



Railway —



We are driven by the need to enhance the mobility of people and goods to foster economic growth, while minimizing environmental impacts and reducing CO2 emissions. In response, transport authorities globally are making significant investments in rail infrastructure.

1,100
rail engineers

24
rail offices globally

6,500 km
of HSR lines

Our expertise is to develop safe, efficient, reliable and cost-effective railway infrastructures.

We offer a comprehensive range of expertise to support the development of your railway network. From the initial concept, we manage all phases of design and oversee construction through to the commencement of operations, ensuring that the project delivers the intended service outcomes. Our experience spans both new infrastructure development as well as the upgrade and renovation of existing networks.

We specialize in the development of high-speed rail systems and conventional lines for both passenger and freight services. At Egis, we ensure that all projects are designed for longevity, incorporating the latest proven technologies, ease of maintenance, and adherence to international standards to ensure system interoperability.

The + of Egis _

We provide a full spectrum of skills to manage the most complex railway projects

We are able to deliver the necessary railway expertise close to our clients, leveraging our established presence in over 100 countries

We Place eco-design at the heart of solutions to reduce their carbon footprint

We have more than 1,100 employees specialised in railway design across all phases

Eco-design at the heart of our solutions

Leveraging our expertise in the design and implementation of both current and future transport infrastructure, we are dedicated to supporting you in the sustainable and responsible management of your projects.

Act4ecodesign is Egis' framework for evaluating the environmental performance of projects, which aims systematically integrating eco-design principles to monitor and minimize environmental impacts across all initiatives.



Act4Ecodesign



Act4Ecodesign is a unique ecodesign framework developed by Egis supporting the deployment of eco-design practices in our projects and the measurement of their impacts. This framework answers the European taxonomy objectives and is aligned with the UN sustainable goals. This framework encompasses processes and tools to effectively implement ecodesign in our projects along seven environmental dimensions presented therein. This framework is based on 4 "action" pillars

- › Action by defining an eco-design ambition
- › Action on projects' intrinsic characteristics
- › Action on project external impacts
- › Defining and implementing a lifecycle eco-design action plan.

Our carbon tools

The quantification of greenhouse gas emissions (GHG) is a key indicator to consider in an eco-design approach. Egis has developed the tool Evacarbhone serving this purpose. Egis is also supporting its clients to implement their own carbon strategy tool, since 2018, Egis supports the French railway operator SNCF in the development of their own carbon footprint tool TUVALU.

EvaCarbone

Role: detailed and comparative analysis, with the selection of alternatives for greenhouse gas emissions by consumption category (earthworks, hydraulics, pavements, structures, etc.)

Objective: Identify the most emission-intensive categories to guide towards the most suitable reduction solutions for the project



Our solutions for the Toulouse-Auch corridor project

- › Improvement of residents' living environment near rail corridor
- › Preservation of biodiversity
- › Resource and energy efficiency
- › Reduced land artificialization

High-speed rail

Since the 1990s, Egis has been building its high-speed rail expertise across all continents, starting with the French TGV and expanding into a various of international HSR technologies. With experience from over 30 projects, Egis is well-positioned to offer its comprehensive HSR knowledge to both current and future clients worldwide.

Morocco | 2010 - 2018

Morocco HSR

The 1st high-speed rail in Africa

- › Kenitra-Tanger HSR: Detailed design and construction supervision of the northern section as part of a Design and Build contract from 2010 to 2018.
- › Since 2022, Egis has supported the ONCF as the design supervisor and a third-party auditor of the 400 km extension to the Moroccan high-speed rail network. Furthermore, in 2024, Egis was appointed as the project manager and technical advisor until construction is complete in 2031.

Client: ONCF



France | 2014 - 2024

Grand Projet du Sud Ouest

Feasibility studies and preliminary design of 417 km of new High-Speed Line between Bordeaux and Toulouse

Client: SNCF Réseaux

Qatar | 2023 - 2024

Q-Express

Feasibility studies review, development of a reference design and tender documentation of 100 km of High-Speed Line connecting Riyadh, King Salman Airport and Qiddiya.

Client: Qiddiya Investment Company



Czech Republic | 2021 - 2024

Czech HSR network

Egis is providing design services for a total of 295 km of new high speed lines, offering technical expertise in the field of track alignment, ETCS signalling, aerodynamics, traction power supply.

Client: Správa železnic



Egypt | Since 2024

HSR Blue and Red Line

The project covers design coordination, project management, design review and construction supervision services for 1,325 km of high-speed lines and 39 stations.

Client: NAT

USA | 2024 - 2029

California HSR

Leading the Strategic Delivery stream of the Project Delivery Support contract for 700 km of new HSR between San Francisco and Los Angeles. Egis is also assisting in delivering the Rail System Engineering Services for the same project.

Client: CAHSR



Latvia | 2022 - 2030

Rail Baltica

Egis is supporting the Rail Baltica project through various assignments, in particularly as PMC on the Riga station and on the deployment of control command & advanced signalling on 870 km of the entire network.

Client: RB Rail AS

Commuter railway —

Paris, France | 2019 - 2022

EPCM Eole RER E

Preliminary and detailed design of a new 6 km underground commuter railway link (RER E) in Paris with 1 new major underground station at Porte Maillot (Paris Congress Centre).

Client: SNCF Réseaux

Egis is also the designer of the Design and Build contract for the laying of a third track on the extension to Épône & Mantes. This includes all civil works as well as all railway systems equipment.



Auckland, New Zealand | Since 2019

Auckland City Rail Link

Design validation, system engineering and construction supervision of the railway systems (signalling, power supply) for 3.5 km of new underground railway link under Auckland CBD and 3 stations.

Client: Link Alliance

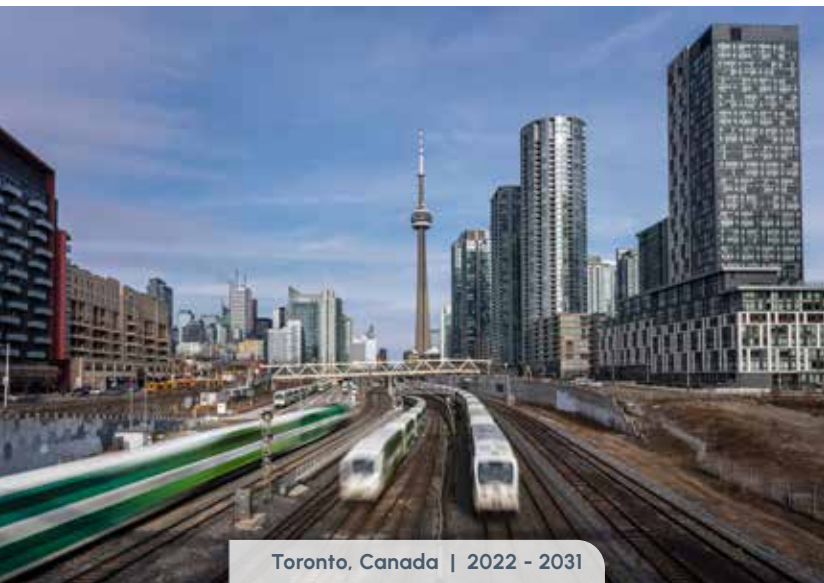
France | 2020 - 2027

Line 13 in Paris between Saint-Germain and Achères (TGO)

Full EPCM (design, PMC & construction supervision) for 19 km of commuter rail, mixing urban sections and intercity sections, new lines and renovations of lines in operation, electrification, new signalling system, station upgrades, new rolling stock (LRT/Tram-Train).

Client: SNCF Réseaux

Railway upgrade and work under operation —



Toronto, Canada | 2022 - 2031

GO Expansion

Technical advisory services for the On-Corridor project, the regional commuter rail for the Greater Toronto and Hamilton Region.

Client: ARUP

France | 2022 - 2027

EPCM Poitiers Limoges renovation

EPCM (design & work supervision) for the full renovation of the line (141 km): realignment, track, structures, geotech, drainage, signalling and communication as well as management of the right of way.

Client: SNCF Réseau

Bulgaria | 2015 - 2018

Modernization of the railway line Sofia-Plovdiv, section Ihtiman-Septemvri

45 km of railway upgrade for passengers (160 km/h) and freight (120 km/h), 3 stations, 11 tunnels and the electrification of the line.

Client: National Railway Infrastructure Company

Stations

Riga, Latvia | 2020 - 2025

Riga Station

Supervision of the design and the construction (FIDIC Yellow Book engineer) of the station building (12,600 m²), railway sub-structures and systems (track, OCS, signalling), and infrastructure.

Client: Eiropas Dzelzceļa Līnijas SLA



London, UK | 2024 - 2029

Old Oak Commons HS2

Multi-year contract to deliver mechanical, electrical, public health, fire and communications systems works for HS2's landmark Old Oak Common Station as part of a JV with VPP (Anthro JV).

Client: BBVS (Balfour Beatty, Vinci and Systra consortium)



Melbourne, Australia

by WW+P

Melbourne Metro Tunnel

Architecture of 5 new underground stations in Melbourne (Concept to detailed architectural design, construction support).

Client: CYP Design and Construction Joint Venture

Paddington, UK

by WW+P

Paddington Integrated Project, Elisabeth line

Architectural design, concept to detailed, construction support, masterplanning, public realm, stakeholder management for this 25,000 sqm sub-surface station on the Elisabeth line in UK

Client: Crossrail Ltd



Montpellier, France | 2014 - 2017

Montpellier Station HSR

Design of the new HSR station of Montpellier delivered in PPP

Client: SNCF Réseaux

Depot & maintenance facilities

Villeneuve Prairie | 2023 - 2027

Villeneuve Demail

Renewal of the maintenance facility of Villeneuve-Saint-Georges (28ha, 5 buildings) for the maintenance of 200 new vehicles that will be delivered to SNCF, preliminary & detail design in full BIM.

Client: SNCF Voyageurs



Vilnius, Lithuania | 2023 - 2025

Vilnius Maintenance depot

Preliminary design of a new maintenance facility for locomotives allowing the maintenance of more than ten different types of locomotives.

Client: LTG Cargo

France | 2023 - 2025

Marcheprime depot

Design of a new HSR and conventional rail depot.

Client: LISEA (concessionaire of the Sud Europe Atlantique HSR PPP)

London, UK | 2018 - ongoing

Eurostar, Stratford

Procurement management for the Design & Build of Temple Mills Depot (Eurostar HSR line): track upgrade, OHL upgrade, new signalling system.

Client: Eurostar International Limited

Rolling Stock

France | 2023 - 2025

Rolling Stock Technical Assistance for Nouvelle Aquitaine

Technical assistance to the Nouvelle Aquitaine region in the ownership transfer of Rolling Stock fleet (204 cars of EMU, DMU and bimode) of regional trains from SNCF to the region.

Client: Région Nouvelle Aquitaine

Australia | 2023 - 2034

Queensland Train Manufacturing Program (QTMP)

Provision of Independent Certifier services across the entire QTMP, ensuring quality, safety and excellence for the people of Queensland

Client: Queensland Department of Transport and Highways



Australia | 2019 - 2021

X'Trapolis 2.0 EMU Project

Technical advisory services from early feasibility study, reference designs and procurement management, through manufacturing to testing and commissioning.

Client: DOT Victoria

Signalling projects —

Egis designs and implements best-in-class rail signalling solutions to all type of railway systems, with two main centres of expertise in Europe and Australia. In France, Egis is also involved in signalling installation work as a contractor.

Ireland | 2020 - 2025

Irish rail network resignalling

Upgrade of the legacy interlocking equipment with a single computer-based interlocking that will be progressively rolled out to control and monitor the entire Irish railway network.

Client: Irish Rail

Baltic | 2022 - 2030

Rail Baltica CCS

Technical supervision of the design, installation, system integration, testing & commissioning of the unified signalling system compliant with ERTMS for the entire network of Rail Baltica across the 3 baltic countries.

Client: Rail Baltica



Montigny-les-Metz, France | 2024 - 2025

Montigny-les-Metz Depot

Egis is in charge of the entire design & build scope for the signalling & telecom. This includes specifications, design, procurement, installation & construction, testing & commissioning.

Client: SNCF Voyageurs

Brisbane, Australia | 2017 - 2022

Brisbane Cross River Rail

Delivery of the design and involved in the testing and commissioning of the new signalling system.

Client: Unity RIS Alliance



Melbourne, Australia | 2015 - 2017

Melbourne Metro Tunnel Project

High Capacity Signalling design support as part of the delivery team, completion expected in 2025.

Client: Rail Project Victoria

Freight projects —

United Arab Emirates | 2018 - 2024

Etihad Rail

Design validation, project management & construction supervision of 800 km of new freight lines, including 40 freight facilities and maintenance sites.

Client: Etihad Rail



India | 2015 - 2019

Western Dedicated Freight Corridor

Power supply system designer for 915 km of new freight line in India, as part of a design and build consortium.

Client: Larsen & Toubro

France

Imerys

Designer for the railway facilities for this new mining operation in France (Lithium) at the feasibility study stage and preliminary design.

Client: Imerys

Columbia | 2023 - 2024

Pacific Rail Corridor

Feasibility study for 580 km of passenger and freight railway to connect the Buenaventura port on the Pacific to the Central Railway corridor.

Client : Financiera de Desarrollo Nacional (FDN)

Saudi Arabia | 2015 - 2016

GCC railway design studies

Preliminary and detailed design studies for the “GCC Railway”.

Client : RailCorp

France | 2019 - 2024

Western Provence Intermodal Freight Hub

Design and construction supervision (ECPM) for a new combined transport facility, able to manage simultaneously 4 trains of 850m and a number of trucks through a fully digitalized experience.

Client: Charmade



Our Design & Build projects

Egis is not only supporting public authorities in designing and delivering their railway projects, but also collaborating with construction companies to bring its technical expertise in designing complex railway infrastructure in design & build or PPP projects.

France | 2011 - 2017

Sud Europe Atlantique HSR

Designer for the new HSR line between Tours and Bordeaux in France. Delivered via a PPP, this project was the largest European infrastructure project at the time of its construction (300 km).

Client: COSEA



France | 2022 - 2027

D&B Roissy Picardie

Design & build of a new railway track to improve the connection between the Paris airport (Roissy CDG) to the city of Amiens.

Client: SNCF Réseau

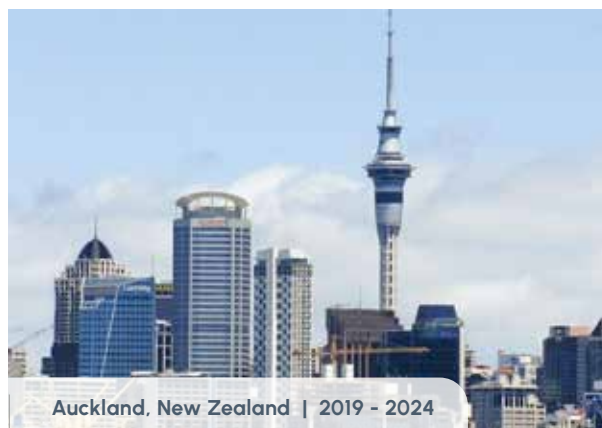


France | 2019 - 2023

Charles De Gaulle Express

Express airport link between Paris East central station (Gare de l'Est) and Paris international airport (Roissy CDG). Egis is part of a D&B contract to deliver this new railway line in a very complex and dense urban area.

Client: SNCF Réseau



Auckland, New Zealand | 2019 - 2024

Auckland City Rail Link

Underground commuter rail link below the CBD of Auckland. Egis provided system engineering, signalling, telecom and power supply engineering services to the Link Alliance.

Client: Link Alliance (VINCI, Soletanche Bachy, Downer, Aecom, WSP-Opus, Tonkin & Taylor)

Uruguay | 2019 - 2020

Ferrocarril Central

Designer for this major railway project consisting of the modernization of 273 km of railway line between Montevideo and Paso de los Toros. This project is delivered as a PPP.

Client: NGE, SACYR Concesione, SACEEM et BERKES, IDOM



IMAGINE. CREATE. ACHIEVE.
a sustainable future

You can also find our brochure here:



Egis is an international player active in the consulting, architecture, construction engineering and mobility service sectors. We design and operate intelligent infrastructure and building capable of responding to the climate emergency and helping to achieve more balanced, sustainable and resilient territorial development.

With operations in 100 countries, Egis places the expertise of its 19,500 employees at the disposal of its clients and develops cutting-edge innovation accessible to all projects. Through its wide-ranging fields of activity, Egis is a central player in the collective organisation of society and the living environment of citizens all over the world.

Our 70-year history and our locations throughout France have nurtured a culture of proximity, loyalty and technical excellence in the service of our customers. Our Group's raison d'être is consistent with our ambition: to be a key player in the ecological transition towards carbon neutrality.

www.egis-group.com



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Design and production:

Public Affairs and Communication Department | Service infographie Egis TT

Published: September 2024

Photos: © Egis, © Julian Elliott - shutterstock, © Denis Belitsky - shutterstock, © Maxime ESCRIVA, © Egis - Sergio Vieira, © Gérard Meilley, © Denis Belitsky - shutterstock, © Egis - Vincent Rainot, © Melander - shutterstock, © EDZL and Bererix, © HS2, © BOULENGER Xavier - shutterstock, © Ethihad Rail, © Lalam photography - shutterstock, © Remy Girard, © olrat - shutterstock