egis

Our Projects

Structures

IMAGINE
CREATE
ACHIEVE
a sustainable future

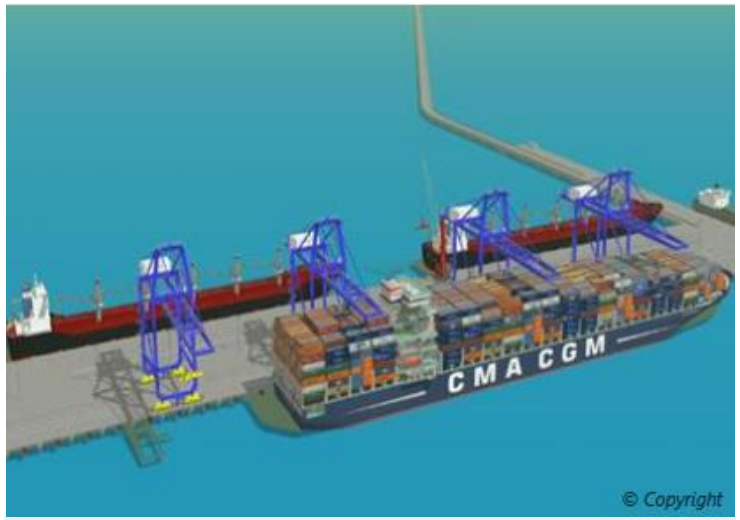
Key Projects

Offshore extension of Anse du Portier

Monaco | 2015-2024

Integrated project management

Design of the maritime infrastructure a 6-hectare eco-district:
-Concrete caisson ring
-Mixed structures (rockfill dykes / quays)
-Dredging / filling / soil reinforcement
-Marina
-Weirs / hydraulic structures
-Environmental missions
-Complex technical context (earthquake, water depth, cramped conditions...)



Puerto Antioquia

Colombia |2021 2024

Project Management Advisory

Port greenfield multipurpose port comprising an offshore with 1300 m of deep-water quay, a 35-hectare onshore logistics platform and a 4 km-long viaduct on piles linking these 2 platforms.
Egis is leader of the engineering consortium
selected as Project Management Company for this project
- Assistance technical assistance in the tender phase works
- Supervision maritime/land works
- Control of feasibility studies

Port of Calais

France | 2015-2022

Project Management Advisory

Re-development of the port in line with increasing traffic:
- Dyke 3 km long rockfill breakwater
- Dredging (6 million m3)
- Zone reclamation area of 61 ha reclaimed from the sea
- New berths (ferry)
- Land access and internal circulation, road and rail management of the design-build contract, regulatory files technical and environmental expertise

Offshore Extension of Anse Du Portier

Monaco | 201 2015 – 2024

The Project

Given the small size of its territory, the Principality of Monaco has launched an urbanization project to develop an eco-district covering an area of approximately 6 hectares (60,000 square meters of private housing and luxury shops, public facilities, an entertainment port with a capacity of 30 moorings, a 1-hectare green park, a promenade and extension of the Grimaldi Forum). The estimated cost of the project is 2 billion euros, half of which for the Maritime Infrastructure part.

The Maritime Infrastructure consists of creating an embankment confined by a 450 m of 18 trapezoidal reinforced concrete caissons 30 m high and weighing over 30,000 tonnes.

Our value creation

Design conception, through a team integrated into the Contractor's organization, and supervise the construction of a technically complex project in a context of major challenges:

- Environmental constraints (protected areas in the direct vicinity of the project)
- Urban environment / limited accessibility directly influencing design and construction methods
- Site constraints (swells >4m, earthquakes, water depth >30m, geology, etc.)
- Extreme remoteness of the construction site
- Interface management

The Project :

Maritime infrastructure designed to an eco-district of 6Ha

Missions :

- Design including hydraulic modeling of hydraulic of structures
- Supervision of works
- Technical assistance during the execution phase
- Environmental services

Key Projects

Bridge Simone-Veil

Bordeaux, France|
2014- 2020 (studies)
2017-2023 (construction)

The main bridge over the Garonne is conceived as a public space created on the river, modular in use and in time. Winner of the Design Competition of Concours de Maîtrise d'Oeuvre

Kippi Ipsala

Ipsala, Greece | 09/2022 10/2023

External supervision of design studies
A gateway between Europe and Asia, the "Friendship Bridge will be an essential node of the future "Corridor IV", a pan-European corridor comprising a 602 km road section between Thessaloniki and Istanbul. Crossing the River Evros, it will be the busiest between the two continents.

The Bar of Camélat

Agen, France | 2020 2024
Complete project management
AVP, PRO, regulatory documents, ACT, VISA, DET, OPC

The Camélat bar will enable the RN21 to be diverted west of Agen. 80% of it is located in a flood zone. The operation includes the construction of 10 engineering structures, including 2 non-routine crossings of the Garonne (240m) and the Canal lateral at the Garonne (120m).

Structures

Missions :

- PRO-ACT-DET-AOR-VISA-OPC
- Detailed Design - Tendering - Construction (monitoring and execution - Operations Advisory - Construction Approvals
- BIM (project coordination and review, quantity extraction)
- G2 PRO
- Network relocation
- Quality Master Plan

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The new Larivot Bridge

Matoury et Macouria (Guyane) France | 2019 - 2025

The Project

The bridge is 1,300 m long and has 19 piers built in the Cayenne riverbed.
The objective: to secure the Cayenne river crossing with a new structure and integrate a two-way greenway for soft mobility

Our value creation

The design conception and implementation takes into account the extremely sensitive natural environment estuary and mangrove swamps.
The design of high-quality concrete and the use of local materials were based on a specific formulation study and laboratory tests carried out by Egis.

The constructive choice of a prestressed concrete bridge built using successive prefabricated corbels is the result of a commitment to durability and high environmental standards.

This ensures the robustness of the structure over the long term, given the particular atmosphere (equatorial climate, river-sea environment).
The project is also the subject of a BIM-type approach in the design and construction phases.

19 piles
founded on 4 piles

1300 m
in length

Key Projects

Grand Paris Express Line 16

Paris, France | 2014-2028

Complete infrastructure project management

- 39 km of tunnels, 10 stations, 33 ancillary structures, 4 - tunnels 9 tunneling machines
- Design of tunnels and underground stations, geotechnical surveys.
- Egis expertise: civil engineering, equipment, ventilation, safety, railway systems,
- BIM d'Or 2017

Tunnel Euralpin Lyon-Turin

France Italy | Since 1999

Engineering, project management, expertise

- 57 km of railway tunnel
- Egis has been working on the project for more than 20 yrs
- Involvement of the Group's many areas of expertise:

Surveying, Geology, Geotechnics, Safety, Ventilation, Environment,
Water, etc.

Renovation of the Brussels tunnels

Brussels, Belgium | 2010-ongoing

Design concept studies - Project management advisory - Complete project management

Repair and safety upgrading of 25 urban tunnels
Design and implementation of program strategic Asset Management advisory
Léopold II PPP

Tunnels

The project ;

Rail tunnel under the Alps, more than 750 m underground.
57 km
Conventional tunnelling and Tunnel boring machine

Missions :

- Surveys
- Feasibility studies
- Complete project management
- Bi-national framework

Agreement intergovernmental between France and Italy

© Spie Batignolles Marion Tallec

Euralpin Lyon Turin Tunnel

France - Italie | 1999 - 2031

The Project

The rail tunnel project between Lyon and Turin, known as the TELT (Tunnel Euralpin Lyon Turin), aims to build a high-speed rail tunnel 57 km under the Alps, linking Lyon in France to Turin in Italy. At a depth of over 750 m beneath the Alps. The construction involves the creation of two main tubes for rail traffic, as well as service tunnels and emergency tunnels.

The objective: The tunnel will reduce journey times between the two cities, significantly improving connectivity between the two countries. It is also designed to enable heavy goods vehicles and passengers currently using road transport.

Our value creation

Study and carry out a highly technically complex project and overcoming the challenges:

- Complex geological context with convergences of more than 1 m, excavation in the presence of methane and asbestos
- Severe environmental constraints
- Digging of vertical ventilation shafts 500 m deep raise boring
- Excavation of descending structures and large caverns

Key Projects

RN125 Déblai to Hournech

Saint Béat |2022 - ongoing

Geotechnical design of an exceptional rock cut.

The project in brief:

3.4km + RD44E to be restored, 2 viaducts over petrifying springs, 5 OACs, 4 retaining walls, 2 large embankments, 2 "medium" embankments "and the Hournech cut.

- Recall dip surveys
- Analysis of core sampling
- Identification of failure mechanisms not identified in G2 PRO

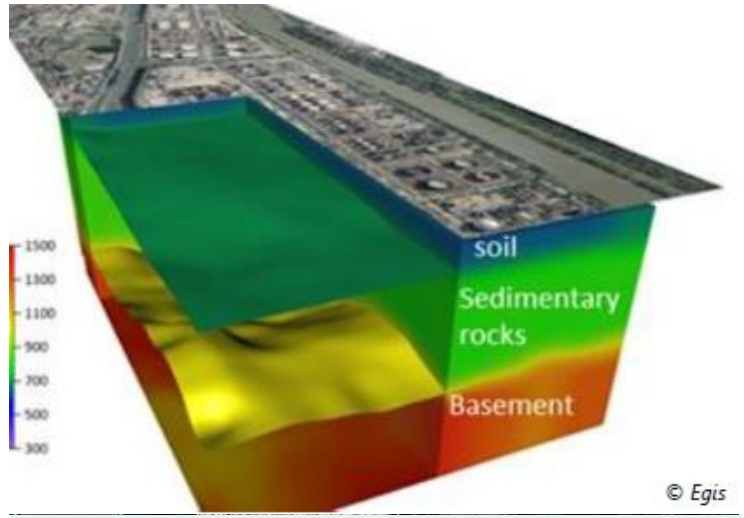
ESCOTA

Freeway A8, A50, A51, A52, A57

Semi-automated census of GIS, IDP

ESCOTA motorway network, France | 2020-ongoing

Implementation of a GIS and criticality study of earthworks, Periodic Detailed Inspections of earth structures.
Organization and planning of visits. Detailed inspection of each embankment.
Preparation and presentation of inspection reports or minutes.



Total

Industrial site |2019

3D seismic imaging of shear wave propagation velocities and geological interpretation.

Results obtained on the basis of geophysical investigations (without active vibratory source).
This model is used to optimize seismic hazard prediction on industrial risk facilities, and thus limit the investments required to comply with plant safety regulations.

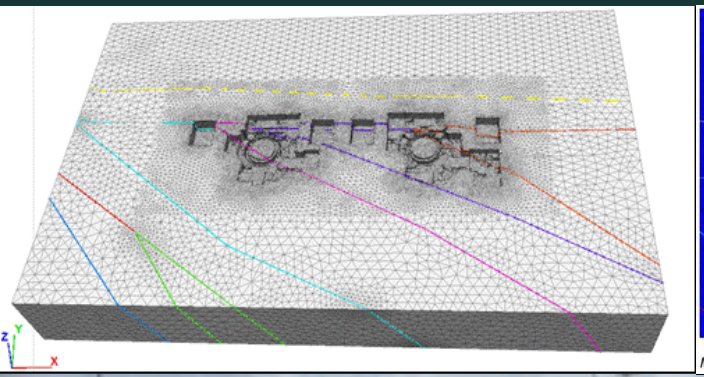
Geotechnical

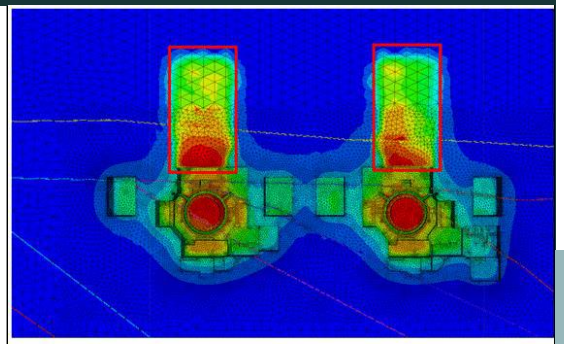
The project ;

EPR HINKLEY POINT
United Kingdom
Uni, UK |
2013 2016
Industrial structure

Mission :

- Design study, complex design of Interaction Structure (OISS)





Model 1 : Displacement according to the z-direction, map view.

EPR HINKLEY POINT HPC

Royaume-Uni - UK | 2013 - 2016

The Project

Creation of a new EPR-type power plant at Hinkley Point in the UK (2 units)

Objective: Civil engineering design and determination of soil-structure interaction under static conditions.

Our value creation

Study and carry out a highly technically complex project with the following challenges:
Complex digital modeling in FLAC3D interoperable with the model (GDM 3D model) and the structural model (ANSYS 3D model) of all the buildings.

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