the case of allegations and appeals, study and control of the records on appeal or allegations that have been filed, and the commissioning for the Management of records that have passed all controls.

Improvement of the video surveillance system in the Guadiana river basin authority facility in Don Benito

Based on IP technology, we have carried out the modernization of the existing analog centre of video surveillance in offices and urban area of the Guadiana River Basin Authority in Don Benito. Eptisa has provided design and implementation services of the turnkey project which consists of the implementation of a restricted wireless network with strict security systems and 2 Mpixel night vision cameras with resolution higher than FullHD, digital recorder and analog video digitizer, and operation via website.



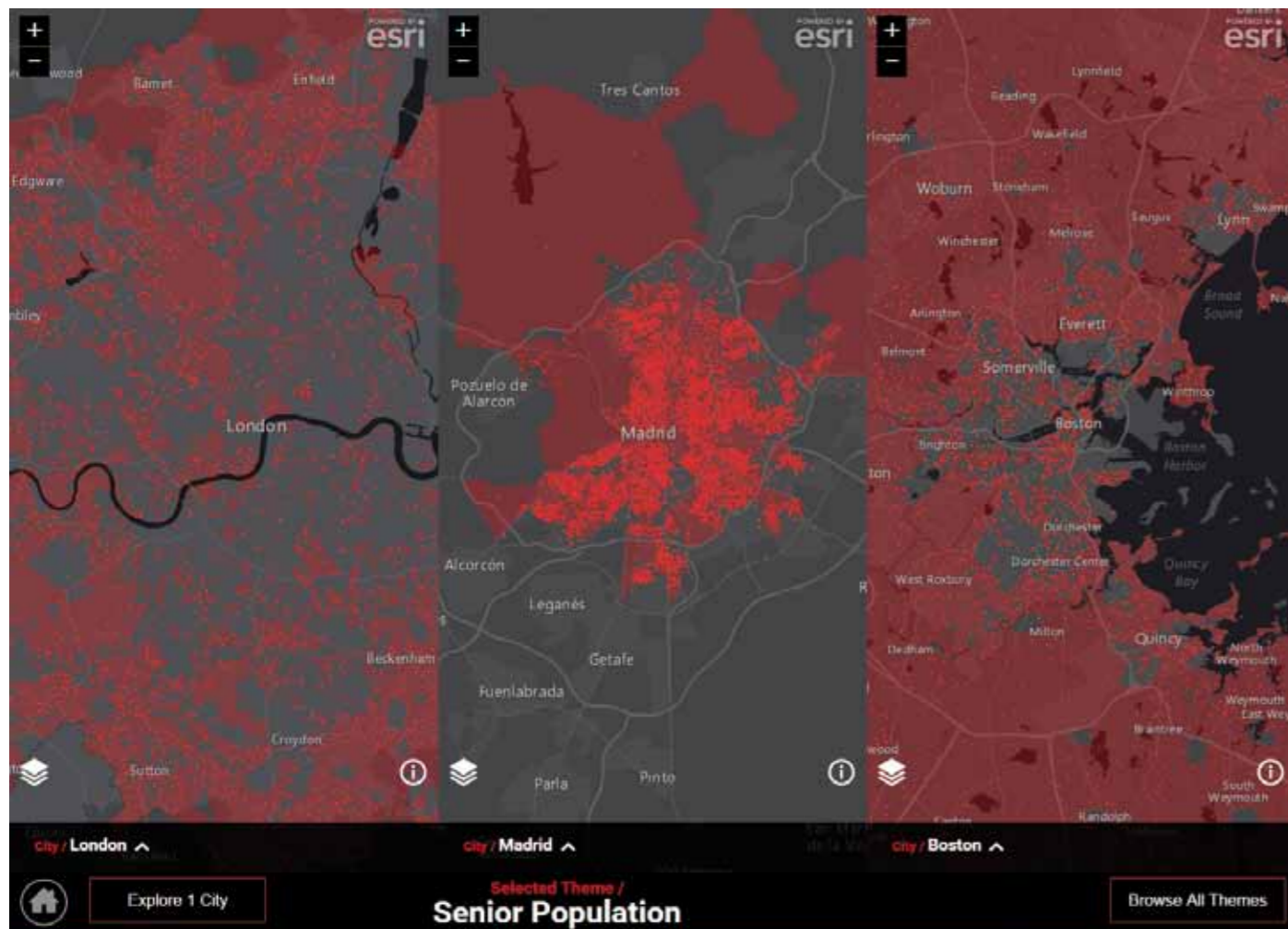
Geographic Information System for the Insurance Compensation Consortium

This project is aimed to provide technical assistance services related to the maintenance and development of the Geographic Information System of the Insurance Compensation Consortium based on ArcGIS platform version 10.2.

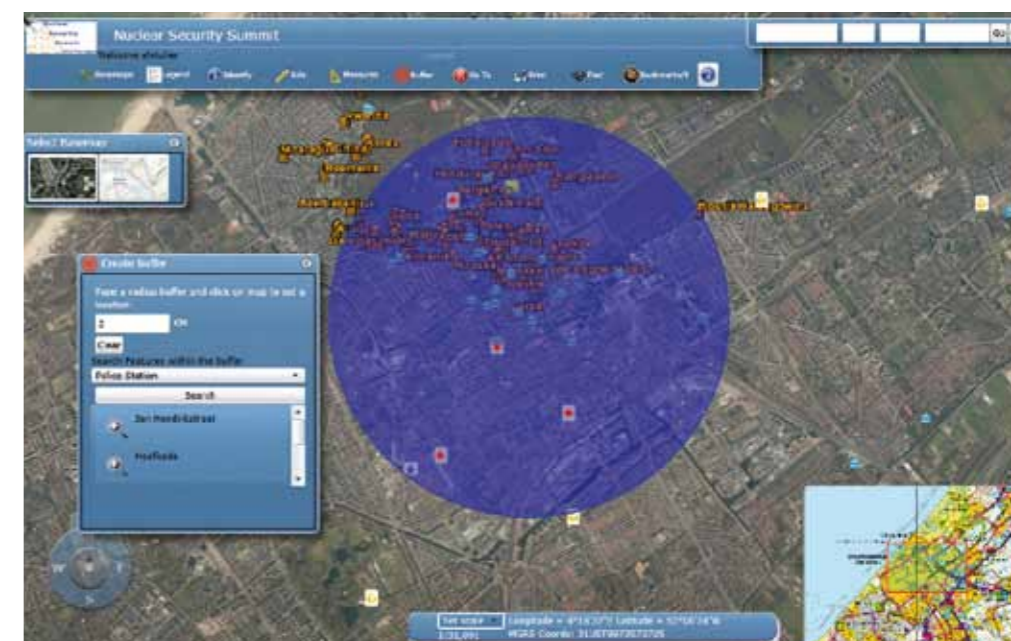
To do this we have developed two main GIS applications:

- A web viewer for delegates, implemented with the API light Javascript of Esri. The main functionalities are query, processing and inspection areas from the map (identifying tool), theme selection of the map, reporting, drawing and measurement tools
- Development of base maps, that besides of accessing to ArcGISOnline, have added services WMST of the National Geographic Institute, as Cadastre, PNOA and topographic.





European union satellite centre (SATCEN)



European Union Satellite Centre is aimed to support the decision-making of the European Union in the field of Security and Defense by providing analysis of satellite imagery and data. The management of this information is a challenge because it requires agility and absolute precision in the answer.

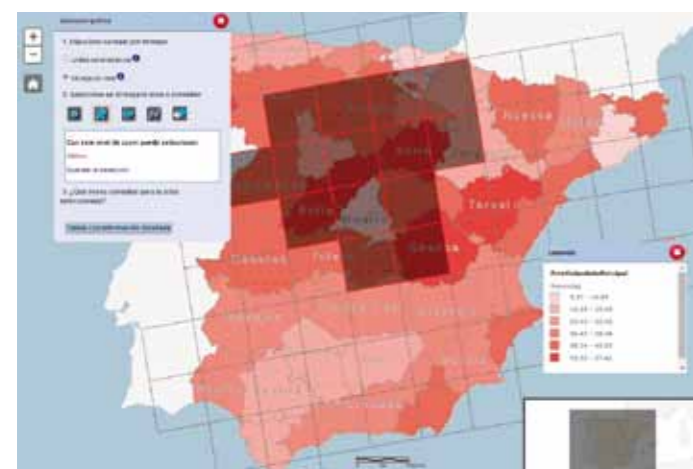
Since the signing of the agreement with Esri, a complete geospatial platform was implemented gradually to manage large volumes of satellite images, as well as the management of vector data. In addition, it has implemented a Service Oriented Architecture (SOA) allowing its operation from any device, anywhere and anytime, both by analysts of the Centre and by the Member States that serves the platform.

Madrid is already part of the Urban Observatory

The Urban Observatory is a project that allows comparing cities around the world with dynamic contents, which are organized around issues related to employment, demography, places, movement and the systems of a city.

Esri Spain has added the data of Madrid City into this initiative, so it can be compared to other cities included in the project such as New York, London, Tokyo, Abu Dhabi and Berlin, who have also joined this opendata initiative.

The capital has become part of this global data repository which will allow us, not only compare data with other cities around the world but also discover trends through the analysis of the same that will help to establish patterns, to look for opportunities, etc. From now on, any citizen will be able to access to this application and compare the data of Madrid on issues such as population density, infrastructure or quality of life. In addition, the application allows comparing simultaneously these issues in three different cities.



Spanish Statistics Institute

For the first time, the Spanish Statistics Institute combines interactive maps and Big Data Analytics to consult the census by geographic area. The largest statistical operation of the Spanish Statistics Institute in ten years shows a Geographic Information System that allows displaying the information by cities and even by neighbourhoods or residential areas.



EMTNav

The Madrid's Public Transport Network (EMT) implements EMTNav, a browser installed on the console of the bus which allow EMT's drivers to know in real time which route must follow at all times, informing them in the event of an incident, traffic court, etc., the most appropriate alternative route to ensure the best service.



EUROPE

In 2014 we consolidate the markets of Balkans, Caucasus and Turkey, strengthening our leadership in the water, transport infrastructure and environment sectors

Our network of branch competes in local tenders with the companies of the region and opens up opportunities for the Spanish companies in the area

UNITED KINGDOM

Mersey Gateway Project in Liverpool, United Kingdom

Eptisa is part of the design team for Merseylink, the international consortium that has awarded the project for the design, construction, financing and operation of the new gateway bridge over the Mersey River, between Runcorn and Widnes, in the outskirts of Liverpool. The project, known as Mersey Gateway Project, includes the design of a new bridge upstream of the existing Silver Jubilee Bridge and the main road access infrastructures commissioned by the Halton municipality.

The consortium is formed by the three partners, Macquarie Capital (Australia), Bilfinger Project Investments (Germany) and FCC Construcción (Spain), who will be responsible for finance and operation the infrastructure during next 30 years. The construction companies Samsung C&T Corporation (Korea), FCC Construcción (Spain), Kier Infrastructure and Overseas Limited (England) will participate in the construction phase. And besides

Eptisa, the companies Flint & Neill, URS, Fhacor and Dissing + Weitling will collaborate on the consortium.

The infrastructure consists of a cable stayed bridge with three towers with 1,000 meters of suspended deck and extensive approach viaducts providing improved public transport in the area and relief to the current congested Silver Jubilee Bridge and in the area, from and to Liverpool. The project includes a series of changes and improvements in the existing road network between Widnes and Runcorn.

The Eptisa's participation begins in the design phase, in the fields of structures, geotechnical and drainage, and it is extended during all work period as part of works supervision team. The works started in October 2014 and it is expected to be completed in summer 2017.



GREECE

Under the contract of the **Specialized Consultant for Quality Control E.S.P.E.L.** project we continue with the development of audits and quality control of the works of the projects co-funded by European Funds and the institutional technical assistance to the Administration and the Ministry of Public Works. Along this year, it has been carried out the quality control in different works in the **transport, water and buildings sector.**



PORTUGAL

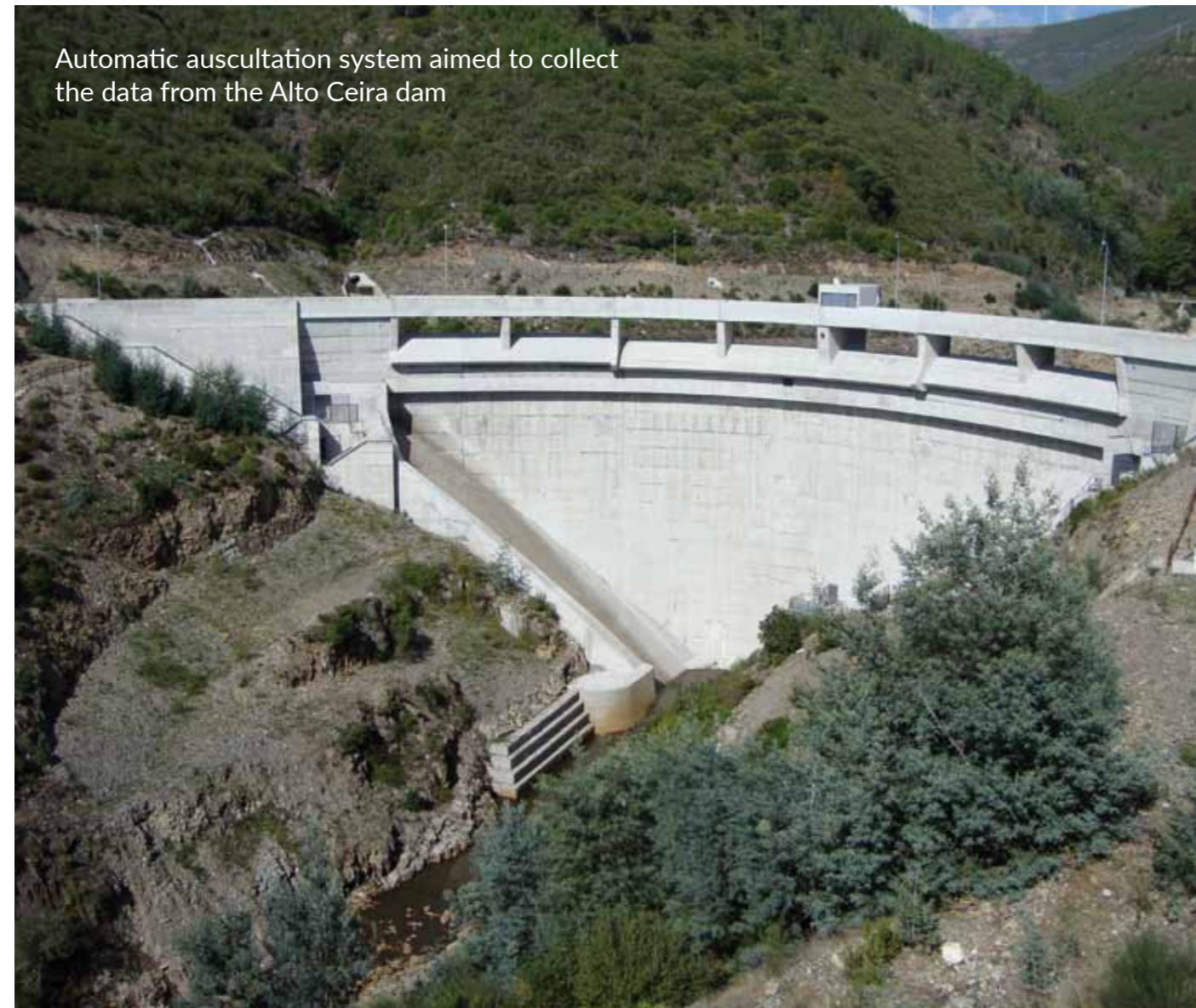
The electricity company EDP Gestão da Produção de Energia, S.A. awarded us the project to install an **automatic auscultation system aimed to collect the data from the Alto Ceira dam** which is part of the Santa Luzia Hydroelectric Plant located in Coimbra.

The dam is a double-curvature concrete arch type with maximum height of 41 m with a crest length of 100 m, supported by gravity-type abutments. The elevation of the dam crest above sea level is 668.50 m and it consists of 6 blocks of 16 - 17 m in length, separated by vertical asphalt contraction joints.

The works include the preliminary design, the construction of three new flow meters including its automation, the installation of four new control cabinets equipped with a Programmable Logic Controller (PLC) Siemens series 1200 with Ethernet port and connected by optical fibre to a PC located in a technical building built about 200 m downstream of the dam on the left bank at a higher elevation than the crest of the dam.

The Programmable Logic Controller PLC has 3 inputs / outputs required to automate the installed sensors during the construction of the dam: reservoir water level by limnimeter, ambient temperature, rainfall, temperature of the concrete within the dam body, horizontal displacements of the structure, vertical displacements by roof extensometers, relative displacement between blocks by three-dimensional joint gages, tensions within the dam body by Carlson type extensometers, pressures in foundation by piezometers, accelerations by two seismographs with recorder, optical fibre sensors installed in parallel with conventional instrumentation Carlson type.

The PC to monitor the dam has the computer application SCADA (Supervisory Control and Data Acquisition) SayTL, developed by Eptisa, and it is responsible for the acquisition of the measurements of the various sensors, its storage and sending data to the auscultation server located in Porto through EDP's corporate network and following the timetable set by EDP.



Automatic auscultation system aimed to collect the data from the Alto Ceira dam

ROMANIA

Eptisa has consolidated the leading position in its key sectors on the Romanian engineering market, such as the infrastructure related to water supply and sanitation, waste management, environment, urban heating systems, and civil constructions, providing engineering services in technical assistance for design, works supervision and project management.

In 2014, we celebrated our 20 years of presence in Romania, the first market in Eastern Europe in which Eptisa began its international activity. If 20 years ago Eptisa's activity was mainly focused on institutional strengthening and capacity building for central and local public administration bodies, today the engineering services in the field of environmental infrastructure, and more specifically in the water and wastewater sector, are the most important fields of our activity.

Currently, with a team of over 120 professionals and 80 collaborators, we carry out our activities through the central office in Bucharest, 3 regional offices in Craiova, Iași and Cluj-Napoca and over 15 project offices in major cities throughout the country to implement 28 projects in 2014. Due to the success and the availability of resources, the activities on the market of the Republic of Moldova are managed from the Romanian offices.

Eptisa achieved the first place in Top 100 Design Construction Companies in Romania. In the last five years, Eptisa has been a permanent presence in Top 10 engineering companies in this country and, in 2014 we occupied the highest position of the IBC Focus classification for the first time. IBC focus is a market leader in monitoring and studying for leading projects and construction in Romania that annually publishes the "TOP 100 Design Construction Companies".

In 2014 we had six newly-signed contracts for the design, management and works supervision in water sector, one in buildings sector and a new project for the development of a mobility plan within the transport sector.

In the **water** sector, we continue successfully working to regional water operators in 10 regions. We implement projects in the field of supervision, design, budget support, project management and turnkey projects. In 2014 we were awarded two new projects in the Dolj County to provide technical assistance in the extension of the water supply and sanitation network in the mentioned area, including the services of project management, works supervision, contract management and reporting activities. Another contract was signed in Olt County to provide technical assistance services to works supervision.

In the Buzau County we started the technical assistance and works supervision project of the extension and modernisation of the water supply network in the project's area, aimed to expand the coverage of drinking water and sanitation services in the Buzau County.

Eptisa achieved the first place in Top 100 Design Construction Companies in Romania



Integrated Waste Management Systems in Botosani

In Botosani County, Eptisa supports the water and waste water operator, S.C. NOVA APASERV S.A., in managing and implementing the project for the extension and modernisation of the water supply, sewerage and waste water treatment systems, with an investment over € 80 million.

We continue working in the design, project management and works supervision projects in the Cluj and Salaj Counties. Both include design, project management and works supervision of water and sanitation infrastructure. And in the Iasi County we provide technical assistance in the works for the extension and rehabilitation of water infrastructure.

In the **waste management** sector, we have established ourselves by extending the scope of services and the technical assistance for Botosani and Salaj Counties in terms of supervising the works for their Integrated Waste Management System.

In the **buildings** sector, Eptisa carries out the works supervision for the rehabilitation of the municipal buildings in District 3 of Bucharest, within the framework contract for consultancy and site management services of any works carried out in the buildings under the administration of the City Hall, such as schools, public facilities, etc.

For the Ministry of Health, we work on the project for the rehabilitation of neonatal and maternity units, developing the designs and works supervision.

Within the field of **industry** and for the Spanish company Grupo Antolín, we finalized the design, supervision and project management of its new factory in the Sibiu County covering 12,500 m². The factory will be composed of production hall, warehouse, offices, platforms, roads and relevant utilities.

In the **energy** sector, Eptisa has become a reliable partner for energy savings and efficiency projects, thanks to the experience developing projects of district heating systems in the cities of Iasi and Bacau. We are working in the project for the modernization of the city heating systems for compliance with the environmental standards on air emissions and thus, increasing of the heating supply urban efficiency.

In **transport** sector, the European Bank for Reconstruction and Development (EBRD) awarded Eptisa a new consultancy contract to carry out the Galati Urban Transport Rehabilitation Project - Sustainable Urban Mobility Plan (SUMP). The main objective of this assignment is to develop the SUMP that will enable the City to manage mobility to be compatible with European and national requirements and identify the future priority investments in the sector. The SUMP will be based on an Urban Transport Model (GIS support) using a software platform.

MOLDOVA

Within the Moldova Water Utilities Development Program financed by the European Bank for Reconstruction and Development, Eptisa was awarded an extension of contract for the rehabilitation and extension of the water supply and sewerage networks in 6 regions. The objective is to improve the water and sewerage sector and to create models of independent operators who provide high standard services. Specifically, the project consists of the provision of consultancy services for institutional strengthening and works supervision in the regions of Floresti, Soroca, Orhei, Ceadir-Lunga, Hincesti and Leova, with over 210,000 inhabitants. Eptisa acts as the consultant engineer to guarantee the compliance of the FIDIC Conditions of Contract during the works supervision of the rehabilitation and extension of over 600 km of water supply and sewerage systems in the municipalities selected.

In the field of institutional strengthening, we continue working in two **local and regional development** projects financed by the GIZ. We provide technical assistance to the relevant institutions in the management, planning and implementation of projects in the sectors of water and sanitation, waste management, energy efficiency and road transportation.



Extension and rehabilitation of water supply and sanitation network in the Cluj and Salaj Counties

Technical Assistance for works supervision of the extension and modernization of the water supply and sewerage network in Buzau county in Romania

In the Buzau County we started the technical assistance project to supervise the extension and modernization of the water supply and sewerage networks of the area, aimed to extend the coverage rate of the drinking water supply and wastewater services in Buzau County.

The works consist of the construction of four drinking water treatment plants in Buzau and Sapoca, and the extension of water supply and sewerage networks in Buzau County, Vernesti and Spataru localities. This works also include the construction of water supply, installation of technological equipment, drinking water pumping stations, electrical connections, SCADA network and training the personnel.

The services contract of Eptisa includes the project management from the works supervision to the control and monitoring of the projects, ensuring an efficient system to control costs, terms, safety, environmental protection and management of the main stakeholders.



Sustainable Urban Mobility Plan in Galati, Romania

The European Bank for Reconstruction and Development (EBRD) has awarded Eptisa a new contract to carry out the Galati urban transport rehabilitation project - Sustainable Urban Mobility Plan (SUMP). The main objective of this assignment is to develop the SUMP that will enable the City to manage mobility to be compatible with European and national requirements and identify the future priority investments in the sector.

As Consultant, Eptisa is responsible for defining the study area on which the Sustainable Urban Mobility Plan will be focused on, and it must contain the entire transport system, serving the whole urban and neighbourhood area. The Plan aims to create sustainable urban transport system by addressing, at minimum, the following objectives:

- Ensuring that the transport system is available and accessible to all, such that urban public facilities including public transport can provide services on an inclusive basis;
- Improving safety and security in all modes of transport and reducing the number of accidents;
- Reducing air and noise pollution, greenhouse gas (GHG) emissions and energy consumption;
- Improving the efficiency and cost-effectiveness of the transportation of persons, including both municipal and private transport providers;
- Contributing to enhancing the attractiveness and quality of the urban environment and urban design

- Elaborate a general and specific set of indicators, regarding the mobility, socio-economic and urban development of the City, which will be monitored in evaluating the effectiveness of the Plan associated to established objectives;
- Developing non-motorised modes and intermodal transport networks;
- Propose recommendations on Private Sector Participation (PSP) opportunities in the provision of urban transport services in Galati Municipality.





Rehabilitation and extension of the drinking water and wastewater infrastructure in Dolj County in Romania

The project represents a significant stage for the general rehabilitation and extension of the drinking and wastewater infrastructure in Dolj County and, with this new technical assistance contract for the project implementation and supervision of works with European Union investments in 2007-2013 programming period, Eptisa provides support for project

management for the following areas: organizational structure, support for the regional operator's team in order to respect the financing contract and ensures technical supervision during the implementation of the works contracts of the water networks in the localities of Ciuperceii Vechi, Călărași, Bechet, Dăbuleni Segarcea, Băilești, Filiași and Poiana Mare.



Engineering services for the construction of a new factory for Grupo Antolín in Sibiu, Romania

Eptisa provides engineering services to the subsidiary in Romania of Grupo Antolín (the Spanish manufacturer dedicated to the design, development, production and delivery of vehicle interior components for the automotive industry) as part of a project to build up a new factory in Sibiu, in the Western Industrial Park covering 12,500 m². The factory is composed of production hall, warehouse, offices, platforms, interior roads and relevant utilities.

The services provided by the Eptisa has been the design of the factory, including preliminary studies, preliminary design, and detailed design; licenses processing & management, consisted of collection of administrative data and requirements of the utilities; support in obtaining permits and licenses; build-up the technical documentation files necessary for agreements & permits, as requested by different institutions & agencies from the municipality. And finally, the creation of "As-built" documentation: construction book, "as-built" layouts, materials homologation certificates, approvals, operation and maintenance manuals, equipments and systems guarantees, etc.



Supervision of construction of the sewerage system and wastewater treatment plant

BALKANS

2014 has undoubtedly been a very encouraging year for the consolidation of Eptisa's Regional Office in the Western Balkans

With a current backlog of around €34 million in inked contracts, and a business figure of roughly €19.5 million, 2014 has undoubtedly been a very encouraging year for the consolidation of Eptisa's Regional Office in the Western Balkans.

In addition to the 14 newly-signed contracts and addenda, covering a wide variety of technical disciplines (ranging from transport engineering to environmental infrastructure, and from energy efficiency to public administration reform services), the implementation of 8 projects was successfully finalised with notable results.

In 2015 we are commemorating the 10th anniversary of our Regional Office for Southeast Europe, established in Belgrade in March 2005. In these 10 years we inked a total of 116 contracts in all the 7 countries covered by our Regional Office. 116 assignments for the most important donors and active IFIs in the region. 116 projects implemented with a maximum enthusiasm and where we tried to give our best at all levels.



Construction and rehabilitation of water supply and sanitation infrastructure in several municipalities in the Republika Srpska

Eptisa have participated in very important assignments. We have covered all the possible subsectors in the consulting and engineering domain: transport infrastructure, environmental management, building and architecture, public administration reform, development of information systems, integrated water resources management, support to the implementation of grant schemes in social sectors, energy efficiency and renewable energy, and a large etcetera. It is difficult to highlight the most important projects where we have made a contribution, but, certainly, some of them represent very essential references in our track record, such as:

- The Municipal Infrastructure Programme in Serbia, financed by the European Union;
- The Technical Assistance to the Regional Housing Programme, managed by the Council of Europe Development Bank;
- The Supervision During the Construction Works of the Road E80 in Serbia, financed by the World Bank;
- The Technical Assistance for the Management of the IPA/Structural Funds Operational Programme in Croatia, funded by the European Union;
- The Supervision for the Water and Sanitation Project in Republika Srpska (Bosnia and Herzegovina), financed by the European Investment Bank;
- The Supervision of the Railways Corridor VIII in the Republic of Macedonia, funded by the European Bank for Reconstruction and Development;
- The Support to the Ministry of Environment in Montenegro, managed by the European Agency for Reconstruction;
- The Technical Assistance for the Implementation of Antidiscrimination Policies in Serbia, EU-funded; or
- The Supervision of Secondary and Local Roads in Albania, cofinanced by the EBRD, the EIB and the KfW.

Being fully aware of how essential is to be as close as possible to our clients and partners, in 2012 and 2013 we set up additional subsidiary companies in Croatia, Macedonia and Bosnia and Herzegovina. In 2014 Eptisa continued its expansion in the region with the opening of an office in Montenegro. Now, and completing

the network of country offices, we are working in the set-up of Eptisa Illyria, covering the territories of Albania and Kosovo. The new companies and branches coordinate the commercial efforts and undertake the project management and quality control for all the assignments implemented by Eptisa in these markets.

We can proudly say that we are nowadays the working place for 50 permanent and very qualified employees and for 300 local and international consultants, representing more than 30 different nationalities. This, our people, is certainly our biggest asset. Many challenges had to be faced together.

In this our 10th anniversary in the region, our thoughts turn gratefully to those who have made our progress possible. It is in this spirit that we say thanks a million to our partners, clients, experts, beneficiaries and to any other individual or institution that made feasible our growth and development. We can only look forward to at least another ten years of such a positive and valuable co-operation.

In 2015 we are commemorating the 10th anniversary of our Regional Office for Southeast Europe, established in Belgrade in March 2005. In these 10 years we inked a total of 116 contracts in all the 7 countries

REPUBLIC OF ALBANIA

Eptisa is currently implementing four projects in Albania, in the fields of **transport and environmental infrastructure**.

During 2014, we continued with the implementation of the project "Supervision of Secondary and Local Roads", through which we are monitoring the upgrade of 1,500 km of local and secondary roads all over the country. Here, a strategically composed team of local and international engineers are responsible for the supervision of all the contracted civil works, including monitoring, inspection, and reporting supervision activities with direct support to the Albanian Development Fund (ADF), the implementer of all the project components.

Also during 2014 we were selected by the EBRD to implement an assignment for the provision of technical support to the Albanian Roads Authority during the procurement and construction of the Bypass Roads in Fier and Vlore. Thanks to this new contract, Eptisa will offer technical support for project implementation and contract management related to these road investments, will deliver on-the-job training to their Project Managers, and will assist in the preparation of future road investment projects.

In the field of **environmental infrastructure**, Eptisa advanced with the supervision services for the construction of the sewerage systems in Shkodra, in the framework of an EU-IPA initiative. The contract envisages the finalisation of the construction of a new sewerage network and a wastewater treatment plant in the industrial area of Shkodra, in the north-west of Albania.

During this year, we also continued with the implementation of the contract for the supervision of construction of and supplies for the sewerage system and Wastewater Treatment Plant in Velipoja Area - Phase III. Within this intervention a team of local and international engineers of Eptisa are providing 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. The team also supervises the extension of the Wastewater Treatment Plant, currently under construction, in order to treat a total flow of 465 m³/h.

In this our 10th anniversary in the region, our thoughts turn gratefully to those who have made our progress possible

BOSNIA AND HERZEGOVINA

In Bosnia and Herzegovina, we finalised the implementation of four important contracts. Support to the Implementation of the Birds and Habitats Directives, where we provided assistance in the transposition and implementation of the EU Directives on Birds and Habitats. Furthermore, we assisted the **environmental** authorities during the initial steps for the development of a NATURA 2000 network and its corresponding management plans.

In 2014 Eptisa also completed the implementation of a contract financed by the Global Environment Facility (GEF), aiming to strengthen the integrated management of water resources in the country, in accordance with the EU Water Framework Directive. More specifically, Eptisa provided technical assistance for the management of the Neretva and Trebisnjica river basins by developing decision support instruments and guidelines to achieve the maximum economic effects in respect to the operational rules and constrains of hydropower plants in various hydrological conditions.

Another assignment that was completed with remarkable results was the EU-funded project strengthening of Bosnia and Herzegovina's environmental institutions and Preparation for Pre-Accession Funds, aimed at strengthening the technical, administrative and programming capacities of all the institutions involved in the management of the country's natural resources. This will result in bringing Bosnia and Herzegovina closer to the EU environmental standards.

Finally, within the **social development** sector, Eptisa was involved in strengthening the role of the Civil Society Organisations, as part the EU-funded project for capacity building of government institutions to engage in policy dialogue with the civil society. In more detail, Eptisa supported the Governments of Bosnia and Herzegovina at a national and entity levels to increase the engagement of the civil society in the different reform processes related to the eventual accession of the country to the EU.

Nowadays Eptisa is also leading the implementation of 4 important contracts in Bosnia and Herzegovina.

Firstly, we are providing supervision services during the implementation of a European Investment Bank-funded programme aimed at the construction and **rehabilitation of water supply and sanitation infrastructure** in several municipalities in the Republika Srpska (one of the two entities of Bosnia and Herzegovina). Here, a team of engineers from Eptisa supervises the design, construction, testing and commissioning of a large number of environmental infrastructures. Eptisa acts as "the Engineer" and carries out its regular duties in accordance with FIDIC Conditions of Contract.

In the municipality of Capljina we are undertaking supervision services during the design, construction, testing and commissioning of a new water supply system. The project is financed by the EBRD.

Another important assignment under implementation is the "Capacity Building in the Water Sector", managed by the EU Delegation to Bosnia and Herzegovina. Our team of experts are supporting the transposition and implementation of water-related EU Directives and the enhancement of the water resources management in the Sava River basin, enabling the designated

authorities to prepare a full River Basin Management Plan in line with the local legislation, with the EU Acquis on environment, and with several relevant international conventions and treaties.

In the field of **transport infrastructure**, we continue with the supervision of the design and construction works of 36.6 new kilometres of the motorway Banja Luka – Doboj, a section part of the Trans-European Corridor V. In this assignment we supervise the works on the section Prnjavor – Doboj and on several local and access roads. This road will play a key role in providing a financial boost to the development of Bosnia and Herzegovina's economy and will also have a significant impact on the entire region.

REPUBLIC OF CROATIA

During 2014, two important contracts were awarded in Croatia. The first project, within the **water infrastructure** sector, is entitled "Supervision of Construction of the Sewerage System and Wastewater Treatment Plant of Čakovec". The upgraded sewerage and treatment facilities, with a capacity of 75,000 Population Equivalent and tertiary treatment, will serve the population of Čakovec, both the county seat and the largest city of Međimurje County, leading to a more efficient protection of the water resources in the area.

At the same time, Eptisa signed a new contract and will act as a subcontractor during the implementation of the project of supervision services for the Implementation of the Project for Improvement of the Water Utilities Infrastructure - Agglomeration Zupanja.

Our subsidiary in Croatia, Eptisa Adria D.O.O, also continued with the implementation of other important assignments. In the framework of the Sisak Wastewater Programme – Supervision of Design and Construction, we undertake the supervision

during the construction works for the sewerage systems and for the new wastewater treatment plant (60,000 P.E.) in Sisak, all executed under FIDIC Red Book and Yellow Book Conditions of Contract, as well as under the national regulations.

We also advanced with the implementation of the project of works supervision for the construction of the **Waste Management Centre** Mariščina in Primorsko-Goranska County, through which we closely monitor the construction of a new state-of-the-art regional solid waste management centre.

Lastly, within the Environmental Infrastructure Sector, Eptisa is currently acting in the capacity of the Engineer following FIDIC Conditions of Contract within the project "Supervision of Works for the Construction of the Water Supply and Sewerage System and Wastewater Treatment Plant in Slavonski Brod". The new facility will have a capacity of 80,000 P.E., contributing to the overall protection of the water resources in this municipality, the seventh largest in the country.

In the field of **environmental management**, we successfully completed the project "Strengthening Capacities for Strategic Environmental Assessment at Regional and Local Level", where we provided support to the Croatian Ministry of Environment and Nature Protection during the transposition and implementation of the EU Acquis on Strategic Environmental Assessment at regional and local levels.

During 2014 we also advanced with the implementation of the "Technical Assistance for the Management of the IPA/Structural Funds Operational Programme". Here, Eptisa provides support in managing and implementing the existing IPA Environment Operational Programme (EOP) and in the preparation and start of implementation of a new EOP, this time to be financed with Structural Funds.



Kosovo*

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KOSOVO*

During 2014, Eptisa has participated in several important projects in Kosovo. First of all, we finalised the implementation of an EU-funded contract in the field of **integrated water resources management**, the support to the Ministry of Environment and Spatial Planning in water management and monitoring of water resources. Through this program, Eptisa assisted the Kosovan authorities in the prioritisation and planning activities aimed at improving the protection of water resources and the water management practises in Kosovo, all in accordance with the EU environmental Acquis. The intervention led to a unified Water Strategy at a national level.

We also provided a wide range of engineering services for the development of **socio-economic infrastructure** in several municipalities, as part of the project "Municipal Social and

Support to the Ministry of Environment and Spatial Planning in Water Management and in the Monitoring of Water Resources in Kosovo*

The project to support to the Ministry of Environment and Spatial Planning (MESPP) in water management and in the monitoring of water resources was funded by the European Union's Instrument for Pre-Accession Assistance (IPA) with a budget of roughly € 1.2 million. The contract, which was successfully implemented from September 2012 to December 2014, aimed to provide technical support to its main beneficiary, the Water Department at the Ministry of Environment and Spatial Planning, for a further approximation to the standards underlined in the EU Water Framework Directive (WFD).

For 28 months, a team of experts from Eptisa provided technical assistance in order to enhance the capacity of the Kosovan authorities in the water sector. More specifically, the team gave advice in the planning and implementation of improvements in the fields of water resources protection and integrated water management. The intervention led to a unified Water Strategy at a Kosovan level. The assignment also aimed to effectively integrate a Water Action and Investment Plan into the evolving expenditure frameworks and management structures presiding over the sector.

The following project tasks were implemented and related outputs were prepared and delivered to the main project beneficiary within the expected deadlines:

1. Support to the Ministry of Environment in developing the Kosovo Water Strategy 2015–2034.
2. Development of the Water Action and Investment Plan.
3. Further support to the Water Resources Management Information Systems.
4. Training and capacity building activities.
5. Promoting private sector participation
6. Support to the Water Department during the preparation of River Basin Management Plans.

Economic Infrastructure". Eptisa is involved at all stages of project implementation, developing detailed designs and technical specifications and supervising the construction works until handover and final acceptance.

Finally, during 2014 we were awarded a new contract, financed by the IBRD/IDA, and aiming at providing capacity building activities in the field of energy to the staff of the Ministry of Environment and Spatial Planning, the Environmental Protection Agency, and the environmental inspectorates in Kosovo. Our experts will also offer technical assistance in the review process for Environmental Impact Assessments, in the approval of permits, and in the monitoring requirements for power plants and mines.

The main outputs of the Project were the Kosovo National Water Strategy and the accompanying Water Action and Investment Plan. Both strategic documents were presented in Pristina during a Donor Conference and in the "EU+" meeting at the European Union Office in Kosovo.

In addition, the Project's activities on the Water Resources Management and Water Quality Monitoring components comprised the following outputs:

- Report on monitoring of groundwater and surface water bodies.
- Roadmap for the development of WFD-compliant River Basin Management Plans.
- Updating the surface water quality data.
- Training in analyzing surface water quality data.
- Preparation of technical specifications for the rehabilitation of five water quality monitoring stations.



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FYR OF MACEDONIA*

During 2014, Eptisa was awarded an important contract in the **railways sector**: Supervision for Renewal of the Railway Section Bitola-Kremenica (Trans-European Railway Corridor X). This new project is located in the southern part of the Republic of Macedonia, between the municipalities of Bitola and Kremenica, near the border with Greece. The complete rehabilitation of this railway links along Corridor X will result in a substantial increase in the national railway capacity, leading to a better cohesion with the EU Member States and other neighbouring countries. During the reconstruction of the 17 km-long railway line, Eptisa will act as the Engineer in accordance with Red Book FIDIC Conditions of Contract.

Additionally, Eptisa continued with the implementation of the contract "Railway Corridor VIII - Consulting Services for Supervision and Project Implementation Unit Assistance". The Trans-European Corridor VIII is the infrastructure axis connecting the Adriatic with the Black Sea, through Italy, Albania, Macedonia, and Bulgaria. It spans over the South-eastern European area,

Supervision for renewal of the railway section Bitola-Kremenica (Trans-European Railway Corridor X) in the Republic of Macedonia*

The project supervision for renewal with reconstruction of the railway section Bitola-Kremenica (Trans-European Railway Corridor X) is located in the southern part of the Republic of Macedonia, near the border with Greece.

The complete rehabilitation of the railway links along Corridor X will result in a substantial increase in the national railway capacity, leading to a better cohesion with the EU Member States and other neighbouring countries. It will also facilitate a sustainable economic development of the transit areas, minimising the adverse effects of road transport in the environment and improving the overall transport safety standards.

During the reconstruction of the 17 km-long railway line, Eptisa will act as the Engineer in accordance with Red Book FIDIC Conditions of Contract. The assignment has a budget of € 900,000 and is financed under Component III of the IPA programme.

The civil works, which will extend during the next 38 months and that will be supervised by a team of engineers from Eptisa Macedonia and Romania, 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 Zaveni and a halt in Kravari, including new track alignments (sidings).



where rail infrastructure is rather weak and some crucial links are still missing, while the existing ones are patently insufficient. Here Eptisa is acting in the capacity of the Engineer during the reconstruction of the 30 km-long railway line between the towns of Kumanovo and Beljakovce. The assignment has a value of almost € 2.7 million and is financed by the EBRD.

Finally, during 2014 Eptisa successfully closed the project "Development of a National Water Tariff Study", funded by the EU Instrument for Pre-Accession Assistance and aimed at the elaboration of a national water tariff study by developing economic instruments for a balanced water price system and the management of financially sustainable water investment projects. Our team also developed economic instruments for an effective and affordable cost recovery in the water sector and formulated a water tariff methodology and a new structure of the water tariffs.

MONTENEGRO

During 2014 Eptisa finalised the implementation of the EU-funded "Preparation and Implementation of the National and Local **Waste Management Plans**", ensuring Montenegro's roadmap for the implementation of the EU legislation in the field of waste management. This project provided the beneficiaries with a new National Waste Strategy on which to base the subsequent National Waste Management Plan 2013 - 2018, supporting an enhanced effectiveness in controlling pollution from solid waste.

REPUBLIC OF SERBIA

During 2014, Eptisa signed a new contract in the Republic of Serbia, within the **socio-economic** and **public administration reform** sectors. The project support to the social inclusion of the most vulnerable groups, including Roma, through more diversified community-based social services, with an allocated budget of € 1,160,000 and recently awarded to a consortium led by Eptisa, will promote a greater social inclusion of vulnerable groups, including Roma, by broadening and strengthening community-based responses tailored to their specific needs. The overall objective of the assignment is to provide assistance to the EU Delegation to the Republic of Serbia and to the Ministry of Labour, Employment and Social Protection in the implementation of social inclusion policies and in the development of a wide range of community-based social services for vulnerable and disadvantaged groups, including Roma.

Also in this sector, we advanced with the implementation of the EU-funded Strengthening Media Freedom project. A team of experts from Eptisa provides support to the efforts of the Serbian Government in the harmonisation of the legal framework governing the media sector and in the enhancement of the competences of journalists and media professionals. We provide technical assistance to the Ministry of Culture and Information, to the relevant regulatory bodies, to journalists' associations and

media professionals, and to judges and prosecutors in further developing media-related legislation and in the implementation of the Media Strategy and Action Plan.

At the same time, Eptisa continued working in the "Technical Assistance to the Serbian Authorities for the Management of Pre-accession Assistance", an intervention aimed at the provision of support to the Serbian administration to effectively manage pre-accession assistance in order to speed up the preparation for EU membership.

We are currently also executing the "Technical Assistance for the Implementation of a Grant Scheme to Support the Closure of the Remaining Collective Centres". The overall objective of this intervention is to provide assistance to the EU Delegation to the Republic of Serbia and to the Commissariat for Refugees and Migration in the implementation and monitoring of a € 14.2 million grant scheme that aims to find adequate living conditions and to integrate forced migrants who choose to stay in Serbia, while also supporting the sustainable return of those wishing to go back to Kosovo.

In addition to this, we finalised the implementation of the contract "Implementation of Anti-discrimination Policies". Here, Eptisa led



Wastewater treatment plant within the Thermal Power Plant Nikola Tesla

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an initiative to support the efforts of the Serbian Government in combating discrimination and in promoting tolerance, equality, and diversity. Our team worked in the protection of human and minority rights and in the promotion of equality and non-discrimination standards.

In the **transport** sector, Eptisa continued with the supervision during the construction of two major tunnels. Following FIDIC Condition of Contract, a joint venture led by Eptisa supervises the construction of the tunnels Predejane and Manajle, both located on the highway E-75. This highway is the most important traffic corridor in the Serbian transport network, connecting the most significant social and economic centres of the Northern and Southern parts of the country.

Furthermore, we moved ahead with the implementation of the project "Supervision of Construction Works on the Highway E-80, Prosek - Dimitrovgrad", for which we signed a €5.2 million extension. A team of local and international engineers of Eptisa are supervising the works performed by several international contractors in nine different subsections in the section Dimitrovgrad - Prosek, all the way to the border with Bulgaria. Being part of the Trans-European Corridor X, this road will become a crucial element in the main route from Central Europe to Turkey. Its construction will boost the economic development in the region while decreasing the number of casualties due to traffic accidents. It consists of 60 kilometres and includes 43 bridges and viaducts, 4 tunnels, and 3 interchanges.

In the field of **building** and within the contract "Support to the Ministry of Science for the Implementation of the Research and Development (R&D) Facility", Eptisa is the main technical advisor in the implementation of the R&D Infrastructure Investment Initiative and in the tendering and construction of all the related buildings and facilities. Within this project, a multidisciplinary team from Eptisa provides architectural, engineering and management support services for the design and construction of several buildings and a wide range of research-related infrastructure.

In the **water and environment area**, Eptisa is the leading company in the implementation of the "Municipal Infrastructure Support Programme", covering its Phases 1, 2, and 3. All together, the three phases of this Programme represent a technical assistance of €23 million, aiming to assist the country in the improvement of its municipal infrastructure services, in the enhancement of the human capacities of its local governments, and in the development of its people's living standards. While the successful implementation of the first phase is already behind us, our activities continue now with the realisation of the second and third phases, where we are providing technical support in the preparation and prioritisation of municipal and socio-economic infrastructure projects. We are also undertaking a number of feasibility studies, providing supervision services for several construction projects, and offering advice and support for the improvement of the technical and financial management of several public utility companies.

Finally, in the field of **waste management**, Eptisa advanced with the preparation of the feasibility study, the detailed design, and the tender documents for the construction of the first Hazardous Waste Management Facility in the country.

In the **energy** sector, Eptisa is supervising the construction and commissioning of a new wastewater treatment plant within the Thermal Power Plant Nikola Tesla, which is considered the largest of its kind in Serbia, covering almost half of the national demand of electricity.

Last but not least, we continued providing engineering services within the EU-funded "Supervision of Works for the Vranje and Leskovac Substations and Related Transmission Lines".

During 2014 Eptisa continued with the implementation of four regional contracts.

The first one, funded by EBRD and KfW is the **Municipal Infrastructure Development Fund (MIDF)**, an initiative aimed at providing finance to municipalities and utility companies for the realisation of infrastructure-related investments in the Western Balkans.

The second contract is the European Investment Bank-funded **Framework Contracts for Consultancy Services in the Transport Sector** Lots 1, 2 and 4. The aforementioned lots are related to infrastructure projects in the road, railways and airport sectors. The sub-assignments 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's countries of operation.

Additionally, Eptisa continued providing technical assistance to Bosnia and Herzegovina, Croatia, Montenegro and Serbia during the implementation of the overall **Regional Housing Programme**, funded by the European Commission and managed by the Council of Europe Development Bank. Within this initiative, Eptisa gives technical support in the provision of durable housing solutions for refugees and internally displaced persons (IDPs) after the armed conflicts in the Western Balkans during the nineties. More specifically, our team of experts provided substantial assistance to the four beneficiary countries in finalising the preparation of the specific Country Housing Projects within the joint Regional Housing Programme, and in their subsequent implementation in order to assure sustainable housing solutions in line with the best international practice.

Another regional project under implementation aims to promote the execution of **EU programmes on energy efficiency** in a group of EU Member States and in the Candidate Countries. Namely, we are part of an international consortium that is implementing the project "Consultancy Services in Support of EU Programmes on Energy Efficiency". The assignment targets energy efficiency projects implemented by Small and Medium Enterprises and Energy Service Companies in Croatia, Hungary, Poland, Romania, Slovenia, and the Slovak Republic. During the next years, we will assist a number of financial intermediaries in the beneficiary countries with the selection, preparation, processing, and verification of a wide variety of energy efficiency projects eligible for EU grant financing.



The Municipal Infrastructure Support Programme – Phases I, II, III, Republic of Serbia

The Municipal Infrastructure Support Programme (MISP), financed by the European Union, assists municipalities in the Republic of Serbia to identify priority municipal infrastructure projects, prepare technical documentation, and implement selected infrastructure investments. MISP is primarily focused on supporting environmental and economic projects, including water supply, wastewater treatment, solid waste management, industrial zones, and tourist sites.

The main objectives of MISP are to:

- Assist in developing infrastructure-related policies and coordination mechanisms;
- Develop project pipelines and to prepare technical documentation (feasibility studies);
- Improve municipal capacities to manage projects and to absorb EU funding;
- Support the implementation and sustainability of the highest priority projects.

The European Union has provided support to the development of local and inter-municipal infrastructure through three different phases of MISP. From its very first phase, the technical assistance of the Programme was awarded to a consortium led by Eptisa through a service contract of €4 million. Thanks to the successful project implementation, the contract for the second phase was awarded in 2010 with an additional €13.2 million for technical assistance. The third phase started in 2011 and has a value of €5.8 million.

In total, €23 million of EU funding were invested in technical support, and over €70 million were allocated for the construction of new infrastructure.

Feasibility studies were completed for 15 projects, with another 2 being now finalized. The results of the Programme also include 12 tender dossiers and the provision of monitoring/supervision services for 16 infrastructure projects already realised or currently under construction. More than 2 million people in over 40

municipalities will, directly or indirectly, benefit from this new infrastructure.

A comprehensive capacity building plan was also implemented. From 2008, more than 70 events were organized, including trainings, workshops, and study tours. In addition, the Financial and Operational Performance Improvement Plan (FOPIP) to support public utility companies who are to take over and manage the new assets, was delivered. Substantial support was also provided to national authorities in preparing a draft Strategy for Restructuring Public Utility Companies. This process is of key importance for achieving a modernised and efficient operation of public utility companies.

In close cooperation with the Standing Conference of Towns and Municipalities, the SLAP Information System was developed, currently containing information on more than 80 priority local and regional projects.

Last but not least, during 2013/2014, support was also provided to national and local administrations in finalising and implementing the Methodology for Prioritisation and Selection of Infrastructure Projects.





Integrated solid waste management system project, City of Grodno

CAUCASUS

In 2014 Eptisa successfully completed the implementation of the **regional project** for the Programme for the Prevention, Preparedness and Response to Man-made and Natural Disasters in the ENPI East Region (PPRD East), providing technical assistance to contribute to the capacity building of the countries. The Programme focused on natural and man-made disasters with special emphasis on the identified as priority in the ENPI East region, formed by Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine, such as seismic risk, hydro-geological events, forest and ground fires, urban/ industrial disasters, road accidents and disasters caused by extreme meteorological conditions.

AZERBAIJAN



Plan for Sustainable Urban Development in the Baku's region

In 2014 we successfully finished the technical assistance for the Strategic Plan for a Sustainable Urban Development Plan of the Region of Baku. The overall objective is to support authorities in the development of the Strategic Environmental Assessment (SEA)

of the Greater Baku Regional Development Plan, which includes environmental considerations and evaluates the significant effects (risks, cumulative long term impacts and opportunities) related to the implementation of the Greater Baku Regional Development Plan (GBRDP). The Study area in this assignment covers roughly 280,000 hectares including a triangular strip separating Baku and Sumgayit cities (including Xirdalan city).

The specific objectives of this SEA are to: (a) recommend policies, institutional and governance arrangements conditioned on the premise of sustainable urban development of the Baku's region; (b) provide overall direction and inputs to the GBRDP formulation (including LED strategy and action plan) and other sectoral projects and plans; and (c) ensure stakeholders and wider public participation in the dialogue on the urban development planning through a series of consultations. In the third phase of implementation are developed tools to integrate environmental aspects of sustainability in regional planning according to international standards, best practices and processes of impact assessment and urban development monitoring.

BELARUS

In 2014 the first part of the contract was successfully completed, which consisted of the design and works supervision for the construction of a mechanical waste separation facility in the city of Grodno, financed by the World Bank. And subsequently, Eptisa started working in the second part of the contract that is part of the National Plan for the integrated **waste management** and reuse of recyclable materials, financed by international multilateral funds.

The main objective of this assignment is to provide technical support to the client for the development and implementation of the proposed municipal solid waste mechanical materials recovery facility as an integrated part of the City of Grodno's overall waste management system and its recycling program. The services provided by Eptisa in the first part of the contract included: preparation of conceptual design, business plan, technical specifications and bidding documents. In the second part of the contract Eptisa undertakes technical evaluation of tender proposals for civil works and equipment supply, and supervision of construction works of the waste separation facility.



Feasibility studies for the selection of viable irrigation schemes for rehabilitation, Georgia

In 2014 we consolidated our project portfolio in Georgia with three new contract awards that joined the projects in development

GEORGIA

The European Investment Bank awarded Eptisa a new project in the **water infrastructure** sector to provide technical assistance for the non-revenue water investigation in six towns of Georgia. The overall objective of the technical assistance is to support the United Water Supply Company of Georgia to prepare and implement the water sector investment schemes and improve the performance of the water supply and wastewater infrastructure assets within the country.

Also in the water sector and within the Urban Services Improvement Investment Program financed by the Asiatic Development Bank, Eptisa assists the Georgia United Water Supply Company to supervise the construction of water supply and sanitation networks in five cities of Georgia.

This is one of the biggest and complex four years project in Georgia, aimed to contribute to guarantee the access to drinking water network during 24 hours in the touristic centres of Georgia and to reduce the maximum the pollution of the environment as well as improve health conditions.

In 2014 Eptisa completed the project for the preparation of feasibility studies for the selection of viable irrigation schemes for rehabilitation in Georgia, financed by the International Fund of Agricultural Development (IFAD) and implemented by the Ministry of Agriculture of Georgia. The Government of Georgia considered

as top priority the rehabilitation of the most deteriorated to ensure the water supply to the irrigation areas, because it is a constraint to the development of rural infrastructure and therefore, the development of the economy.

Millennium Challenge Corporation (MCC), the independent United States foreign aid agency, awarded Eptisa a consultancy contract for technical support to MCC in Georgia for the rehabilitation of school **buildings**.

MCC funding in Georgia is targeted to improve the quality of education, by improving the conditions of facilities and the physical environment of schools, which directly results in the comfort of students and their educational achievement. The *Improved Learning Environment Infrastructure Activity (ILEIA)* program will involve the full internal and external rehabilitation of selected school facilities, utility upgrades, and provision of laboratories.

In the **socio-economic development** sector, we continue working in the project financed by the World Bank for the works supervision for the rehabilitation and refurbishment of touristic infrastructures (buildings, monuments, etc.) in the region of Imereti. In October 2014 an extension of the consultancy services between the Municipal Development Fund of Georgia and Eptisa until May 2016 was signed.



Technical Assistance for the Non-Revenue Water Investigation in six towns of Georgia

The overall objective of the technical assistance financed by the European Investment Bank is to support the United Water Supply Company of Georgia (UWSCG) to prepare and implement the water sector investment schemes and improve the performance of the water supply, as well as wastewater infrastructure assets within Georgia.

Eptisa is conducting comprehensive feasibility studies on the actions to undertake for the control of losses and the Priority Investment Program in order to improve the network in six towns selected: Chiatura, Khashuri, Ozurgeti, Poti, Sagarejo, Zestaponi. It will also provide technical support to improve the capacity of the UWSCG and train the existing staffs in non-revenue water reduction techniques and transfer of know-how.

- Preparing non-revenue water focused feasibility studies for six selected towns: six non-revenue water focused feasibility studies; Priority Investment Programme for network upgrades in six towns; draft procurement plan for prioritized investments; Long Term Investment Programme for network upgrades in six towns; completion of draft Terms of Reference for design

documentation of priority components (detail designs, tender documentation) for six towns (for implementation under FIDIC 1999 Red Book or FIDIC 1999 Yellow Book as appropriate)

- Training the existing staffs in non-revenue water reduction techniques, transfer of know-how; methodology and a strategy for the investigation of non-revenue water in UWSCG such that the results of the technical assistance can be repeated in all towns served by the beneficiary; Term of Reference template for design documentation of priority components (detail designs, tender documentation)
- Outline the procurement strategy plan for projects' preparation and implementation in compliance with the EIB Guide to procurement; Training UWSCG staff.

Consultancy services for the developing rehabilitation design packages and construction supervision in public schools of Georgia



The Millennium Challenge Corporation (MCC), a bilateral United States foreign aid agency, awarded Eptisa a new consultancy contract in Georgia to provide technical support to MCC during the construction and rehabilitation of schools and related facilities in ten regions of Georgia: Adjara, Guria, Imereti, Kakheti, KvermoKartli, Mtskheta-Mtianeti, Racha-Lechkhumi, Samegrelo-ZemoSvaneti, Samtskhe-Javakheti and ShidaQartli.

MCC funding in Georgia has the overall objective of improve the quality of education by improving the conditions of the facilities and the physical environment of schools, which directly results in the comfort of students and their educational achievement. The Improved Learning Environment Infrastructure Activity (ILEIA) program will involve the full internal and external rehabilitation of selected school facilities, utility upgrades, and provision of laboratories.

Eptisa will be responsible for the project assessment and planning, due diligence on behalf of MCA-Georgia, field studies, feasibility and pre-design studies, environment, social, resettlement studies and plans, detailed design and preparation of bidding documents, construction supervision, and operation and maintenance, training, and miscellaneous services for works associated with schools infrastructure projects, including with water and sanitation and other ancillary facilities.

Urban Services Improvement Investment program in Georgia

A consortium led by Eptisa assists the regional company United Water Supply Company of Georgia (UWSCG) to supervise and control the construction of all civil works in the towns of Anaklia, Mestia, Kutaisi, Poti and Ureki.

Throughout the year in the framework of the project were implemented the construction and rehabilitation works of water intakes and transmissions, water treatment plants and reservoirs, pumping stations, head works, water supply and sewerage networks and wastewater treatment plants.

The services provided are the technical supervision of construction, quality control, contracts management, cost control, project planning, environmental protection and public awareness; design review of water treatment plants and reservoirs; technical assessment of risks and advise on risk minimization and mitigation; on-the-job training to counterpart UWSCG engineers, and assistance for commissioning and handing over of works to client.



Imereti Regional Development project in Georgia

Eptisa continued working on the Regional Development Project in the Imereti region, providing supervision services for the construction and rehabilitation of touristic and recreational infrastructure in the region. In October 2014 an extension of the consultancy services between the Municipal Development Fund of Georgia and Eptisa was signed to carry out works supervision until May 2016.

Throughout 2014 Eptisa provided the following services: inspection of the works; review, adapt and refine of the communication and supervision management procedures; monitoring of all the financial disbursements; control of the materials, equipment and workmanship, according to Conditions of Contract for Works and international standards; proper recording of the progress of the works and orderly planning of the civil works; preparation of progress, technical and contractual reports.



UKRAINE

In the **environment** sector, we are working for the Ministry of Ecology and Natural Resources in the implementation of the **Sector Budget Support Program (SBS)**. We are providing assistance during the harmonization process of the Ukrainian legislation with the respective EU acquis and promoting the participation of the civil society in the issues related to environment.

In 2014 we signed an extension of the contract, requested by the Ministry of Ecology and Natural Resources of Ukraine, to provide assistance in preparation of amended National Environmental Strategy and National Environmental Action Plan for 2016-2020 based on assessment of its implementation in 2011-2015, as well as for proper public involvement into this process, also taking into account the EU-Ukraine Association Agreement implementation.



Sector Budget Support Program

The services provided by Eptisa included the capacity building to plan, implement and supervise the Sector Budget Support Program (SBS) and the National Environmental Action Plan (NEAP), according to the priorities of the National Environmental Strategy (NES). The technical assistance will also cover the coordination and dialogue with other civil society stakeholders (NGO) and donors in the environment sector, in order to achieve a successful implementation of the SBS Program.

The achievements of this project have been the following:

- Approval and launch of implementation of the Strategy and the National Environmental Action Plan paved the way for signature and implementation of the Agreement between the Government of Ukraine and EU on allocation of € 35 million to finance the Sector Budget Support Program (SBS). Implementation of the SBS Program was completed in 2013, and based on its results Ukraine had received from EU 70% of the maximal amount.
- Ecological Strategy for Approximation of Ukraine's Legislation towards EU Requirements was developed and presented by the Minister of Ecology and Natural Resources of Ukraine in September 2014.
- The project supported the process of development of the Public assessment of national environmental policy implementation reports by environmental NGOs for 2011 and 2012. Also a large awareness raising campaign regarding the implementation of the EU environmental directives, importance of protected areas etc. were conducted during 2012-2014. In total more than 2500 participants (including representatives from 75 civil society organizations) attended more than 60 workshops and round tables.
- The project prepared the report "Assessment of the implementation of the Strategy of Ukraine's State Environmental Policy for the Period until 2020 and National Environmental Action Plan (NEAP) for 2011-2015", covering the period 2011-2013.

Programme for the Prevention, Preparedness and Response to man-made and natural Disasters (PPRD East) in the ENPI East Region

In 2014 Eptisa successfully completed the implementation of the Programme for the Prevention, Preparedness and Response to Man-made and Natural Disasters (PPRD East).

The Programme focused on natural and man-made disasters with special emphasis on the identified as priority in the ENPI East region, formed by Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine, such as seismic risk, hydro-geological events, forest and ground fires, urban/industrial disasters, road accidents and disasters caused by extreme meteorological conditions.

The overall objective of the project was to contribute to the peace, stability, security, and prosperity of the Eastern Partner Countries, and to protect the environment, the population, the cultural heritage, the resources, and the infrastructure of the region by strengthening the countries' resilience, preparedness, and response to man-made and natural disasters.

During its 45 months of implementation, the PPRD East Programme has achieved all four planned results, utilizing the expertise available in the European Union and in the region, organising the working meetings, seminars, round tables, trainings, workshops, conferences and study tours, undertaking the short term technical assistance missions, carrying out surveys, analyses and assessments, developing the hard copy, electronic and video promotional materials and facilitating contacts between the stakeholders in Partner Countries with potential cooperation partners in the EU member states and the international organisations.

In total, 85 events have been organised with 1,855 participants, out of which 950 are representatives of key beneficiaries, i.e. civil protection/disaster management authorities from the beneficiary countries. PPRD East Programme activities have been organised in 6 Partner Countries and 10 Member States: Belgium, Czech Republic, Estonia, Italy, Netherlands, Poland, Romania, Slovakia, Spain and United Kingdom.

Results:

1. Based on the Risk Assessment and Mapping Guidelines for Disaster Management, a Risk/ Hazard Assessment Policy for the ENPI Eastern Region has been developed.
2. The Electronic Regional Risk Atlas is designed and developed as an INSPIRE compliant multi level geo-portal allowing either to browse national and regional static disaster risk maps or to perform dynamic disaster risk analysis and reporting.
3. Study on the regional provision of assistance during disasters and host-nation support (HNS) was developed.
4. 82 experts participated in SEVESO Directives capacity building programme.
5. Regional Communication Strategy has been developed.
6. The Family Guide for Emergency Preparedness and Response, the interactive Fire Safety poster for schoolchildren and the Fire Safety Public Social Advertising Video have been developed as an information package utilized for Information and Public Awareness Raising Campaigns conducted in all 6 Partner Countries.
7. EU Civil Protection Mechanism Information Days were conducted in all 6 Partner Countries with in total 243 participants.
8. Study tour to Emergency Response Coordination Centre has been organized.
9. The electronic Civil Protection Operational Guidebook was developed, a document designed for a facile and rapid use when planning a disaster response operation or during deployment, containing relevant and accurate information on Partner Countries profiles, as well as on the European Union Civil Protection Mechanism as potential partner of practical cooperation and source of good practices for the Region.



TURKEY

In 2014, Eptisa has consolidated as the benchmark consultancy and engineering for any company that wants to develop business or invest in Turkey. From the offices in Ankara and Istanbul and with a team of 90 professionals, Eptisa is executing seven projects in the country and other four projects in the nearby region of Central Asia.

In the **transport** sector, we are working in the Marmaray project, aimed to connect the railway lines between the European and the Asian side in Istanbul through an undersea tunnel in the Bosphorus Strait, which will allow the transit of high-speed, commuter and freight trains between the two continents. The new railway system will be approximately 76 km long. Eptisa, in consortium with the Turkish company Prota, has carried out the detailed design, as well as the design of the stations and associated structures in both European and Asian side of the Gebze-Haydarpaşa and Sirkeci-Halkali line. In 2014, we also executed the auscultation of the section between Pendik – Gebze, within the railway contract.

In the **water** sector we continue working in the construction project for the Ceyhan waste water and storm water treatment plant. Eptisa carries out the project management and construction supervision services under FIDIC Conditions of Contract, and provides technical assistance and capacity building services.

Eptisa is supporting Turkey to become fully ready to implement **Strategic Environmental Assessment (SEA)**, including all relevant public institutions and other stakeholders and ensure the effective implementation of By-law on SEA in Turkey. This project mainly covers intense training programmes, seminars, and study tours workshops for different target groups such as Ministry of

Environment and Urbanization staff, component authorities, NGOs, universities and chambers, and the implementation of four pilot SEA projects on different sectors. The overall objective is to provide a high level of protection of the environment and to contribute to the integration of environmental considerations into the State plans and programs.

In the **social development** sector, the Ministry of National Education of Turkey has awarded Eptisa a new technical assistance contract to provide tools to the Government for students to learn about the European Union: its common values, fundamental rights and policies. This project is funded by EU IPA and National Contribution funds.



In 2014, Eptisa has consolidated as the benchmark consultancy and engineering for any company that wants to develop business or invest in Turkey



Marmaray Project: Gebze-Haydarpaşa Line, Sirkeci-Halkali In Istanbul, Turkey

The objective of the Marmaray project is to connect the railway lines between the European and the Asian side in Istanbul through an undersea tunnel in the Bosphorus Strait (currently in service), which will allow the transit of high-speed, commuter and freight trains between the two continents.

Eptisa, in consortium, has carried out the detailed design, which includes the layout, earthworks and drainage works, geotechnical, retaining wall, enclosure, bridges, overpasses, tunnels and other structures, track superstructure, noise and vibration study, electrical substations, stations (architectural, structural, MEP, acoustic, fire safety and protection and landscape), depots and railway yards and their railway equipment, as well as technical specifications for the manufacturing, installation and construction of all systems and structures.

The new railway system will be approximately 76 km long. The railway corridor runs along the length of the coast of the Sea of Marmara, between the towns of Kazlıçeşme and Halkali in the European side of Istanbul, and between the towns of Ibrahimaga and Gebze in the Asian side. The project will upgrade the existing railway corridor and adapt it to accommodate two tracks for internal Istanbul traffic (Commuter Rail) plus a third line on which interurban traffic will run (Intercity). Furthermore, the railway corridor has to be suitable for the movement of goods both on the dual track (CR) and on the two-way single track (IC). The maximum capacity at peak-hours should be about 75,000 passengers per hour per travel, the loading capacity for freight trains will be around 25 tonnes and the maximum operational speed will be 100 km/h with 104 min. of travel time between Gebze and Halkali (currently is about 185 minutes).

The main structures and systems are: 37 stations (20 underground stations, 12 surface stations and 5 special stations), 197 structures, an operations control centre, 5 maintenance facilities and railway yards and 7 electrical substations (one provisional).

Furthermore, Eptisa has executed the **auscultation of the section between Pendik – Gebze**. The control has been carried out during the execution of the work to control possible effects on adjacent buildings due to the excavations between embankments and walls.

To do this we implemented a topography network along the entire section and in different buildings, complemented by the installation of inclinometer pipes at different points to control the horizontal and in depth movements, and the installation of vibrating wire piezometers to know the interstitial pressures and the fluctuation of the groundwater level in the surrounding area. Additionally, it was undertaken the control of existing fissures in buildings by using digital comparators and inclinometers were installed to control possible variations in the inclination of the buildings annexed to the work.





Supervision of construction works for the Ceyhan waste water and stormwater project in Turkey

The services provided by Eptisa consist of the supervision of the first phase of the construction works for a waste water treatment plant and replacement of the existing collector, and the construction of a storm water drainage network for the existing area. As well as provision of technical assistance for administrative, financial and technical capacity building of Ceyhan Municipality and the modernisation of the water utility department to enable sound implementation of planned projects and improve financial and operational performance for water / wastewater services.

The Project is under the scope of the Environment Operational Programme - Instrument of Pre-Accession Assistance (IPA) for the Regional Development Component in Turkey and is co-financed by the EU and the Turkish Republic Government. It is aimed to support the improvements in storm water and waste water systems, in order to improve the conditions of health, environmental protection and municipal services.



Technical assistance services to increase the students awareness and knowledge on EU values in Turkey

The overall objective of the project, of which this contract is a part, is to enable Turkish society reach a high level of awareness and knowledge on values, fundamental rights and policies of the EU. And more specifically, this project is aimed at bringing knowledge and awareness to students (aged between 10 and 18) on EU values, fundamental rights and policies through effective educational measures.

This project, which is funded by EU IPA and National Contribution funds, has two components.

Component 1: Raising awareness of the students, teaching and non-teaching staff and Ministry of National Education's staff about the EU (values of the EU, fundamental rights and policies of the EU, the EU institutions and their functions, the accession process of Turkey and reforms regarding Turkey's EU accession process, gains and results of the EU membership) through various informative materials (handbooks, brochures, booklet, posters, Europe diary, games, puzzles, e-books, etc.) and a website of the project. This website will be used both for dissemination of the project activities as training material for the schools. There will be a monthly online newspaper portal linked to the website prepared by the schools.

But firstly, existing situation analysis will be carried out through surveys for the pupils to get a specific idea about their knowledge level on the EU in general. The surveys will be carried out at the provinces where an EU Information Centre exist (Adana, Ankara, Anta lya, Bursa, Denizli, Diyarbakır, Edirne, Erzurum, Eskişehir, Gaziantep, İstanbul, İzmir, Kayseri, Kocaeli, Konya, Mersin, Samsun, Sivas, Şanlıurfa, Trabzon, Van) and it will give a clue about the success of the project activities, as the post survey will be implemented shortly before the project will be finalised.

Component 2: Increasing capacity of students, Ministry of National Education's personnel and raising awareness of all related groups

about the EU. This component will focus on the organization of the different competitions for pupils to increase their knowledge about the EU through enabling active participation of the pupils. It will also be improved the institutional capacity of Ministry of National Education at local and central level and all structures involved through trainings and awareness raising activities. The competitions include quizzes, painting, short story and slogan competitions and it will firstly be organised at provincial, then regional and finally national level. The outputs of all the competitions will be exhibited with an organization in Ankara.

The trainings will be conducted for teachers, administrators, and Ministry of National Education staff at the central and local level on the various issues of the EU. Through the information trainings that will be organised in almost all the provinces of Turkey, a general awareness raising campaign will be organised. Furthermore, to raise a general awareness in public, international conferences will be organised; two spot films will be prepared and broadcasted on the national televisions to support awareness raising campaign.





ASIA

In 2014 our market has evolve towards Central Asia, India and Bangladesh. Our branch office in India has materialized its consolidation with contracting important projects and bright future expectations

In Central Asia we work recurrently in Uzbekistan, Kyrgyzstan and started an important project in Tajikistan





CENTRAL ASIA

UZBEKISTAN

In 2014 we consolidated the presence of Eptisa in Uzbekistan thanks to the new contract awarded by the Ministry of Finance, through the Republican **Road Fund**, to provide road safety consultancy services for the Second Central Asia Regional Economic Cooperation (CAREC) Road Investment Program financed by the Asian Development Bank.

In the **water** sector, we continue working in the technical assistance project to the Uzbek Communal Services Agency for the supervision and management of the subprojects included in the Water Supply and Sanitation Services Investment Program - Tranche 1, financed by the Asian Development Bank that will be implemented until August 2017. The project includes the reconstruction of water pipelines, wastewater facilities, sewerage networks and water supply systems in the cities of Andijan, Gijduvan, Kokand, Vabkent, Termez, Fergana, Margilan, Rishtan and Yangibazar and in the regions of Djizzak (Kuytash water intake), Khorazm and the Republic of Karakalpakstan.

KYRGYZSTAN

In 2014, the Ministry of **Transport** and Communications of Kyrgyzstan awarded us a new engineering and construction supervision services contract for the reconstruction and rehabilitation of a 120 km section in the Bishkek to Osh **road**. The Bishkek to Kara-Balta section, currently in very poor condition, poses serious traffic hazards as well as being an obstacle to trade and regional development. This contract, financed by the Asian Development Bank, is the 4th part of the CAREC Corridor 3 improvement project, which to date, has rehabilitated more than 80% of the Bishkek-Osh road.

The Issyk-Kul basin is internationally important for biodiversity and the oblast was declared as a Biosphere Reserve by the Kyrgyz Government in 1998, and the UNESCO in 2001 and the Asian Development Bank has classified the project as Environmental Assessment Category A. Eptisa, in consortium with the Kyrgyz companies RAM Engineering Associates LLC and OJCS Promproekt, is working in the project to prepare feasibility studies, detailed designs and tender documentation within the Issyk-Kul **Sustainable Development Project**.

This project adds to the technical assistance to improve the **water** supply and sanitation in the cities of Osh (capital city of the Osh region and second largest city of Kyrgyzstan) and Jalal-Abad (capital city of the Jalal-Abad region) and Bazar-Korgon located in the Southwest of the country on the border with Uzbekistan.



City of Osh

In the **information technologies** sector, Eptisa continues working in the contract to carry out the supply and installation of a Network Information System based on Geographical Information System (GIS) for the water supply system of the city of Bishkek. The aim of this project is to improve the accessibility, quality and efficiency of local infrastructure services provided to the population of Bishkek novostroikas in order to improve the living conditions and facilitate the socio-economic integration into the urban community.

TAJIKISTAN

The Asian Development Bank awarded Eptisa a new project to provide project preparatory technical assistance for the **water resources management** in the Pyanj River Basin. The objective is to design a stand-alone grant investment project for its subsequent financing by the Asian Development Bank in order to increase farm incomes in the Chubek Irrigation System area in Pyanj River basin.

Also in the Pyanj River Basin, we have been awarded our second project financed by the Asian Development Bank to support relevant authorities of Tajikistan in improving the resistance and reduce the vulnerability of irrigation and flood management infrastructure against the effects of climate change.

Technical assistance for the water resources management in Pyanj river basin in Tajikistan

The objective of this technical assistance contract is the identification and formulation of projects for their subsequent funding by the Asian Development Bank for the improvement of the irrigation systems and, thus, increasing farm incomes in the Chubek Irrigation System area in the Pyanj River Basin.

The investment project is aimed to increase the productivity and effectiveness of agricultural water use. To do this, technical capacities in water resources management of the organisms responsible are developed, the infrastructure are modernized, ensuring reliability against potential risks from climate change, and the income from the agriculture are improved thanks to a improvement in the project management.

Eptisa is evaluating the irrigation systems, agricultural production, water use, the vulnerability of the systems, making a diagnosis, as well as developing proposals for the modernization of infrastructure, and improve the capacity of key stakeholders,



including the Agency on Land Reclamation and Irrigation, the Ministry of Energy and Water Resources Management, and water user associations.

To do this, we are carrying out topographic and geotechnical surveys, and feasibility studies of the proposed improvements of irrigation system, proposing the terms of agreement between the different agents, agricultural planning and auditing the investment projects, as well as formulating different investment packages.



Feasibility studies and design consultancy services for the Issyk-Kul sustainable development project in the Kyrgyzstan

The project covers the cities of Balykchy, Cholpon-Ata and Karakol and it consists of preparing feasibility studies for the first regional sanitary landfill solution to serve the communities along the Northern shore of Issyk-Kul with possible transfer station locations in Balykchy and Karakol, and for sewerage, sewerage treatment and involving facilities with a planning horizon to 2035.

Eptisa also prepares engineering designs, calculations and drawings for the transfer stations and for the complete development of the sanitary landfill establishment with an initial operating capacity for

10 years (total volume about 1,000,000 m³), to have provisions for fencing, internal roads, drainage, landfill cells, administration and maintenance facilities, parking areas, guard house, weighbridge and truck-wash, leachate treatment, etc.

Furthermore the consortium will prepare the detailed design and complete tender documentation with bills of quantities and cost estimates for the works identified for implementation in Phase II.



Road Safety Consultancy Services for the second road investment program of the Central Asia Regional Economic Cooperation

The Ministry of Finance of the Republic of Uzbekistan, through the Republican Road Fund, has awarded Eptisa a new Asian Development Bank funded contract to provide Road Safety Consultancy Services for the Second Road Investment Program of the Central Asia Regional Economic Cooperation (CAREC) for Corridor 2 - Project 1. The study includes the following main activities:

Development of a comprehensive road safety strategy, including all necessary reviews and analyses, that will address the existing problems with a comprehensive system of road infrastructure safety management, plus a long-term national strategy to reduce fatalities linked to the road infrastructure.

Development of a safety impact assessment tool and manuals to be applied for road construction and maintenance, and more specifically, for designing and planning roads financed by Road Fund under Ministry of Finance of the Republic of Uzbekistan.



Development phased safety program on all sections of the ADB funded Second CAREC Corridor 2 Road Investment Program and particularly on Tashkent-Angren Road, where Eptisa will define a detailed program to improve traffic safety on this section through signing, road markings and installation of appropriate traffic safety features to solve safety issues. This section will be used as a model to be applied for other road sections.

Water supply and sanitation services investment program in Uzbekistan



Eptisa supervises feasibility studies and the final design; approves the key staff, construction programmes and method statements, temporary land occupation by the contractors, materials and sources of materials and inspects the works for the reconstruction of water pipelines, wastewater facilities, sewerage networks and water supply systems in the cities of Andijan, Gijduvan, Kokand, Vabkent, Termez, Fergana, Margilan, Rishtan and Yangibazar and in the regions of Djizzak (Kuytash water intake), Khorazm and the Republic of Karakalpakstan. Eptisa assists the Uzbek Communal



Services Agency in supervising and administering the design and construction of the individual projects.

It also trains the future operatives in the correct operation of the plant in accordance with the chosen processes and installed equipment so as to ensure a low operating cost for treating the wastewater.



SOUTH ASIA

2014 was a year of significant growth in South Asia region. In this year we have been awarded important projects in India in different sectors, as well as consolidate our position in Bangladesh. After the consolidation of our offices in India and Bangladesh we hope to expand our growth to the surrounding countries of Nepal, Bhutan and Sri Lanka, maintaining our growth in the region. To tackle the year's contracts, we have strengthened our team in India to guarantee a smooth execution of all the new projects that have been awarded. 2014 also saw the opening of the branch office in Bangladesh.

INDIA

In the **transport infrastructure** sector, the Ministry of Road Transport and Highways of India awarded Eptisa the project to carry out engineering services for the Z-Morh tunnel in the state of Jammu and Kashmir. This is a very critical project in the overall communication infrastructure of the country as this 6.5 km long tunnel would ensure all-weather connectivity between the Kashmir and the Leh regions of the state of Jammu and Kashmir. This project is of national strategic importance and Eptisa has the responsibility to ensure smooth execution of this project.

Within the World Bank consulting programs in India, in 2014 we were awarded two projects in the sector of **roads**. The first one is the implementation of the Road Safety Program in the state of Assam under the Assam Road Sector Improvement Project. Eptisa will design the basic road safety implementing structure within the Public Works Department in the state of Assam, as well as implement a pilot project as a "proof of concept".

The second project consists of providing consultancy services for the construction supervision of the road sector between Nuapada and Bangomunda of approximately 80 km in length in the state of Orissa, under the National Highway Infrastructure Improvement Program.

Throughout 2014 we continue working for the Ministry of Road Transport and Highways of India, through the National Highways Authority of India (NHAI), in providing independent engineer services for the Rohtak to Hissar section of four lanes NH-10 Highway, in the Haryana state. Eptisa reviews the detailed design, construction methodology, quality and safety procedures, subcontractors' conditions and all documentation sent by the Concessionaire.

2014 also saw Eptisa winning major projects with the Asian Development Bank, both in India and Bangladesh. In India, we won the consultancy project for capacity building and **institutional strengthening** for the Public Health Department (PHD) in the state of Jammu and Kashmir. This is a very important project for the development of proper management structure and

IT infrastructure and organizational strengthening of the PHD department in Jammu and Kashmir, enabling the department to smoothly absorb the large development fund which Asian Development Bank is spending in the state to provide for development of water and sewerage infrastructure in the two main cities of Jammu and Srinagar.

After the award of these projects, Eptisa demonstrates the capacity and experience acquired in consultancy projects for the socio-economic development and Institutional Strengthening in other regions worldwide. These projects will become the backbone for further development of these services in this territory.

In the **buildings** sector we won an important project in the state of Bihar for the construction supervision of more than 600 schools being constructed under the hallmark "Sarva Shiksha Aviyan" programme of the Government of India, aimed to ensure the reach of educational infrastructure in all of the regions of the country.

In the Uttar Pradesh State, and for the **Irrigation Infrastructure** Department, we are working in the consultancy services project to carry out a survey and redesign for the rehabilitation and modernization of irrigation infrastructure, specifically the main delivery canal in Lower Ganges Canal System, which provides irrigation facility to the entire lower area of the Yamuna River Basin, tributary of Ganges. The project is financed by the World Bank.

In the **water** and **information technology** sectors, we continue working in the development of a surface water information system (e-SWIS) project for the Central Water Commission (CWC), a technical organization in the field of water resources and is presently functioning as an attached office of the

Ministry of Water Resources. The new web environment system will be implemented in participating agencies in the phase II of the National Hydrology Project, and potentially, in all States and UTs of India. Furthermore, the web services required for data dissemination will be provided, that, among other tasks, will allow the support of the Flood Warning functions.





Construction supervision consultancy services for NH-217 in the state of Odisha in India

The Ministry of Road Transport and Highways of India has awarded Eptisa a contract to provide consultancy services for the supervision of the rehabilitation and upgrading to 2 lanes/2 lane with paved shoulders configuration of Nuapada-Bango Munda section (Km 90 to Km 158) of NH-217 Highway in the state of Odisha, under Phase - I of National Highways Inter-connectivity Improvement Project (NHIIP).

The major responsibilities of Eptisa as part of the project are management and supervision of civil works contracts, monitor the pre-construction activities, comprehensive supervision of project implementation activities carried out by the contractors to ensure compliance with the drawings, technical specifications and various stipulations contained in the contract documents, ensure safety during construction and adherence to all Environment Management Regulations prescribed under the Contract, as well as the services obligations of the Contractor during maintenance.

Eptisa assists in taking remedial actions to avoid slippages, cost overruns, delays by the contractor and ensure that effective Contract Administration is achieved.



Engineering services for construction, operation and maintenance of Z-Morh tunnel in India

The Z-Morh tunnel, located 2637 meters above sea level, is a two-lane tunnel with parallel 6.5 km long escape tunnel on a new alignment between Gagangir and Sonamarg under Srinagar-Leh section of NH-1 that will provide all weather connectivity between Srinagar and Leh.

At present, Ladakh remains cut off for six to seven months of the year during winter due to heavy snowfall on the Jammu-Srinagar-Zozila-Kargil-Leh and the Manali-Sarchu-Leh routes that connect Leh to the rest of the country. It can only be reached by air during the winter months. The weather is extremely chilly during the winter months and characterized by snowfall and avalanches.

The stretch between Srinagar and Leh is not only important for the strategic interests of the Indian Army, but also for the socio-economic well-being of the people of Ladakh and holistic development of the state.

Eptisa will review drawings and documents along with detailed design, construction methodology, quality assurance procedures and procurement, engineering and construction time schedule, inspect and monitor the construction works. It will also conduct tests on completion of construction and issue completion certificates. Finally, during the operation phase, it will monitor the operation and maintenance.



Capacity building and institutional support to Public Health Engineering Department (PHED) of Government of Jammu and Kashmir in India

The Public Health Engineering Department (PHED) of the Government of Jammu and Kashmir is the responsible for the water supply and water treatment in the urban areas of Srinagar and Jammu. Currently it is involved in an investment program to improve the infrastructure of water supply and distribution networks. The objective is to improve the service, operational efficiency and financial sustainability of the water supply system through institutional, financial and IT reforms as well as improvements in the tariff structure and subsidy mechanism.

Eptisa, in association with KPMG, will work with the Government of Jammu and Kashmir and PHED in planning and design of reforms and improvement plans. The consortium will study the existing situation, including legal, organizational, financial and operational arrangements, and prepare reform options in consultation with the Government of Jammu and Kashmir. The project also includes providing implementation and handholding support to Government of Jammu and Kashmir and PHED for the implementation of reforms and improvement plans, along with Capacity building for PHED staff through proper training.



Supervision services for the construction of senior secondary schools and higher secondary schools in the State of Bihar in India

Patna is in the process of construction of various educational institutional buildings at various locations in the state of Bihar. The Bihar State Educational Infrastructure Development Corporation Limited (BSEIDCL) has decided to engage Eptisa for providing supervision consultancy services relating to project supervision during the construction of these school buildings.

Eptisa will act as the Consultant and ensure that the contract is properly followed and works are done in accordance with the approved designs and drawings. Eptisa would physically verify all dimensions of work done and be responsible for overall monitoring of the construction. It is required that the work is done with due diligence and efficiency in conformity with sound architectural, engineering, administrative and financial practices.



Engineering services for NH-10 highway project in the state of Haryana in India

Eptisa works for the National Highways Authority of India (NHA) providing independent engineering services for the Rohtak to Hissar section of the four lanes NH-10 highway. This project includes the section from km 87,000 (NH-10) to km 348,000 (NH-71) to be executed on DBFOT pattern (Design, Build, Finance, Operate and Transfer) under the Phase III of the National Highways Development Project in the State of Haryana.

The project involves the construction of 4-lane highway including bridges, widening and rehabilitation of bridges and culverts;

construction of high embankment, elevated structures, ROBs wayside amenities, etc. along the existing highways including provision of realignment and bypasses.

Eptisa reviews the detailed design, construction methodology, quality assurance procedures and the procurement, engineering and construction time schedule sent to it by the concessionaire and furnish its comments. It also reviews, inspects and supervises the construction works, O&M and the divestment requirements, conducting tests on completion of construction and issuing completion and provisional certificate.

Consultancy services for capacity building in Road Safety Management Systems in the region of Assam in India

Road traffic accidents are amenable to remedial action. Many developed countries have witnessed a drop in road accidents and casualty numbers, by adopting a multi-pronged approach to road safety that encompasses broad range of measures, such as traffic management, design and quality of road infrastructure, safer vehicles, law enforcement, provision of accident care, etc.

Situated in its remotely located North-East region, Assam is one of the lower income states of India, with a per capita income of approximately US\$604, which is about 40 percent below the national average. Assam is also the gateway to the landlocked North-East region. Thus, its road network has significant strategic importance for the integration of the lagging North-East region with the country's economy. The Public Works Road Department (PWRD), under the Government of Assam, recognizes that a good road network is critical for a rapid but inclusive growth and that adequate and reliable transport infrastructure and services are important factors contributing to the state's economy.

Eptisa has been awarded this consultancy contract to assist the Public Works Road Department in improving road safety

engineering and management. Some of the primary responsibilities include:

- Development and operationalization of a road accident database and management system (to collect RS engineering – blackspots related data, analyze data to prepare cross tabulations / reports and to develop a RS Management Information System (RSMIS) and developing data-based intervention strategy to identify and treat blackspots
- Building road safety capacity for PWRD during design, construction and operation stages under the road safety component
- Developing Road Safety evaluation methodology for the department
- Incorporating and highlighting some strategies for Institutional Capacity Building (ICB) that have been used in the past across various developed countries.



Survey and design for the modernization of irrigation infrastructure in the Uttar Pradesh State in India

During 2014 Eptisa carries out the implementation of the survey and design project for the rehabilitation and modernization of irrigation infrastructure of main delivery canal in Lower Ganges Canal System, framed within the second phase of the Water Sector Restructuring Plan carried out by the Government of Uttar Pradesh State, whose main objective is to increase the productive capacity of the agricultural sector.

This project will allow the rehabilitation of the main irrigation

channels of one of the most important systems of this state, which provides service to 1,250,000 hectares, and it is aimed to reduce the flow losses derived from the age and poor state of conservation. The new design will also include the rehabilitation and construction of new structures affected by these channels, as well as the implementation of regulatory systems and automated control in the irrigation management. With this project Eptisa initiates its activity in one of the most important sectors within the economy of the country.





Coastal Towns Infrastructure Improvement Project

BANGLADESH

In Bangladesh, we are working for the Asian Development Bank in the Project Management and supervision consultancy within the framework of the **infrastructure improvement project of the coastal towns** desolate by rising sea level.

Bangladesh is a country on the huge delta at the estuary of the Ganges, Brahmaputra and Meghna Rivers in the Bay of Bengal. The country which actually is in the delta is low-lying and is therefore very sensitive to natural events such as earthquakes, tidal waves, tides, droughts, floods, heavy rainfall, erratic monsoon and cyclones which can be disastrous to the population. Climate change is a critical issue which is affecting long term monsoon behavior. A 1.5°C increase in temperature and 4 percent increase in precipitation would potentially result in 27cm or more rise in sea levels in the Bay of Bengal by 2050. Warmer temperatures would result in more frequent and intense cyclones and storm surges, damaging roads, bridges and rendering existing drainage, water supply and sanitation systems ineffective, as well as threatening public life and safety.

The Coastal Towns Infrastructure Improvement Project (CTIIP) covers eight project towns, which are divided into two batches of four with each town entitled to two stages of investment and is jointly financed by Asian Development Bank and the Government of Bangladesh. The aim of the Project is to provide climate-resilient municipal infrastructure, strengthening institutional capacity, local governance, knowledge based public awareness, for improved urban planning and service delivery system considering climate change and disaster risks.

The role of Eptisa as consultant is to provide **project management** and administrative support to the Local Government Engineering Department (LGED) with special focus on the overall project management, performance monitoring and reporting, contract management including e-procurement process and procedures, quality control of engineering designs and construction supervision, and compliance with Asian Development Bank safeguard policies.

The overall expected outcome of Coastal Towns Infrastructure Improvement Project is to develop high quality and reliable climate-resilient municipal infrastructure which includes drainage, water supply, sanitation, cyclone shelters, emergency access roads, bridges which in turn will support general economical growth in the area, better health condition of local residents, thus reducing human mortality.

As part of the above project, the client in close coordination with Project Management Unit (PMU), Department of Public Health Engineering (DPHE) and respective Pourashavas (municipalities) aims to improve the municipal governance in terms of planning and financial management, mainstreaming climate change and incorporating the factors in designing of infrastructures and implementing a participatory approach in disaster planning with encouraging and improved citizen participation.

As consultant, Eptisa provides technical assistance for the **institutional strengthening** and capacity building to the PMU to manage the project through detailed project planning & implementation. And it undertakes identification of fundamental issues from the beginning which will enable the project managers to deal with any overall project or site specific issues.

Mainly, we put our focus on our consulting services for community and socio-economic development in the adaptation of existing infrastructure and construction of new climate-resilient infrastructure; sustainable service delivery through strengthened local governance and capacity; increased public awareness on climate change and disaster risk preparedness, water conservation, and hygiene activities; and improved project management and administration support.



Improvement of the sewerage system. Philippines

SOUTHEAST ASIA

PHILIPPINES

The World Bank awarded Eptisa the consultancy services contract to carry out an options study to **improve the sewerage system** of South Caloocan-Malabon-Navotas cities. The objective of the study is to identify and assess the different sewage treatment and collection options to help in the reduction of pollution in Manila Bay and its tributaries within the South Caloocan, Malabon and Navotas catchment, improving significantly the sanitation condition in these areas. The study also consider alternatives for the wastewater collection system, main interceptors, combined sewer overflow (CSO) structures, and the number, location and process technology of wastewater treatment plants.

The intention is to collect dry weather flow from the drainage system using interceptor pipes and divert it to be treated in the proposed STP/s before discharging to the bodies of water. A secondary treatment is thus applied to ensure the conformity of effluent released to the river to the DENR standards - Class SB (suitable for swimming and other forms of contact recreation).

The cities of South Caloocan, Malabon and Navotas are located north of the City of Manila with a total land area of approximately 4,400 ha and an estimated population of 1,100,000 people. The cities are geographically prone to flood especially during rainy season and high tide.

LAOS

The Ministry of Agriculture and Forestry of Laos, through the Department of Irrigation, awarded Eptisa a new consultancy services contract financed by the Asian Development Bank for **capacity building** of National Early Warning Center in flood and drought mitigation.

Floods and droughts have great impact on social, environmental and economic conditions in urban and rural areas of Laos, so reliable hydro-meteorological data and the development of an effective early warning system are essential to mitigate the losses from flood and drought disasters. To achieve this goal, improvement of the hydro-meteorological network, effective data transmission and management system, development of forecasting models, early warning and public awareness, and effective communication system are necessary.

The project aims to provide capacity building for the National Early Warning Centre, as part of the Department of Meteorology and Hydrology. Eptisa, in consortium with the company Lao Consulting Group, supports water resources planning and management to National Early Warning Centre and other concerned agencies by providing necessary and reliable hydro-meteorological information.

More specifically, Eptisa will strengthen the hydrometeorological monitoring system, mainly in two Mekong River basins that have suffered the most flood damage: Sebangfai and Sebanghien. It will also build technical capability of Department of Meteorology and Hydrology staff on forecasting of floods in both river basins, on forecasting of droughts and extreme weather events, and on seasonal climate prediction at basin and national levels.



AMERICA

The European Commission has awarded a new contract to Eptisa, in consortium, to provide technical assistance services to the Supporting Public Health Institutes Program, financed under the DCI-Sante (Thematic Investing in People Program)

The overall objective of the Supporting Public Health Institutes Program, which will be implemented in 47 countries of Latin America, Asia and Africa, is to contribute to the protection and promotion of population's health through the provision of policy analysis and policy advice



Port-au-Prince

Throughout 2014, we continue implementing in the **water** sector the project financed by Inter-American Development Bank funds to carry out a hydro-geological study in the metropolitan region of Port-au-Prince, performed for the aquifers Massif de la Selle and Nappe de la Plaine du Cul-de-Sac. This project is aimed to draw up preliminary studies for the implementation of drinking water extraction wells.

In 2014 we finished the project to carry out the Regional Master Plans for drinking water and sanitation. The objective of the Master Plan is to provide each one of the four regional offices (OREPAs) with data and short, medium and long term investment proposals. The construction phase of the water and sewerage networks started in late 2014.

Also in the water sector the technical assistance project for the extension programme of the water supply and sewerage networks in the metropolitan region of Port-au-Prince for the Lyonnaise Eaux of Haiti was concluded. The activities of Eptisa included a review of topographic and hydrological studies, hydraulic models and proposed plans for extension and replacement of water networks, as well as the preparation of detailed design and technical specifications for construction.

Within the **institutional, economic and social development** sector, we were awarded the technical assistance to the Support to the Ministry of Trade and Industry (MTI) Programme, financed by the European Union under the 10th FED. Eptisa provides technical assistance to the MTI in order to strengthen its institutional capacities when it comes to analyzing, formulating and implementing trade, industrial and competitiveness policies. It will also consolidate the coordination between public and private stakeholders and will ensure the coordination and implementation of the different trade agreements and commitments.

Particularly, the project offers assistance services for the strategic definition of industry and trade policies, suggestions to help Haiti to respond to the commercial agreements that have been signed, facilitate the public-private dialogue and the improvement of the MTI staff capacities, among others.

In the sector of **buildings**, we work for the Ministry of Interior and Territorial Communities (MICT) of Haiti in the project to carry out a study and construction supervision of the multifunctional centre for the Civil Protection Department in Port-au-Prince. During the first phase, it has carried out the study of execution and drawing up the detailed design and, in the second phase, we prepared the dossier with the conditions of the call for tenders for construction companies, as well as an analysis of the offers of the companies that participate and their evaluation. And to finalize, it will be carried out the works supervision of the building, including the monitoring of scheduled execution, reporting and a dossier of executed works.

HAITI

We continue strengthening our presence in Haiti with the award of new projects in the institutional, economic and social development sector and the development of projects in the water and buildings sectors.

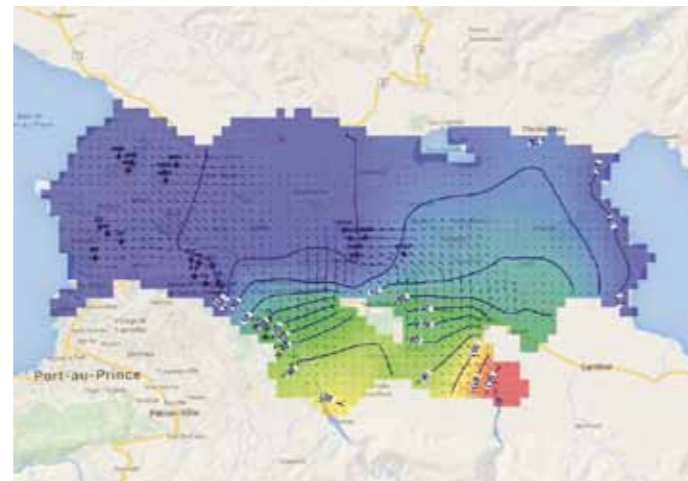
The European Union awarded Eptisa a new project within the framework of the State Building Contract. The project will improve the capacities of the Haitian Government in the public finances management, public services and education. Eptisa gives technical assistance support to provide **institutional support** to the Government of Haiti aimed to strengthen its capacities in three main areas of action: Improvement the capacities of the Haitian State for the launch and monitoring of the public finances reform, reinforcement of the capabilities of the Ministry of Education to achieve the objectives of the educational reform, and coordination with other components of the Budget Support Program, being favorable to the synergy between the interventions of technical and finance partners involved.



Project for the extension of water networks in the metropolitan region of Port-au-Prince



Project for the construction of the multifunctional centre for the Civil Protection Department in Port-au-Prince



Hydro-geological study in the metropolitan region of the haitian capital Port-au-Prince performed for the aquifers Massif de la Selle and Nappe de la Plaine du Cul-de-Sac in Haiti

The objective of the study is to carry out preliminary reports for better implementation of the extraction wells. The project consists of recovering and gathering the existing information and executes the study with taking into consideration all existing studies, all information from the boreholes and wells located in the studied area.

Eptisa is carrying out the preliminary studies for better implementation of the extraction wells. With the support of these studies, the piezometers have been placed and the data extracted from them are mathematically modeled, so that optimal production capacity and water extraction flow can be determined. We also coordinate technical tasks as well as the establishment of the database with the existing data and update with the data acquired from the research campaigns.

In the aquifer *Massif de la Selle* it is carried out the verification of the stability of the springs and detection of any rehabilitation needs that have not been detected previously. Following, it is performed geological cartography and analysis of possible fracturation in the selected region, analysis of geophysical state to define exploration drilling and the placement of piezometers, as well as trial execution to determine stable pumping flows in opened boreholes. The study for the *Massif de la Selle* closes with the synthesis of the potential of newly identified water resources

and with the cost assessment of the construction and exploitation of the particular hydrological resource, its connection to the existing network and its storage.

In the aquifer *Plaine du Cul-de-Sac*, the hydro-geological research includes: interpretation of hydro-geological data and data on water level recovered from existing piezometers and those drilled during the project; long-term data follow-up and interpretation; inventory; identification and interpretation of the data from the existing wells (wells from the industrial areas and old irrigation wells); examination of the current situation and the potential for drilling in the contracting Administration, update of the database, with its adaptation to the newly gathered data; evaluation of the reserve of renewable aquifer; analysis of the quality of water evolution; evaluation of the optimal pumping flow from the currently exploited boreholes; localization of the future drilling zones and identification of affected properties; evaluation of the vulnerability of the *Plaine du Cul-de-Sac* aquifer; summary of the potential of newly detected resources in *Plaine du Cul-de-Sac* and its overall capacity. Cost assessment for the construction of new water supply infrastructure and its communication with the existing network.

DOMINICAN REPUBLIC

In 2014 the National Water and Sewerage Authority (INAPA) of Dominican Republic awarded the DRWMS consortium, formed by IControl as leader, Open Systems SAS and Eptisa, a new contract for the development and implementation of a cadastral system of the drinking water supply and sanitation network users, and a **technological information system**, including commercial and geographic information.

Within the **institutional, economic and social development** sector, Eptisa provides technical assistance for the Civil Society and Local Government Support Program (PASCAL), aimed to contribute to the consolidation of the democratic governability and to social cohesion in Dominican Republic.

Specifically, the program has three clear objectives. First, the institutional strengthening of the Ministry of Public Administration to implement the municipal component of its Strategic Plan, secondly, the institutional strengthening of pilot city councils of the program to implement the Law on Public Function, and finally, the improvement in the provision of public services in pilot

municipalities through an improved participation. The technical assistance supports these three areas described.

The assessment of the technical assistance support during the first six months of implementation is very positive, highlighting the design of the SISMAP II Municipal, as milestone reached by the project in the first phase of implementation.

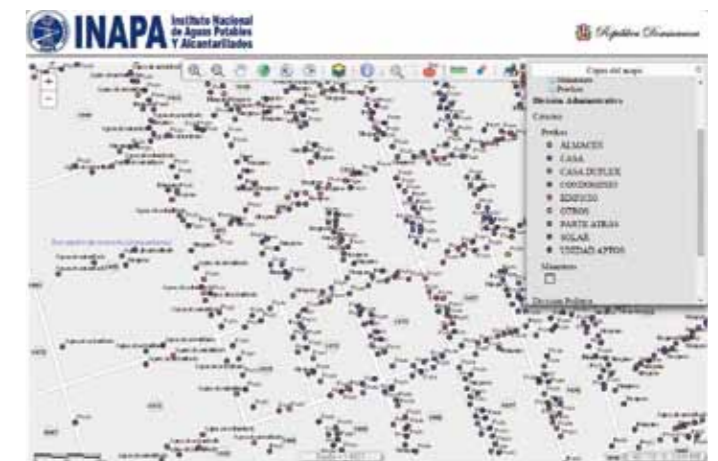
Eptisa supports the Ministry of Public Administration in the implementation of key elements of the 2009-2012 Strategic Plan in at least six institutions of the Government, within the Program Supporting Public Administration Reform (PARAP). These have been selected under the permanent scrutiny of the Dominican society organizations. The aim of the project is to contribute to strengthening the Dominican Republic's governability, social cohesion, and modernisation by means of the professionalization of civil service, the quality of public services, and the strengthening of public bodies.

Development and implementation of a cadastral, commercial and geographic information system for the management of the INAPA's drinking water supply and sanitation network users in Dominican Republic

The National Water and Sewerage Authority (INAPA) of Dominican Republic awarded the DRWMS consortium, formed by IControl as leader, Open Systems SAS and Eptisa, a new contract for the development and implementation of a cadastral system of the drinking water supply and sanitation network users, and a technological information system, including commercial and geographic information.

The main objective of the project is to standardize and integrate all information related to network user's on a common database to improve the commercial management of the clients and users and the management of the drinking water supply and sanitation network in the municipalities under the jurisdiction of INAPA.

Eptisa will be responsible for the project management and the design, definition, development and implementation of the Geographical Information System. The Cadastral System of Users will include updated geographical information with the base maps and will provide INAPA with an effective and efficient tool for the commercial and operative management, the billing and payment of the service offered in different municipalities.



Within the project, the consortium will provide the necessary technological equipment for the correct operation of the commercial and GIS systems, as well as the capacity building of the technicians of the INAPA for training all staff involved in the system. Following the launch, the consortium will support INAPA in the operation of the system and all its components for a year.

MEXICO

Eptisa continues providing technical assistance and support to the general direction and team within the **Integrated Program of social cohesion Mexico - European Union**, Lot 2: Mexico- European Union Social Cohesion Laboratory, as well as to the related public institutions and communities and beneficiary groups of the program. The objective pursued is to establish, implement and strengthen an integrated participatory model for sustainable local development in the regions of the Selva and Sierra at Chiapas State.

GUATEMALA

In Guatemala, we work in three projects related to the **institutional, economic and social development** sector. The first one, offering technical assistance services for the **Support Programme to Security and Justice Sector (SEJUST)**, with the aim of improving the justice and security sectors to allow it to operate more effectively in prosecution and investigation of crime and guarantee due process by protecting the rights of victims and vulnerable groups seeking rehabilitation, reintegration and education of the lawbreakers.

Due to the importance of the programme and the quality of the consultancy services that are provided, the European Union requested a two-year extension of the technical assistance contract, until July 2017.

The second is aimed to reduce poverty, food insecurity and chronic malnutrition. Eptisa provides technical assistance to the Government of Guatemala in the implementation of the **Programme of Support to the Food Security National Policy (PESAN)**. The program is being coordinated by the National Food Security Department and the Ministry of Public Finance.

In 2014 Eptisa continued the support to the Government of Guatemala after the approval of a new initiative in support of Public Financial Management reform. In the frame of the **Regional Medium-Term Expenditure Framework Project**, the consortium lead by Eptisa has agreed with the Guatemalan Administration providing technical assistance for institutional strengthening. The Work Plan has been drafted with the leadership of the Ministry of Finance (MINFIN) and the General Secretariat for Planning of the President's Office (SEGEPLAN in Spanish).

Its specific objectives are focused on three activity areas: strengthening of planning and budgeting processes for a Results-Oriented Management, improving the predictability of budget revenue, development of monitoring and evaluation of Government planning and budgeting.

The project reinforces the relationship between planning and budget, facilitating the development and implementation of programs and comprehensive strategies compatible with the goals of development and social cohesion, with a special focus on the sectors of health, education and security.

Technical assistance for the Support Programme to Security and Justice sector in Guatemala (SEJUST)



Due to the importance of the programme and the quality of the consultancy services that are provided, the European Union requested a two-year extension of the technical assistance contract, until July 2017. The project is financed by the European Union and coordinated by the Executive Secretary of the Coordinating Body for the Justice Sector Modernization of the Government of Guatemala.

The SEJUST Programme, with a budget of € 22 million, has the aim of improve the justice and security sectors to allow it to operate more effectively in prosecution and investigation of crime and guarantee due process by protecting the rights of victims and vulnerable groups seeking rehabilitation, reintegration and education of the lawbreakers.

Eptisa, as the leader of the consortium formed by ICON and the "Instituto de Estudios Comparados en Ciencias Penales de Guatemala", supports beneficiary institutions of the SEJUST programme (Judiciary and Supreme Court of Justice, Public

Ministry, Ministry of the Interior and Criminal Public Defence Institute (IDPP), among others) in coordination, planning, implementation, monitoring and follow-up of program activities, and provides technical support and advices in the design, development and implementation of Procurement Processes, in accordance with procedures of the European Commission; and supports other needs that might arise during the implementation of the technical assistance.

A special effort has been made to strengthen the coordination between institutions of the sector through the Coordinating Body for the Justice Sector Modernization, beneficiary of the SEJUST Project. Important activities have been driven in penitentiary field, strengthening the Ministry of Government, as well as different activities to train the staff of the Public Ministry and Criminal Public Defence Institute. Other important activity promoted during this year is the next construction of three 24-hour courts in the country.

EL SALVADOR

In El Salvador we finalized the **technical assistance services** to the Government, specifically to the National Institute of Youth (INJUVE), in the implementation of the **Projovenes II** Project. Its objective was to promote social cohesion and to mitigate the risks factors of violence and youth delinquency. The Program was characterized by carrying out its work through granting prominence to the young people, and through the municipalities where are located the focused communities on which prevention and support interventions are carried out.

The key factors that allowed to prevent youth violence and of which the Projovenes Project paid more attention have been community development, the promotion of sport, art and culture as a cornerstone of youth development, education for coexistence, recovery of public spaces and preserving the environment, employability, and the improvement of labor opportunities and relations, among others.

Eptisa provided technical assistance services in the two phases of this project, which had represent an important accompaniment and support to the institutions for nearly ten years.



Projovenes II Project

NICARAGUA

Throughout 2014 we have worked in the third phase of the **Institutional Strengthening** Programme in support of the Government of Nicaragua for the development and establishment of a **Mid-Term Expenditure Framework (MTEF)**. Following the successful completion of the second phase, the Swiss Cooperation through the Swiss Secretariat for Economic Affairs trusted in the consortium led by Eptisa to implement the third phase of the Program, adding a regional approach, with the support of the COSEFIN Secretariat and its member countries COSEFIN (Costa Rica, Guatemala, El Salvador, Honduras, Panama and the Dominican Republic). The project has duration of three years until April 2016. The Regional MTEF project works in the diagnosis, design and institutionalization of budget formulation oriented to results, monitoring and evaluation of programs.

Currently, we continue with the traditional intervention in Nicaragua (SECO I and II) and there is an ambitious support plan to the coordination of the Budget Plan and the assistance in the development of a Medium-Term Fiscal Framework in Guatemala.

In Panama, a diagnostic study on the implementation of a MTMP has developed and it will be soon supported in the formulation of a reform roadmap. On the other hand, a diagnostic study will be carried out in Costa Rica. Likewise, it is dealing with specific demands in El Salvador and Dominican Republic.

The technical assistance project for the **Institutional Support for the Development Policies in Nicaragua (POFI)** enters in its final phase (October 2015). The project successes have been numerous after three years working in the Ministry of Home Affairs and the rural sector of Nicaragua, aimed to contribute to the strengthening of the planning, execution and monitoring capacities in the implementation of public policies. Among them, there is the institutional planning, identification of goods and services delivered to the population as well as their costs, the integration of gender approach and environmental sustainability in the policies of these two Ministries, etc., which largely contributed to institutional strengthening.

HONDURAS

In Honduras Eptisa continues with the technical assistance for the **Support Program to the Public Administration and the Regional Integration (SPARI)** that will last four years. It supports the State of Honduras in promoting a better grade of social cohesion through the reinforcement of the State institutions and other organizations of the civil society involved, directly or indirectly, in the implementation of development strategies linked to the poverty reduction, social protection and improvement of public budget management.

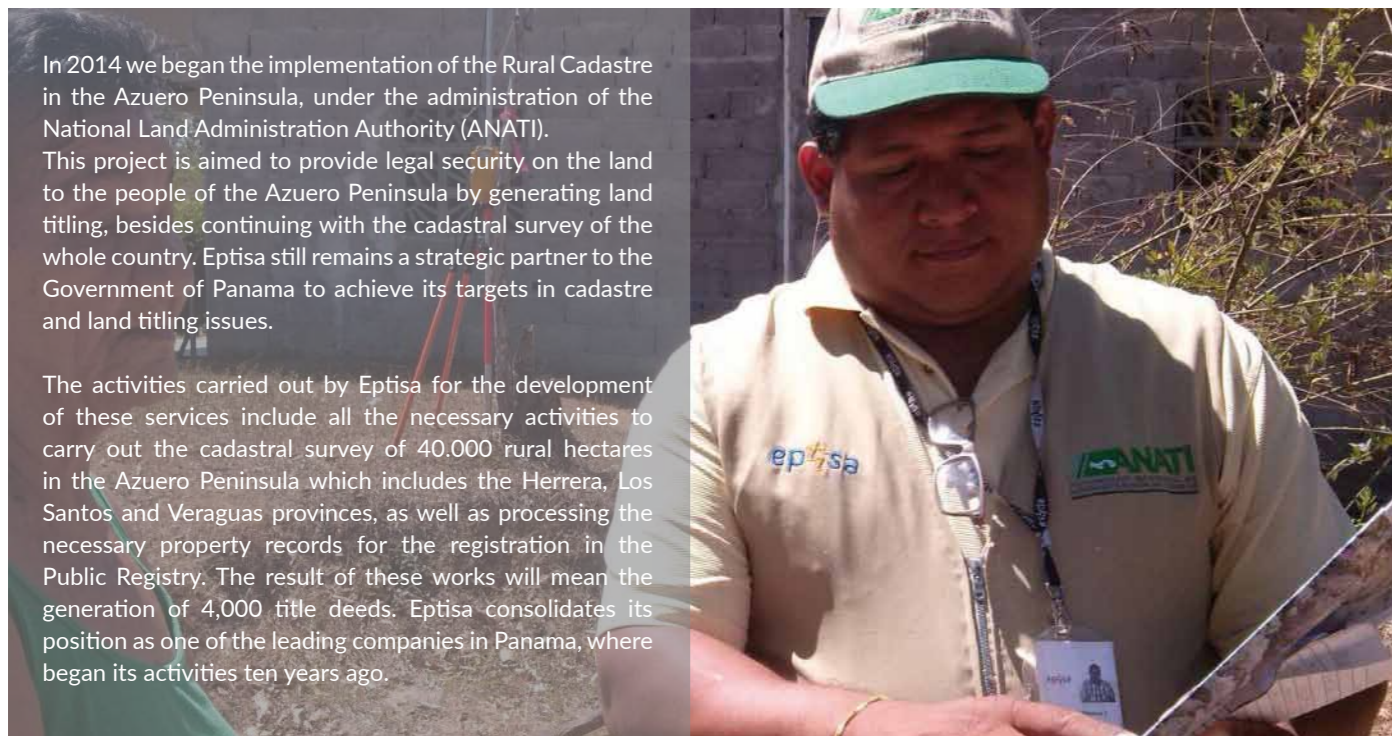
During the year 2014 it was particularly supported the National Quality System of Honduras, strengthening, in particular, the Honduran Standards and Accreditation Agency.

COSTA RICA



Included in the Cadastre and Registry Regularization Program Eptisa finalized the Cadastre preparation and regularization for cadastre and registry information for Zapotal Area. To do this, Eptisa employed a team of over 90 professionals, with whom it was possible to achieve the objective of regulating the registration and cadastral situation of more than 99,400 rural and urban properties from four regions of the Republic. It is a key project in the process of land regularization in Costa Rica.

PANAMA



In 2014 we began the implementation of the Rural Cadastre in the Azuero Peninsula, under the administration of the National Land Administration Authority (ANATI). This project is aimed to provide legal security on the land to the people of the Azuero Peninsula by generating land titling, besides continuing with the cadastral survey of the whole country. Eptisa still remains a strategic partner to the Government of Panama to achieve its targets in cadastre and land titling issues.

The activities carried out by Eptisa for the development of these services include all the necessary activities to carry out the cadastral survey of 40,000 rural hectares in the Azuero Peninsula which includes the Herrera, Los Santos and Veraguas provinces, as well as processing the necessary property records for the registration in the Public Registry. The result of these works will mean the generation of 4,000 title deeds. Eptisa consolidates its position as one of the leading companies in Panama, where began its activities ten years ago.

Eptisa consolidates its position as one of the leading companies in Panama, where began its activities ten years ago

COLOMBIA

Eptisa continues with the technical assistance project to the **New Territories of Peace of Colombia** in consortium with three local companies. The objective is to contribute to the consolidation of their safety and development by promoting socioeconomic initiatives, which it turns towards a culture of peace, democracy and a State of Law. This is fostering to a decent living conditions and equal opportunities for all citizens.

In 2014 we opened an office in Medellin for business development in the field of **information technologies**. In less than a year Esri Colombia has awarded us as the best technological partner of the country for the development of solutions based on Geographic Information Systems.

ARGENTINA

Eptisa works in the technical assistance for the project to **Improve Regional Economies and Local Development**, aimed to contribute to improving the life quality of the community and the local development of ten less-favoured areas of the country, located at Northwest and Northeast Regions. Through this program, it is provided specific technical assistances on different topics of interest for the National Industrial Technology Institute (INTI) so they can improve the services to enterprises, particularly in the northern areas of the country, as well as advice to get the project having the greatest possible impact.



Indexing and document search solution for SBS

PERU

Within the **Information Technologies** sector, Eptisa is consolidating its presence in the country with new projects. The Superintendence of Banking, Insurance and Private Pension Fund Administration, hereinafter SBS, awarded to Eptisa a contract to provide an indexing and document search solution for its Intranet, Google Search Appliance (GSA) technology-based. SBS, to fulfill their supervisory functions as well as to prevent and detect the Money Laundering and Terrorist Financing, needs searching documents produced and stored by different departments quickly, for content and centralized of all documentary systems respecting the rules of security and confidentiality specific to each system. These searches should be for both users and employees, as well as for the supervised institutions and the general public.

In 2014 we finalized the project for the development of an **Integrated Geographic Information System for the Drinking Water and Sewerage Service of Lima (SEDAPAL)**. The objective of the Information System, based on ArcGIS technology, was to homogenize and integrate all the geographic information into an only database which SEDAPAL managed in different formats. Furthermore the necessary functionalities had been developed for the use of the said information. The proposed solution included custom application development for the management of the network, client's data, works and maintenance.

BOLIVIA

In 2014 we consolidated our presence in Bolivia with the project awarded by ENDE, the National Electricity Company, a consultancy services contract for the development of the design and tender documents for the **construction of the Rositas Hydropower Plant**. The objective of this project is to carry out the final design of the Rositas Hydropower Plant, preparing all the necessary documentation to make possible its bidding and construction, as well as to carry out the Technical-Economical and Environmental Feasibility Study of the Second Hydropower Plant in the watercourse of the Grande River.

The works of the Rositas hydropower plant are located one kilometer downstream of the confluence of the Grande and Rositas Rivers, of which takes his name. It is in the municipality of Abapó, 140 kilometers to the South of the Santa Cruz department. The project will include the studies of cartography and topography, geology and geomorphology, climatology, hydrology, etc., the perform of Specific Environmental Studies and the review and update of the Feasibility Study of the Río Grande Rositas Hydropower Project and the Pre-Feasibility Study of the Río Grande Hydropower Development, which include the assessment of 6 alternative dams for the selection of an additional Hydropower Project.

In the **environmental** sector, we work in the project within the **Biodiversity Sustainable Conservation Support Program (PACSBio)**, with the global objective of provide technical assistance for an adequate implantation of the program and institutional strengthening to the Environment and Water Vice Ministry and the National Service of Protected Areas (SERNAP). The purpose of PACSBio is the biodiversity conservation and the

sustainable development in Bolivia, thus supporting the Bolivian policies under the Protected Areas National System.

In the **institutional, economic and social development** sector, we continue providing technical assistance services to other two EU-funded projects. In the first one we provide advice and operational support to the Ministry of Mining and Metallurgy, in the **Improvement Work Conditions and Employment Creation in the Mining Regions of Bolivia (EMPLEOMIN** in Spanish). The target is to contribute to economic, social and environmental development in these areas, as well as to create employment opportunities by developing the artisanal mining sector and by diversifying the economy activity.

Particularly we emphasize the technical assistance support in the development of the Sectoral Plan for Metallurgical Mining (2015-2019) of Bolivia, whose technical proposal was approved by the Ministry of Mining and Metallurgy in late 2014.

In the second project, and within the consortium led by Eureka, we offer technical assistance to the project supporting the PRO BOLIVIA agency and other beneficiaries on the **Program for supporting the Productive Development with Decent Employment Sector Plan**. The focus is to improve productivity and employment quality in the Small and Medium Enterprises (SMEs) in prioritised sectors, through the improvement of management capacity, promotion of productive development and institutional strengthening.



PACSBio-European Union



PACSBio - European Union



PACSBio - European Union

Biodiversity Sustainable Conservation Support Program (PACSBio)

The Biodiversity Sustainable Conservation Support Program (PACSBio) in Bolivia, one of the most biologically diverse countries in the world, is an initiative financed by the European Union and accompanied by a technical assistance led by Eptisa.

PACSBio is articulated through the modality of Budget Support, which means that EU will directly transfer a total of € 14 million to the national budget of Bolivia within four years. This modality appears as an attempt to overcome the traditional project logic, with the aim to support directly certain public policies (national and sectoral) and to develop the capacity building, all in line with the objectives of the Paris Declaration on Aid Effectiveness.

PACSBio also constitutes a particularly relevant case because it is the most important project globally in the field of sustainable conservation of biodiversity and management of Protected Areas. It focuses its actions not only in conservation issues, but also on essential issues of sectoral governance (institutional reform, improving of planning and management capacity at the field level, optimizing the regulatory framework and consolidation of instruments to enhance the financial sustainability).

In this line, the technical assistance provided by the consortium led by Eptisa had, from the beginning, a focus oriented at the demand of sectoral institutions and the capacity building of the institutions. The focus contributed to reinforce some positive aspects in both governability and capacity building issues, among which it can be highlighted the following:

- The results-based management modality has promoted an institutional culture of public management, results-oriented sectoral and less towards compliance with standards and procedures.
- The upgrade and redesign of the Performance Assessment Framework, supported by the technical assistance of the programme, has positively influenced the development of the internal capacities of institutions. Consequently, they have initiated processes of organizational restructuring

and distribution of responsibilities, in order to target more effectively their organizational structures to tasks for supervision and monitoring of indicators and targets established.

- The optimization of instruments for integrated planning and for control and supervision (Protection and Management Plans for Protected Areas) has improved the quality of the design of the plans, both in national and sub-national areas, favouring the monitoring of the implementation of Bolivian biodiversity protection.
- The programme has strengthened the coordination mechanisms between the different levels of management of the National System of Protected Areas Department, promoting the realization of actions at central, departmental and municipal level, to increase the representativeness of ecoregions and the level of management of the areas.
- The support for the improvement and the comprehensiveness of the Integrated Water and Environment System of the Ministry of Environment and Water has enhanced the supervision and monitoring of the sectoral policy and has optimized the decision making process.
- The focus of the programme in aspects related to the financial sustainability of Protected Areas has enabled the creation of economic and sustainable alternatives more compatible with the conservation and an integrated land management of natural resources.
- Finally, the support for the design of a Training Program for the staff involved in the integrated management of the Protected Areas will strengthen the capacities of planning, management, monitoring and evaluation of the environmental policies.

For more information, please visit www.pacsbio.org or contact pacsbio@eptisa.com



AFRICA

During 2014, the presence of Eptisa in Africa has increased thanks to the new projects awarded in the water, institutional, economic and social development sectors, as well as energy, buildings and environment sectors





AFRICA

In the **water** sector we work in new construction projects of waste water treatment plants in Morocco and Algeria. In Algeria we also support the Algerian Government in the implementation of its sectoral environmental policy.

Due to the trust of the environmental and water agencies, Eptisa strengthens its presence in North Africa. In recent years, the activity developed in the African continent has had an important expansion, consolidating our presence in the countries of Morocco and Algeria.

In the **energy** sector, we continue working for the European Union in the project to provide technical assistance to the countries and regional organizations located in Western and Central Africa within the framework of the Sustainable Energy for All initiative (SE4All). This initiative is aimed to achieve by 2030 the insured universal access to modern energy services, doubling the global rate of improvement in energy efficiency and doubling the share of renewable energy in the global energy mix.

Also for the European Union, but in the **institutional, economic and social development** sector, we provide technical assistance services within the Programme to strengthen the regional capacity of civil society facility in the Neighbourhood South Countries. The purpose of this contract is to strengthen the overall capacities of the non-state actors to promote the national reform and increase public accountability in the countries located in the Southern Mediterranean region: Morocco, Algeria, Tunisia, Libya, Egypt, Israel, Occupied Palestine Territory, Jordan, Lebanon and Syrian Arab Republic.

The European Commission has renewed its trust in Eptisa with the award of a new monitoring contract based on **ROM methodology (Result-Oriented Monitoring)** of the cooperation programmes and projects financed by European Union in Africa. Its main objective is to provide technical assistance to the Commission's services

and its Delegations in the partner countries and regions in the monitoring and reporting on the implementation of projects and programmes financed within the framework of the EU's external assistance.

As consultants, we are responsible for organising the monitoring of each project and preparing the reports concerned. The objective is to guarantee an objective, impartial and rigorous quality control over the results of the European Union Aid and Cooperation Programmes in Africa. Within the programme, will be visited 600 projects in practically all countries of Sub-Saharan Africa, including ACP (Africa, Caribbean and Pacific) regions and Pan-African programs.

Since 2012 Eptisa is part of the consortium that provides its services evaluating the UK Department for International Development (DFID) and facilitating the compliance of its purpose of maximize both impact and effectiveness of the development aid as the value of money from UK taxpayers. 28 mainly African and Asiatic countries are included, and specially emphasises the impact assessments in fragile or conflict-affected countries and in sectors such as governance, climate change and development of private sector.

In recent years, the activity developed in the African continent has had an important expansion, consolidating our presence in the countries of Morocco and Algeria



Technical assistance to the evaluation of projects and programmes of the European Union's cooperation in Africa

The European Commission has renewed its trust in Eptisa with the award of a new monitoring contract based on ROM (Results Oriented Monitoring) methodology. The European Commission, through the ROM (Results Oriented Monitoring) Coordination Unit, has awarded Eptisa, in consortium with the companies Eco3 and Epes Mandala, the technical assistance project to carry out external ROM reviews and support missions concerning projects and programmes financed by the European Union for Africa.

Initially, the ROM project will last one year, renewable up to a total of four years. It aims to assist, with a group of experts, the Commission's services and its Delegations in the partner countries and regions in the monitoring and reporting on the implementation of projects and programmes financed within the framework of the EU's external assistance. This assistance represents the follow-up of the former ROM system implemented since the beginning of the decentralization in 2000.

The services provided include the performance of review missions of projects and programmes under implementation, as well as missions to support end-of-project reporting on results. It will also comprises consolidated analysis of the individual project reviews and results reporting support missions.

This lot covers the EU national and regional projects and programmes for the Sub-Saharan African region, including intra-ACP (Africa, Caribbean and Pacific) and pan-African programmes, financed by the European Development Fund (EDF) and the budget of the EU. It is planned over 600 monitoring missions, 350 of which correspond to the monitoring of implemented projects and programs, 35 to regional projects, 240 to end-of-project missions and 10 missions of budget support.

The purpose of the new ROM system is to enhance the European cooperation efficacy and the Commission's accountability and management capacities with a stronger focus on results at all levels, including the EU's corporate level as a donor, through the new EU International Cooperation Framework.

IVORY COAST

The European Union awarded Eptisa a new contract to carry out external missions of technical audit and specialized expertise in the framework of the **support program to cooperation activities** for the effectiveness and the quality of the partnerships Ivory Coast - European Union (SEQUACI). The overall objective of this contract is to ensure the achievement of the ongoing and futures cooperation programme results of the European Union in Ivory Coast.

EGYPT

In 2014, the European Investment Bank awarded a new contract to Eptisa, in consortium, to provide technical assistance services to the Integrated and **Sustainable Community Development Programme in El Cairo**. The aim of this project is to contribute to the improvement in the quality of buildings and, more general, enhancement in living conditions for the citizens with fewer resources, and the creation of employment opportunities for them.

ALGERIA

In 2014 began the technical assistance project to the Algerian Ministry of Land Management and Environment for the Program for Supporting the **Environment** Sector in Algeria (PAPSE). The overall objective of this new contract is to support the Algerian authorities in the design and implementation of sectoral environment policy, focused on the metropolitan area of Algiers under a sustainable and durable development perspective. Specifically, the program is aimed to reinforce sectoral environment capabilities and implement sectoral strategies Algeria.

In the **transport** sector, we continue drawing up the Construction design of a 32.5 km section of the new single-track railway line Ralizane - Tiaret - Tissemsilt, which will be 185 km long. We have also carried out the pavement project of the new aircraft parking at the airport of Annaba.

With the desire of protecting and safeguarding the environment, the Ministry of Water Resources of the Government of Algeria has developed and is implementing a program to build various **wastewater treatment plants (WWTP)** throughout the national territory, aimed to complete the economical and social development that it is experiencing Algeria. Specifically, we work in two contracts to control and approval of executive studies and works supervision, drawing up the documentation of the wastewater treatment plant in the city of Akbou and the city of



Pavement project of the aircraft parking at the airport of Annaba

Bou Ismail, as well as the technical assistance during the year of guarantee and operation.



Control and supervision of the construction works and assistance during the operation of the wastewater treatment plant in Akbou in Algeria

The project for the construction of the Akbou WWTP is part of the plan for the development of purification capacities, following the objective of complementing the economic and social development of the town of Akbou. It also contributes to the improvement of the living conditions of its citizens and to the environmental protection.

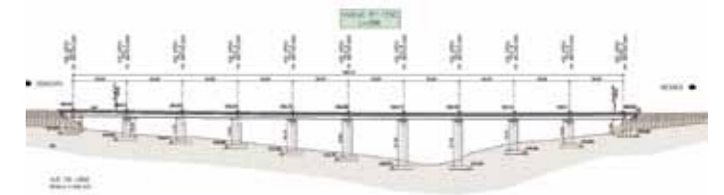
In this environment, the National Sanitation Office of Algeria, the public institution which manage the drinking water treatment and supply and the waste water collection and purification, has trust in the consortium formed by Eptisa - NEE (Spain / Algeria) the control and works supervision during the construction of the waste water treatment plant in the town of Akbou.

The new WWTP will cover an equivalent population of 100,000 people and will make a biological treatment (low-loaded activated sludge) and include a complete line of wastewater treatment and other line of sludge treatment.

Eptisa will be responsible for:

- Control and approval of executive studies
- Works supervisión
- Drafting of the treatment plant documentation.
- Administrative and technical assistance to the project manager during guarantee and operation.

Detailed design of three sections of the new railway line for passengers and goods between the cities of Relizane, Tiaret and Timssemsilt in Algeria



The project consists of the detailed design of the new railway line for passengers and goods between the cities of Realizane, Tiaret and Tissemsilt. They are part of the track and platform layout design, earthworks, design of esplanade, ballast and sub-ballast, cross and longitudinal drainage, track superstructure, railway and non-railway facilities, replacement of affected services and structural protection of gas pipelines near the layout.

It also includes the highway and road design cut off by the new railway line and their replacement guaranteeing cross permeability. The layout, earthworks, pavements, drainage and road replacement signalling will be analyzed during the process. The project includes the design of 8 structures, 6 overpasses and 2 railway viaducts made of precast beams with lights of 300 m and 120 m respectively.

The geotechnical study related to earthworks and slope stability in the railway layout and road layout, as well as the analysis of parameters of design and recommendations of structures foundation are part of the detailed design.



The project involves the design of two railway stations (Mendes and Rahouia stations) at both building design level (architectural and structural design) and related facilities design level. It is also included in the project the design of the adjoining areas to the building for vehicles, buses and taxis parking.

Control and supervision of the construction works and assistance during the operation of the wastewater treatment plant in Bou Ismail (Wilaya de Tipaza) in Algeria



The Bou Ismail WWTP is intended for the treatment of waste water for a population equivalent of 23,000 in 2030, with an estimated daily flow of waste water of 32,000 m³/day. The biological treatment has three lines and will be a low-loaded activated sludge plant. The WWTP will have three circular secondary clarifiers in parallel and the sludge will be treated by two gravity thickeners and two centrifuges. In order to allow the reuse of water for irrigation, in a first phase it is planned UV disinfection for the 50% average hourly flow.

The activities carried out by Eptisa are:

- Control and approval of drawings and construction design, established by the contractor, in terms compatible with the program of works of the Contractor.
- Technical control and permanent monitoring of the execution works, setup and commissioning of the equipment.
- Visits of experts during the works, setup and commissioning of all facilities.
- Administrative and technical assistance during the guarantee and operation.
- Reporting, control of drawings and construction design, monitoring of works, of setup and of the final documents of the facilities.

MOROCCO

In the **water** sector, the ONEE (Office National de l'Electricité et de l'Eau Potable) has contracted the consortium formed by Eptisa and GS Inima the **turnkey project** of the drinking water treatment plant of Fez and Meknes with an amount of € 25.2 million. The project includes the design, construction, equip and commissioning of a drinking water treatment plant with 172,800 m³/day (2,000 l/s) of capacity.

This significant project consolidates the participation of Eptisa in turnkey contracts for the construction of water treatment facilities both in Spain and at international level.

In the **institutional, economic and social development** sector, the Delegation of the European Union in Morocco has renewed its trust in Eptisa after the successful implementation of the first phase of the monitoring project of the Support Programme to Literacy and Adult Education Strategy, through the award of a new technical assistance contract for the monitoring of the second phase.

The contract started on November 2014 and will last 26 months and includes the following specific objectives: (1) strengthen the impact of sectoral Literacy Strategy in three main aspects: rural

areas, targeted to an audience aged 15 to 24 years, improvement of institutional management and governance, (2) influence in those regions where illiteracy is more developed, (3) improve professional practice to ensure a more efficient strategy regarding the individual monitoring of beneficiaries and their socio-professional integration, monitoring and evaluation of NGOs and improving the training of literacy tutor professionals (4) develop the capacities of intervention in post-literacy and (5) develop a professional and intersectoral vision of literacy in relation to the system of evaluation and certification as well as the development of mechanisms for partnership with NGOs and local economic actors.

We continue working in the project awarded by the European Investment Bank to provide technical assistance to the Central Project Management Unit (CPMU) of the Ministry of Agriculture and Maritime Fisheries for the modernization of **irrigated agriculture** in the area of Gharb, Haouz and Souss Massa in Morocco. The project is part of the "Programme National d'Economie d'Eau en Irrigation" (PNEEI), a national programme aimed to transform a surface of 21,405 Ha into an irrigation area in three regions of the country.



Technical assistance for the modernization of irrigated agriculture in Morocco

From late 2013 a new technical assistance to the Ministry of Agriculture and Maritime Fisheries of Morocco began, and more specifically to the Irrigation Department, to carry out the accompaniment during the transition from traditional irrigation processes such as sprinkler or gravity irrigation to drip spray irrigation. This project is part of a national program for agricultural transformation within the "Maroc Vert" Plan.

In order to modernize and make more sustainable the Moroccan agriculture, the European Investment Bank in collaboration with the Government of Morocco promotes this transformation. Eptisa supports to the General Directorate of Irrigation and its regional offices to advise them technically, in social and environmental aspects in the program areas: Gharb (Kenitra), Haouz (Marrakesh) and Sous-Massa (Agadir), all traditionally agricultural areas with a climate and diverse environmental conditions.

Turnkey project: Design, construction and commissioning of the drinking water treatment plant of Fez and Meknes in Morocco

The ONEE (Office National de l'Electricité et de l'Eau Potable) has awarded the construction of the drinking water treatment plant of Fez to the consortium formed by Eptisa and GS Inima, with an amount of € 25.2 million. The project includes the design, construction, equip and commissioning of a drinking water treatment plant with 172,800 m³/day (2,000 l/s) of capacity.

The water coming from the Idriss reservoir will be treated in the water treatment plant to reach the required parameters for human consumption. A pumping station will drive the water from the treatment plant to the water storage tanks for its distribution in Fez and Meknes municipalities.

The scope of the works includes the design, basic engineering and detailed engineering of the DWTP, water reservoir and pumping station. Construction of civil works: installation of mechanical, electrical and automation and control equipments; construction of buildings for facilities; testing and commissioning of the facilities.

The water line of the DWTP has: manhole for flow regulation and measurement, mixing chamber 1, lamellar separator, mixing chamber 2, flocculation, lamellar clarifiers, sand filters, filter washing, filtered water reservoir, dirty washwater recovery tanks, washwater separator, treated water reservoir with 20,000 m³ of capacity, pumping station and measurement of treated water.

The sludge line has sludge draining, sludge tank, gravity thickening and drying beds.

The reagent line includes dosage of aluminum sulfate, ferric chloride, polyelectrolyte, lime, chlorine gas, activated carbon and potassium permanganate.

The plant will be completed with drinking water networks, water services, emptying network, electrical connection, electrical transformer center, instrumentation and remote control, lighting, control building, urbanization and enclosure.

MOZAMBIQUE

Mozambique has demonstrated a strong macroeconomic performance over the last decade and prospects for future growth are stronger still. In spite of this, more than 50% of the population still lives below the poverty line, while insufficient quality and quantity of dietary consumption leaves more than 30% of households chronically affected by food insecurity, with alarming rates of stunting among children.

In this context, we have been awarded with a new technical assistance project to the **Food Security and Nutrition Secretariat (SETSAN)** of Mozambique to achieve the Millennium Development Goal 1C: halve, between 1990 and 2015, the proportion of people who suffer from hunger.

Within the **health** sector we work, since 2012, in the European Union-funded project for the **Institutional Strengthening to the Ministry of Health** titled: Support to the Development of Human Resources for Health Sector Management and Administration. The overall objective of this project is to improve the population's health conditions by equitably expanding high-quality basic health care services. Many activities have already contributed to an approach to the overall objective of the project, including strengthening and developing the planning, management, and evaluation process in the health care sector (with a focus on infrastructure, human, material and financial resources).

It stands out, especially, the work done for the definition and development of curricula, profiles and training programs of a Medium Technician in Healthcare Administration, as well as training session to teachers in technical, pedagogical and methodological aspects.



We continue working in the implementation of the pilot phase of the project **Territorial cartography** at a scale 1:25,000. The project consists of strengthening the institutional capacities of the Cartographic and Telecommunications National Centre of Mozambique (CENACARTA), which is in charge of the collection, storage and processing of cartographic and satellite images within the country.

The institutional strengthening is carried out through the procurement of modern equipment and training on technology transfer at national level, as well as the creation of a database of georeferenced data to produce topographical cartography at 1:25,000 scale and update the existing cartography at 1:50,000. The project seeks to cover the needs of different sectors within the country: cadastre, agriculture, transport infrastructure, geographic information systems, energy and telecommunications, among others.

After the Pilot phase, it will be carried out the procurement of equipment, software and satellite images, the starting of cartographic production, technology transfer, training and testing of proposed methodology. The Production phase comprises the extension of cartographic production to other locations different to the pilot zones within Mozambique, and the assumption of responsibilities in the production process by the client's staff.

Technical assistance to the Food Security and Nutrition Secretariat of Mozambique to achieve the Millennium Development Goal 1C in reducing hungry

Mozambique has demonstrated a strong macroeconomic performance over the last decade and prospects for future growth are stronger still. In spite of this, more than 50% of the population still lives below the poverty line, while insufficient quality and quantity of dietary consumption leaves more than 30% of households chronically affected by food insecurity, with alarming rates of stunting among children.

In some areas of the country, like the Beira and Nacala corridors, malnourishment has become a prevailing condition, even when the agriculture production is apparently sufficient to ensure access and availability of food. This is the result of a combination of limited diversity of food intake and inadequate nutrition practices, compounded by poor water and sanitation conditions.

In this context, the country is to renew its efforts to improve the food security situation. The Food Security and Nutrition Secretariat (SETSAN) has the mandate to coordinate and monitor the food security situation in the country and the implementation of the Action Plan for the Reduction of Chronic Malnutrition.

Within this project, the SETSAN existing capacity will be strengthened in order to take on the additional tasks of coordination, monitoring and evaluation of the MDG-I Programme, aimed to achieve the target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

Eptisa will be responsible for the effective coordination of the Programme at Central and Provincial levels, effective Monitoring

of the Programme, consolidation of the annual reports, successful conclusion of the process of programme reviews, support the visibility and communications effort of the Programme and support SETSAN in the management of the Programme Estimate, in respect of EU procedures.



JORDAN

Eptisa, in consortium with the German company GFA and the Jordanian NGO Partners Jordan-Centre for Civic Collaboration, began the implementation of the technical assistance to the programme in the first quarter. The Programme's objective is to promote democratic **governance** in Jordan, support civil society and organizations based in the communities to engage an effective policy dialogue with the authorities.

It is working on three components: strengthening of the institutional and administrative capacity of the Chamber of Deputies; building the institutional capacity of decentralized structures in each province, and supporting Non-State Actors to act as an effective drive for good governance and accountability.

DJIBOUTI

In 2014 we received the award of a new technical assistance services to develop a **National Housing Strategy** in Djibouti, aimed to improve the building standards and housing conditions in the country, to include risk management considerations and make safe housing affordable.

We continue working in the technical assistance project for the development of an Integrated Risk Assessment Platform in Djibouti (IRAP), which is part of the Natural Disaster **Risk Assessment and Monitoring System Project**. The project is financed by the GFDRR (*Global Facility for Disaster Reduction and Recovery*) and managed by the World Bank.

The main objective of this consultancy is the analysis, evaluation, communication and monitoring of the country's risk factors, as well as the assessment of the associated potential losses in order to provide decision-makers with the necessary tools for the development of their functions.

CORPORATE SOCIAL RESPONSIBILITY

Aware of the significance that company's Corporate Social Responsibility has acquired in this new context, Eptisa designed an action plan for the implementation of the Corporate Social Responsibility

Eptisa provides services with high technical and quality standards, and develops its projects aiming to provide the highest benefits for its clients', always acting professionally and looking for continuous progress and orientating its results, to the extent possible, towards environmental public interest and sustainability

Corporate Social Responsibility (CSR) is a strategic focus which potentiates Eptisa and its brand. Furthermore, it builds the trust and commitment of our employees. These factors being key in today's globalised market

In 2014 it has been fostered in Eptisa an environmental and socio-economic approach in services and management processes, by including social, economical and environmental criteria that will bring more sustainability to our solutions for the clients and will add value to society.

In the following sections we set forth the main aspects of Eptisa's Corporate Social Responsibility policy





IMPLEMENTATION OF CORPORATE GOVERNANCE

The incorporation Corporate Governance best practices directly enhances trust, safety and value creation within the Company

Corporate Governance is the development of a framework that effectively manages the relationships between the shareholders, the Board of Directors, management and key stakeholders in Eptisa. Therefore, Eptisa's management commits to ensuring that its executives act in a responsible and ethical manner in the course of their professional activity, applying Corporate Governance best practices via the implementation and monitoring of CSR related standards and recommendations, and to integrating these guidelines within Eptisa's internal organization without overlooking strategic management and operational efficiency.

GOVERNING BODIES

In order to incorporate these Corporate Governance best practices and consequently fulfil its commitment to transparency and business ethics, Eptisa has the following Governing Bodies: (i) Shareholders' General Meeting, (ii) the Board of Directors and (iii) the Executive Committee.

Among others, the main objectives of these Governing Bodies include the following:

- Ensure the organisation's sustainability from the economic-financial, social and environmental point of view;
- Foster an environment of ethical business practice in order to aid the Directors, managers and employees to prevent any unethical irregularities from occurring within Eptisa;
- Ensure an effective framework of Corporate Governance, establishing the necessary internal policies and regulations;
- Involve stakeholders in the Corporate Governance model in order to foster collaboration and cooperation so as to maximize value creation;
- Contribute to creating long-term value through careful management of corporate reputation;
- Potentiate the transparency and ensure the accuracy of the published financial information;
- Monitor operational management efficiency, improvement of processes and compliance with the applicable legislation.

Shareholders' General Meeting

The Shareholders' General Meeting is the supreme organ of expression of the shareholders' will. The decisions concerning the matters within their competence are adopted through majority.

Amongst others, matters within its competence include the following:

- Modifications to Eptisa's corporate structure;
- Modifications to the composition of the Board of Directors;
- Amendment of the Articles of Association; and
- Election of the External Auditor of the Company.

All shareholders are represented at the Shareholders' General Meeting and meet at least twice during each financial year.

Board of Directors

The composition, meetings schedule and internal regulations of Eptisa's Board of Directors are defined in specific clauses in the Articles of Association and by the Capital Companies Act. Furthermore, Eptisa's Board of Directors also abides to the applicable recommendations of the Good Governance Code.

Eptisa's Board of Directors is made up of the following seven Board Members, of which three are Executive Directors:



Ángel Corcóstegui

Chariman of Eptisa and Founding Partner of Magnum Capital Industrial Partners

Prior to founding Magnum Capital Industrial Partners in 2006, Ángel Corcóstegui served, from 1994 to 2002, as the Global CEO and First Vice-Chairman of Banco Santander Central Hispano (BSCH / BCH, currently Banco Santander). From 1988 to 1994 Ángel served as General Manager and Board Member of Banco Bilbao Vizcaya (BBV). From 2002 to 2006 Ángel worked as an Industrial Advisor to Carlyle Private Equity.

Ángel is currently Chariman of Eptisa and Iberchem and Board member of Generis, Geriatros, Nace, the Lauder Institute and the Wharton Business School.

Ángel holds a Ph.D. in Finance and an MBA from the Wharton Business School (Fulbright Scholar), and a Master of Science degree in Civil Engineering from Santander University.



Luis Villarroya

Vice-President and CEO of Eptisa

Luis Villarroya has been Vice-President of the Board and CEO of Eptisa since 2007, where he has held positions of the highest managerial responsibility since his incorporation in 1990. Luis is currently a member of the Strategic Guidance Committee of ICEX specialising in exports and investment; Vice-president of the Steering Board of the Spanish Exporters and Investors Club; Vice-president of the Association of Engineering, Consultancy, Environment, Architecture and Technology Services Companies of Madrid (ASICMA); Member of the Steering Board of the Spanish Association of Engineering, Consultancy and Technology Services Companies (TECNIBERIA); Member of the Executive Committee of the Pan-American Federation of Consultants (FEPAC) and Member of the Forum for Engineering Excellence (FIDEX).

Luis has a Master of Science degree in Civil Engineering from the Polytechnic University of Madrid.



Ángel Catena

Executive Director and Corporate General Manager of Eptisa

Ángel has been working for Eptisa for more than 25 years and has held office as Controller, Chief Financial Officer and General Manager. Prior to this he spent five years as project manager and chief consultant at Arthur Anderson in the Construction and Manufacturing sectors. He is currently President of the Ressa Foundation.

Ángel has a Master Science of degree of Civil Engineer from the Polytechnic University of Madrid.



Gerardo Roiz de la Parra

Executive Director and General Manager of the International Division of Eptisa

Gerardo has been General Manager of the International Division since 1997 and therefore manager of Eptisa Romania, Eptisa Mühendislik Ltd. in Turkey and co-manager of Eptisa India. Gerardo was a member of the Stichting Priority Foundation of the Dutch multinational engineering firm Arcadis for 8 years (1997-2005).

Gerardo holds a Master Science of degree in Civil Engineer from the Polytechnic University of Madrid.



João Talone

Board member and founding partner of Magnum Capital Industrial Partners

Prior to founding Magnum Capital Industrial Partners in 2006, João Talone served as CEO of Energias de Portugal (EDP) from 2003 to 2006. From 2002 to 2003, João was Special Commissioner for the Portuguese Government Special Commissioner and before that he spent 13 years (1988 - 2001) with the Commercial Bank of Portugal (BCP) where he served as Executive Board Member and Chairman of the Board of Directors (1999 to 2001).

João is currently Chariman of Iberwind and Board Member of Generis, Nace, Eptisa and Vendap.

João has an Advanced Management Program degree from Harvard Business School, an MBA from Universidade Nova of Lisbon and a Master Science of degree in Civil Engineer from the Technical University of Lisbon. In 2006, João was awarded the honour of "Grand Officer of the Order of Merit" by the President of the Portuguese Republic.



Enrique de Leyva

Board member and Founding Partner of Magnum Capital Industrial Partners

Prior to founding Magnum Capital Industrial Partners in 2006, Enrique de Leyva worked for McKinsey & Company for over 20 years in Spain, Lisbon, New York and London. Enrique was the Managing Partner of the McKinsey Spanish office, Co-chairman of McKinsey's Worldwide Partner Election Committee (1998 - 2002), and a key member of McKinsey's Worldwide Director-Election Committee (2003-2006). Prior to McKinsey, Enrique worked at Union Fenosa (1982-1984) in financial planning and regulatory affairs.

Enrique is currently Chairman of Geriatros and Board Member of Iberwind, Eptisa, Vendap, Iberchem and Nace.

Enrique has an MBA from the Columbia Business School (Fulbright Scholar), and holds a Master of Science degree in Civil Engineering from the Polytechnic University of Madrid.



Alberto Bermejo

Board member and partner of Magnum Capital Industrial Partners

Alberto Bermejo joined Magnum Capital Industrial Partners in 2007. Previously, Alberto worked for nearly 6 years as Associate Director in Mercapital. Previously, Alberto worked for Deloitte in the Corporate Finance Department.

Alberto is currently a Board Member of Geriatros and Eptisa.

Alberto holds an MBA from IMD (Caja Madrid Scholar), a Masters in Finance from the Complutense University of Madrid and a degree in Business Administration also from the Complutense University of Madrid.

Eptisa's Board of Directors is assisted by its Secretary, Gonzalo Garcia de Prado (Garrigues Law Firm), being an independent, impartial and professional person who, as a non-Board member, attends Board meetings but lacks voting rights. The Secretary diligently records in the Minutes the agreements, comments and proposals covered within the Board Meetings.

Eptisa's Board of Directors performs its tasks with unity of purpose and independence of judgement, treats all shareholders equally and takes the company's interests - understood as maximising the sustainable economic value of the Company - as its guiding principle. Additionally, Eptisa's Board of Directors is committed to respecting the rules and regulations, fulfilling its obligations and contracts in good faith, respecting the customs and good practices of the sectors and territories in which it carries out its activity and observing the additional principles of social responsibility that it has voluntarily accepted in its relationships with all the Company's stakeholders.

Eptisa's Board of Directors assumes, as a critical part of its mission, the approval of the Company's strategy, as well as, the accurate organisation required to put it into practice. Furthermore, Eptisa's Board of Directors commits to supervising and ensuring that Management fulfils the Company's targeted strategic objectives and respects its social purpose and interests. Consequently, Eptisa's Board of Directors reserves the power to approve the Company's general policies and strategies, and in particular the following:

- The strategic or business plan, as well as, management objectives and annual budgets;
- The investment and financing policy without prejudice to the prerogatives of the General Shareholders' Meeting;
- Definition of the corporate structure, without prejudice to the prerogatives of the General Shareholders' Meeting
- The Corporate Governance policy;
- The Corporate Social Responsibility policy;
- The remuneration policy and evaluation of the performance of top-executives;
- The risk management policy and periodic monitoring of the internal information and control systems; and
- The dividends policy and the treasury shares policy, in particular their limits.

The Board of Directors also has the prerogative of informing the General Shareholders' Meeting of the annual financial statements and the auditors' report.

The members of Eptisa's Board of Directors are required to actively participate and limit to a minimum any possible faults of attendance. With sufficient time in advance, Eptisa's Management provides the members of the Board of Directors with the required information in order for these to be able to take an active participation its meetings. Furthermore, all members of Eptisa's Board of Directors may request any additional information on any subject covered by the Board of Directors.

At the beginning of every financial year the Board of Directors sets the schedule of meetings for the coming year with a frequency of at least one ordinary meeting per month and/or any other meetings it may deem necessary. Once a year a meeting is scheduled to assess the operation of the Board of Directors in order to analyse its performance and detect aspects that could be improved.

Eptisa's Board of Directors is not remunerated and there are currently no other Board Committees.

Management Committee

Eptisa's Management Committee main function consists of defining, implementing and evaluating the strategic and operational plans of the Company approved by the Board of Directors.

The CEO of Eptisa appoints the Management Committee from among the members of the management team that takes care of the day-to-day operations of the Company. The following managers comprise Eptisa's Management Committee:

- | | |
|--------------------------------|------------------------------------|
| • Luis Villarroya Alonso | • José Ignacio Soriano Artacho |
| • Javier Andreu Posse | • David Pascual Braña |
| • Ángel Catena Asúnsolo | • Javier Sanz Urbina |
| • Gonzalo García Alonso | • Ignasi Cantarell Taxonera |
| • Gerardo Roiz de la Parra | • Fernando Varela de Ugarte |
| • Alfonso Rubio Barroso | • José María Pascual González-Babe |
| • José Manuel Sampedro Quijano | |

COMMITMENT TO PERSONAL AND PROFESSIONAL DEVELOPMENT

Eptisa is committed to the welfare and professional development of its professionals

TECHNICAL RESOURCES DEPARTMENT

Eptisa promotes training, creativity and synergy among its professional to enhance efficiency, productivity and knowledge management. With this aim, the technical resources department provides Eptisa's professionals anywhere in the world with the support of a technical team of engineers, architects, economists, geologists, programmers etc. that work to apply innovations, to modernise and optimise our services and make them available to the entire Company. In 2014 was developed in large areas of expertise such as Geotechnical Engineering and Environment.

OCCUPATIONAL HEALTH, SAFETY AND HAZARD PREVENTION POLICY

Eptisa is firmly committed to its strict health, safety and hazard prevention policy with the aim of preventing accidents and improving the welfare of its employees everywhere in the world. Occupational health and safety recommendations are published through the communication and training plan disseminated on the Intranet.

Eptisa adopted the Joint Prevention Service in the technical specialities for all of Eptisa's companies. For this reason Eptisa implemented the Occupational Hazard Prevention Management System, which has as its main objective the prevention of accidents and enhancement of occupational health in order to eliminate and/or mitigate harm to people and damage to facilities, machinery, materials, products etc., reduce downtime and foster safe, efficient working procedures.

This management system is certified by CERNE under the OHSAS 18001 standard which specifies the requirements of an Occupational Health and Safety (OHS) management system to enable the Company to monitor its OHS hazards and improve its OSH performance. It is an effective tool to establish an appropriate occupational health and safety policy (OHSP) in companies with the will to undergo continuous improvements.

EQUALITY POLICY AND WORK-LIFE BALANCE PLAN

The Equality Policy and Work-Life Balance Plan have contributed to the professional development of women in Eptisa and are an example of the Company's commitment to the family. Within the framework of the Equality Policy and the gender equality plan objectives, in 2014 we carried out training courses to foster awareness and integration of good gender equality practices in the career development of women in Eptisa. Additionally, the Company maintains its commitment to the family life by implementing work-life balance plans.

Again this year Eptisa renewed the collaboration agreement with the Adecco Foundation for the development of the initiative called Family Plan to support employees who have handicapped family members. This programme, which is specialized in helping handicapped individuals integration into the labour market, is a fundamental element of Eptisa's Corporate Responsibility Policy. In this sense Eptisa's employees with handicapped children, siblings or spouses under 65 years of age can take part in the counselling plans implemented by the Adecco Foundation's recruitment consultants. This personalized attention of the family member consists of guidance, advice and the design of actions adapted to the needs of each participant. These needs are valued under a counselling plan in the following areas: Medical-clinical, family, social, educational and labour-related.

PERSONALIZED PROFESSIONAL CAREER DEVELOPMENT PLAN

All of Eptisa's employees have a personalized professional development plan based, responsibilities and capabilities required for each position. Internal training plans and a talent management program help to develop the professional career of every employee in the Company. In 2014 it was intensified in the definition of the responsibilities, objectives and competences of the key positions for the company.

In Eptisa we want to foster the access to junior employment, developing a roadmap to attract and promote the youngest talent through a scholarship program and collaborations with universities, masters, etc. to allow them to access to their first job.



COMMITMENT TO ENVIRONMENTAL SUSTAINABILITY

Eptisa is committed to the development of solutions to guarantee the socio-environmental sustainability of our planet and improve the development of society

The companies that work in solutions and services in order to improve the management of resources and guarantee the socio-environmental sustainability will positively affect in the development of society. Over-exploitation of the planet compromises its sustainability and the resources available for future generations.

Engineering is an essential component of environmental conservation, the recovery of natural areas, water and waste management and the search for alternative energy sources to ensure a sustainable future. We understand that progress entails protection of the environment, and therefore Eptisa integrates policies associated with sustainable development into its production processes to guarantee long-term sustainability in all projects, mainly in developing countries.

The effects of climate change are producing devastating consequences in the basic infrastructures of the countries at risk, and thus deteriorating the quality of life of the population. Eptisa has become one of the best partners for international institutions in the development of projects within programs financed by multilateral agencies to mitigate the risk and to design infrastructure resilient to the effects of climate change.

Eptisa works to mitigate the environmental impact caused by its activities through a programme of environmental sustainability best practices aimed at reducing the consumption of resources and proper waste management. The environmental management system implemented by Eptisa defines the Company's commitment to reducing its environmental impact.

Environmental and Quality Policy

Eptisa's Management carries out an Integrated Quality and Environmental Management System in accordance to UNE-EN ISO 9001 and 14001 standards. This system includes a Quality and Environmental Policy based on the following principles:

- Quality and environmental management are key strategic objectives for the Company;
- The personal, technical and managerial development of all employees through continuous improvement of their knowledge and skills is a priority of the corporate mission;
- A comprehensive client service is the core value that makes Eptisa a global company, which approaches all tasks from an innovative multidisciplinary perspective;
- Continuous improvement in the efficiency of the system and prevention of pollution are considered essential ;
- The integration of Environmental criteria into activities and business processes are promoted, and
- Eptisa and its clients are committed to providing products and services that meet the requirements specified by the current applicable legislation.

The system is aimed at achieving the following objectives:

- Customer satisfaction and the pursuit of excellence in the performance of the assignment , and
- Conducting activities with minimal environmental impact.

Eptisa's Management reviews the System in order to evaluate the suitability of the policy and set the specific, measurable and quantifiable objectives for the current year.

The policy is accessible to the general public and is communicated to all employees and those who work for or on behalf of Eptisa to ensure that it is known, understood and put into practice.

Integration of the Values of Environmental Sustainability within Services and Products

Eptisa is working on integrating socio economic and environmental criteria in our production processes that guarantee the sustainability of the solutions provided and add value to the environment to be a driver of the social development. To do this, each of Eptisa's business units develops and implements detailed operational plans to protect environmental sustainability. Among others, these include:

Transport

In the transport sector Eptisa is committed to optimizing mobility in order to minimize the environmental and economic impact, as well as maintain the growth of the welfare state without over-exploiting the resources of the earth.

Energy

In the energy sector Eptisa focuses on saving energy and the search for new alternative sources of energy by designing energy-efficient facilities and infrastructures, collaborating in several developing countries in the renewable energy development programs.

Water

In the water sector Eptisa is committed to improving people's access to water all over the world by providing its know-how and engineering and managerial services. Eptisa works with multilateral agencies on projects to improve water supply and sanitation infrastructure in developing countries. It also collaborates on projects for the efficient management of water supply and sanitation networks to prevent drinking water losses.





Internal Management of Buildings and Environmental Performance

In 2014 the following environmental initiatives were carried out, some of them for the optimization of services and saving resources.

Initiatives Implemented in 2014

Among the implemented initiatives related to environmental management are:

- Optimizing the use of paper by the implementation of a monthly budget allocated to each department to contribute to the rational use of paper through double-sided printing, the use of recycled paper for drafts, conducting communications via e-mail rather than printed internal memos, etc.
- Guidelines on the proper use of vehicles, aimed to increase the safety of the occupants and the use and improvement of the vehicle performance, which will ultimately leads to savings on fuel and thus reducing the environmental pollution. We continue with saving measures, such as optimizing the size of vehicles, reducing the number of vehicles, rental vehicles with star-stop system and tires with less friction.
- Optimization of energy costs, focused on the negotiations of Kw/h rates, adjustment of contracted powers and progressive introduction of LED technology. The replacement work of the existing light with new LED technology began in the headquarters in Madrid in late September 2014.
- Mobile phone recycling, donating the amount collected from recycling the mobiles delivered by Eptisa's staff to UNICEF
- Donation of computers (tower, screen, keyboard and mouse) to a NGO that facilitates the access to training to the inhabitants of the most disadvantaged areas of Latin America and Africa.
- Optimization of the use of electronic equipment (computers, mobiles, etc.): replacing computers and mobiles when strictly necessary has decreased the generation of waste EEE.
- Development of a corporate travel policy that contributes to decreasing the environmental pollution. It consists of the implementation of measures such as minimizing the number of trips, the number of people in each route/work, promoting the use of public transport or limiting the use of taxi outside the city centre, etc.

Eptisa's Intranet has become the communication channel for sharing best practices, improvement points and recommendations on the most efficient use of power, water, paper, etc.

Objectives achieved in 2014

The following results have been achieved thanks to the involvement of the personnel and monitoring of the aforesaid initiatives:

- 7% reduction in energy consumption in almost all work centres. The average savings were nearly 10% over the previous year, reaching reductions of 30% in the past two years in half of the centres.
- 5% reduction in paper consumption. In some important centres such as Madrid and Barcelona has been reduced 53% and 43% respectively over the previous year.
- 2% reduction in water consumption. It has been achieved in more than half of the centres
- 10% reduction in fuel consumption. A 24% saving in fuel consumption in the past two years has achieved.

Waste of Electrical and Electronic Equipment

To reduce electrical and electronic equipment waste (WEEE), the use of electronic materials has been optimised and units were only replaced when absolutely necessary.

Noise level

Regarding the measurement of noise in Madrid, a measurement of the level of noise inside and outside the offices of Emilio Muñoz has been carried out, ensuring that Eptisa is within the permissible levels of interior noise and the noise emitted to outside.

Objectives 2015

For 2015 the environmental objectives are fixed in a general way to all business units included under the certificate. Briefly, the objectives are as follows (the goals are detailed in a separate document).

- Measure and develop a plan to reduce the CO2 footprint
- 10% reduction in paper consumption
- 10% reduction in fuel for vehicles
- 5% reduction in print
- 5% reduction in plastic waste

ISO 14001 Environmental Management Certification

Eptisa's Environmental Management System is certified by AENOR, accredited by IQNet, the international certification network and in Spain by ENAC in accordance with the ISO 14001 standard.

The implementation of an Environmental Management System under the UNE-EN ISO 14001 standard is a tool which systematises environmental aspects related to the Company's activities and fosters environmental protection and pollution control and at the same time considering socio-economic aspects.





COMMITMENT TO QUALITY

Quality management for achieving excellence is Eptisa's commitment to its clients

Eptisa's commitment to quality management gives rise to continuous improvement plans as part of the strategic planning. Eptisa's Management understands quality as the suitable administration of all resources to achieve optimum results, and thus ensures the achievement of excellence in service provided to clients.

Integrated Quality and Environmental Management System

In Eptisa quality management and client satisfaction have always been a key objective. So much so that the Company had a certified quality management system implemented more than ten years ago, applicable to all its processes and activities regardless the brand that operates in the market.

For the sake of simplicity and operational efficiency the quality and environmental management systems are merged into a single Integrated Quality and Environmental Management System (IQEMS), which means that all those who work at Eptisa share a commitment to quality and a deep respect for the environment, which has as ultimate objective client satisfaction.

ISO 9001 Quality Management Certificates

The Quality Management System is certified by Bureau Veritas, accredited by ENAC in Spain and internationally by UKAS Quality Management in accordance with the UNE-EN ISO 9001 standard. This international standard fosters the adoption of processes to develop, implement and improve the effectiveness of a quality management system based in turn on the continuous improvement PDCA (Plan, Do, Check, Act) cycle approach.



COMMITMENT TO SOCIAL DEVELOPMENT

The companies with experience in developing countries and a pro-development focus, able to adapt to the local context, generate more value to society and operate with less risk

Much of the population growth occurs in emerging and developing countries, where it is concentrated much of the global demand for infrastructure and service to ensure the development of society. To achieve the objectives, these countries need better institutions and better governability.

Engineering projects in the new emerging countries mean major professional challenges.

Companies are major players in the development of society, both by the provision of services, civil works and supply of equipment and through the transfer of knowledge, technology and management skills to less-favoured environments areas of the planet. To generate greater value for society Eptisa adapts its business strategies to the features of each local context.

Institutional, Economical and Social Development

Our experience evidence that the projects in developing countries are not purely technical: technical issues are always associated with social issues. Therefore it is necessary to understand how local socio-cultural variables function (which are different in every location) in order to ensure that the technical solutions proposed are an adequate response to all aspects of the project.

Since 1996, Eptisa develops a specialized activity in the institutional, economical and social development sector with the main objective of combining business opportunities that benefit the Company with activities which also benefit society as a whole.

Eptisa is now a reference for the management of multilateral funds and works with leading international development agencies.

Eptisa understands that the companies have a very important role for the transformation of reality. The culture of development cooperation advocates for a balanced transformation (between economic, social and environmental dimensions) and in where the efforts are focused on generating opportunities for more vulnerable or disadvantaged countries or regions. As a consulting company, we provide useful services to entities in the beneficiary countries in order to strengthen their capacities to improve the conditions of its population.

The socio-economical development has many objectives with a common focus on reducing poverty. This scope requires players with very different skills, for example: the engineering companies, which have an extensive knowledge in diversified technical fields.

Eptisa's strengths are its technical and management skills, the knowledge to identify and define technical solutions, the capacity to contribute to improvement of the physical capital of the environment of the people and the capacity to quickly respond to high level demanding commitments.

Responsibility and Respect of the Local Community

Eptisa's corporate responsibility focuses on respecting a series of principles such as (i) the value of local human and material resources, (ii) the population's sense of ownership, (iii) awareness and consensus of the local stakeholders, (iv) the compatibility with local development processes and (v) the conservation of local natural resources.

Eptisa's technical and managerial teams understand perfectly that the contribution of other actors such as consultants, research centres, universities and public institutes that provide local knowledge is vital. This also applies to the role of NGOs that have experience and knowledge of the dynamics of society, have facility for interact and understand the needs of the population, have experience in the design of social interventions and normally knowledge of the local appropriate techniques / technologies.

The management of Eptisa, aware of the importance and scope that social responsibility and labour conditions acquire when performing the its activity, actively promotes the responsibility of each employee to comply with national and international laws on working conditions and the respect for the local community with which they interact.

In 2014 the donations and collaborations programs with NGOs and associations has intensified thanks to the commitment and solidarity of the group's employees. Used phones have been collected for UNICEF, food for the Food Bank, computers for the NGO Altamiro, etc.



COMMITMENT TO INNOVATION

Innovation as a founding pillar of the development of civilization

The "Vision 2050" report, a new agenda for business of the World Business Council for Sustainable Development, in which 29 large companies have developed a worldview centred on sustainability, affirms that it is necessary to understand a "global and sustainable" market as a reality that will be imposed for companies and in the markets. For which, the change of behaviour and social innovation are as crucial as better solutions and technological innovation.

Innovation is the key factor in creating sustainable competitive advantages. For that reason the ability to learn and innovate are a reliable method of increasing competitiveness and developing new products, processes and services to better meet client needs.

Eptisa has adopted a management model based on continuous improvement in the activities of our core business; in other words: adapting and improving processes, products and services, always regarded within the specifications of our clients' needs.

Eptisa's professionals use their know-how to introduce technological innovations that improve the products and services we provide to clients and have a beneficial impact on society.

Eptisa's R&D projects

R&D projects developed by Eptisa seek to create innovative products in order to meet the needs of clients and society, and to optimize internal management processes in order to foster managerial modifications focussed on improving the economic and social potential of the Company.

Pathology Prevention Warning System in Wind Turbines

Eptisa has developed a system that enables control the behaviour of the static elements (foundations, ferrules and towers) of wind turbines from the design to the operation and maintenance phase.

The activities that Eptisa carries out are a mobile dynamic test unit for these preventive measurements and monitoring and automation through SAYTLDynamic. As a general rule, preventive tests can identify the current state of the static structures of the wind turbines so that maintenance measures can be planned ahead.

In those cases in which measurements are obtained during a preventive campaign, a scheduled inspection or during routine

maintenance reveal damage to structural elements, it may be advisable to implement a permanent monitoring system of the pathology detected by empirical damage control.

The main tool is the SAYTLDynamic software, a preventive system for intensive, continuous monitoring of conditions in wind turbines using continuous data acquisition equipment and a SCADA web for its display, management and alarms.

The preventive measurements enables the wind farm operator to anticipate repairs before damage to the foundations causes technical shut-down of the machine with the consequent loss of earnings and, in many cases, an increase in repair costs.

R&D+I project in an urban milla lab laboratory of the Zaragoza art and technology centre eTopia

The Centre for Art and Technology (eTopia) consists of three next-generation buildings with more than 16,000 m² of floor space designed to house and foster the most innovative creative projects and entrepreneurs within Milla Digital area. It aims to be an area open to all citizens, businesses and artists, while working as a contemporary culture centre showcasing the most innovative artistic expressions, as a workshop for artists and technologists, a dedicated training area specialising in the new fields deriving from the meeting of art and a technological think tank for the digital city and incubator of new companies in the content sector.

Eptisa is a part of the Urban Milla Lab, an area within eTopia intended as a smart city R&D+i laboratory. We developed the digital infrastructure inventory project and dashboard system for the participatory city.

This project, based on the experience obtained with the systems deployed in the Valdespartera Ecocity project, manages the environmental and economic impact of the proposal and carries out research into a sustainable model for implementation in other areas of the city. It brings major innovations for both the public authorities (in efficient infrastructure management) and for the public in general.

First remote-controlled prototype for measuring the effectiveness of decontaminating materials

Eptisa, in collaboration with the Centre for Industrial Technological Development (CDTI), launched a research programme aimed at developing the first remote-controlled research and testing method applied to photo-catalytic materials. This new technology will enable on-the-ground measurement of the decontamination effects of pavements treated with photo-catalytic products and definition (among other applications) and determine the variables that influence their conduct through laboratory testing.

The activities that will be carried out within this program are aimed at achieving three objectives. In the first place, to investigate the behaviour of new decontamination materials, the chemical reactions of photocatalysis and the influence of temperature, relative humidity and UV radiation on the decontamination materials. Secondly, to design and develop the first device for testing the efficiency of pavements treated with decontamination materials both in situ and in the laboratory. And thirdly, to design and develop automated tests.

ROMA (Road Management System)

Due to its advanced capabilities for display, editing, search, management and analysis of information, the ROMA Road Management System is the most comprehensive Esri GIS-based technological solution for professional treatment and management of information related to linear infrastructures. ROMA users have access to a series of tools that enables them to perform asset management and management of preventive and corrective maintenance of infrastructure and their elements, including paving management.

ROMA Pavement Management is both an independent or integrated module that consists of working tool that allows to know how, when, where and why the pavement should be intervened, and the associated costs to such investment.

SmartDam Projects

Eptisa develops R&D+I projects for clients in specific environments. Examples of this are the SmartDam projects, a set of solutions that allow improving the management of superficial water resources and flood abatement, operating on the dams safely and accurately.

It has been developed solutions for monitoring the drainage elements in their top chambers implementing both broadband data and voice communication networks connected to corporate networks and internet

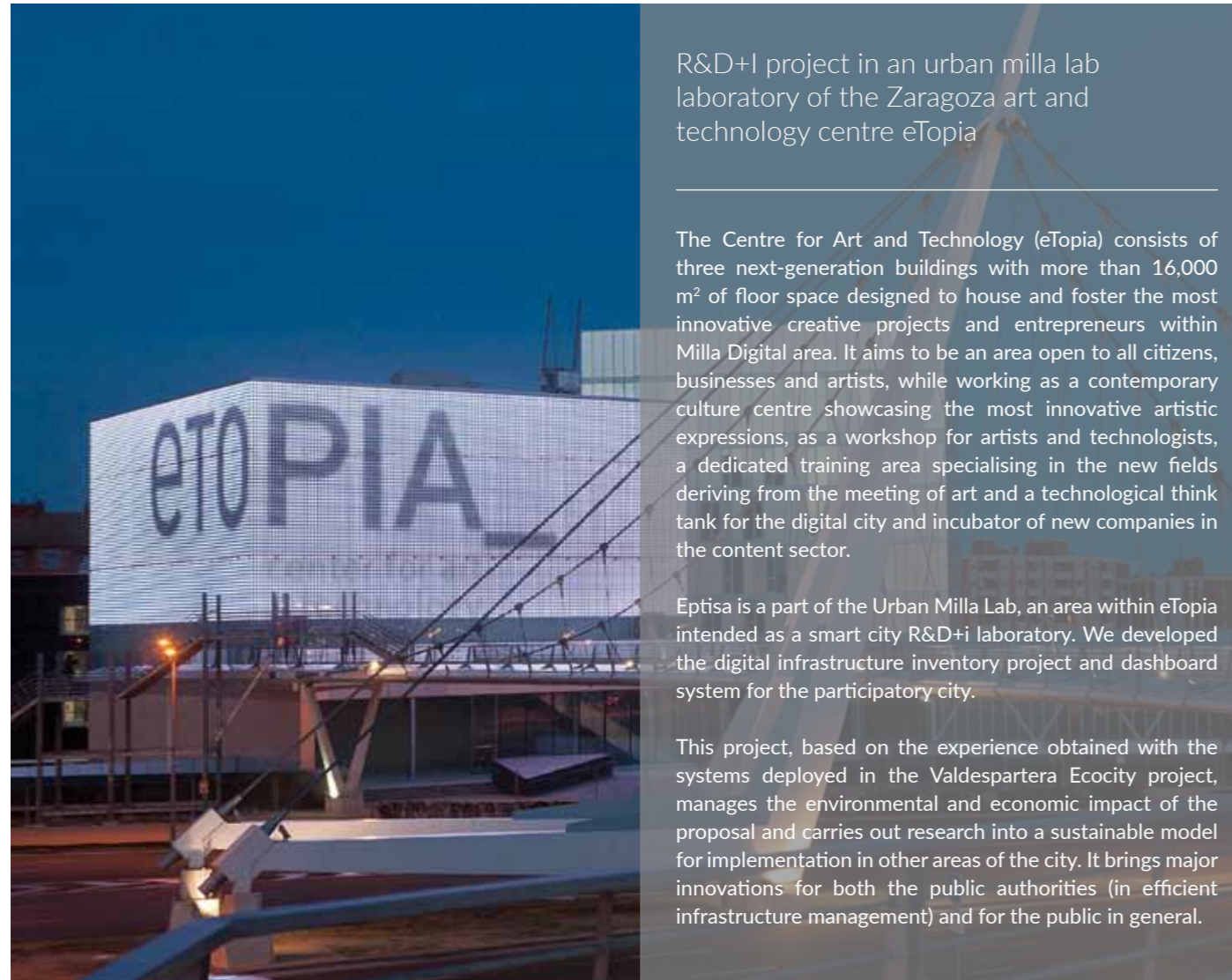
Integrated Pavement Management System - P@vement Check

The objective is to develop an automatic tool accessible through an on-line platform that enables visual inspections of the pavement of all types of infrastructure (streets, sidewalks, roads, ports, airports, bike lanes, racing circuits, etc.) to create an objective inventory of their pathologies, minimising the influence of the human factor to determine their condition or degree of deterioration and plan their rehabilitation needs. The application will be based on the Geographic Information System (GIS), with mapping, geo-referencing of pathologies and quantification of the same for subsequent corrective measures and to determine future investments.

The project was funded by the Ministry of Industry, Tourism and Trade under the 2008-2011 National Plan for Scientific Research, Development and Technological Innovation. Its project identification number TSI-100502-2013-10.

In the scope of this project Eptisa develops:

- Integrated Pavement Management Manual, which articulates and standardizes the methodology to perform.
- Software development and integration to automate data processing and postprocessing, quantification of deterioration and determining investments.
- Implementation and integration of GIS Software specially designed to optimize the digitalization and extraction of information from the captured image with the field tool. The software has functionalities of photogrammetry in three dimensions, allowing:
 - 3D positioning the visible elements in the image.
 - Digitizing directly on the image of the points, polylines and polygons of the items to make an inventory.
 - 3D measurement: distance between 2 points, height, width and length of each object, surface measurement.
 - The possibility to overlay existing map layers, both raster and vector with the georeferenced data produced with the 3D photogrammetry, allows obtaining vector, objective and standardized data layers. This makes it into an optimal tool for generating data on which to implement specific decision making algorithms.
- Implementation of the Online GIS platform with functionality specifically designed to assists the pavement maintenance work teams in the decision making, planning and monitoring of the work, as well as historical documentation of the work performed.
- Using a 5-megapixel camera, with the capacity of obtaining a series of correlative images, in a specifiable distance between them depending on usage from 1 to 20 metres of distance, with 50-channels Differential GPS and a Inertial Measurement Unit to correct positioning in areas with low GPS coverage and a barometric sensor for high precision position.
- Field tests on different types of pavements and different infrastructure, in order to calibrate the algorithms that will be integrated into the software that will be developed. The camera used shall be coupled on a conventional car.



Giro project: New architectural solutions for a new gerontological care person-focused model

The population ageing set an unavoidable and not hypothetical challenge, because the elderly of the future already inhabit the earth. The current health care and social protection model is facing a changing conception of the elderly. The older person is now an active entity responsible for his/her own care. Society in general and providers of health care services in particular has to increase the value of the elderly rejecting negative stereotypes and changing its working models and health care systems. Older people constantly express their desire to age in their home, even when they are depending people and need help in several areas of their life. When this is not possible, they prefer alternatives to their home to ensure the motto "live like at home", focusing on small accommodation or cohabitation units in traditional centers in order to develop care person-focused models.

Definitely, we are facing a change of the health care model paradigm. The overall objective of this project is the development of new products, environments and services to build and remodel efficient gerontological centres based on Gerontological Care Person-Focused Model, which covers the needs, tastes and expectations of elderly and favour the development of their capabilities, comfort and welfare. To do this, we take as basis the characteristics of the environment of the people that have special needs and live in residences for the elderly.

The Eptisa's work will be to search architectural solutions that improve the people's welfare. The new gerontological model will be able to offer a homely feel, as well as stimulus that encourage the feeling of control immediate environment and of the activities of daily life, where the affective relationships are cultivated.

In this project it is intended to propose new architectural designs for:

- Development of a new accommodation person-focused model with con modular building solutions: the private room is not only "a bedroom" but "his/her new home".
- Promoting people's welfare: integral and friendly accessibility; creation of "large small spaces and small large spaces"
- Encouraging social interaction with open spaces and corridors that favour the meeting and exchange, combined with places from which they can observe the daily life.
- Taking care over specific designs for caring for people with dementia: design appropriate spaces to facilitate and allow wandering

COEM HIGIA: Smart platform for management and monitoring of health workers, patients and assets in hospital environments

The main objective of this project was to design and create Hygía, a platform to centralise and manage the information of patients and health care resources intelligently and efficiently on the basis of real-time identification and location of the resource to optimise the entire attention process. To do so, agent technology, artificial intelligence, innovative identification and localization technologies and e-health techniques are used to endow the platform with a certain degree of intelligence and to generate knowledge and the ability to adapt to the demands of each individual interaction. The great challenges facing the platform are to provide the best patient care, enable access to information, improve data management, aid decision-making, promote the use of new technologies, optimise access to the resources and reduce costs.

The extreme complexity, scope and diversity of the objectives of the project meant that it was necessary to set up a consortium to access the necessary expertise in the various areas of investigation. The project consortium is composed of Eptisa and HORUS. The Directorate General for Health Development of the Regional Government of Castilla y León and the University of Salamanca Biomedicine Intelligent Information Systems and Educational Technology Group (BISITE) also participated in the project.

The R&D project was funded by the European Regional Development Fund (ERDF) and the Regional Government of Castilla y León.



CODE OF ETHICS

The Integrity Management System establishes the principles, norms, values and basic rules of conduct that should guide the behaviour of all people and collaborators who work in Eptisa in the development of their professional activity.

Following up with the commitment of the Eptisa's Management to transparency, ethics and professional development of our management structure, in 2014 the design of an Integrity Management System was started, which includes the policies that, based on principles, values and corporate commitments (CSR Policy), govern our business activity and management.

In 2014 the Eptisa Code of Ethics was adapted to the principles, norms and values to define the basic rules of conduct that have to guide the behaviour of all those who work in the Company in the course of their professional activity.

It seeks to ensure that labour and human rights will be thoroughly followed, and that people, in all their diversity, will be fully integrated within the corporate structure and culture.

Eptisa's Management is committed to promoting, among both employees and partners, the knowledge, acknowledgement and assessment of the ethical business behaviour which is in compliance with the content of Eptisa' Code of Ethics.

Scope

The Code of Ethics is applicable to all levels of Eptisa's corporate structure:

- Board members
- Management and all other employees

When establishing business relationships with other companies and professionals, Eptisa will consider as key selection criteria their compliance to the management and behaviour principles set forth in Eptisa's Code of Ethics.

Basic Principles of Behaviour

The following are the principles on which Eptisa's Code of Ethics is based:

- **Legality:** In the course of their professional activities all of Eptisa's management and employees shall strictly comply with the currently applicable legislation in the territory where the Company carries out its activity. No order which contravenes the provisions of the rule of law shall be obeyed.
- **Ethical integrity:** All those who work for Eptisa shall perform their tasks with objectivity and professionalism.
- **Human rights:** All activity carried out by Eptisa and the people who compose it shall scrupulously respect the Human Rights and public freedoms enshrined in the Universal Declaration of Human Rights.

eptisa

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