

We make everything flow





- + 1,800 km of railway lines
- + 300 airport projects
- + 3,000 km of roads worldwide

We place great value on the application of planning, consultancy, design and engineering to transport and Mobility through a combination of rigor and creativity

Comprehensive Services Consis Project Services Value Engineering along the whole Project life cycle



1 Consultancy

- Demand Analysis, Traffic forecast and Modeling
- Conceptual & Preliminary Design
- Feasibility Studies
- Concessional assessments : CBA, Business
 Case Development, Eco-financial modeling
- Technical due-diligence and asset management
- Strategic infrastructure and business planning

2 Design

- Infrastructure and Systems all level designs
- Multimodal Interchange Hubs & Stations
- Depots &Workshops
- Project Management
- Ancillary Systems
- Centralized Traffic Control

3 Construction services

- Works management, control and supervision
- Due-Diligence
- Tender Documentation and procurement support
- Systems Integration management
- RAMS assessment
- Construction management
- Project &Program Management
- Design Technical Assistance

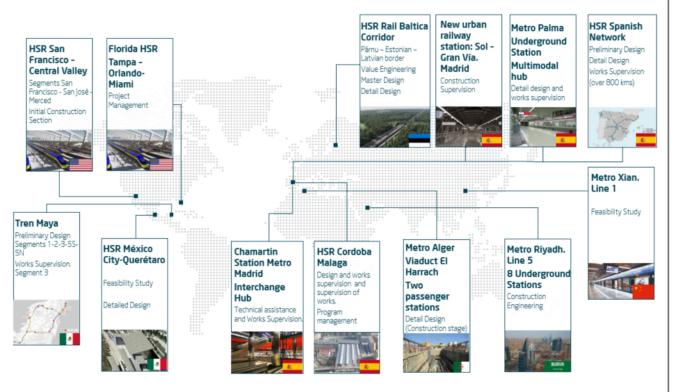
4 Operation& Maintenance

- Operation Consultancy
- Commissioning
- Maintenance

- Asset Management
- Operation and Maintenance Planning
- Infrastructure Management Applications

Railways | Demonstrated experience in all phases of Railway development

Worldwide experience



Contributing, for over 30 years, to the expansion of the world's railway network

- + 120 professionals all rail areas
- + 30 years in railways
- + 1,700 km design services
- + 1,000 km construction managed



a rail project



BIM & GIS



Sustainability & environment



Bridges & structural design



Geology & Geotechnics



Arquitecture & Building



Facilities & energy



Railway & Road tunnels



Hydraulics & drainage



Integral management solutions

We transform mobility through the best advice, with a differential value proposal based on the conjunction of our deep knowledge regarding technology and our experience and specialization in projects in all sectors related to transport.

We work in close collaboration with our clients in their transport infrastructure studies and projects



References | Baltic Region





Pärnu to Estonian-Latvian Border.

Design and Design Supervision

- Integrate the Baltic States in the European rail network.
- A new railway line for passengers and freight traffic.
- Environmental Impact Assessment on going during Design phase.
- BIM methodology implemented in the project

93.5 Km Length double track

250 Km/h Maximum Speed

45 Major Structures (railway and road bridges)

4 Stations/passing loops



Riga Airport Railway station Access

Works supervision and engineer FIDIC

- Building structures of the terminal and overpass, access roads and with related infrastructure
- Terminal structures
- Embankmet and railway overpass
- Railway tracks

4,4 Km Length double track

2.000 m. long overpass

1 Passenger station connected to the airport

16.000 m2 terminal

3 Levels station

3 years working together



References Indra | Baltic Region



TMS. Railway traffic control and management system
LG Lithuanian Railways

Indra's technology platform unifies railway traffic regulation and management at state level

- It organizes and manages rail traffic throughout the network.
- Regulates the loading and unloading of passengers and goods in all stations
- Plans the locomotives and schedules the trains that operate on the network.
- Coordinates the communications system
- Controls electrical and energy systems
- Monitors the trains, allowing their analysis and controlling their journeys in real time

1,700 Km rail network

+5 Mill. passengers/year

+50 Mill. Tonnes

+ 40 electronic subsystems integrated

+ 50 electromechanical interlocking subsystems and axle counters integrated



TMS. Railway traffic control and management system for the country's rail network

Eesti Raudtee

Transition to a fully automated traffic control system

The benefits of the projects are expected to be:

- More efficient capacity utilization.
- Higher traffic management quality.
- Improved reliability, safety and environmental footprint of railway.

1,219 Km network 795 Km mainline 130 Km electrified track

129 Pcs platforms
61 pcs stations
1,195 pcs points

2,080 pcs signals
480 Km
automatic block
lines
152 Pcs level
crossing
29 Hot-Boxes

Differential value | BIM Methodology

"A hybrid system is created, light, flexible and agile that covers all the needs of the life cycle of the Project "

Design phase

Territorial planning

Simulation

Construction phase











Operation phase

Associated Services:

- Design engineering and in construction phase of transport infrastructures..
- Technical-economic management.
- Environmental management.
- Energy efficiency.
- Maintenance Plans.
- GIS.
- Security consulting in construction.
- Operations Consulting.



Review and completion of the construction design of 8 underground stations of Line 5 of the Riyadh Metro, through the use of the BIM methodology in all its disciplines.