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FOREWORD

4200

COLLABORATORS

Since its creation, TPF has experienced years of sustained growth, both organic and from acquisitions, which have enabled it to double in size on average every 3 years since its incorporation in 1991, evolving from 20 to 4200 employees.

This was the result of acquisitions, the last one being Cenor in Portugal in 2015. It was also the result of a constant and strong organic growth, with for example an 8-fold turnover increase in India since 2006, a 5-fold turnover increase in Brazil since 2009 before the crisis occurred, followed by a 2.5-fold increase, and also a 4-fold turnover increase in West Africa since 2011.

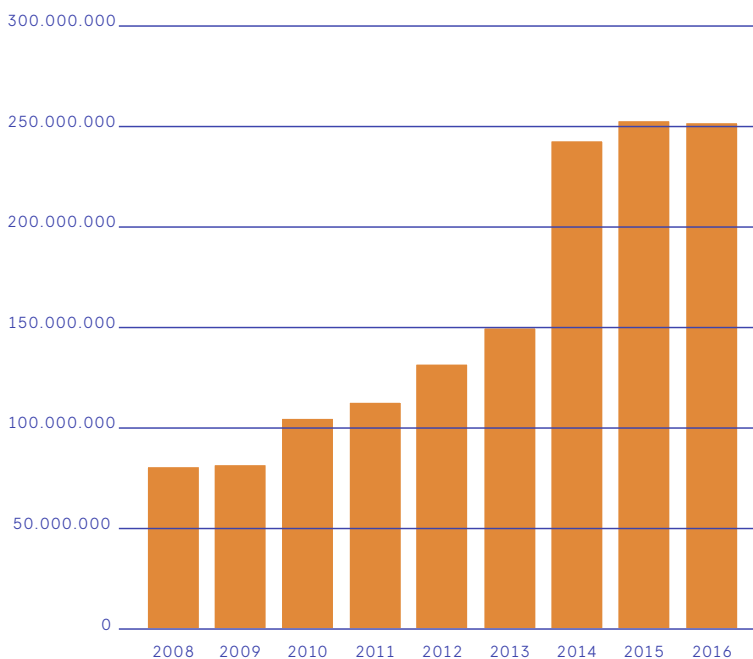
This development did not hinder our profitability since for ten years now, our EBITDA has been gravitating around 10%.

What are our success factors?

Alongside a strong desire to remain among the best in terms of profitability, there are two more specific factors:

- ▶ Even if we are deeply attached to Europe, we have not been afraid to expand internationally in order to be present on the four other continents.

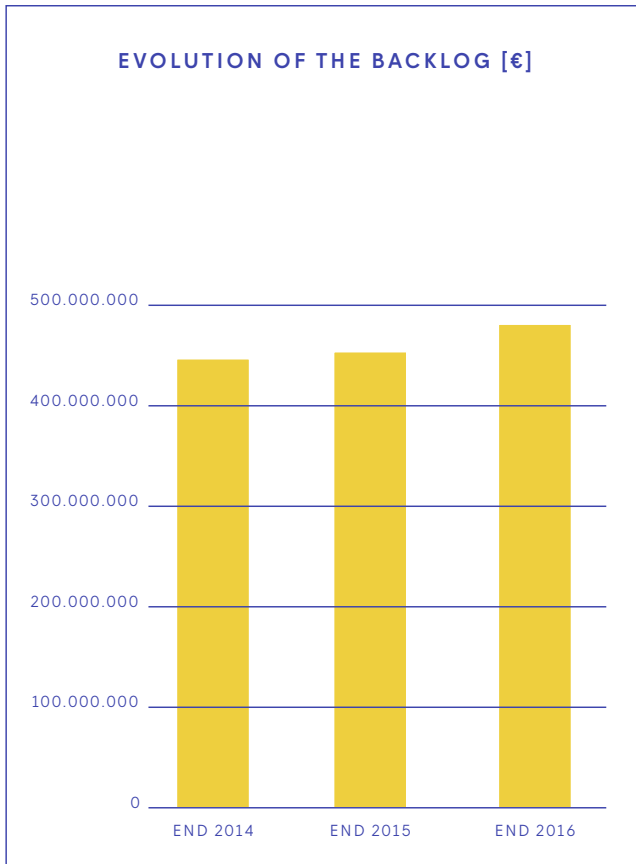
EVOLUTION OF SALES AND SERVICES [€]



This has enabled us to carry out very large projects, to maintain and increase our expertise and, despite our size in this relatively modest framework, to be considered a respected competitor by companies ten to twenty times larger than us.

As such, among the 1,500 projects we have worked on in 2016, at the end of this introduction, we have highlighted five projects in our five different activity sectors (building – urban planning, transport infrastructure, water, energy and environment) which are all projects we won in 2016.

1. In Turkey, the design of three artificial islands in the Marmara Sea for the Istanbul City Council (total area of 5,500 hectares);
2. In India, the Detailed Project Report and Authority Engineer Contract for the construction of the Zuari bridge in Goa (length: 720 m, two viewing towers);
3. In Brazil, the supervision of the construction of two stretches of canal, adding 140 km to the Ceará Water Belt,



- 4. In Brazil, the complete socio-economic assignment following the Samarco ecological catastrophe (the largest in Brazil's history) with 300 TPF employees mobilized.
- 5. In Cameroon, the project management assistance and work supervision for the Bini hydroelectric development at Warak, including a dam with a 75-MW capacity,
- ▶ Our diversity, which is rare among our competitors, is a factor of success. As such, I would just like to mention the fact that the TPF Executive Committee includes men and women originating from the four main continents who follow the main philosophical beliefs: Christianity, Islam, Hinduism and laity.

All employees and customers are respected at TPF.

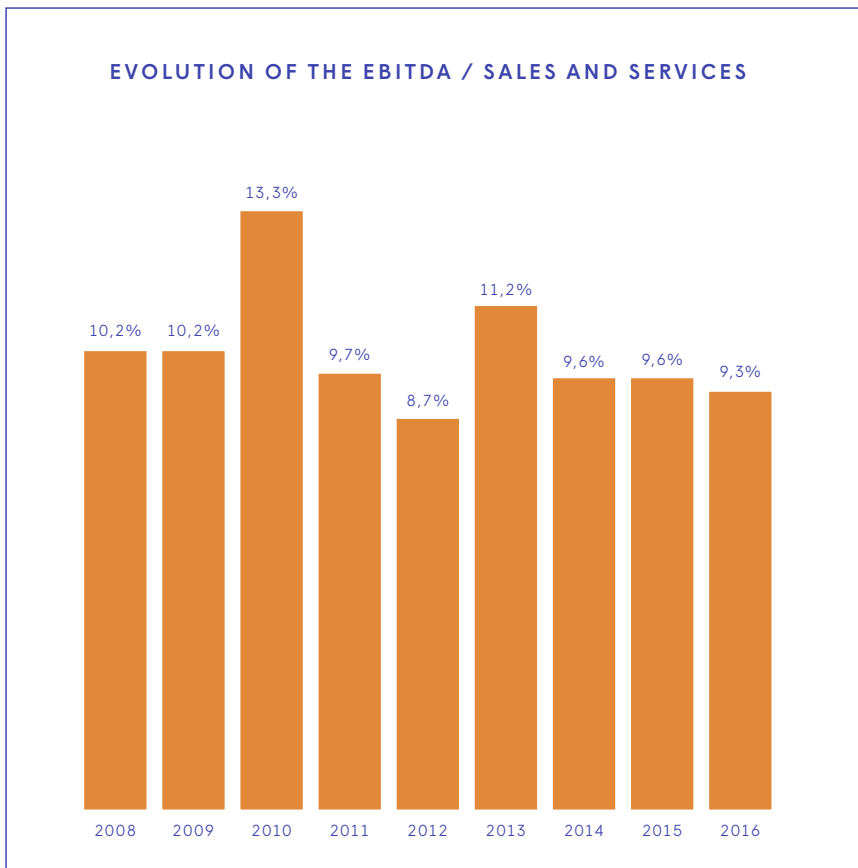
ACTIVE IN

71

COUNTRIES ON THE

5

CONTINENTS



In 2016, we decided to focus on simplifying and improving the group.

- Simplification through mergers in Spain, Portugal, Brazil, India and Poland, a process which is expected to be completed this year.

It is a complex process because it involves grouping teams, harmonizing IT systems and accounting methods, and redefining business plans.

- Improvement of the group by increasing internal subcontracting, through better organization of centers of expertise, and the adoption of the TPF name by all entities of the group.

We now form a more integrated structure with a single global brand: TPF.

As a result of these changes, in spite of a year marked by the slowdown in activity in emerging countries and stagnation in developed countries, we are particularly pleased to have generated an order backlog of 481 MEUR at the end of 2016, which is a significant increase (447 MEUR in 2015).

Also, in order to focus on our core business, we took out the real estate activities of the group to make them directly dependent on TPF Holding, majority shareholder of TPF S.A.

What are our commitments to society, to this world in constant evolution?

We would like to mention three commitments, with a different nature and scope.

1. We pay significant taxes (41.5%) and our main goal is not to constantly optimize the taxation of our income.
2. We decided in 2016 that none of our subsidiaries around the world would buy diesel-powered cars, and to accelerate the purchase of electric cars (our main offices are equipped with electric charging points)
3. Of course, through our foundation, which we created in 2015, all companies in the group continue to distribute 5% of their net income, which represented an amount of 500,000 EUR in 2016.

With our values, our ambition, our constantly evolving organization and our backlog demonstrating the trust of our customers, we are optimistic for 2017.

Before presenting the five flagship projects of this year in more detail, we would like to extend our warmest gratitude to all of our staff. Through their daily commitment, they contribute greatly to the Group's success and expansion. ■

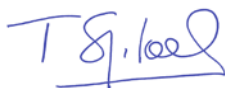
ESTABLISHED IN

50

COUNTRIES



CHRISTOPHE GILAIN
Managing Director



THOMAS SPITAEELS
Chief Executive Officer

BUILDING - URBAN PLANNING

DESIGN STUDIES FOR THREE ARTIFICIAL ISLANDS IN THE SEA OF MARMARA – TURKEY

The artificial islands will be built with the excavation from the construction of another ambitious project, *Kanal Istanbul* which will link the Black Sea and the Sea of Marmara.

Construction of three artificial islands with hotels, housing, shops, offices, financial center, sports facilities, schools, services, parks and activities of all kinds.



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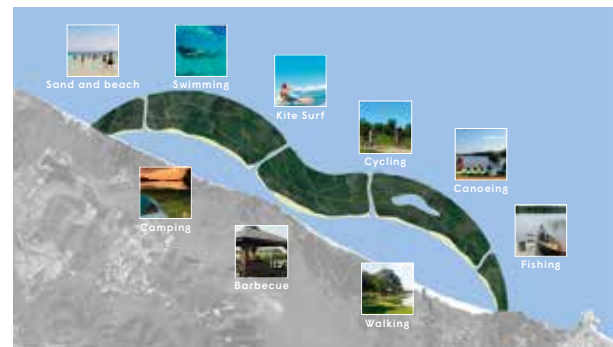
Island 1 – Social, health & recreation
Area: 280 ha
Volume: 50 Mm³



Island 3 – General use
Area: 1170 ha
Volume: 315 Mm³



Island 2 – Offshore & Financial center
Area: 172 ha
Volume: 30 Mm³



Land reclamation
360° beach – Natural living
Area: 3 865 ha
Volume: 1 250 Mm³

TRANSPORT INFRASTRUCTURES
CONSTRUCTION OF THE ZUARI BRIDGE IN GOA – INDIA

8 lane cable stayed bridge

LENGTH: 720 m

MAIN SPAN: 360 m

Two viewing towers in the center

CLIENT

Ministry of Roads, Transport and Highways (MoRTH)

MISSION

In 2014 – Detailed Project Report (DPR)

In 2016 – Authority Engineer contract, the single largest contract won by TPF in its history in India

TOTAL PROJECT COST

€ 375 million



WATER
CEARÁ WATER BELT – BRAZIL

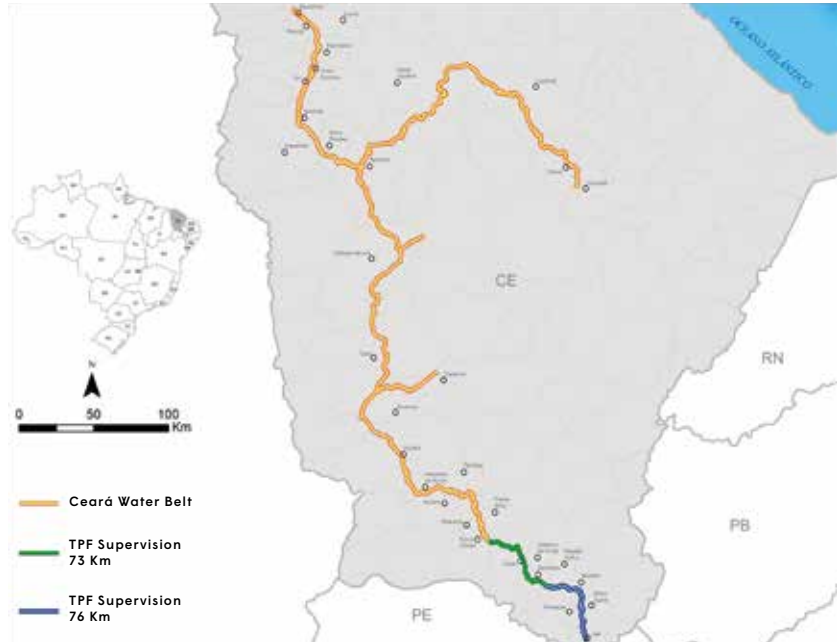
Supervision for the construction of two stretches of canal, adding 140 km.

This is the largest water transfer system in the area and is due to ensure supply during upcoming severe droughts.

PROJECT COST
USD 700 million

TOTAL INVESTMENT
USD 3 billion over 10 years

TOTAL LENGTH OF THE CANAL
1,300 KM



SOCIO-ENVIRONMENTAL ENGINEERING

SOCIO-ECONOMIC OPERATION FOR THE MINING COMPANY SAMARCO IN THE RIO DOCE RIVER BASIN – BRAZIL

Contract concluded with Samarco within the framework of the Socio-environmental Impact Assessment and Mitigation Plan relating to the Fundão Dam breach.

Ecological disaster caused by the mud which flowed across Minas Gerais and Espírito Santo States over 670 km:

- ▶ The town of Bento Rodriguez was completely submerged in mud.
- ▶ 40 municipalities were partially flooded.
- ▶ 30,000 families were affected.

300 collaborators are working on this project:

- ▶ socio-economic registration of all directly affected families and their respective asset inventory and asset valuation,
- ▶ social action in the reconstruction of Bento Rodriguez and Paracatu (dialogue with families, organization of meetings),
- ▶ dialogue mediation (Ministry of the Environment, Federal Government, States, Municipalities...)

PROJECT COST
€ 15.2 million



ENERGY

BINI HYDROPOWER PROJECT IN WARAK – CAMEROON

Assistance to project owner and work supervision.

The project includes:

- ▶ the mixed dam (Hmax 37 m – 603 hm³),
- ▶ the hydropower plant (75 MW),
- ▶ the electric line (225 kV) up to the post of Mouguel (70 km),
- ▶ the electrification of the rural areas,
- ▶ the rehabilitation and construction of access roads.

CLIENT

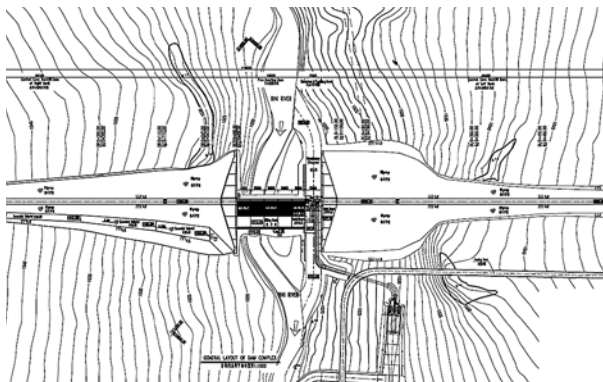
Ministry of Water and Energy

PROJECT COST

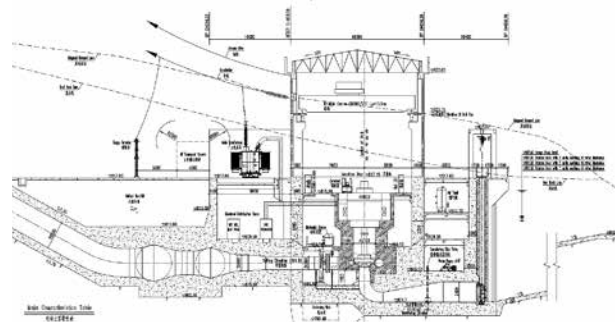
€ 350 million

DURATION

68 months



Dam



Hydropower plant

THE EXECUTIVE COMMITTEE OF TPF

From left to right and from top to bottom:

AMADOU DE

Member of the Executive Committee

PEDRO DANIEL GOMEZ GONZALEZ

Member of the Executive Committee

KATALIN BUDAY

Member of the Executive Committee

THOMAS SPITAEELS

Chief Executive Officer

JORGE NANDIN DE CARVALHO

Member of the Executive Committee

CHRISTOPHE GILAIN

Managing Director, Member of the Executive Committee

FRÉDÉRIC LASSALE

Member of the Executive Committee

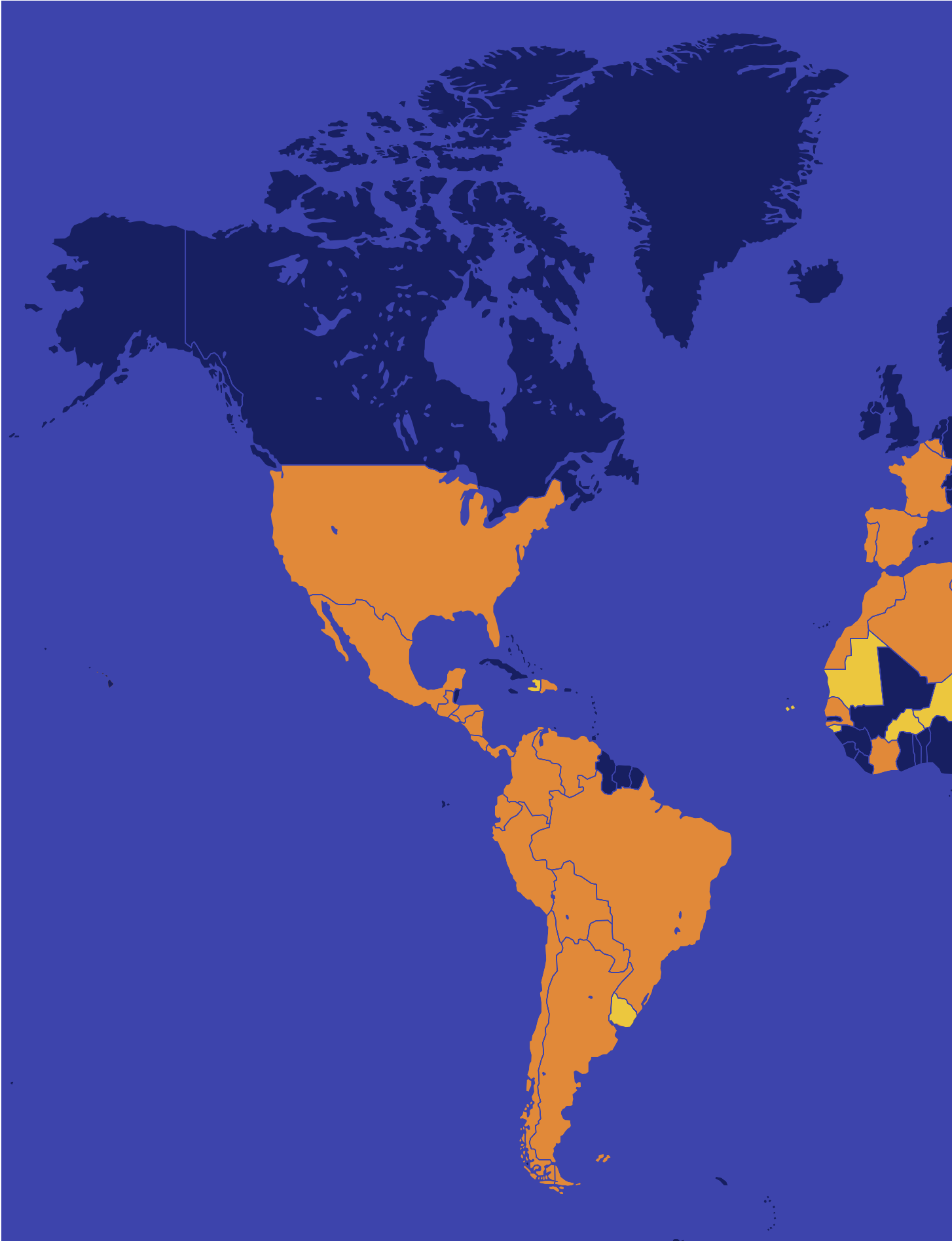
ATUL BHOBE

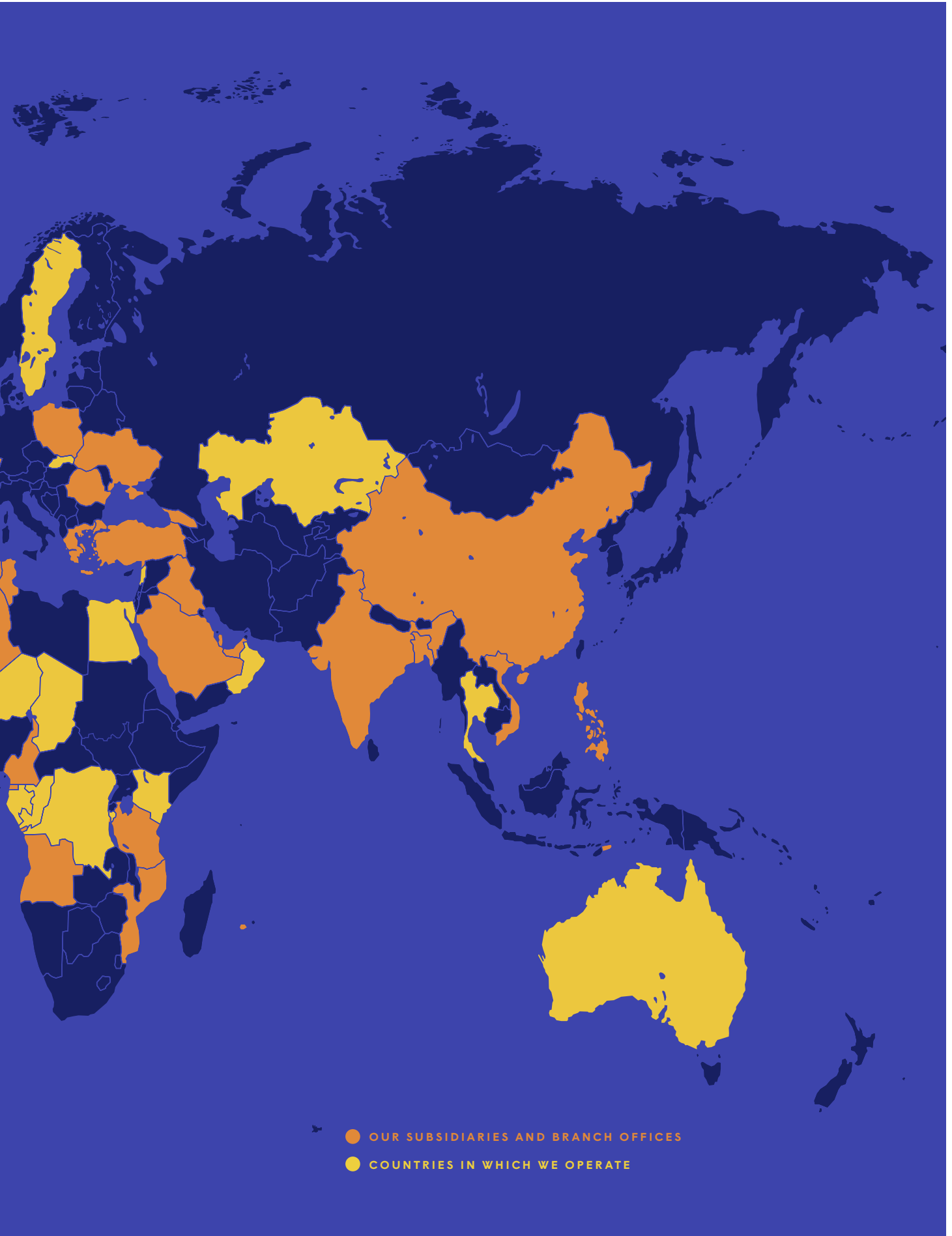
Member of the Executive Committee

ANDRÉ LUIZ DA SILVA LEITÃO

Member of the Executive Committee











HIGHLIGHTS BY GEOGRAPHICAL ZONE

“Consolidation and new markets, this is what characterizes the year 2016. The merger of the Group subsidiaries enhances our ability to meet new challenges. Our goal is to conquer new markets while redoubling our efforts to maximize results while remaining alert to any opportunity for growth.”

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Pedro Daniel Gomez Gonzalez, Member of the Executive Committee of TPF and CEO of TPF GETINSA EUROESTUDIOS

In 2016, Getinsa-Payma and Euroestudios, merged under the name of TPF GETINSA EUROESTUDIOS at year-end, have continued to work closely with our other Spanish subsidiary TRN INGENIERÍA in order to tackle new challenges while making sure they remained number 1 on the Spanish market.

While strengthening our position in strategic countries such as Algeria, Chile, Colombia, Mexico, Panama, Peru, the Philippines, Poland, Tunisia and Vietnam, we have further expanded our activities internationally. This has allowed us to win new business, especially in Argentina, the United States, Honduras, Kazakhstan and Senegal.

ALGERIA | Signing three new contracts in 2016 reflects our desire to increase our presence in Algeria. These projects bring the total number of ongoing achievements to more than twenty units.

One of them involves the preparation of the detailed design of the water supply system that will serve the Wilaya of Constantine (Package 01 and Package 02). Another one is a geotechnical investigation contract for the construction of Nutri industrial facilities in the area of the Port of Djen Djen. Finally, we have been awarded a contract to provide construction supervision services for the rehabilitation of the Safir Hotel in Algiers.

ARGENTINA | In Argentina, thanks to our 10 years of experience and technical expertise in the field of transport infrastructure, we have a major advantage to win new contracts.

This year, we have secured a large contract covering the supervision of the construction of one section of Paseo del Bajo Road in Buenos Aires. This section will have a total length of 2.42 km and it is expected to improve traffic flow on the north-south road across the city.

CHILE and COLOMBIA | In 2016, several rail and airport projects have caught our attention.

In Chile, we won a major railway transportation contract to provide technical inspection services during the rehabilitation of 137 railway bridges North and South of the country.

In Colombia, a significant milestone was achieved with the opening of two important infrastructures - the Bogota-Villeta road and



▲
La Sagrera Station
in Barcelona / Spain

the Olaya Herrera Airport, for which we have been providing consulting services. We were appointed as Independent Engineer to monitor the upgrading works carried out to the Ernesto Costisoso Airport in Barranquilla.

EGYPT | Throughout 2016, we have reaffirmed our position in the railway sector. We have completed the upgrade design of the telecommunications systems for the railway section Tanta - El Mansoura - Damietta (118 km).

As a result, the project can now move on to the tendering stage for the construction and implementation of the new railway systems and to the subsequent supervision stage. In addition, we have secured a new contract for the modernization of the electrification system of Line 1 of the Cairo Metro.

SPAIN | In Spain, we continue to make excellent progress in securing new contracts despite the economic crisis, still heavily present in our sector of activity.



In 2016, we have been awarded four railway contracts, three urban transport contracts and six contracts in the field of airports. The contracts we have won in the airport sector allow us to position ourselves as a leading player in Spain, driven by our exponential growth in the aviation market. With respect to the building sector, we have received a contract award to conduct the architectural design and the design of the systems of La Sagrera Station in Barcelona

UNITED STATES | High-speed railway remains our preferred sector in the United States: several ambitious projects are underway.

On the one hand, we are the lead design consultant of the feasibility study for the southern section of the Texas HSR corridor that will link Houston and Dallas. This southern section extends for 120 km from Houston to Singleton. Furthermore, we are working on the California HSR project. The California HSR Corridor covers a total length of approximately 1,280 km and will connect the major metropolitan areas of California, from San Francisco and Sacramento in the north to Los Angeles and San Diego in the south. We are conducting the detailed design of all the civil works included in Package 4 of this large high speed rail project.

INDIA | We are ready and determined to meet the challenges that lie ahead in India such as improving transport infrastructure.

We continue to enjoy steady growth in the transport infrastructure sector in India, where we have been awarded nine new contracts: six contracts entailing the preparation of the feasibility study and the detailed design of several roads and bridges, two road construction supervision contracts and one contract to provide quality and Health & Safety auditing services during the construction of the Mughalsarai – New Bhaupur section of a new railway corridor in the west of India.

KAZAKHSTAN | Events that shaped the international activity of TPF in 2016 include our entry on the Kazakh wastewater treatment engineering market. A first contract has just been signed for an assignment in the city of Atyrau.

It concerns the detailed design and construction supervision of a new wastewater treatment plant. The project includes two water intakes from different lagoons, a Wastewater Treatment Plant





01 Port of Djen Djen / Algeria

02 Railway section Tanta – El Mansoura – Damietta / Egypt

03 El Dorado International Airport / Colombia

04 New railway corridor in the west of India (Mughalsarai – New Bhaupur section)

05 Wastewater Treatment Plant in Atyrau / Kazakhstan

06 New correctional complex in Panama

07 Supervision of the construction works for the national road corridors Sullana – Aguas Verdes and Sullana – El Alamor / Peru

08 Expansion works on a 3.2 km section of road NH627 / Poland

09 Study for the BRT Dakar / Senegal

10 Muntinlupa Cavite Expressway toll road (MCX) / The Philippines

11 WWTPs that serve the city of Jendouba / Tunisia

12 BRT system of Hanoi / Vietnam



And with respect to Honduras, we have signed a contract that covers the provision of construction supervision services for the rehabilitation of the West Road CA – 11 in the northwest of the country.

All of these new projects continue to underpin and drive our growth in the Central American market.

PERU | Transport infrastructure in Peru is a booming market. By winning eight new contracts this year, our Spanish subsidiary has strengthened its leading position in this sector.

Some of the new contracts that deserve to be highlighted are: the supervision of the construction works for the replacement of ten bridges on the national road corridors Sullana – Aguas Verdes and Sullana – El Alamor, the studies for the design of toll plazas and assessment of a secondary route that will connect the Huaycoloro region with the highway, the drafting of an Urban Transport Master Plan for the city of Juliaca, Puno Region and last but not least the pre-investment studies for first BRT Trunk Corridor of the Arequipa Integrated Transport System, with a total length of 16 km.

THE PHILIPPINES | We have successfully overseen the design and construction of the Muntinlupa Cavite Expressway toll road (MCX). This 4 km structure opened in July 2015 and connects the South Luzon Expressway (SLEX) to Daang Hari, south of Manila. It is currently in its Operation & Maintenance phase.

The new agreement signed this year marks a milestone in the development of the group in the Philippines and demonstrates

(WWTP), pumping stations and pipelines to supply treated water to an industrial park 40 km away from the plant.

MEXICO - PANAMA - HONDURAS | In Central America, our actions revolve around four areas: water, telecommunications, building and road infrastructure.

In Mexico, we have been awarded three new contracts: one water sector contract and two contracts in the field of telecommunications.

In Panama, it is worth mentioning that we have been successful in securing a major contract to conduct the preliminary design of a new correctional complex.



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the quality of our services and customer satisfaction. It relates to the development of a Replacement and Major Rehabilitation Works Plan to implement during the O&M phase.

POLAND – ROMANIA | The integration of our Polish subsidiary Getinsa Polska in TPF Poland opens a new page of our history in Eastern Europe.

In POLAND, we have increased our portfolio across the infrastructure market throughout the year by winning three new contracts that cover the design of highways and railway lines.

Regarding ROMANIA, we have continued working on two major infrastructure projects that were won in joint venture with TPF CProject. One is the Service contract for Technical Assistance for preparation of Funding Application and Tender documentation for regional project development of water and wastewater from Bistrita Nasaud County, in the 2014 – 2020 period. The other one is known as “Package 1”: Construction supervision services for the line and related systems. Rehabilitation of the railway line Brasov – Simeria (part of the IV Pan-European Corridor) for trains running at a maximum speed of 160 km/h, Coslariu – Simeria section.

SENEGAL | We broke into the Senegalese market in 2016 with a contract in the urban transport sector.

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The main purpose of the assignment is to review all the elements that compose the demand study for the Dakar BRT (with a total length of 18 km and 23 stations).

TUNISIA | Two major projects have strengthened our portfolio in the area of water treatment.

The scope of one of the assignments is the provision of technical assistance and supervision services during the construction of a sea outfall that will discharge the effluent from the WWTP of Choutrana, in the north of Tunis. The other contract is a detailed design contract for the extension and rehabilitation of the WWTPs that serve the cities of Beja, Majaz al Bab, Jendouba, Siliana and Tabarka.

VIETNAM | We ended the year with the opening of the first line of the BRT system that serves Hanoi in Viet Nam.

It is a 14.7-km segment featuring 21 bus stops and the vehicles that are used on the route have a capacity of 90 passengers per vehicle. Construction of the new BRT system started in 2013. Getinsa-Payma carried out the supervision of the civil and architectural works, together with the implementation of intelligent transport systems, ticketing systems and traffic management systems. It was completed at a total cost of \$53.6 million. ■

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“Despite a growing activity, the year 2016 was a stepping stone for the launch of our transformation project NEO TPF-i for the improvement of the organizational and financial performance of the company.”

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Frédéric Lassale, Member of the Executive Committee of TPF and President of TPF Ingénierie

Following several years of strong growth, 2016 was for TPF INGÉNIERIE a year of transition, consolidation and stabilization of the activity and results.

In a still uncertain economic environment outside regions of Ile de France, Auvergne-Rhône-Alpes and Provence-Alpes-Côte d'Azur, where activity was satisfying, we initiated our transformation project NEO TPF-i in the 4th quarter in order to improve the organizational and financial performance of the company: an organization focused on big cities and French administrative regions, creating a sustainable and innovative city management, and strengthening TPF-i's international development actions.

The 'projects' dynamics was supported by several victories including the AMO mission for the construction of the PSA Peugeot Citroën factory in Kenitra in Morocco, the construction of the new Lariboisiere hospital in Paris or the technical assistance mission for the construction of the tower La Marseillaise designed by architect Jean Nouvel in Marseille.

IN FRANCE, this year has seen the completion of the road and networks project management mission as well as studies and regulatory procedures for the extension of the CAP 3000 commercial center in Nice in partnership with the Groupe 6 architecture office.

Work included creating a sales area of 26,000 m², with 2,000 additional parking spaces and new access roads to the area, as well as securing the site against the risk of flooding.

Along with the delivery in 2015 of the emblematic project Les Docks in Marseille, and the inauguration of Docks Bruxsel in October 2016, this operation reinforces TPF Group's experience for the construction of the largest shopping centers.

In line with the Odeon tower, the first skyscraper in Monaco, TPF-i is leading a new project management assistance assignment on a prestigious operation: La Marseillaise. A new sea front tower with a height of 135 meters designed by Ateliers Jean Nouvel.



◀ Breeze real estate project in Saint-Tropez

TPF-i provides both technical assistance and project management assistance for this 31-story building that will house offices, a business restaurant and a crèche.

This building is composed of a central reinforced concrete core, metal facade posts, and will see its front side garnished with 3,500 sun breaking ornaments (spread on a 18,000 m² area) using ultra high performance fiber concrete, with a chromatic range gradient offering 30 different colors and thousands of combinations with the false ceilings of the tower. Delivery is expected in 2018.

L'assistance Publique des Hôpitaux de Paris (AP - HP) assigned the first phase of construction of the new hospital Lariboisière in Paris to the architecture office Brunet Saunier, accompanied by TPF-i and SNC Lavalin.

The project consists in building two new distinct buildings and restructuring the junction between one of these buildings and the historic part on a total area of 51,000 m².

The first building “Nouveau Morax” will integrate key players in technical engineering, information technology and bio-medical sciences. Its construction in the southeast of the plot is an essential prerequisite for the construction of the new Lariboisière building.

The main building “Nouveau Lariboisière” has a surface area of about 39,000 m² and will include the following services:

- ▶ a technical platform bringing together imaging (conventional x-ray, ultrasounds, MRI, scanners, gamma camera), surgery area (including hybrid surgery area), obstetrical area, resuscitation and monitoring service, neuro ICU, cardio ICU, and neonatology,
- ▶ four levels of conventional hospitalization,
- ▶ ambulatory and interventional treatment unit,
- ▶ one level of medical/technical logistics with a central sterilization unit and a pharmacy for internal use,
- ▶ emergency room with a capacity of 100,000 patients per year.

In Marseille, our subsidiary has worked on another hospital project: the expansion on four levels of the main building of the Clairval private hospital, the landmark private establishment of the group Ramsay Générale de Santé within the Provence-Alps-Côte d'Azur region.

This expansion is spread on an 8,911 m² area featuring three 30-bed accommodation units, outpatient service, and is extending the technical platform (with the creation of 6 operating rooms) and the central locker room with clothing dispensing machines. The program also provides open air parking for 350 cars.





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- | | |
|--|---|
| 01 CAP 3000 Commercial Center – Nice / France | 05 PSA Peugeot Citroën Factory – Kenitra / Morocco |
| 02 26 Carré Or Building – Monaco / Principality of Monaco | 06 Expansion of the main building of the private hospital of Clairval / France |
| 03 New hospital Lariboisière – Paris / France | 07 New TV station – France 3 Normandy – Rouen / France |
| 04 Tower La Marseillaise – Marseille / France | |



04

This operation is particularly complex because it requires a significant change in road layout, including the creation of an esplanade for patients and visitors, moving the bus terminal, modifying the existing road slopes in order to build a new entry platform for the hospital, and many changes in the access road network.

Architect SCPA RIGAL & BARGAS and TPF Ingénierie have been entrusted with the study and realization of the project.

In the heart of Saint-Tropez, TPF-i landed a contract with developer BPD Marignan Immobilier within the framework of the Breeze real estate project.

This is to ensure project management for the construction of a luxury residence of 20 homes near the place des Lices, featuring

shops and 76 private parking places (with car lift), all on registered site.

This building will also feature a pool of 20 m².

In the audiovisual world, the France Télévisions group entrusted CCD architects and TPF Ingénierie with the multidisciplinary technical studies and realization of the construction of the new TV station for France 3 Haute-Normandie in Rouen.

This “hangar” type building will be located along the quay of the right bank of the Seine, and will host approximately 100 people 24 hours a day. This project is located in a flood site and is subject to severe constraints which are architectural (Architectes des bâtiments de France on tide gauge site) but also acoustic, as the TV studio is located close to rail lines. The project must be

carried out in a very short time, since the building must be operational for the “Grande Armada de Rouen” which will take place in June 2019.

ON THE ROCK OF MONACO, our French subsidiary continues to occupy a prominent place on the real estate market. After completing several missions on the Odeon Tower in Monaco, TPF-i, acting through its monegasque subsidiary BETEK Ingénierie, will take care of the project management assignment for fluids (heating – ventilation – air conditioning, electricity, automation, elevators) in the construction of the building 26 Carré Or.

This building of high standing is composed of 19 floors with 7 levels of basement and 6 levels of underground parking, featuring a car lift system. The program provides a spa/pool area spread on two levels, a number of shops located on the ground floor and 1st floor, offices from the ground floor to the third floor and housing from the 4th to the 18th floor including 2 apartments simplex, one duplex and one triplex with terrace.

This very high standard construction is in the process of obtaining BREEAM® certification with a Very Good performance level.

This 'smart' building will be energy efficient: energy control, efficient outdoor lighting, use of renewable energy and energy efficiency for the elevators and lifts.

IN MOROCCO, the group TPF-i / TPF Pyramide, in association with SNC Lavalin, won its first AMO mission in the automotive field, for the production/design of the PSA Peugeot Citroën factory in Kenitra: a great opportunity in the heart of Maghreb, which is experiencing full industrial expansion.

The project involves building the workshops for automobile production as well as other facilities necessary for the operation of the factory (utilities, social and administrative buildings...). The goal is to produce vehicles at a speed of 15 vehicles per hour expandable to 30 vehicles per hour.

The surface to be built includes 65,000 m² of buildings and 180,000 m² of roads and parks.

The mission scope includes assistance for the studies, construction, acceptance and commissioning of the operation and ancillary buildings, all underground networks, roads and outdoor spaces, entry booths as well as security fences and equipment, shipping docks, and test track. ■



“Leading player in the design of high performance buildings and infrastructure, TPF Engineering had its share of success despite a rather morose 2016 for our activity. This success is due to operational integration and the ever stronger solidarity of our three divisions *Technical Utilities, Structural and Civil Engineering and Building in Brussels, Liège and Luxembourg.*”

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Stephan Bussing
CEO OF TPF ENGINEERING

The slight growth in the activity of TPF ENGINEERING during the fourth quarter, particularly in the renovation sector, allows us to face the future with serenity and confidence.

Despite tough competition in the market and the decline in fees, the quality of our services was greatly appreciated. The Belgian engineering pole took harder to renew and deepen its knowledge in 3D modeling (BIM, REVIT) and sustainable construction in order to meet the challenges of its clients.

This year, TPF Engineering joined the network of sustainable construction and renovation actors in Brussels 'Ecobuild.Brussels' and platforms of specialized knowledge in energy neutral construction PMP and PIXII.

While it is true that public works have suffered a decline in the number of tenders, the backlog of TPF Engineering nevertheless attests an increase in the number of public infrastructure projects, particularly in the area of tunnels.

Indeed, our work in Brussels includes overseeing the repair and renovation of the Montgomery tunnel associated with the displacement of a slab, and supervising the repair works of the Stephanie tunnel.

Also in this area, Brussels Mobilité asked Egis Tunnels – TPF Engineering to refresh the visual inspection reports dating from 2010. Specifically, our team was awarded the civil engineering inspection for 27 Brussels tunnels and drafting of reports.

In Brussels, TPF-Engineering is also working on the line extension project for tram no. 94 from Boulevard de la Woluwe until the Roodebeek metro station.

Following the attacks that took place in Brussels on March 22, 2016, Brussels Airport has reviewed its policy on access to its various parking lots with its partner Interparking. As part of the development of a new Kiss and Ride area, the private operator entrusted us with the study of two access roads towards level +5 of the Front Park 2 Parking. Our experts were also tasked with a study for the move of the VIP parking area and access control infrastructure for the various car parks.

At the same time, TPF Engineering was also involved in important commercial center development projects. Its experience in



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Paradis Express - Liège

the areas of stability and technical building services enabled it to participate in the construction of the new Brussels commercial center, *Docks Bruxsel*, and the second phase of the Tournai commercial center *Les Bastions*.

Docks Bruxsel is a new eco-responsible Shopping District spread on 3.3 hectares, a unique urban experience bringing together leisure, shops, restaurants, and cultural activities while incorporating its industrial history in the site design. Indeed, the oldest Brussels industrial building (1830) called *La Cathédrale* (former HQ of the Godin stove makers) has been renovated to house a museum, offices and shops. Docks Bruxsel is strongly involved in sustainable development. For example, its heating system is provided 100% through the recovery of hot water produced by the nearby incinerator of Bruxelles Propreté.

With respect to Les Bastions, special attention was also given to sustainable development and the energy performance of the building. The project obtained the mention Very Good on its

BREEAM certification. In 2016, TPF Engineering started the second phase for the renovation and extension of the commercial center (16,000 m²) including an underground parking, consisting of two levels (29,000 m²) and the development of the surroundings of the site including three roundabouts.

This year featured many impressive renovation or new construction projects including offices, housing, mixed housing, hospital infrastructure or school centers, with among others:

The Wilfried Martens Building for the European Parliament in Brussels

The Trèves- Belliard (TREBEL) office building was demolished, rebuilt and renamed *Wilfried Martens Building*, in order to accommodate European officials on a surface area of nearly 30,000 m². Our Engineering Department in technical building services made sure that the building combines comfort and energy efficiency (high energy performance building facade) while taking advantage of renewable energy (sunlight, geothermal energy).





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©Colruyt Group

01 Docks Brussel – Brussels

02 Wilfried Martens Building – Brussels

03 Tunnel Montgomery – Brussels

04 Fine Food Meat 2, Colruyt Group – Halle

05 School Les Lilas in Berchem-Sainte-Agathe, Brussels region

06 Les Bastions – Tournai

07 New cancer treatment center IRA2 – Brussels

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The *Sans-Souci* mixed complex in Ixelles

Inaugurated in September, this complex is made up of 28 passive housing and a small equipment area, and was elected 'Exemplary Building'.

The new *Brussels American School* in Sterrebeek

Our three engineering divisions (Technical Utilities, Building, Structural and Civil Engineering), in collaboration with an American architect, completed the design study for the new primary and secondary school *Brussels American School*, first school in the Benelux to meet the criteria of the "21st Century Schools" established by the (Department of Defense Education Authority) DoDEA. Note that the property has been designed according to the principles of sustainable development and very strict environmental requirements in order to obtain the USCG LEED Silver certification. Modularity and flexibility are the keywords of the project: besides the interior flex studios, neighborhoods and learning hubs, laboratory and exploratory spaces, performance space and information center, food and health services, recreation facilities, etc. will be provided.

The eco-district *Paradis Express* in Liège won an award during the Mipim Awards 2016 in the category Projects of the future

Studies are underway for this project developed by Fedimmo and designed by the Jaspers-Eyers, A2M and BAG architect offices. This versatile complex is equipped with a landscape walk and will



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feature a mix of shops, offices (21,000 m²), 162 residential units and additional service areas.

The new cancer center *Institut Roi Albert II*, named 'IRA2', on the Saint-Luc University Clinic site in Brussels

This new 22,000 m² space has a capacity of 120 beds and will be dedicated to the usual hospitalization and consultation activities as well as research. It should be ready to welcome its first patients early in the year 2020. For the time being, our teams began special techniques and stability studies with their partners Modulo Architects and De Jong Gortemaker Algra Architecten en Ingenieurs bv.

In the food sector, among a few events that took place this year, the opening in Halle in September of *Fine Food Meat 2*, the new Colruyt Group factory for meat processing, Colruyt being a distribution leader in Belgium.

18,000 m² are dedicated to the production, slicing and packing of cold cuts, to the production of meat products as well as the preparation and packaging of caterer dishes and vegetarian products. In addition to consulting in logistics, process and hygiene services, TPF Engineering and architectural Office Arcoteam were responsible for the permit applications, the architectural studies, the studies of the technical installations and consultancy in the field of logistics, process and hygiene, from concept to execution phase.

In the food, catering, logistics and real estate sectors, the intense work of our subsidiary TPF Luxembourg allowed us to boost our commercial activity in the Grand Duchy of Luxembourg and expand our customer portfolio. ■



Through its Belgian and French entities, TPF-UTILITIES has become a leading player over the years, thanks to its technical know-how recognized by both public and private clients. This expertise is recognized both in the Facility Management sector and Delegated Management as well as in studies related to water (collection, treatment, recovery and distribution), production, management, or even sensible use of green and traditional energy.

In 2016, TPF-Utilities increased its Maintenance activity across Belgium and in the North of France.

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BELGIUM | In Brussels, we were awarded a contract running from 2015 to 2018 for the maintenance and delegated management services for the technical installations of the building ATRIUM MIDI, which houses the SNCB, the Belgian national train service company. It features a net area of 56,000 m² including 39,000 m² of offices and 17,000 m² of underground areas and parking.

The challenge for TPF-Utilities is to ensure preventive, conditional and evolutionary maintenance as well as the management of heating and cooling installations, cooling towers, ventilation and air conditioning, fire protection, electricity (HT, lighting,...), and compressed air.

The use of a computer-assisted maintenance management tool offering a platform allowing our client to access activity reports has proved to be essential.

Our team was also responsible for carrying out a complete energy audit of the building and offered suggestions for improvement.

On behalf of the local authorities for public cleaning in Péruwelz, Ath, Leuze, Lessines and Enghien (IPALLE), TPF-Utilities provides project management assistance for the construction and commissioning of the *Moulins Saint-Roch* wind farm on the territory of Peruwelz and Beloeil. Our services began this year and will spread over a period of two years.

Specifically, four turbines of type SENVION MM100, each with a power of 2 MW with a 100m rotor will soon stand in a place called Moulins Saint-Roch, North of the E42 motorway and close to the N50 and N60 roads.



Our team's mission is to assist the client at every stage of the project: selection of machines via a tendering process, negotiating contracts for supply and O&M (operation and maintenance) for a period of 20 years, drafting of the tender specifications and procurement (4 lots - ancillary equipment - driveways, foundations, electrical connection and head cabin), supervision of the construction site (construction of the access roads and foundations, installation of wind turbines, connection of the installation on the electricity distribution network), follow-up of logistics and commissioning of the wind farm.

As a sign of appreciation of our long-time partner, the Ministry of Defense entrusted us this year with the maintenance and operation of the technical installations of the buildings of the military district of Peutie. A contract with total guarantee of the equipment for a period of four years.

TPF-Utilities has been mandated to manage preventive, conditional and evolutionary maintenance and operation of the heating facilities, HVAC, water treatment (softeners, water treatment and biological analyses), fire protection and gas detection, BT electricity (lights, signaling) and high voltage cabin, hoists, compressed air. Furthermore, we have implemented a CMMS and proposed improvements on the basis of the energy studies.

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01 Building *Atrium Midi* –
Brussels / Belgium

02 Housing managed by
ParteNord Habitat –
Département du Nord /
France

03 Wind farm

FRANCE | In France, one of the significant events of the year was the signing of a contract for the operation and management of facilities for the heating, production of domestic hot water and water treatment for the ParteNord Habitat sites, the Office Public de l'Habitat (OPH) of the Département du Nord.

This contract runs for a period of four years and involves the operation of a central boiler room running on natural gas and 17 sub-stations. This contract includes the supply of fuel and hot water for sanitary use with an incentive to energy conservation, the management and maintenance of production and distribution facilities for heating, hot water and water treatment and of all the technical equipment, and the prevention of legionella proliferation, with full warranty. ■

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In June 2016, TPF Basse Sambre decided to change its identity and name to TPF CONTRACTING. Our subsidiary was specialized in the production of electromechanical installations, and was faced with an increasingly hard turnkey development market, therefore repositioning itself on a niche market. The objective was to offer innovative and competitive solutions to differentiate itself from the competition.

It made a successful strategic choice by settling in Tanzania and opening an operational office in Dar Es Salaam in November 2015. Opting for the gas industry was a synonym for success.

The year 2016 was marked by the end of the connecting works on five gas wells in the Mnazi Bay (operated by the petro-gas company MAUREL & PROM). The power station of Mtwara and the city of Dar Es Salaam will be supplied with natural gas through a pipeline of 600 km in 2017.

This first success enabled us to reach a milestone and face new challenges and reach new customers. In the month of August, TPF Contracting concluded an EPC contract with the oil company ORYX including engineering and installation of 2 km of underwater gas pipes in the port of Dar Es Salaam. The goal was to connect the ORYX boats unloading facilities to the new LPG storage unit located on the opposite bank.

The technical solution proposed by TPF Contracting was to use flexible hoses, which helped to drastically reduce costs and implementation time. This solution also helped to limit the impact of works on fishing boat traffic, which is particularly high in this section of the port. Work on the LPG pipeline project Kigamboni has been carried out in two months and gas connection was performed in December 2016.



In the environmental sector, we will mention two particularly interesting projects.

The first one was launched by the public authorities of the Vestmannaeyjar Islands in Iceland and concerns the production of energy using waste combustion in a pyrolysis oven.

The second is the construction of a pulping plant for wet phosphate in order to supply the phosphoric workshop of the Skhira plant in Tunisia on behalf of the Group Chimique Tunisien (GCT). As part of this international tender, TPF Contracting formed a consortium with Tunisian civil engineering company PIRECO. The latter will provide studies and services necessary for the realization of a new reactor feeding system by pulping using two separate twin lines.



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01 Pipeline LPG Kigamboni –
Port of Dar Es Salaam /
Tanzania

02 Preheater – Line N°5 – Umm
Bab / Qatar

03 Connection Wells – GPF site –
Mtwara / Tanzania



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In the cement sector, there was a decline in investment in 2016. This was a consequence of mega-mergers between cement world leaders such as Holcim – Lafarge or HeidelbergCement – Italcementi.

In Qatar the construction works for line no. 5 in the cement plant of Qatar National Cement Company (QNCC) located in Umm Bab were extended with great satisfaction from TPF Contracting which is in charge of the supervision. The commissioning of the grinders required for the first cement production began at the end of the year. A production of 5 000 t/d of clinker is scheduled for the month of August 2017.

In Tunisia, the Carthage Cement group has asked our team to carry out the feasibility study for a cogeneration plant allowing to produce 7.5 Mwh. ■

“2016 was above all the year of the merger between TPF Planege and Cenor. By bringing together the expertise and strengths of the two Portuguese subsidiaries under the same name: TPF PLANEGE CENOR, we will be stronger and even more at the service of our customers. With its 37 years of experience, the new entity can now carry out its missions with the support of ten branches in Africa and Asia and of its 330 employees, including 220 employees active in Portugal.”

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Jorge Nandin de Carvalho, Member of the Executive Committee of TPF and CEO of TPF Planege Cenor

From the very beginning, TPF PLANEGE CENOR prevailed. Whether it regards the building sector or the infrastructure sector related to transport, water, energy and environment, our subsidiary has, as in the past, provided all of its customers with quality services in the areas of engineering and architecture in order to accompany them in the realization of their current activities and their future projects.

From Portugal to Turkey or Algeria, Angola, Cameroon, Cape Verde, Equatorial Guinea, Macau, Mozambique, Tanzania and East Timor, let us focus on major construction projects which have been entrusted to us.

PORTUGAL | The company IP-Infraestruturas de Portugal has entrusted the consortium led by TPF Planege Cenor with the feasibility study, preliminary study, environmental impact study, execution study and environmental compliance report for the modernization of the Mangualde – Guarda section of the Beira Alta railway line, representing 73 km.

14 months of studies will be required for the development of the project. The objective is to eliminate the railway infrastructure capacity constraints, to make adaptations allowing the 750 m long trains to cross at the station and to ensure the interoperability of the trans-European transport network.

These works are part of the modernization plan of the Beira Alta line between Pampilhosa and Vilar Formoso at the Spanish border, whose goal is to strengthen the rail connections between the Northern and Centre regions of Portugal and our European neighbours to ensure a more efficient transport of goods and strengthen the competitiveness of Portuguese economy.

In Algarve, our Portuguese subsidiary is involved in the Vilamoura XXI Lake City project near the marina. Carrying a residential and touristic character, this project features an area



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Sidi-Bel-Abbès station / Algeria

of about 110 hectares among which 25% will be devoted to the creation of artificial lakes for recreation and river transport.

The studies we are carrying out for the real estate company Lusotur concern the development of urban infrastructure (earthworks for the construction of the lakes and banks, system for lake water renewal in the Vilamoura Marina), protection against flooding (bypass of the Vale Tisnado river, protection dykes, dredging of the Quarteira river and lake spillways), road infrastructure (road and pedestrian bridges) as well as the underground infrastructure.

The program also provides an underground parking and design of several buildings on the central island.

Within a consortium, TPF Planege Cenor is currently carrying out execution studies and the environmental impact study for the hydraulic circuit of Reguengos de Monsaraz and the irrigation

block for EDIA (Empresa de Desenvolvimento e Infra-Estruturas do Alqueva, S.A.)

The Reguengos of Monsaraz hydraulic circuit starts at the channel Alamos/Loureiro and connects the dams of Alamos and Reguengos. Its purpose is twofold: maintain the required flow for the irrigation block of Reguengos and strengthen the irrigation perimeter of Vigia. Studies concern the design of the primary and secondary irrigation network, the road network, the drainage network, the monitoring, automation and remote management system, the development of the health and safety plan as well as the plan for the prevention and management of construction and demolition waste, the geographic information system (GIS) and expropriation procedures.

ALGERIA | Algeria has always been a key market for TPF Planege Cenor and will remain so. Our subsidiary is particularly active in the areas of transport, water and building. Its



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expertise in studies and construction work supervision enabled it to convince and retain leading public and private project owners.

With regards to transport infrastructure projects, we will mention the technical assistance missions to the project owner for the Algiers metro, and the development of facilities and equipment of the East-West Highway, and also the construction work supervision for several rail lines such as the mining line East – Lot 3 or even the lines Annaba-Ramdane Djamel, Relizane-Tiaret-Tissemsilt and Oued Tlélat-Tlemcen. We can also include the preliminary design study and the final design study (architectural and engineering components) for the construction of the Sidi-Bel-Abbès station in partnership with TPF Gentisa Payma, within the framework of the modernization project for the railway line Oued Tlélat-Tlemcen, representing a construction area of 8,455 m².

Furthermore, participation in several hydraulic and hotel projects reflects the will of TPF Planege Cenor to diversify and expand its presence in the Algerian market. The contracts that we have been awarded include the execution study for the hydraulic system of El Kebir between the dams of Boukhroufa and Boulatane, which are managed by the Agence Nationale des Barrages et Transferts, as well as the follow-up and control of the renovation and rehabilitation works for hotel Amaroua in Tizi-Ouzou.

ANGOLA | In Angola, TPF displays a positive balance sheet thanks to its environment monitoring activity.

The Ministry of environment entrusted us with construction control and supervision for the National Institute for Biodiversity located in Kilamba, Luanda. This contract runs for a period of 12 months and is financed by the African Development Bank (ADB) as part of the environmental sector support project.

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01 Modernization of the railway line Mangualde – Guarda / Portugal

02 Lake Village – Vilamoura XXI / Portugal

03 Reguengos de Monsaraz irrigation project / Portugal

04 Facilities and operation equipment of the East-West motorway / Algeria

05 Bini hydroelectric development in Warak / Cameroon

06 Mobilization of the surface waters in Cape Verde

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CAMEROON | TPF Planege Cenor is the leader of a consortium formed with Brazilian company Intertechne, and is proud to have been associated to the Bini hydroelectric project in Warak, in the region of Adamaoua, which is one of the flagship projects of the Ministry of Water, Energy and Mines aiming to develop the hydroelectric potential of Cameroon.

The contract signed by the consortium concerns the assistance to project owner and construction work supervision for the hydroelectric dam (603 hm³), hydroelectric plant (75 MW), electric line (225 kV) up to the post of Mounguel (70 km), rural electrification system as well as access roads. The project includes the relocation of 300 people for whom a travel and relocation plan was developed, in accordance with the requirements of the World Bank. Our teams will be assigned to the project for 22 months in order to accomplish their mission.

CAPE VERDE | TPF Planege Cenor successfully carried out a detailed study for the Ministry of Rural Development. The aim of this study is to exploit the potential of surface waters through the use of appropriate hydraulic facilities.



07 The city of Mongomeyen
water supply project /
Equatorial Guinea

08 Residential project ZAPE in
Macao / China

09 Messalo River /
Mozambique

10 Extension of the water
distribution network of Dar
es Salaam / Tanzania

11 Rehabilitation of roads in
the district of Oecusse / East
Timor

12 Islands in the sea
of Marmara / Turkey

The study was conducted in three phases covering several inhabited islands of Cape Verde. Firstly, a preliminary technical study had to be conducted on twenty-one identified sites in order to select 10 priority sites to develop. Secondly, preliminary studies were carried out on ten sites, which allowed to choose five successful sites with immediate funding opportunities. The third phase of the work was devoted on one hand to the detailed design studies on those five high performance sites, in order to define the precise characteristics of dams and various associated hydro-agricultural facilities, and on the other hand, to the definition of tender documents.

As for ongoing contracts, they include technical assistance for the Principal dam construction project and hydro-agricultural planning of the associated irrigation perimeter.



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MACAO (CHINA) | Through its subsidiary Cenor Macau, TPF Planege Cenor won the technical assistance contract for managing the residential project Zape 9A1 and 9A2.

Located on an area of 2,320 m², the set consists of two interconnected buildings of 23 and 26 floors above ground and 4 underground levels each. In total: a 36,200 m² construction area, 339 apartments, 18 stores on the ground floor and a 226 spaces parking.

EQUATORIAL GUINEA | Our involvement in the project to supply drinking water to the city of Mongomeyen and its surrounding communities has opened up interesting prospects. We have initiated several building sites in Equatorial Guinea and we will not stop there. The challenges we are facing in the water and sanitation sector are huge.

Specifically, TPF GE (subsidiary of TPF Planege Cenor) is responsible for the execution work supervision for the drinking water network following the Mongomo road from Akonekien to Meyang, representing a total of 18 km of pipelines. This project provides for a water treatment system with a capacity of 2,400 m³/day, a distribution network, domestic connections and a tank of 1,800 m³.

The mission entrusted to us covers the coordination and technical assistance for the execution studies as well as the management and supervision of the works

MOZAMBIQUE | In Mozambique, TPF Planege Cenor and TPF Moçambique are working together on several projects related to environment and territory development.

Studies aiming to characterize the environmental profile of 25 districts in the Zambezi Valley are currently underway. The goal is to allow a better knowledge of environmental issues, to guide the Government in making decisions and implement regional development policies.

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At the same time, the National Direction of Water Resources has entrusted to our two subsidiaries with the development of the integrated management plan for the drainage basin of the Messalo River, including the development of strategies for the sustainable management of the risk of flooding and drought. The ambition of the plan is to simultaneously ensure the socio-economic development and reduce the vulnerability of populations.

TANZANIA | Among major projects this year, we can highlight the expansion of the water distribution network of Dar Es Salaam managed by the “Dar Es Salaam Water & Sewerage Authority”.

With an addition of 2,000 kilometers to the network, 372,000 domestic connections and 470 water hydrants, 90% of the needs of the population of Dar Es Salaam will be covered.

EAST TIMOR | The development and rehabilitation of roads in the district of Oecusse is part of the ambition displayed by TPF Planege Cenor by contributing to the development of the infrastructure of the Special Economic Zone ZEESM TL.

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At the request of the Direction of Bridges and Roadways and Flood Control, our team will focus on the project for 33 months in order to oversee the various construction sites. In total: several bridges and approximately 50 km of roads.

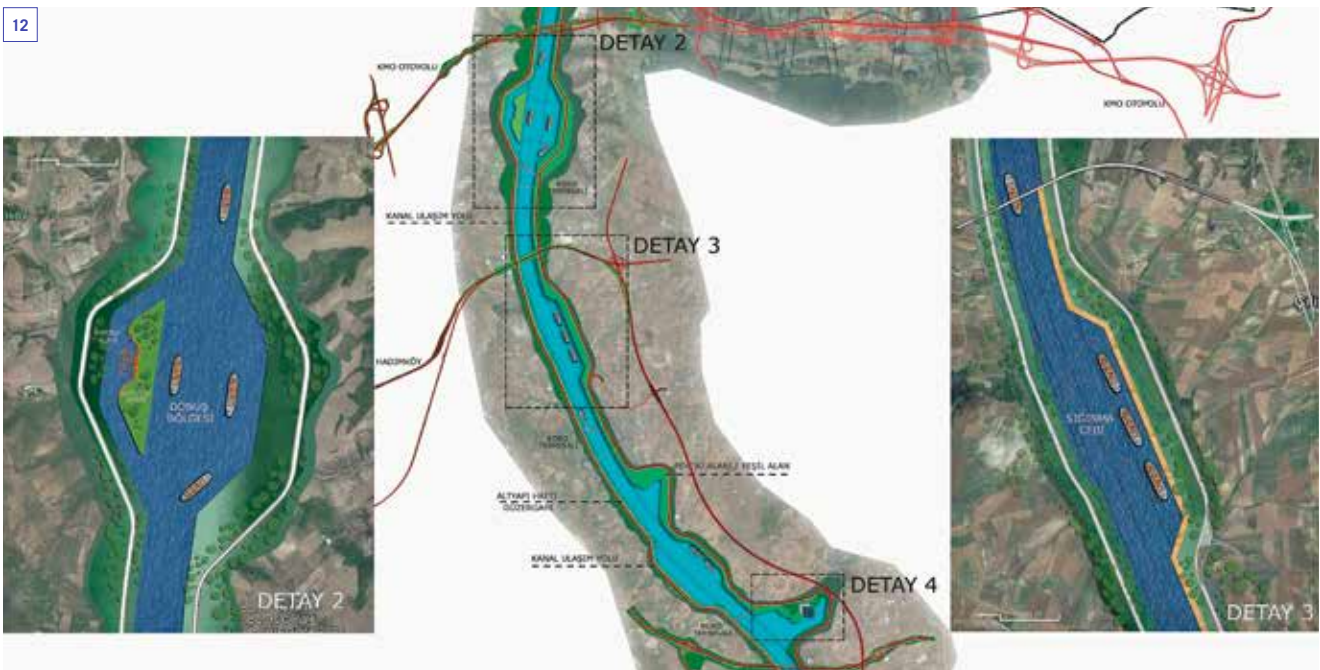
Turkey | TPF is proud to have been chosen by the Istanbul municipality to carry out design studies for three artificial islands in the sea of Marmara. A major project which will use the soil from earthworks carried out in another ambitious project: the Kanal Istanbul which will link the Black Sea to the Sea of Marmara.

This project consists in the creation of three artificial islands of 1,500 hectares using embankments (3,865 hectares) and featuring hotels, housing, shops, financial centers, sports facilities, services (health, education), marinas,...

The mission entrusted to TPF Planege Cenor has four components (evaluation of geotechnical conditions, design of the master plan, estimate of construction costs and economic viability analysis) and focuses on the architectural, technical and economic aspects of project. ■

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“After respectively 50 and 23 years in service Projotec and Engesoft are now merging to become TPF Engenharia. The new launched company and Synergia, gaining momentum in the aftermath of the Brazilian economic and political crisis, are ready to conquer for the TPF Group a proper share of the country's promising consulting market.”

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João Recena
CEO TPF ENGENHARIA

Despite a difficult political and economic context, SYNERGIA and TPF ENGENHARIA (result of the recent merger between Projotec and Engesoft) have managed to reach important goals. The efforts made during the year to conquer new territories and to gain new customers have been successful. Both companies are now considered as key players in the water and environment sector.

Among other achievements, TPF Engenharia won a contract to oversee the construction of a strategic water transfer system in São Paulo and Synergia was engaged in the socio-environmental mitigation scheme of the Samarco mining waste dam accident in the Rio Doce water basin.

The Fundão Dam breach, caused by the mining company Samarco, was an event whose environmental and social impacts are not calculated yet. With international implications, the mitigation of the mud impact in the Rio Doce River and the impact of this situation in 40 Municipalities along the river is still being discussed in numerous instances. SYNERGIA was hired in 2016 to run one of the largest and most complex research work carried out in the country, as well as to support the transformation of this accident into an opportunity to consolidate quality standards in the social (re)organization, which should be established throughout the affected area.

The work involves the socioeconomic registration of all directly affected families and their respective asset inventory and asset valuation, from sizing the material and immaterial damages, to social action in the reconstruction of Bento Rodrigues and Paracatu Districts, which involves the dialogue with families that will receive new housing, economic and productive restructuring, and the dialogue mediation with the Inter-federative Committee established to monitor the work, composed of Ministry of the Environment, Federal Government, Minas Gerais and Espírito Santo States, Minas Gerais and Espírito Santo Municipalities, and CBH-Doce representatives (Basin committee of the Rio Doce river).

In the first stage of services, Synergia will register, until the end of the year 2017, about 30,000 families, considering the type of damage that has occurred (loss of income, inability to produce and develop activities, health problems, etc.), the vulnerability

situation of the family and individual characteristics of each household affected by the event.

In the State of Mato Grosso do Sul, Synergia has been contracted by Votorantim Institute to implement the Emerging and Sustainable Cities Initiative (ICES) program in the Municipality of Três Lagoas. The company is responsible for implementing the ICES' own methodology in collaboration with the Inter-American Development Bank (IDB), the Votorantim Institute and the Town Council, ensuring that techniques are appropriate to the real needs of the territory and have close links with the population's concerns. The ICES of the IDB seeks to encourage sustainable development with the preparation of plans made from a diagnosis including four dimensions (environment and climate change; urban development; governance and fiscal management, competitiveness of the economy) through a multidisciplinary perspective.

By applying the ICES' methodology, the consultancy supported the creation of a Management Group composed of organized civil society representatives, local public authorities and community

members, training them and defining with them an analysis of more than 150 indicators which qualify the issues related to each dimension of the study, pointing out the main points of attention and the improvement and priority investment demands for local development.

Those indicators were complemented by a public opinion survey of 1,060 interviews, seminars and meetings with local technicians and also by the application of quantitative and qualitative filters and the analysis of specialists who, based on the diagnosis, have built the Três Lagoas Sustainable Plan, validated by the local society and which should direct the development actions to be taken by the Municipality.

As part of the environmental compensation associated with Norte Energia S.A. in the issuance of the Operation License of the Belo Monte Hydroelectric Power Plant, environmental actions were determined in the scope of Urban re-qualification. From this point of view, among the compensations sanctioned, it is worth highlighting the household connections to the sewage network of the urban area in Altamira-PA.

Belo Monte Hydropower project





TPF ENGENHARIA was hired by Norte Energia S.A. to manage the implementation process of household connections, whose scope involves the following activities: development of integrated management system, development of terms of reference for contracting construction companies to implement the household connections, definition of the intervention plan and project technical support, database management and monitoring of the construction project.

In addition, the development of TPF Engenharia's work is being based essentially on sanitary and environmental engineering criteria and following the existing technical standards. The services will aim to reduce the environmental impacts caused by the lack of a Sanitary Sewage System, reversing the existing situation with the implementation of household connections.

At the same time, in Recife, a 5-year contract was signed with EMLURB to deploy and control an Operational Center of Urban Cleaning Services.

Currently, the city of Recife through EMLURB (public company responsible for urban maintenance activities and street cleaning) has been modernizing its planning and management activities. The work will combine tracking technologies with mobile technologies to monitor, improve and optimize the services provided to all citizens, including a team of 4 engineers, 14 technicians and 14 field inspectors.

To the North, in the State of Sergipe, TPF Engenharia is involved in the Landfill Project including the preparation of feasibility studies, environmental impact studies, basic and detailed projects for Construction. Projects have been developed for 4



landfills, serving some cities such as Estancia, Santa Luzia do Itanhhy, Indiaroba, Japarutuba Pirambu and Canindé do São Francisco.

Spread over 14 months and divided in 7 steps, the project began with the characterization of the municipalities covered by the landfills, including the selection areas (at the same time analyzing the environmental, economic, social and legal aspects of these areas), diagnosis of waste management and elaboration of engineering projects for construction and operation of the landfills.

Furthermore, environmental licensing services are part of the scope in which the entire engineering project is evaluated by the government agencies.

Let us finish this overview with the industrial complex of Pecém. TPF Engenharia was hired by the Department of Infrastructure in the State of Ceará (SEINFRA - CE) to carry out the Environmental Impact Assessment (EIA) for the construction of two terminals.

One of the terminals has the purpose to handle the logistics of multiple cargos, which includes mostly iron ore, fertilizers and agricultural grains, known as TUP. The other terminal will be built to receive and distribute oil derivatives, like gasoline, aviation fuel, diesel and other derivatives, also aiming at the logistics of such materials, known as TAGL.

There are several studies to describe the multidisciplinary aspect, and in order to proceed the entire study was split in two phases. The first phase consists of assessing the current situation in areas influenced by the project, including geological and hydro-geological assessment, social studies on affected communities, assessment of the impacted basin and fauna and description of vegetation. The second phase consists in the assessment of the potential negative or positive environmental impacts for the construction and operation of both logistic ports in Pecém.

The EIA lists the actions to mitigate or prevent negative environmental impacts expected, encouraging the project to increase the positive impact as a consequence of construction. ■

01 Emerging and Sustainable Cities Initiative (ICES) program in the Municipality of Três Lagoas

02 Samarco / Renova Foundation

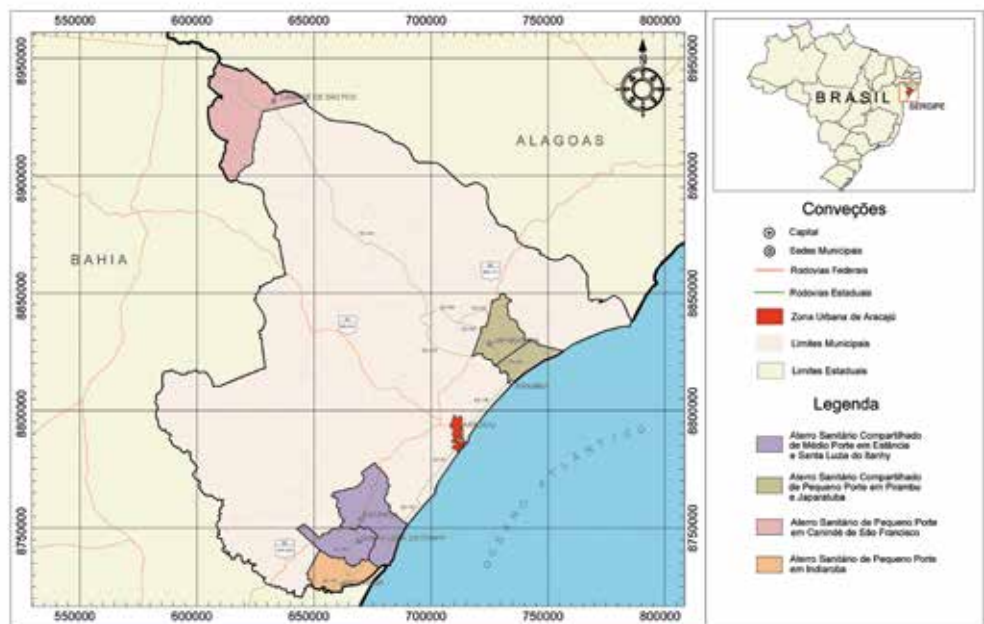
03 Operational Center of Urban Cleaning Services (EMLURB), Recife

04 Landfill Project in the state of Sergipe

05 Industrial complex of Pecém – Construction of two terminals

06 Industrial complex of Pecém

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“TPF Engineering Private Limited has written a new chapter in the history of the group by contributing to the construction of the Dhola-Sadia river bridge in the State of Assam and the Chenani Nashri road tunnel in Jammu-and-Kashmir, the longest structures ever built in India.”

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Atul Bhoje, Member of the TPF Executive Committee and Managing Director of TPF Engineering Private Limited

TPF ENGINEERING Private Limited can be proud of its fantastic achievements in the field of transport infrastructure, and is looking forward to achieving even more. In its quality of independent engineer or authority engineer, our Indian subsidiary has multiplied its services in 2016. The work carried out by our experts throughout the year led to the development of many feasibility studies and Detailed Project Reports.

At the same time, engineers and surveyors at CETEST have passionately carried out geotechnical investigations, surveying or road engineering activities.

In Bhopal, in the State of Madhya Pradesh, the Cable Stayed Bridge in Kamala Park is now becoming a reality. After more than 30 months of construction, the bridge is expected to be opened to traffic in spring 2017.

The bridge has 3 cable stayed spans, 2 short spans of 55 meters each and one long span of 110 meters. The width is 15.9 meters and the bridge has 2 pylons. The 220 meters long bridge has a steel superstructure. TPF ENGINEERING PRIVATE LIMITED (TPFPL) was appointed as the supervision and quality control consultant for this project.

Other important construction projects were continued in 2016. In the state of Madhya Pradesh, work continues for our ongoing project as an independent engineer for 4 laning of a National Highway connecting Indore with Gujarat at the Madhya Pradesh Border.

The scope of work involves construction supervision of a 155.15 km long highway. The project is being executed in association with M/s. Feedback Infra Pvt. Ltd. since 2011.

In the road infrastructure sector in Maharashtra, our Indian subsidiary is working on the preparation of five various Detailed Project Reports (DPR's) for up-gradation of two lanes with paved shoulders and four lane configurations.

Selected stretches/corridors of road networks where work is being carried out in the State of Maharashtra are as follows:



▲
Dhola-Sadia bridge – State of Assam



- ▶ Satara – Koregaon – Mhaswad – Malshiras – Akhuj – Tembhurni – Kurduvadi – Barshi – Yedshi – Murud-Latur
- ▶ National Highway 03 – Manmad – Kopergaon – Shirdi – Ahmednagar – Baramati – Phaltan – Vita – Tasegaon – Miraj – Maishal
- ▶ Coastal Highway (MSH-4) having approximate length of 137 Km from Jaigad, Ganpatipule Ratnagiri – Pawas – Khakashi Titha in Ratnagiri and Sindhudurg District of Maharashtra
- ▶ Pune Ring Road – Urse to Paud Road to Khed Shivapur
- ▶ Selected state road stretches for National Highway connectivity to Backward Areas / Religious / Tourist Places (BRT) scheme – Malkangiri on N.H. 326 – Chintapalle – Naripattanam – Waddai – Chodavaram – Sabbavaram – Gandigudam – N.H. 16 near Tallavalasa

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In the State of Haryana, the detailed topographical survey and geotechnical investigation work entrusted to our other Indian company CETEST for developing the Industrial Model Township in Sonapat are on the right track.

Haryana State Industrial Infrastructure Development Corporation (HSIIDC) acquired 3,200 acres of land and signed an agreement with Wanda Commercial Properties (Hong Kong) Co. Ltd, a Chinese Conglomerate, for developing this Industrial Model Township. This IMT is proposed to have several installations and construction of Trade Centers, School & Hospitals, Municipal Facilities like Electric Substation, Water Treatment & Sewage Treatment Plants, Dormitory and Municipal Roads etc.

The major challenge of this job is the short project duration. Carrying out boring for 973 boreholes up to a maximum depth of 60 m within a very short time span (for a boring length of about 18,600 m) required a significant deployment of men and machineries as well as robust project management. It demanded



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- 01** National road Indore – Gujarat
 - 02** Up-gradation of two lanes with paved shoulders and four lane configurations (State of Maharashtra)
 - 03** Development of Industrial Model Township in Sonipat (State of Haryana)
 - 04** New broad gauge line between New Bongaigaon and Kamakhya (State of Assam)
 - 05** Improvement of NH-10 with 2-lane configuration in the District of Darjeeling, West Bengal
 - 06** Chenani Nashri road tunnel – State of Jammu and Kashmir
 - 07** Cable Stayed bridge at Kamala Park, Bhopal (State of Madhya Pradesh)
-



04



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the mobilization of about 30 Calyx rigs with SPT and sampling assemblies. Furthermore, the scope also included conducting several Down-hole Tests to determine the Liquefaction Potential of the entire project site. The results are to be compared with separate analysis based on SPT values which are to be conducted in 20 boreholes. Additionally, 10 Vertical Electrical Sounding tests followed by Pump-Out Tests are to be carried out to find expected yield of underground water. For the Electrical Substation and other structures, 35 ERT's are proposed for Earthing design. Different other field tests like excavation of Trial pit, Field CBR for design of roads, installation of Piezometer to find out the fluctuation of Ground Water Table are also within the scope.



06

As part of the project for a new broad gauge railway line between New Bongaigaon and Kamakhya in the State of Assam, CETEST has been charged to carry out the final location survey and land survey including the preparation of the detailed plan and detailed estimate.

The work includes Traversing along one or more routes to undertake modification as required to avoid built up area and other obstructions. The main aim of longitudinal and transversing is to obtain the optimum alignment for new BG Railway line and taking details up to 100 m on either side of center line is required. Details are to be captured at an interval of 20 m or at obligatory/important points longitudinally as well as at every 10 m or obligatory points up to 100 m on either side of entire line (transversely) including taking details of important features such as bridges, roads, rivers, nallas, canals, buildings, en-route etc. The work also includes preparation of plans and longitudinal sections, hydraulic data as per the existing codes of practice for design of sub-structure and foundation of bridges. The land survey is complete and preparation of land plans based on cadastral maps/actual site visit along the alignment of proposed line is continuing.

Exploratory drilling of boreholes down to the required depth, drilling of 150 mm diameter boreholes in all type of soils except hard rock and large boulders has to be done.

Conducting laboratory Tests on collected soil samples as per relevant IS code and preparation of detailed report has to be submitted.

Let us finish this overview with the project of improvement of the NH-10 with 2-lane configuration.

CETEST has been awarded this project by the Public Works (Roads) Directorate, Government of West Bengal. The lifeline of Sikkim state, known as the NH10 stretches from Coronation bridge to Gangtok. Our company is developing the 52 km part of this route in West Bengal which is very important for Sikkim State and Kalimpong, West Bengal. More so, it is crucial for the tourism industry as it links the major tourist destinations like *Gangtok, Changu lake, Nathula Pass, Rumtek Monestry* and others. The proposed project route goes through very tough terrain, with a steep hill on one side and the deep valley of *Teesta* river on the other side. The major challenge is that there are several land slide prone areas and sinking zones which are highly accident prone and are safety hazards. Apart from designing a 2-lane hilly road, the project involves providing innovative solutions for river bank erosions, land-slides / rock fall problems, sinking zones issues etc. which can be constructed / installed on the site without obstructing the road which is the only route in that region connecting major locations. The site work was challenging considering the narrow road and safety issues. ■

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07

“As a leader in the field of architecture and engineering services, TPF is committed to make every effort to best meet the needs of its customers in Central and Eastern Europe. A promise which was made and kept in 2016, and will also be in 2017.”

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Marian Constantinescu
CEO TPF CPROJECT

Among the highlights which have punctuated the year in Poland, we can mention the integration of our Polish subsidiary Getinsa Polska within TPF Sp. z o.o. Through this operation, the Group confirms its ambition to become a leading player on the Polish market of transport infrastructure.

In Romania, TPF CPROJECT, TPF ROMANIA and the Romanian subsidiary of TPF PLANEGE CENOR mainly worked on large projects based around water (drinking water supply, wastewater treatment) and maritime infrastructure.

POLAND | In 2016, TPF continued supervising project and construction of the expressway S6 section Goleniów – Kiełpino with a total length of 54.1 km which is expected to complete in 2019.

The task covers services for the management, coordination, control and investor’s oversight regarding the implementation of 3 separate contracts for the design and construction of the expressway S6 Goleniów-Kiełpino.

The works are divided into 3 sections with a length of 19.78 km; 20.361 km and 14.614 km. The S6 expressway will be a connection between metropolitan centers (Szczęci, Trojmiasto), regional center (Koszalin-Słupsk) and sub-regional centers (Kołobrzeg) in the north-west of Poland.

Our Polish subsidiary has taken up the construction of the second roadway of the Ring Road Międzyrzecz on the expressway S-3 km 0+000, 00 - km 6+370,00.

The project covers the construction of the right roadway of the western ring road of Międzyrzecz on the expressway S-3 with a length of 6.37 km. The ring road of Międzyrzecz is located in Lubuskie Voivodeship, in Międzyrzecz District, in the municipality of Międzyrzecz. The route of the road runs through the areas of the cities of Międzyrzecz, St. Wojciech and Nietoperek. The planned investment concerns the construction of the western (right) carriageway of the road adjusting its parameters to the requirements of the expressway and the connection of the designed section on its northern and southern side with the sections of the expressway S3. In addition, it is planned to build a junction at the intersection of the expressway with the provincial road No. 137 – junction “Międzyrzecz West”. The left roadway and



Construction of the second roadway of the Ring Road Międzyrzecz on the expressway S3 km 0+000,00 – km 6+370,00 / Poland

bridges were built in the previous step. The project is expected to be completed in 2017.

At the border of the Kujawsko-Pomorskie and Wielkopolskie provinces, our team continues supervising the project and construction of the expressway S5 with a total length of 23.3 km.

The section Nowe Marzy-Dworzysko is the first of seven planned sections of the S5 expressway Nowe Marzy – Bydgoszcz. The project is expected to be completed in 2019.

In the same area, we can mention the design and construction of the S8 expressway from the junction “Marki” (without the junction) to the junction “Radzymin”.

Getinsa Payma S.L. is responsible for the management of the investment and TPF Sp. z o. o. supervises the construction works. The works are divided into 2 tasks :

- ▶ Task I – Project and construction of the S8 expressway on the section from the junction “Marki” (without the junction) to the junction “Kobyłka”, with a total length of 8.129 km;
- ▶ Task II – Project and construction of the S8 expressway on the section from the junction “Kobyłka” (without the junction) to the junction “Radzymin Pld.”, with a total length of 7.24 km

The S8 route is located in the Masovian district and runs through the communities of Marki, Zielonka, Ząbki, Kobyłka and Radzymin. The project is expected to be completed in 2017.

TPF Sp. z o. o. signed 3 separate contracts for the supervision of the construction works of the national road no.8 adjusting its parameters to the requirements of the expressway, section Wyszaków - border of the province of Podlasie.

The total length of the section is 38.51 km. The task covers services for the management, coordination, control and investor’s supervision. The works are divided into 3 sections with a length of 13 km; 16.1 km and 9.41 km.

The project is expected to be completed in 2018.

In the rail sector, among the successfully completed projects, we can mention the management and supervision of the investment project “Modernization of the railway line E 20 / 20 on the section of 78 km between Siedlce and Biała Podlaska, Stage II”.

This modernized railway line between Siedlce and Terespol is a very important part of the international line belonging to the Trans-European Corridor linking Berlin and Moscow.





01 Modernization of the railway line E 20 / CE 20 on the section between Siedlce and Biała Podlaska, Stage II / Poland

province of Podlasie / Poland

02 Design and construction of the expressway S5 on the section Nowe Marzy-Dworzysko / Poland

06 Multimodal platform in Galati / Romania

07 Extension and rehabilitation of water and waste water infrastructure in Hunedoara County / Romania

03 Design and construction of the S8 expressway from the junction "Marki" (without the junction) to the junction "Radzymin" / Poland

08 Extension and rehabilitation of water and waste water infrastructure in Arges County / Romania

04 New residential building located on Górczewska Street – Warsaw / Poland

09 Sluice gates modernization on the Danube-Black Sea Canal (CDMN) and the Poarta Alba-Midia Navodari Canal (CPAMN) / Romania

05 Construction works of the national road no.8 adjusting its parameters to the requirements of the expressway, section Wyszaków – border of the

10 New frontier crossing point by ferry for merchandise and passengers Isaccea (Romania) – Orlivka (Ukraine)

Getinsa Payma S.L was supervising railway traffic control devices and the transmission data units. The scope of works also applied to three stations: Siedlce, Łuków and Międzyrzecz in which the works included the replacement of the railway infrastructure, among others, surface track, track bed, rail traffic control equipment, catenary, power equipment, railway crossings, engineering structures, buildings and platforms.

Finally, this year has been used to refine the technical work of our experts on the real estate project of Górczewska Street in Warsaw.

The project concerns the development of the technical documentation and estimation of the investment's costs for the new residential building located on Górczewska Street. The project also includes the construction of the underground parking and is carried out under the government program for the Rental Housing Fund.

ROMANIA | TPF CPROJECT is particularly active in the water sector. The projects in which our engineering office is involved have two objectives: firstly, the development and improvement of drinking water and waste water systems, and secondly, the accessibility of services for every citizen.

Our Romanian company has completed the technical assistance to project management for the "Extension and rehabilitation of water and waste water infrastructure in Hunedoara County". Services provided consisted in support for public procurement, phase II of Master Plan update, the development of an effective management.



It is also in this county that TPF CProject, within the consortium between companies RAMBOLL S.E. (leader) and AECOM INGENIERIA, brings its technical support for supervision for the ten contracts of works executed in accordance with the conditions of Red &Yellow FIDIC.

In Cugir, Alba County, our team has completed the feasibility study for rehabilitation and extension of water supply and sewage. The overall objective is to provide a local strategy for the development of the water and wastewater sector to comply with the general objectives negotiated by Romania in the accession and post-accession framework.

Mission accomplished also in Arges County where our experts provided technical assistance for Project Management for the objective "Extension and rehabilitation of water and waste water



infrastructure in Arges County”. TPF’s engineers have successfully completed the second phase, designer’s technical assistance during the execution of the works.

Moreover, our Romanian branch participated in the project for the construction of a multimodal platform in Galati, one of the river and maritime harbors of the central network Rhine-Danube.

Technical assistance services have resulted in the feasibility study, including the engineering services, cost estimation and traffic survey, consultancy during the approval and financing process. This project will allow removing major bottlenecks through the modernization of the existing infrastructure, and ensuring the missing connections for the central network.

In the south-east of Romania, services provided by TPF CProject included design works “Upgrading sluice-equipment and installations” for the rehabilitation for protection of ship routing constructions at Agigea harbour lock-channel No. 2,

Cernavoda Harbour lock-channel No. 2 and Ovidiu harbour lock-channel No. 1.

The sluice gates modernization plays an important role in the integration of the internal market and value of Romania’s geographical position as a transit zone.

Finally, we have been hired as part of the construction of the frontier crossing point by ferry for merchandise and passengers Isaccea (Romania) – Orlivka (Ukraine)

The company NAVROM BAC has requested TPF CProject to provide them with professional services for the elaboration of the feasibility study, detailed design and permits and approvals documentations.

Their new facility will include roads and platforms, quay improvement, dredging works, storage areas, paddocks, warehouses, access area, and an administrative office. ■



“The year 2016 has been a year of consolidation of the achievements of TPF SETICO in the field of water, particularly in Senegal (water supply and sanitation), in Ivory Coast (water supply), Mauritania (water supply) and Cameroon (Irrigation). Our new identity allowed us to better market Group companies in Sub-Saharan Africa and to create synergies leading to two contracts: the first in the area of solid waste with TPF Ingénierie and the second in rail transport with TRN Ingeniería.”

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Amadou De, Member of the Executive Committee of TPF and Chairman of the Board of Directors of TPF-Setico Ingénierie Dakar and Abidjan

Increasing Sub-Saharan populations access to drinking water and sanitation remains one of the major concerns of TPF.

Obviously, TPF SETICO INGENIERIE and TPF SETICO INTERNATIONAL have demonstrated again this year their ability to drive large scale projects to improve sanitation, hygiene and daily life in Senegal and Ivory Coast.

In Cameroon, securing the food supply is at the center of discussions. In this area, TPF SETICO followed the rehabilitation of irrigated perimeters with interest.

In Dakar, TPF Setico Ingénierie participates in one of the major urban hydraulics projects of the country: the construction of the seawater desalination plant in the Mamelles with funding from the Japanese International Cooperation Agency (JICA).

This major project in the priority action plan of the Plan Senegal Emergent (PSE) should secure water supply of the capital for 20 years at least, with a production of 50,000 m³/day expandable to 100,000 m³. Furthermore, it should be noted that the project provides for the rehabilitation of 460 km of network in Dakar 1 (Dakar city). Work will begin in 2019 and is due to be completed in 2021. Our consulting missions include: the design work, assistance to tendering process, control and supervision of construction, facilitation of the implementation of the Environmental and Social Management Plan and the Environmental Monitoring Plan, and capacity development for the follow-up of the E&M of the seawater desalination plant during the warranty period.

This year, our Senegalese subsidiary also won the contract for studies of the master plan for wastewater and storm water treatment from the towns of Podor and Dagana.

This project is funded by the West African Development Bank (BOAD) and has a particular significance for TPF Setico Ingénierie because such studies were not entrusted to the company for nearly three years.



Project of seawater desalination plant in Mamelles – Dakar / Senegal

The goal is to equip Podor and Dagana with a high-performance system.

In the area of Thies-Tassette, the drinking water supply project will start soon.

TPF Setico Ingénierie experts will be responsible for work control and supervision including the laying of 21 km of cast-iron pipes with a diameter varying from 600 to 800 mm and concrete water towers (3,200 m³). This project is funded by the World Bank and is scheduled to start in March 2017.

Still in Senegal, TPF Setico and our Spanish subsidiary TRN Ingeniería worked together and collaborated successfully to sign a contract for the realization of a pre-feasibility study for the creation of a dry port in Tambacounda.

The overall objective of the project is to contribute to the development of multimodal transport networks in order to promote the socio-economic development of the region of Tambacounda and surrounding areas.

Services include studies related to the implementation of the following changes: platforms, access roads, buildings (administrative

offices, controls, service providers,...) and fences, warehouses and sheds, roads and car parks, access for freight trains and container trains, rainwater drainage, electric network, phone network, water supply network and fire security network as well as all the necessary equipment (handling, weighing, and storage equipment, etc.).

In Cameroon, the control of the rehabilitation work continues for irrigated perimeters, dikes of Maga & Logone and Mayo Vrick as part of the implementation of the emergency flood control project in the Far North region.

Initiated in 2015, this project comprises two lots. The first one concerns the rehabilitation of the dyke and dam in Maga and the Logone dyke downstream from Pouss over 3 km, as well as the rehabilitation of the Maga West & East irrigation units of the SEMRY II. The second one covers the rehabilitation of the Logone dam between Yagoua and Pouss over 67 km, the reinforcement of the Logone bank and rehabilitation of irrigation units 4 to 10 of the SEMRY I (stations 3 and 4).

A major project within the Hydraulic and Sanitation for the Millennium Programme (PHAM) in Ivory Coast is the construction of ventilated improved pit latrines (VIP) blocks



01 Master plan for wastewater and storm water treatment for the towns of Podor and Dagana / Senegal

02 Construction of latrine blocks with ventilated improved pits / Ivory Coast

within 21 schools in the region of Gontougou and in 28 health centers in the regions of Guemon, Tonkpi, Upper Sassandra, Marahoué, Nawa and San Pedro.

The Government of Ivory Coast, the European Union and UNICEF work in partnership to improve rural sanitation and to end open defecation which is one of the main causes of infant mortality.

Our subsidiary TPF Setico International currently controls and oversees the construction work for 352 blocks of VIP latrines on behalf of UNICEF. The work will be completed by the end of April 2017.

In the Ivorian towns of Bouafle, Duekoue, Guiglo, Bolequin, Mankono, Boundiali, Ferkessedougou and Ouangolodougou, developing regional systems for drinking water supply is being investigated.

In this context, the Ministry of Economic Infrastructure has appointed TPF Setico International to carry out a diagnosis of the current state of drinking water supply in these areas and to identify orientation patterns for the development of access to drinking water.

Our tasks include: the study of water demand, the diagnosis of existing water supply systems, the development of master plans for drinking water supply and accompanying measures, the economic and financial analysis as well as the development of the investment plan. ■





▲
Marriott Hotel in Agadir

Looking back on this year, the actions carried out in Morocco have been extremely positive. While TPF PYRAMIDE maintained its leading position in traditional business areas, the company also wanted to tackle new markets such as luxury hospitality and the automobile industry. It has done so successfully, as our subsidiary is taking part in construction projects including the Marriot hotel in Agadir, the Peugeot car assembly plant for the French group PSA in Kenitra and the Anfa airport development program.

In Agadir, the Taghazout beach resort is developed by the Société d'Aménagement et de Promotion de la Station Taghazout (SAPST) and concerns the construction of a 28,000 m² 5 star hotel for MARRIOTT, a global leader in hospitality.

“These last three years have been a turning point in the evolution of TPF PYRAMIDE Ingénierie. Our focus was maintained and the company has now found its cruising speed.”

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Jamal Lafquiri
General Manager of TPF PYRAMIDE Ingénierie

The hotel features 250 rooms and suites and will offer a wide range of services: three outdoor pools with direct access to the beach, several dining areas, a conference room, a theatre, meeting rooms and spa facilities as well as a fitness center.

TPF Pyramide has been tasked with the studies and work monitoring for all trades. Work is expected to begin in 2017 and end in June 2019.

In Tangier, the Emirati real estate developer Eagle Hills has requested our assistance for the Tanja Waterfront project.

The project concerns a high standing residential construction in the new Tangier marina.

Works will begin in July 2017 and delivery is planned for spring 2019. Our subsidiary has been appointed for studies and work monitoring for all trades. The signing of this contract reflects the confidence of our customer and the recognition of our expertise. As a reminder, TPF Pyramide had previously worked for Eagle Hills on the joint real estate program of Bab Al Bahr in the Rabat marina, including luxury homes, shops and several districts including the Cité des Arts.

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We should also remember that the consortium SNC LAVALIN – TPFi – TPF PYRAMIDE was asked to provide project management assistance and partial engineering as part of the construction of the PSA Peugeot Citroën assembly plant in Kenitra.

The plant has a built-up surface of 65,000 m² and is scheduled to open in 2019. It is located in a free zone. Its capacity is expected to reach a production of 15 vehicles per hour at first, moving to 30 units later on.

As a conclusion to this retrospective, we can mention the development program for the Anfa airport – in the Anfa Club district which is particularly close to heart.

After entrusting us with the lot 126 project, the Moroccan-Saudi consortium Asma Invest asked us to concentrate on lots 107 and 108. With a built-up area of 66,000 m², Asma Invest intends to develop a joint real estate program combining residences, offices and shops on the ground floor. Our mission concerns the study and work monitoring for all trades. The work is expected to start at the end of 2017 and to be completed in early 2020.

We have also been extremely active in the field of education. As such, TPF Pyramide is involved in the International University of Rabat (IUR) project. It was responsible for carrying out all studies and monitoring the execution of every phase of the project.

For the time being, it is closely interested in the construction of the Enseignement 4 building, with a built-up area of 12,000 m², which will house the future Dental Faculty. Our team is carrying out studies and work monitoring for all trades. Work is expected to be completed at the beginning of 2018. ■



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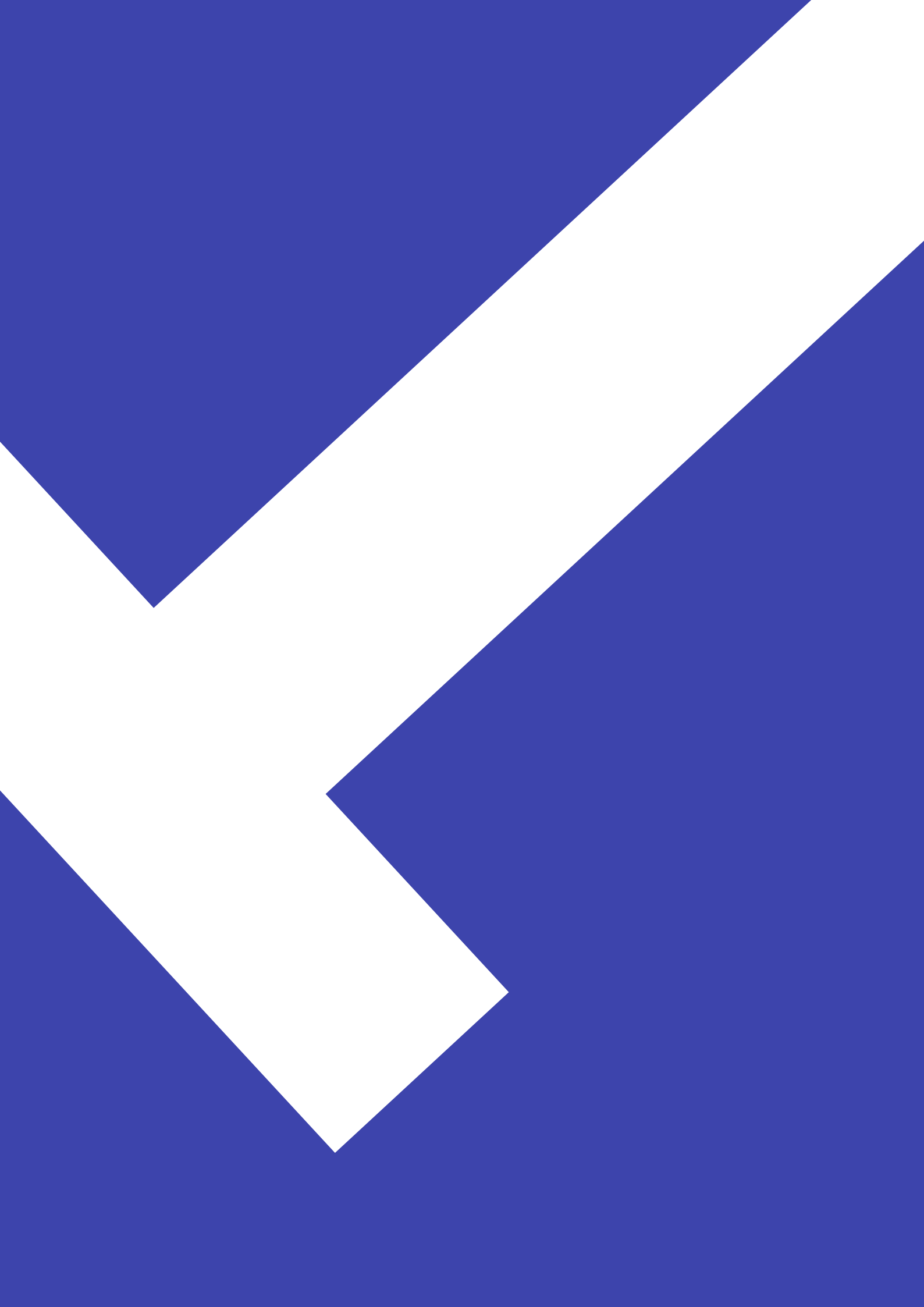
01 New PSA Peugeot Citroën
assembly plant in Kenitra /
Morocco

02 Hotel Marriott – Agadir /
Morocco

03 Tanja Waterfront – Tangier
Marina / Morocco

04 Anfa Airport Development
Programme – Anfa Club
District – Lots 107 and 108 /
Morocco

05 International University of
Rabat (IUR) / Morocco



CENTERS OF EXPERTISE

The background of the page is a solid blue color. It features several large, white, curved shapes that create a sense of movement and depth. These shapes include a large arc on the left side, a smaller arc on the right side, and a large semi-circle at the bottom. The overall design is clean and modern.

One of the most prominent trades of TPF is unquestionably the building activity for which **1,100** employees are working full time on the African, American, Asian and European continents.

True to its motto “Building the world, better” and to its tradition of excellence and innovation, TPF acquired the French start-up IM-PACT this year, a company specialized in the field of digital building and Building Information Modeling (BIM).

This year was also focused on Smart Cities, a theme which is particularly dear to the group. The energy and ecological transition of territories constitutes a real opportunity for growth and innovation for TPF. More than ever, themes of eco-design, intermodality, innovative economic models, responsible mobility, unavoidable energy valorisation, pooling and sharing, circular economy, Smart Cities, Smart Grids, OpenData, digital city,...All of those are at the heart of our concerns, and even more this year.

In 2016, TPF has particularly strengthened its presence and market share in the Building sector in Algeria, Angola, Belgium, Spain, France, India, Poland, Ukraine, Turkey, Brazil, Chile, Luxembourg, Morocco, Mozambique, Portugal and Timor. At the same time, the Group has expanded its business to other countries such as Burundi, Ecuador, Georgia, Guinea-Bissau and Sweden.

The year was essentially focused on housing, tertiary sector, commercial centers, mixed real estate operations, health, and industrial projects.

Housing sector

The housing sector, particularly dynamic in Europe, represents 29% of the turnover of the Group’s building activity. Highlights of this year in Belgium include the inauguration of the complex “Sans Souci” in Ixelles, consisting of 28 passive housing units, a series of external utilities and parking for 60 cars. This project distinguished itself thanks to its environmental ambition and was awarded the label “Exemplary Building” by the Brussels-Capital Region.

In France, the construction program of the **Tour Odéon** deserves to be highlighted. This high-rise building of 170 m, offering high quality services, will become the highest multistoried building in Monaco: in total, 177 state-owned housing, 82 private apartments, 11 levels of basements, shops and offices.

Housing projects were numerous in Morocco. As an example, we can mention the urban development program **Casa Green Town**





whose first phase, launched in 2010, is the realization of 830 villas and 650 apartments. This year was marked by the delivery of several lots: “La résidence du jardin 1” (196 flats), “Les villas sur vergers” (142 villas) and “Les villas du lac” (94 villas).

Tertiary sector

The tertiary sector was not left behind, as it represents 13% of the turnover of TPF’s building activity. Several events have contributed to the success of the year such as the delivery of the TREBEL office building, renamed **Le Wilfried Martens** in Brussels, and developed for the European Parliament. This high energy performance passive building obtained the BREEAM Excellent certification.

As for ongoing projects, two of them are particularly close to our hearts, the construction of the new headquarters of **BNP Paribas** in Belgium with a built-up area of 95,000 m², and the rehabilitation of the headquarters of Angolan bank **Banco de Poupance e Credito** (BPC) in Luanda Angola (21 floors, built-up area of 15,138 m²), for which we also worked as architects.

Commercial sector

The commercial sector represents 5% of the turnover of TPF’s building activity. In this category, the **Docks Bruxsel** definitely deserves to be highlighted: the first Shopping District to obtain the BREEAM “Excellent” certification. This new living place in Brussels opened its doors in October 2016 after three years of work and spreads over 61,000 m² among which 44,000 m² are dedicated to businesses, 10,000 m² to leisure and 7,000 m² to offices.

Mixed housing complex

All around the world, 2016 was marked by quite a few fantastic projects.

In Morocco, our teams have been awarded a contract for technical studies and work monitoring for the second phase of the Casa Green Town project south of Casablanca, called “**Cœur de Vie**”. It is a mixed real estate project, combining shops and residences, which will spread over an area of 250,000 m².

In the Principality of Monaco, our teams are working on the construction of **26 Carré O**: a 19 floor “smart” building including

housing of very high standing. The project is engaged in a BREEAM® certification and is aiming for a “Very Good” performance level.

In Angola, our teams have completed their supervision mission for the construction of the **Luanda Towers**. This 116,000 m² project includes 2 residential buildings and 1 aparthotel with 19 floors, parking and a commercial center.

Health sector

The group is proud of being a key player in the field of health. It represents 11% of the turnover of the Building activity. This year, TPF has won several important projects including the construction project for the **Cancer and Hematology Center of Institute Albert II** in Saint-Luc, Woluwe-Saint-Lambert, with a surface area of 22,000 m² and a capacity of 120 beds. Several iconic projects were continued like the project of the new **Hospital complex in Santiago de Chile** with an area of 92,057 m² and a capacity of 641 beds, projects of technical assistance to the Ministry of Health for the **hospitals in Izmir and Kocaeli** in Turkey, or even the construction project of the **Centre anti-cancéreux Jules Bordet** in Anderlecht, Brussels with a surface area of 88,000 m² and a capacity of 250 beds.

Industry sector

This sector represents 15% of the turnover of the Building activity. Highlights of the year include the award of the construction project for the **PSA Peugeot Citroën assembly plant in Kenitra**, Morocco, or the delivery of the **Fujikura Automotive electronic components manufacturing facility** in Lviv, Ukraine.

Sustainable and innovative city

The Group positions itself as a key player in the sustainable and innovative city. In Marrakech, its presence at the international conference on climate (COP 22) did not go unnoticed.

In France, we can mention our ongoing expertise mission for the implementation of innovative solutions for energy optimization and the use of renewable energy in stations under the innovation partnership for the **Société du Grand Paris**.

And in Brazil, we can mention the commitment of TPF in the program Initiative for Emerging and Sustainable Cities (ICES) of the Inter-American Development Bank (IDB), in the Trés Lagoas city, whose objective is to stimulate sustainable development, through the construction of plans developed based on one diagnosis, in a multidisciplinary perspective.

TPF continues its digital revolution started in recent years. Our company offers the possibility to scan and model existing structures with the '3D scan' laser technology, in a logic of improving work site productivity. The construction of the Hôtel du Territoire of the French Archipelago Saint-Pierre-et-Miquelon is a good example of project designed according to the BIM process. (BIM level 3). 4,500 kilometers away, the TPF teams located in France are leading the studies and facilitate interface with local businesses on the archipelago through BIM.

Now let us look at a few major projects which we would like to highlight:

► **TPF Ingénierie won in 2016 the construction contract for the new hospital Lariboisière in Paris.**

Our teams in France are carrying out a mission of Structural Engineering, roads and networks, acoustics, Demolition/asbestos removal in the first phase of the project. The main building called "Nouveau Lariboisière" has a surface area of about 39,000 m², and will include a technical platform bringing together imaging, surgery block, obstetrical block, resuscitation and continuous monitoring service, four levels of conventional hospitalization, one level of technical medical logistics and an emergency room with a capacity of 100,000 patients per year.

► **Still in France, TPF Ingénierie is working on the project for the design and construction of the office tower "La Marseillaise", a tower listed as a building of great height.**

Our teams provide an assistance mission to the project owner. The building covers an area of 39,560 m² over 31 levels and will feature multipreneur offices, a restaurant serving 2,100 meals a day and a crèche. The building is aiming for certification levels HQE excellent, LEED Gold, RT2012, Label BBC Effinergie 2005.

► **In Turkey, for the municipality of Istanbul, the TPF Planege Cenor teams are developing the Master Plan and studies for 3 artificial islands in the Sea of Marmara, on a total area of 1,500 ha.**

This iconic project has a total cost of around 1.2 billion euros, and will be built through the method of soil and rocks excavation from the new channel of Istanbul. The mission entrusted to us covers the architectural, technical and economic aspects. Studies are developed in partnership with the teams of our subsidiary TPF Planege Cenor in Turkey, making it an example of inter-subsiidiary cooperation within the group. ■

01 Lariboisière hospital / France

02 La Marseillaise / France

03 Casa Green Town South of Casablanca / Morocco

04 Hôtel du Territoire of the French Archipelago Saint-Pierre-et-Miquelon

05 Grand Paris Express / France

06 Artificial islands in the Sea of Marmara / Turkey



This year again, TPF has shown that transport infrastructure is indeed part of its core business.

These are excellent news for our **2,100** active employees in this sector: the Group has not only maintained its position as a market leader in many countries where it is already present, but has also strengthened its capabilities and skills in the field of the transport planning through the acquisition of the Spanish engineering and consulting company Taryet, specializing in mobility studies and sustainable development models.

This acquisition fits perfectly into the group's vision to offer its customers a complete service while enriching its expertise in specific areas.

Whether it concerns roads, subways, railway lines, bus rapid transit, airports or port facilities, the great strength of TPF lies in its ability to act throughout the project life cycle, from design to operation and maintenance of the infrastructure through construction supervision and integrated project management.

Road sector

While TPF has seen its turnover increase in Belgium, Brazil, Colombia, France, India and Poland, the Group has been most active in Algeria, Bolivia, Chile, Costa Rica, El Salvador, Spain, Georgia, Peru, the Philippines, Portugal and Vietnam.

Our clients are both public authorities or private developers, but also international financial institutions.

In 2016, we were able to enter new countries such as Argentina where we awarded two road contracts including the urban project "Paseo del Bajo" which will improve traffic flows on the north-south arterial road of Argentina's capital.

Road Paseo del Bajo in Buenos Aires / Argentina



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02



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In India, where our subsidiaries have recorded a substantial increase in their turnover, several important contracts were also won. The construction supervision contract of the cable-stayed bridge (featuring two spans of 360 m each and one pier) over the Zuari river in Goa is particularly worth mentioning.

Metro sector

This year again, the Group can be proud of being a key player in the sector, having taken part in a series of emblematic projects all around the world. To name but a few: in Peru, line 2 and line 4 of the Lima metro, in Georgia, the extension of line 2 of the Tbilisi metro, in Saudi Arabia, lines 1 and 2 of the Riyadh metro, in Algeria, line 2 of the Algiers metro, in Belgium, the North metro in Brussels, in Spain, line 9 of the Barcelona metro, in France, the Marseille metro, in the Philippines, line 1 of the Manila Light Rail Transit System, and in Chile, lines 1, 2, 4 and 5 of the Santiago de Chile metro.

Rail sector

Over the past year, we have successfully entered the American market. TPF acts as lead designer in the California High Speed Rail project, one of the most important transport projects that is currently being built in the US, and also performed the feasibility study of the Dallas-Houston HSR.

Some other major railway projects undertaken in 2016 are the feasibility study of the upgrading of Huancayo-Huancavelica railway and the modernization of the Mangualde – Guarda railway section in Portugal.

BRT sector

Thanks to our participation in the implementation of the BRT system in Senegal (in Dakar), Vietnam (in Hanoi and Danang) or in France (connecting Mandelieu, Cannes and Le Cannet), we managed to acquire extensive experience in the field.

Airport sector

Not less than 25 contracts were signed this year in Spain, to which we can add many other contracts won in France, Colombia and Bolivia. This shows the importance that TPF gives to this sector.

We are particularly involved in the expansion and modernization of the El Dorado airport in Colombia.

Port sector

Activity in this sector has proved to be more dynamic in Algeria, Brazil, Spain, Portugal and Romania. As an example, TPF takes part in the development of the Suape port in Brazil.

Before finishing our analysis, let us look at three projects to which we are particularly committed:

- ▶ As we mentioned in the chapter dedicated to Spain, our subsidiary TPF Getinsa Euroestudios participates in one of the most important high-speed rail line projects ongoing in the United States.

Our team is providing consulting services for detailed design of a section of the California High Speed Corridor under a design-and-build contract. TPF is responsible for the detailed design of Package 4, which is located in the Central Valley of California.

Eventually, this high-speed corridor will allow trains to travel at a speed of 400 km/h (250 mph) over a distance of 1,280 km (800 miles) between Sacramento and San Diego through Los Angeles.

- ▶ In France, TPF Ingénierie is collaborating with Assystem and the Parsons engineering group on the urban transport project “Automation of lines 1 and 2 of the Marseille metro, with renewal of trains and operating systems.”

This new contract represents 20 km of line, 31 stations, and an investment of 470 million USD. TPF Ingénierie is responsible for

03



01 California High Speed
Corridor / United States

02 Marseille Metro / France

03 Dallas-Houston High Speed
Rail Project / United States

04 Zuari bridge in Goa / India

the engineering studies and supervision of the work for the adaptation of the docks, the facades of dock, changes to infrastructure allowing the integration of new rolling stock and the improvement of accessibility. The end of the construction is scheduled for 2020.

► After having carried out the Detailed Project Report (DPR) of the Zuari bridge in Goa, TPF Engineering Pvt. Ltd. (formerly SN Bhoje & Associates) was awarded in October 2016 the Authority Engineer contract which is the single largest contract won in its history.

The Zuari bridge is an 8 lane cable stayed bridge, 720 m long with a 360 meter main span. It will have two viewing towers in the center which will be its signature. The Ministry of Roads, Transport and Highways (MoRTH) decided to carry out the project in EPC mode.

With this new mission, our Indian subsidiary strengthens its presence in the State of Goa, where it is already working on several projects. ■

04



Drinking water supply and treatment, sanitation, wastewater treatment, seawater desalination, dams and hydroelectric systems, river engineering, flood protection, water resources management... This year, no area has escaped the vigilance and professionalism of our **750** water and environment experts.

Whether in Europe, Africa, Latin America or Asia, TPF was able to demonstrate a broad range of skills and move forward.

In addition to consolidating its position in countries where it is already active, the group saw its efforts rewarded by the signing of a first contract in Kazakhstan relating to the construction of a wastewater treatment plan in Atyrau.

Our multidisciplinary team of experts is sensitive to environment protection and sustainable development, and was extremely busy this year.

Several particularly interesting projects have set the tone for the last twelve months: some were completed, others are still running or have only just begun. Let us reflect back on the work carried out all around the world.

As mentioned in the previous chapters, we have carried out a large number of projects related to drinking water supply and treatment, sanitation, wastewater treatment and sea water desalination.





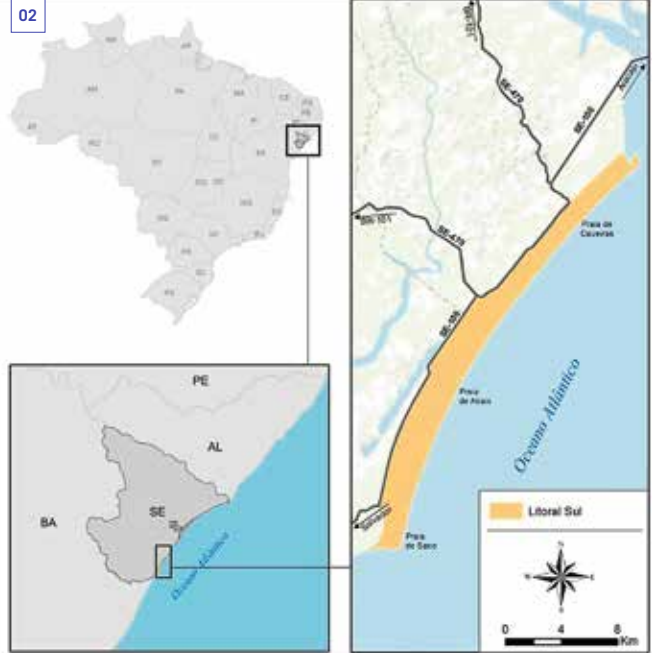
01 Water supply and wastewater treatment infrastructure in the province of Arges / Romania

02 Integrated water supply system, south coastline of Sergipe / Brazil

03 Mobilization of surface waters in Cape Verde

04 Desalination project in Tenerife in the Canary Islands

05 Drinking Water Production Plant and related interconnection networks of Albi / France



ON THE EUROPEAN SIDE, we can mention in **France**, the technical assistance to **construction for a drinking water station** with a capacity of 27,230 m³ per day and associated storage (2 tanks of 1,500 m³) in the municipality of **Albi** or technical assistance to the **construction of a wastewater treatment plant** with a capacity of 350,000 population equivalent in **Perpignan** to control the deterioration of river water quality in the region.

In **Spain**, the TPF group is involved in the **Tenerife desalination project** in the Canary. It features the construction of two desalination stations for the production of drinking water: one in Granadilla and the other in Fonsalia. They are scheduled to gradually produce 14,000 m³ per day, 21,000 m³ per day and ultimately 42,000 m³ per day.

In **Romania**, the development project of **water supply and wastewater treatment infrastructure in the province of Arges** has also marked the year with its footprint. TPF has provided technical assistance to the preparation of documents required for U.E.

funding. Among investments to realize are 32 chlorination stations, 52 water reservoirs (new or to rehabilitate), 196 km of supply lines, 323 km of distribution lines, 43 pumping stations, 2 wastewater treatment plants (including a new one and another requiring rehabilitation), 32 new wastewater pumping stations and 261 km of pipes allowing for wastewater evacuation.

IN AFRICA several exciting missions were initiated. In **Algeria**, our experts are currently working on the detailed design of the **hydraulic system of El Kebir** between the dams of Boukhroufa and Boulatane, with a respective capacity of 1.7 m³ and 2.0 m³ per second.

At the same time, in **Equatorial Guinea**, our teams have been asked to control and supervise the work on the project of **drinking water supply in the city of Mongomeyen** in the Wele-Nzas province: 18 km of network, 11,050 inhabitants, 2,400 m³ per day. The water will be captured in the Lobo River.



IN LATIN AMERICA, we can highlight the **Brazilian** studies for the **integrated water supply system along the coastline South of Sergipe** carried out with funding from the Inter-American Development Bank (IDB) for the Secretariat of State for the Ministry of sports and tourism. This project concerns the Caueira beaches in the municipality of Itaporanga and beaches of Abais and Saco in the municipality of Estancia.

The Group is also carrying out projects in the hydropower sector. The development of surface waters as well as dams and irrigation or hydroelectric facilities formed a large part of the activity of TPF in 2016.

IN EUROPE, the group is, among others, taking part in the construction project of the **dam of Bozkurt** in the province of Sivas (Turkey). The Directorate for State Hydraulic Works entrusted our company with the preliminary studies and execution studies, including alternative analysis, geological and geotechnical studies or even hydrological and hydraulic studies. The water stored in this 50m high clay core embankment dam will be used for irrigation purposes (total water volume stored is 24.8 million cubic meters, with an embankment volume of 2.7 million cubic meters).

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IN AFRICA, we continued studies related to the project of **surface water mobilization in Cape Verde** which is carried out under funding from the African Development Bank (ADB). The study is carried out in three phases and covers several inhabited islands of Cape Verde. Firstly, a preliminary technical study had to be conducted on twenty-one identified sites in order to select 10 priority sites to develop. Secondly, preliminary studies were carried out on ten sites, which allowed to choose five successful sites with immediate funding opportunities. The third phase of the work was devoted on one hand to the detailed design studies on those five

high performance sites, in order to define the precise characteristics of dams and various associated hydro-agricultural facilities, and on the other hand, to the definition of tender documents.

In **Cameroon**, we signed a contract for project review and construction supervision for the **hydroelectric development of Bini in Warak** (capacity of 75 MW, annual production of 300 GWh).

Finally, in **Mozambique**, we started the construction project for the **Metuchira mobile dam** which will improve the supply of drinking water in the region.

IN ASIA, the Group was appointed in **China** by the company China Gezhouba Group Company (CGGC), as part of the Group China Three Gorges, for technical assistance in a tender offer for the construction of the **hydroelectric development of Caculo-Cabaça in Angola**, with a power of 2,000 MW. This collaboration will probably continue in the coming years and lead to the review of the project as a whole.

2016 was also the opportunity to work in the field of river engineering and on flood protection projects.

The activity was particularly strong in **East Timor** where the group is involved in Pante Makasar, in the enclave of Oecusse, in projects of **river regulation and flood protection**.

Moreover, the Group continued its actions in the environment and water resource management sector.

Studies on environmental impact, work monitoring and environmental monitoring are underway and concern mainly land-use planning and water resources. ■



For over 25 years, the group is a reference in the field of energy, where it became a partner of public authorities and industrial actors, both in Belgium and abroad.

The Energy center of expertise relies on a team of **160** experts able to collaborate on high level projects and offer advanced services to its customers: energy studies, exploitation of energy demanding facilities and renewable energy.

Energy is a key factor in the economic, social and cultural development and environmental issues are now under a broad consensus among all developed countries. In this perspective, TPF has always favored the adoption of new technologies and strategies to reduce the negative impacts on the environment and improve energy efficiency.

2016 has been a great year for renewable energy in emerging countries such as South Africa, Brazil, Chile or even Mexico, to the point that the production of renewable energy in those countries has exceeded 18% that of rich countries. A success made possible thanks to the creation in Brazil of a system of auctions and mandates aimed to stimulate the implementation of projects in the region and to exert downward pressure on prices of solar and wind energy.

As you may have understood, the energy sector opens up a wide range of activities for the TPF group. In 2016, its subsidiaries took part in investments and operations for an amount of 100 million EUR.

Wind farm in Ngong Hills, Kenya



01



In the field of ENERGY STUDIES TPF offers a wide range of services, which extend from the realization of energy audits to assistance in energy supply contracts, including studies for the installation of photovoltaic panels or traditional boilers.

For our activity of OPERATION OF HIGH ENERGY CONSUMING FACILITIES, we ensure the maintenance of all types of technical energy consuming installations (boiler, cogeneration, air conditioning, ventilation, emergency generator...). In total, over 5,000 boilers with a total power of over 500,000 kW are maintained by TPF. In addition, we offer a rigorous and efficient follow-up of energy use, which is a sine qua non condition in any approach to energy efficiency. TPF is committed to energy savings by implementing activities which may or may not require investment. This commitment often takes the form of an energy performance contract (EPC). In order for these to be carried out, the constant optimization of technical systems we operate is paramount. In addition, for some of our clients, we also offer assistance in the purchase of energy.

Our Group also has a strong presence in the field of RENEWABLE ENERGY such as wind power, biomass, photovoltaic, hydraulic or other energy sources that meet our needs in a sustainable way. An example is TTR which manages several investment funds active in renewable energy, to the great satisfaction of investors in Belgium, France and Spain.

02





01 Construction project of the coal power plant (2 x 660 MW) in Chittagong / Bangladesh

02 Steam heating system 45t/h - ArcelorMittal-Industeel - Charleroi / Belgium

03 Construction project of a solar energy production unit for the Rourkela Steel factory / India

Let us summarize the main highlights of this year:

IN BELGIUM, as you may have read in the chapter devoted to our subsidiary TPF-Utilities, TPF was awarded the 2015 – 2018 contract for the **maintenance and delegated management of technical installations for the building Atrium Midi in Brussels**, which houses the Société Nationale des Chemins de fer Belges (SNCB): a net area of around 56,000 m² including 39,000 m² of offices and 17,000 m² of basements and parking surfaces.

Our teams are also working on the **Moulins Saint-Roch** wind farm project on the territory of entities Peruwelz and Beloeil. TPF-Utilities provides assistance to project management for the construction and commissioning of the wind farm which will consist of 4 Senvion turbines with a unit power of 2 MW.

This year, and for a period of 4 years, our subsidiary has been in charge of the **maintenance and operation of technical facilities** for buildings located on the **military base of Peutie**. The new contract covers heating facilities, HVAC, water treatment (water softeners, water treatment, biological analyses), fire security, detection of gas, electricity, compressed air and lifting equipment. This contract offers full warranty on the equipment.

To complete these missions, the use of a tool for computer-assisted maintenance management was an absolute prerequisite.

IN FRANCE, **ParteNord Habitat**, the Office Public de l’Habitat of the North Department, entrusted TPF-Utilities sarl with the **operation and management of the facilities** for heating, production of hot water and water treatment on its different sites.

At the same time, TPF Ingénierie is looking at the different leads for **energy optimization and renewable energy exploitation** in new stations which will be built on lines 15 South and 16 of the **Grand Paris Express transport network** as part of the partnership for innovation between Efficacity and Société du Grand Paris.

IN LATIN AMERICA AND ASIA, the Group is working on several energy-related infrastructure projects. Our subsidiary TPF Engenharia is involved as a project manager in the implementation of environmental programs in the context of the **construction of the Belo Monte hydroelectric plant** in Brazil. It also carries out preliminary studies for the transmission line of the new **Fiat Chrysler Automobiles plant** in Goiana, in the Pernambuco State.

As for our subsidiary Cetest, it focused on the construction project of the **coal power plant (2 x 660 MW)** in Chittagong, **Bangladesh** as well as the construction of a **solar energy production unit (1 x 250 MW)** for the **Rourkela Steel factory** in Odisha, East of **India**. The work was focused on topographic work and geotechnical investigations. ■



TPF FOUNDATION





The TPF Foundation fits perfectly into our desire to help build a better world.

Created in 2015, the foundation would not have been possible without the involvement and enthusiasm of our shareholders and employees.

Because of the constant suffering or threats encountered in each continent that we work in, the creation of this new instrument appeared to us as a necessity.

The TPF Foundation favors local small-scale initiatives which help the fight against poverty, precariousness and social exclusion of children and adolescents. It has been involved in many projects in their favor in the field of nutritional assistance, protection, education and health. These projects are carried out in countries where the Group is present.

In 2016, the Foundation was able to provide financial support to 31 associations including 2 newcomers.

ANGOLA

Mwenho Ukola Center (Huambo) | The Center welcomes and hosts children and young girls from 4 to 17 years old orphaned, abandoned or living in poverty.

Coaching, social and academic support, socio-professional reintegration and the implementation of prevention actions (AIDS, unwanted pregnancies) are among its main tasks.

BELGIUM

Parrain Ami Asbl | Support to foster families providing care for children (ages 0-12) in difficult family situations on an ad-hoc and regular basis.

Les Godillots (Rixensart) | Day care center for 21 children and adolescents with serious behaviour, personality and communication problems (psychotic and neurotic disorders, autism). This year, thanks to the TPF Foundation, the day center “Les Godillots” transformed a carport in a courtyard so that children could enjoy playtime throughout the year regardless of the weather.

Castia Notre-Dame and the Communauté Educative Pierre Harmignie (Florennes) | These two associations provide educational assistance and host 72 children (ages 3-18) in difficult or dangerous situations and facing parental problems. The objectives are multiple: providing a home for young people, reintegration, autonomy.

BRAZIL

Grupo dos Amigos Voluntários (São Paulo) | This association supports some 300 people living in the streets of São Paulo and in situations of extreme precariousness, by providing food aid and clothing on a weekly basis.

Association Junior Achievement (Recife) | Junior Achievement is the world’s largest organization dedicated to educating students about workforce readiness, entrepreneurship and financial literacy through experiential, hands-on programs. Volunteers help and prepare young people for the real world by showing them how to generate wealth and effectively manage it, how to create jobs which make their communities more robust, and how to apply entrepreneurial thinking to the workplace. Students put these lessons into action and learn the value of contributing to their communities.

Peter Pan Association– APP (Ceará) | The Peter Pan Association is dedicated to improving the quality of life of more than 2,000

children and teenagers suffering from cancer, through the implementation of various actions (educational program, sponsorship and food basket, cultural and artistic activities, games, reading, youth work focused on social inclusion...). These actions are developed in partnership with the Albert Sabin Children’s Hospital in Fortaleza. The donations have helped funding the construction of the Peter Pan Day Hospital and the Center specializing in pediatric oncology.

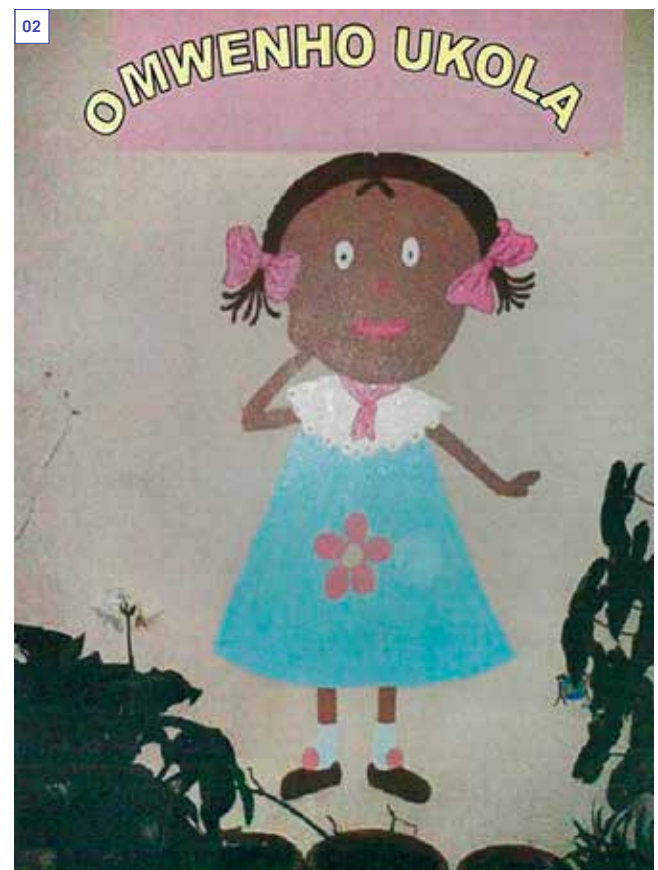
CAMEROON:

Zerca y Lejos (South-Cameroon) | “A school, a child, a garden” is a project driven by NGO Zerca y Lejos which aims to ensure food security for the children of Baka ethnicity by giving them access to healthy, nutritious foods and in sufficient quantity. Several ways are taken to achieve this: the creation of vegetable gardens in schools, agroecological training, development of a plan for environmental education, investment in agricultural production systems or even the purchase of equipment and materials for agricultural activities.

CAPE VERDE

Acarinhar | The association Acarinhar (cuddling) is designed to improve the quality of life of children affected with cerebral palsy, by providing activities promoting a full and harmonious development.

Acrides | This Cape Verdean NGO supports disadvantaged children. Some of them are completely left to themselves, orphans, victims of ill-treatment and sexual abuse, others live in a foster family but in precarious conditions.





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01 Associação Junior Achievement – Recife, Brazil

02 Mwenho Ukola Center, Huambo – Angola

03 Youth Care Organization La Castia Notre-Dame, Florennes – Belgium

04 Jean XXIII Foundation – Spain

05 Annual sports day – India

06 Peter Pan Association, Day Hospital and Center specializing in pediatric oncology, Ceará, Brazil

07 Uchalan High School / India

08 Pinocchio 'for a different look at disability' – Morocco

09 Parrain Ami Asbl / Belgium

ETHIOPIA

Pablo Horstmann Foundation | The main goal of the foundation is to ensure access to school for the 37 school-age abandoned children living in Meki Orphanage, as well as for the 225 orphans fostered by relatives who are in a situation of extreme vulnerability. Access to education will enable them to contribute to the development of their community.

FRANCE

UDSP 13 | The Regional firefighters' association's mission is to help and support the children of firefighters who have passed away, whether on duty or not, by providing them with moral, psychological and financial support (help with training

05



and educational support for children, organizing trips and summer camps, help with looking for their first job and their own accommodation).

Arc-en-Ciel Marseille | The Arc-en-Ciel Scouts of Marseilles is a branch of the Association of Scouts and Guides of France, which brings together children of 8 to 20 years old with disabilities (autism, down syndrome, cerebral palsy).

The Apprentis d'Auteuil | This Parisian association deals with the safety and protection of children. It also works on the education of young people from 18 to 25 years old, dropping out of school, professional inclusion and parenting support. As of today, 25,000 young people and 5,000 families in difficulty were able to benefit from its assistance.

GUINEA BISSAU

Miradas Al Mundo | This association promotes the use of moringa as a dietary supplement in the Bafata region. This plant has exceptional nutritional virtues and is an excellent source of vitamins and contains minerals, amino acids, antioxidants and anti-inflammatory compounds.

INDIA

Vasundhara (Bombay) | The Vasundhara Charitable trust was founded in 2011 for the purpose of extending medical and educational help to various sections of the society especially the rural population and the urban poor. The Indian Government is encouraging e-learning programs in schools. In rural areas, school infrastructure is not sufficient to run the e-learning program effectively. The trust is proposing, among other activities, a fund for enabling e-learning in these schools.

I'm because of you (Bombay) | The main objectives of the project are: to support the opening of a coffee shop to employ young people at risk of social exclusion by reason of their background; to create a space for friends to have drinks and healthy food in a clean and comfortable environment and affordable for all kinds of people; to promote the training of young people from the poorest areas of Mumbai and help them to reintegrate in the labor market.

06



CETEST-TPF scholarship program | Our Indian subsidiary CETEST implements social responsibility in the field of Education through a grant scholarship program for disadvantaged and meriting students in the free primary schools of Muidhara, Boyda and Duargram, and in the Uchalan High School. Each year, CETEST also sponsors one or two students from the SPB Technical Institute, where it recruits most of its Survey Engineering experts.

MOROCCO

Pinocchio "A different way to consider disability" | This Association works for the social integration of children with disabilities such as Cerebral Palsy, Autism and Down's Syndrome. It creates specialized classes for school inclusion (CLIS) within schools in Rabat. Currently, many schools have hosted CLIS classes including Jeanne d'Arc, Hizam Alakhbar, Zoubayr Ibn Aouam and college Imam Al Boukhari.

POLAND

The Empowering Children Foundation (formerly known as "Nobody's Children Foundation") | This Polish NGO has several objectives: the protection of children and adolescents against violence and sexual abuse, the improvement of the situation of children participating in legal procedures as witnesses, or the aid and assistance to children and adolescents as well as their families.

PORTUGAL

Ajuda de Berço | The main purpose of the Association Ajuda de Berço is to defend and guarantee the fundamental rights of children in danger, referred by the courts or child protection committees. The opening of two houses enabled them to accommodate 40 babies.

Aldeias de Crianças SOS Portugal | The Foundation Aldeias de Crianças SOS Portugal is actively involved in the improvement of the living conditions and prospects for the future of children whose parents can no longer take care of. It allows them to find the warmth of a home and grow up in a family setting.

06



Associação de Emergencia Social, Lisbon | The fight against urban poverty in the region of Lisbon and the social integration of families from disadvantaged neighbourhoods are at the center of the concerns of Associação de Emergencia Social. It has been helping children and young people by providing leisure and learning spaces.

Fundação Arcelina Vitor dos Santos | This social action NGO provides support to malnourished children and families in Caparica, a few kilometres from Lisbon by bringing them food and clothing assistance via a distribution network. It has also opened a social crèche for children from 0 to 3 years.

Operação Nariz Vermelho | The Institution Operação Nariz Vermelho aims to entertain hospitalized children to give them a better experience during these difficult times. Each year, volunteer clown doctors visit some 40,000 children in hospital.

07



ROMANIA

Fundatia pentru Excelenta in Educație | This Foundation finances projects for disadvantaged pupils and orphans to have equal social opportunities. Currently, twenty orphan students are attending the classes from 9th to 12th grade in “Iulia Hasdeu” national college and “Traian” technical school in Bucharest, and benefit from a pilot programme for academic, social and emotional support.

Association for urban transition - University of architecture in Bucharest | This association held an architecture competition for students and future architects covering rehabilitation / design of the attic of the school “Ferdinand No. 1”, a school for children aged 7 to 14 years. The prize of this contest was sponsored by our Romanian subsidiary.

08





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SENEGAL

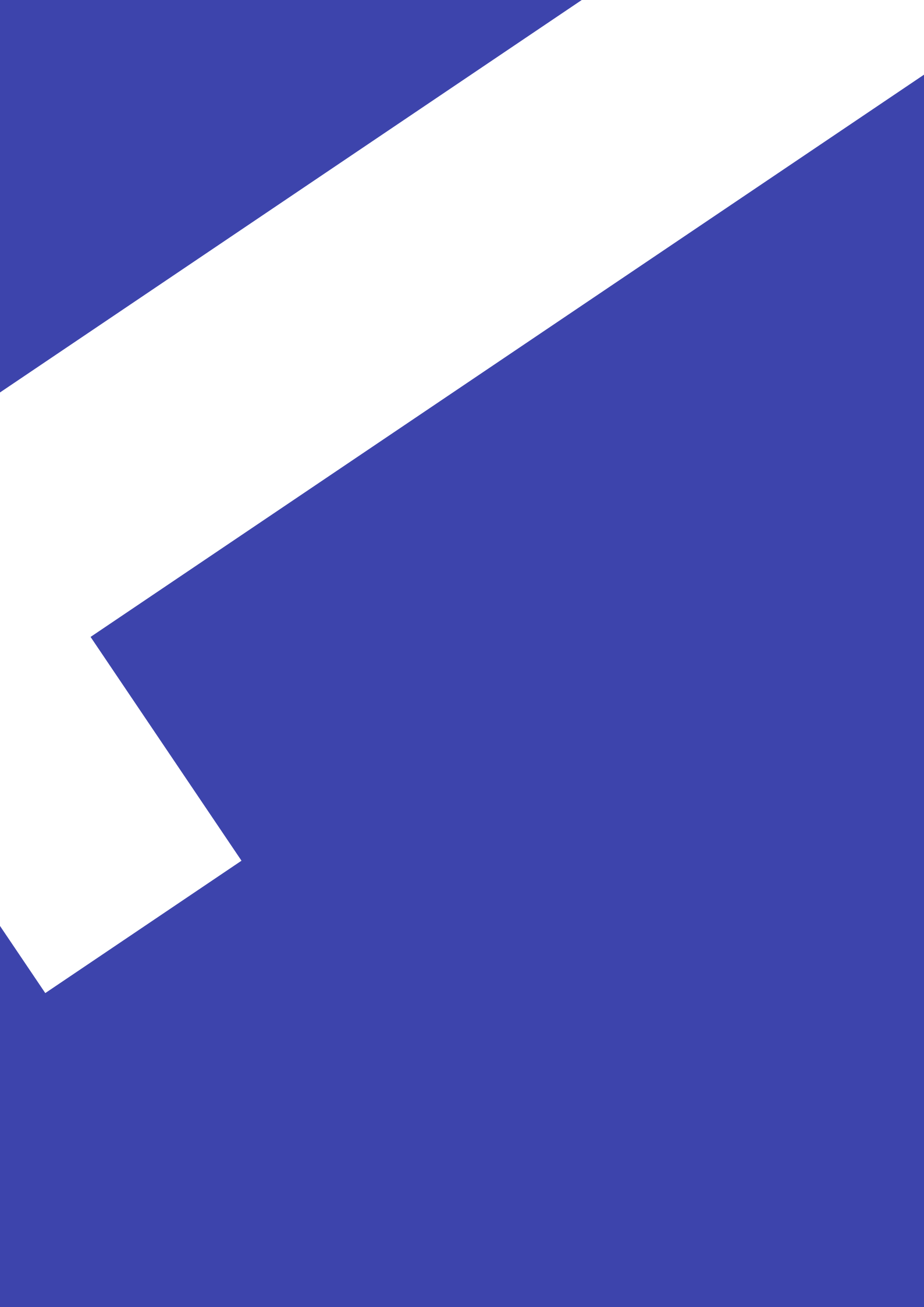
Demain Ensemble (Saly Carrefour) | Founded in 2010, the NGO “Demain Ensemble” aims to fight against exclusion and begging among children with disabilities, through education and training. To this end, an inclusive education school was created and named after the NGO, featuring pre-school and elementary school programs. The school is composed of nine classes and offers tuition to a total of 164 students, including 48 children with disabilities (sight, hearing and light intellectual disabilities). The staff is composed of 10 teachers, administrative and supervisory personnel. In addition to formal education, the school offers a specialized professional education (computer classes, art workshops, micro-gardening training, aviculture) and focuses on sports.

SPAIN

Foundation idic15 | The main purpose of the project is to improve the quality of life for the children affected by idic(15) syndrome and their families. Idic(15) syndrome is a genetic disorder that involves an abnormality both structural and in terms of the number of chromosomes, which results from the presence of an extra chromosome 15 (supernumerary marker 15). Prevalence is estimated at 1 in 30,000 live births. It is categorized as a tetrasomy 15q in the rare diseases database.

GEPAC (Spanish group for cancer patients) | This association organizes the Kingos project, “A summer adventure”, which is a holiday camp for children whose parents are suffering from cancer.

Juan XXIII Foundation | The main purpose of this foundation is to improve the quality of life for children with intellectual disabilities and their families, by promoting their skills and personal development and encouraging their independence and autonomy. ■



CONSOLIDATED ACCOUNTS 2016

The background of the page is a solid blue color. It features several large, abstract white shapes. On the left side, there is a large white polygonal shape that extends from the top left towards the center. Below this, there is a large white semi-circular shape that spans across the middle of the page. At the bottom, there is a smaller white semi-circular shape. The overall design is minimalist and modern.

CONSOLIDATED BALANCE SHEET / ASSETS

2016
€

2015
€

TOTAL FIXED ASSETS	38,213,288.89	48,956,611.29
I. FORMATION EXPENSES	21,779.12	35,980.31
II. INTANGIBLE ASSETS	1,747,907.03	1,492,788.24
III. GOODWILL	17,073,591.30	18,470,325.58
IV. TANGIBLE ASSETS	9,233,785.07	8,565,335.83
A. Land and buildings	2,064,765.47	1,314,793.78
B. Plant, machinery and equipment	3,054,357.40	2,754,409.18
C. Furniture and vehicles	3,669,965.63	3,685,352.80
D. Leasing and other similar rights	18,420.91	41,619.68
E. Other tangible assets	426,275.66	769,160.39
F. Fixed assets in progress		
V. FINANCIAL ASSETS	10,136,226.38	20,392,181.34
A. Companies consolidated by the equity method		
1. Participating interests		
2. Amounts receivable		
B. Other companies		
1. Shares	5,035,031.18	15,172,219.12
2. Amounts receivable	5,101,195.21	5,219,962.22
TOTAL CURRENT ASSETS	284,699,251.01	248,932,092.15
VI. AMOUNTS RECEIVABLE AFTER ONE YEAR	2,578,718.88	14,293,106.54
A. Trade debtors	1,540,085.18	1,341,561.05
B. Other amounts receivable	1,038,633.70	12,951,545.49
C. Deferred taxes		
VII. STOCKS AND CONTRACTS IN PROGRESS	53,268,262.20	30,311,758.49
A. Stocks	1,214,514.38	2,914,104.54
1. Raw materials and consumables	455,361.32	501,407.03
2. Goods in process	3,967.98	1,534,499.21
3. Finished goods	617,479.20	684,396.80
4. Goods purchased for resale	0.00	8,935.17
5. Real property acquired or constructed for resale	0.00	20,000.00
6. Advance payments	137,705.88	164,866.33
B. Contracts in progress	52,053,747.82	27,397,653.95
VIII. AMOUNTS RECEIVABLE WITHIN ONE YEAR	164,923,841.28	158,589,690.69
A. Trade debtors	121,436,936.28	131,586,809.02
B. Other amounts receivable	43,486,905.00	27,002,881.67
IX. INVESTMENTS	11,167,992.49	11,339,328.34
A. Owned shares		
B. Other investments	11,167,992.49	11,339,328.34
X. CASH AT BANK AND IN HAND	44,529,116.61	29,416,630.61
XI. DEFERRED CHARGES AND ACCRUED INCOME	8,231,319.56	4,981,577.48
TOTAL ASSETS	322,912,539.90	297,888,703.43

CONSOLIDATED BALANCE SHEET / LIABILITIES

2016
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2015
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EQUITIES	60,135,672.32	47,583,206.80
I. CAPITAL	18,327,188.00	18,327,188.00
II. SHARE PREMIUM ACCOUNT		
III. REVALUATION RESERVES	5,580.99	5,580.99
IV. RESERVES	40,878,565.14	30,357,554.51
V. BADWILL	2,020,244.24	2,167,042.16
VI. CUMULATIVE TRANSLATION ADJUSTMENTS	- 1,095,906.05	- 3,311,083.73
VII. GRANTS	0	36,924.87
VIII. THIRD PARTIES INTERESTS	15,424,947.38	15,204,523.32
TOTAL GROUP AND THIRD PARTIES EQUITIES	75,560,619.70	62,787,730.12
IX. PROVISIONS AND DEFERRED TAXES	4,365,624.46	4,791,543.93
A. Provisions for liabilities and charges	978,813.91	840,610.16
B. Tax provision	187,236.49	270,788.30
C. Important repairs and important maintenance	1,609,622.36	2,312,936.39
D. Other risks and charges	1,575,861.40	1,366,306.23
E. Deferred taxes	14,090.30	902.85
TOTAL DEBTS	242,986,295.79	230,309,429.34
X. AMOUNTS PAYABLE AFTER ONE YEAR	61,553,055.64	66,639,335.81
A. Financial debts	57,499,468.64	62,246,175.36
1. Subordinated loans		
2. Unsubordinated debentures		
3. Leasing and other similar obligations	92,037.24	68,210.47
4. Credit institutions	40,608,065.60	44,610,380.90
5. Other loans	16,799,365.80	17,567,583.99
B. Trade debts	174,987.98	251,007.33
1. Suppliers	174,987.98	251,007.33
2. Other trade debts		
C. Amounts received for orders	568,299.89	1,062,265.90
D. Other amounts payable	3,310,299.13	3,079,887.22
XI. AMOUNTS PAYABLE WITHIN ONE YEAR	178,388,234.73	157,326,646.56
A. Current portion of amounts payable after one year	35,025,111.77	21,905,433.88
B. Financial debts	59,376,784.01	44,029,978.08
1. Credit institutions	56,486,536.12	42,075,882.27
2. Other loans	2,890,247.89	1,954,095.81
C. Trade debts	34,737,855.45	31,598,423.77
1. Suppliers	34,737,855.45	31,598,423.77
2. Other trade debts		
D. Advances received on contracts in progress	2,940,481.91	4,092,249.50
E. Taxes, remuneration and social security	33,608,435.46	31,447,491.60
1. Taxes	20,652,078.82	17,520,263.86
2. Remuneration and social security	12,956,356.64	13,927,227.75
F. Other amounts payable	12,699,566.14	24,253,069.73
XII. ACCRUED CHARGES AND DEFERRED INCOME	3,045,005.42	6,343,446.97
TOTAL LIABILITIES	322,912,539.95	297,888,703.39

CONSOLIDATED PROFIT AND LOSS ACCOUNT

2016
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2015
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I. OPERATING INCOME	253,681,206.83	253,819,685.81
A. Turnover	243,761,580.24	241,653,620.57
B. Increase ; Decrease in stocks of finished goods, work and contracts in progress (+, -)	7,505,031.81	6,753,278.62
C. Capitalized production		
D. Other operating income	2,414,594.79	5,412,786.62
II. OPERATING EXPENSES	234,156,603.39	232,532,180.44
A. Raw materials, consumables and goods for resale	61,165,498.47	60,173,800.12
1. Purchases	61,141,160.79	60,166,879.43
2. Increase ; Decrease in stocks (+, -)	24,337.68	6,920.69
B. Services and other goods	53,617,781.00	53,423,236.43
C. Remuneration, social security costs and pensions	112,239,044.61	113,252,388.00
D. Depreciation of and other amounts written off establishment costs, intangible and tangible fixed assets	2,669,831.18	2,761,993.44
E. Increase ; Decrease in amounts written off stocks, contracts in progress and trade debtors (+,-)	1,890,319.12	892,254.20
F. Increase ; Decrease in provisions for liabilities and charges (+,-)	-438,324.34	-677,711.04
G. Other operating expenses	3,012,453.35	2,706,219.31
H. Capitalized charges corresponding to formation expenses		
I. Depreciation of goodwill		
III. OPERATING RESULT	19,524,603.45	21,287,505.37
IV. FINANCIAL INCOME	5,517,485.79	8,587,610.59
A. Income from financial fixed assets	609,554.01	1,421,745.50
B. Income from current assets	515,799.36	1,332,686.36
C. Other financial income	4,392,132.42	5,833,178.73
V. FINANCIAL EXPENSES	22,700,953.69	14,837,844.18
A. Interests, etc	5,282,683.56	5,762,071.31
B. Increase ; Decrease in amounts written off current assets other than those mentioned under II.E. (+,-)	8,236,883.16	0.00
C. Other financial expenses	5,220,857.38	6,195,883.95
D. Depreciation of goodwill	3,960,529.59	2,879,888.93
VI. CURRENT RESULT OF THE CONSOLIDATED COMPANIES BEFORE INCOME TAXES	2,341,135.55	15,037,271.77
VII. EXTRAORDINARY INCOME	25,307,543.68	469,933.31
A. Release of depreciation and amounts written off intangible and tangible fixed assets		
B. Release of provisions for financial investments	457,105.50	10,169.47
C. Release of provisions for extraordinary liabilities and charges	4,642.07	0.00
D. Gain on disposal of fixed assets	24,614,617.69	197,239.65
E. Other extraordinary income	231,178.42	262,524.19

CONSOLIDATED PROFIT AND LOSS ACCOUNT
2016

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2015

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VIII. EXTRAORDINARY EXPENSES	8,309,040.96	1,747,427.16
A. Extraordinary depreciation of and extraordinary amounts written off establishment costs, intangible and tangible assets		
B. Amounts written off for financial investments	6,209,375.79	260,681.87
C. Amounts written off financial fixed assets	0.00	10,099.42
D. Provisions for extraordinary liabilities and charges	71,703.86	44,520.65
E. Loss on disposal of fixed assets	1,919,586.93	1,432,125.22
F. Other extraordinary expenses		
G. Extraordinary depreciation on goodwill	108,374.38	0.00
IX. RESULT FOR THE PERIOD OF THE CONSOLIDATED COMPANIES BEFORE TAXES	19,339,638.27	13,759,777.92
X. TRANSFERS TO AND FROM DEFERRED TAXES	- 1,288,836.60	- 2,139,761.67
A. Transfers to deferred taxes	134,474.74	0.00
B. Transfers from deferred taxes	1,423,311.34	2,139,761.67
XI. INCOME TAXES	8,036,530.90	6,311,048.47
A. Taxes	8,154,041.98	6,466,703.39
B. Adjustment of taxes and release of provision for taxes	117,511.08	155,654.92
XII. PROFIT FOR THE FINANCIAL YEAR	12,591,943.97	9,588,491.13
XIII. RESULT OF COMPANIES CONSOLIDATED BY THE EQUITY METHOD		
A. Profit		
B. Loss		
XIV. CONSOLIDATED PROFIT	12,591,943.97	9,588,491.13
XV. RESULT OF THIRD PARTIES	2,070,933.34	1,400,950.39
XVI. RESULT OF THE GROUP	10,521,010.63	8,187,540.74

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