

A modern silver tram is shown on a city street, moving from left to right. The tram is sleek and has large windows. In the background, there are historic buildings with balconies and windows. The scene is set in a city with a mix of old and new architecture. The tram is on a track, and there are streetlights and utility poles visible. The overall atmosphere is that of a busy urban environment.

**INFRASTRUTTURE
E GRANDI OPERE
BELT & ROAD
Febbraio 2019**

RI A

SKILLS AND EXPERTISE

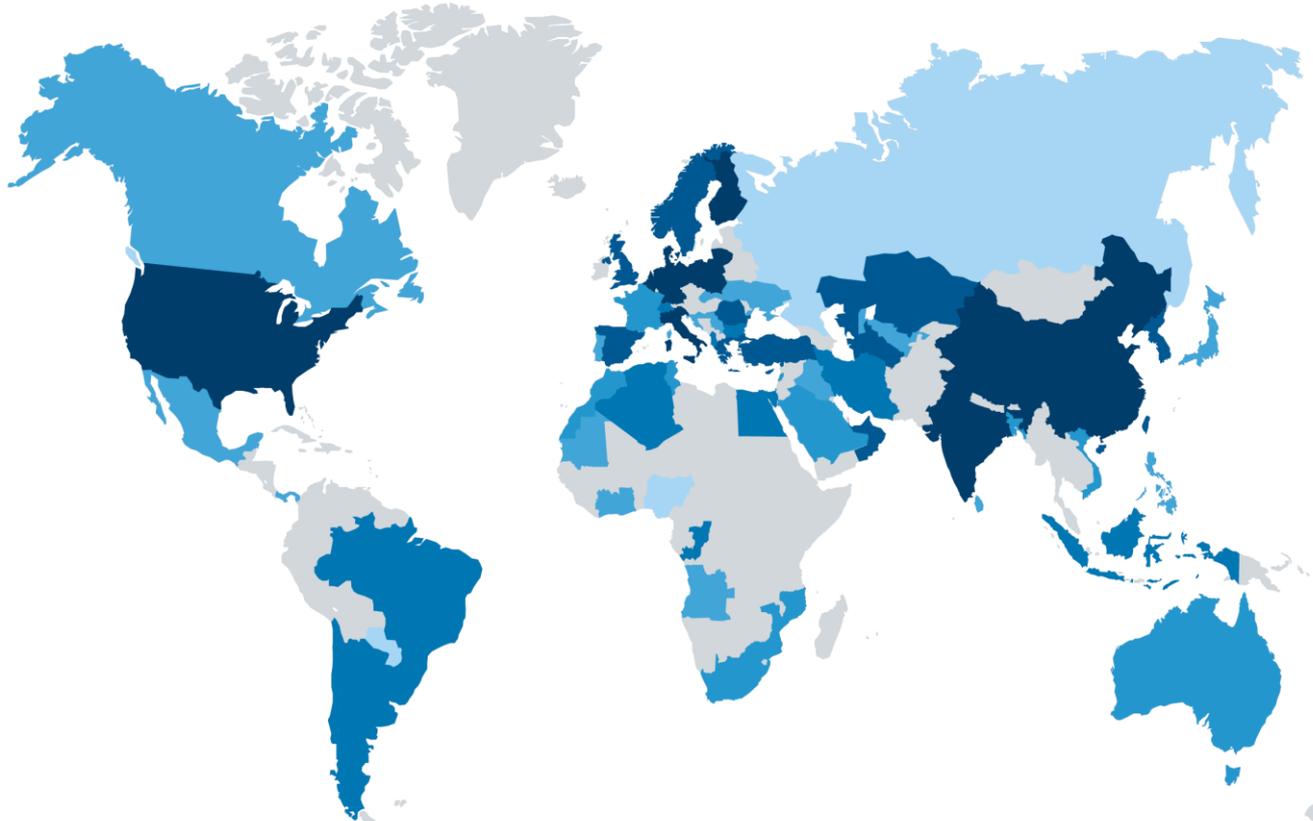
RINA is

- “
- a global player supporting clients in the project management and development
 - offering Engineering Design and Consulting services
 - offering Classification, Certification, Testing and Inspection services
- ”

Over 150 years
of experience



WHAT IS RINA TODAY



65+
Countries

170+
Offices

4000
Colleagues

CLIENTS

Public Authorities
(Ministries, National and Local Authorities)

General Contractors
(Major Construction Companies and Concessionaires)

Real Estate Developers and Asset Management
Companies

IFI, Donors, Lender Groups, Banks, Insurance
Companies
(World Bank, EBRD, ABD etc.)



TRANSPORT & INFRASTRUCTURE

Testing, Inspection, Certification

ACHIEVEMENTS ★

TOP MARKET SERVICES

- Design Verification
- Site Supervision
- Technical Inspection on Buildings, Infrastructure & Railways
- Sustainability services
- Procurement inspection and expediting – Welding Inspection, NDT Test, coating inspection
- Vendor Qualification and Auditing
- Railway Independent safety assessment, Certification & Testing

- **700+** projects for railway lines, trains and metro for
- **100+** customers in about **20** countries in Europe and worldwide
- Third party services for **45** billion euros of capex of work
- **1,000+** verified projects
- **3,000+** Energy Certifications issued
- **3** million sqm certified



TOP MARKET SERVICES

- Studies, Conceptual Design & Feasibility
- Design Services
- PMC / Construction Supervision
- Technical Advisory
- Asset Integrity Management (AIM+)
- Environmental Impact Assessment
- Operation and Maintenance
- Decommissioning
- Logistics and Supply Chain advisory services and technical assistance

- Technical Advisory / PMC Services on **30+** Mass Transit Systems in 12 Countries
- Technical Advisory / PMC Services on **15 Driverless** Metro/LRT Systems
- Engineering services for **2,000+** km of High Speed Railway lines
- **25+** Feasibility and design services for Port Facilities
- **70+** Bridges and Viaducts Designs
- **500+** Industrial and Civil Buildings Designs
- **5** National Coastal and Land Border Control Systems Designs
- **50+** Urban Development and Mobility Projects
- **80+** designed and supervised dams
- **40+** projects in cement and steel industries

WHAT WE CAN DO

PROJECT MANAGEMENT

PROGRAMME MANAGEMENT



MASTERPLANS & CONCEPT DESIGN

- Master plans
- Concept design and feasibility studies
- Site characterization studies
- Permitting
- Environmental impact assessment



PROJECT DEVELOPMENT & CONSULTANCY

- Multidisciplinary basic and detailed design
- Energy efficiency
- Systems engineering and integration
- Specialized technical advisory



CONSTRUCTION

- Construction supervision
- Health and safety
- Risk and security
- Structural monitoring and integrity management
- Test & commissioning



OPERATION

- Operation and maintenance
- Decommissioning

A photograph of a city skyline at sunset. The sun is low on the horizon, creating a bright orange glow and lens flare. In the center, a tall tower with a large spherical top (Orbita tower) stands out. To its right are several modern skyscrapers. In the foreground, there is a walkway with a metal railing and some greenery.

OUR PRESENCE IN THE REGION

Kazakhstan

RINA KAZAKHSTAN LLP has Operative Offices in Atyrau and Aksai, with personnel operative in all the main operative Oil&Gas production site

RINA in Kazakhstan does count more than 40 employees, (more than 85% are Kz citizen) among management, office staff and technical experts.

RINA Kazakhstan and RINA Turkey are the hub for our operations in the Caspian Region

MARINE

RINA Caspian Fleet has more than 20 vessels

RINA classification certificate, on behalf of Kazakhstan Flag.

The same by Azerbaijan Administration.

RINA developed a dedicated set of Rules for the design and construction of vessels operating in the Caspian Area

ENERGY

Clients:

- Karachaganak Petroleum (KPO)
- North Caspian Operating Company (NCOC)
- ERSAI (Caspian Contractor)

Services: QA and QC activities, Expediting, Material Inspections, EIA, Local Environment Regulations, Work Supervision

RENEWABLES

- Technical Due Diligence for Baikonyr Solar Plant (EBRD, ADB PSOD as co-lender)
- Wind Farm Ereymentau II - Wind Energy Yield Assessment
- Lender's Technical Advisory - Shymkent Solar 16MW (EBRD)
- Lender's Technical advisory - Burnoye Solar II - 50MW PV plant (EBRD)
- Lender's Technical Advisory - Burnoye Solar I - 50MW PV plant (EBRD)
- Lender's Technical Advisory - PV portfolio - ca. 70MW (EBRD)



Egypt (1/2)

ENERGY

RINA Consulting S.p.A. - Egypt Branch has the operative offices in Cairo with personnel operative in all the main operative Oil&Gas production site

RINA in Egypt does count more than 10 employees, (more than 80% are Egyptian citizens) among management, office staff and technical experts.

Client: ENI S.p.A. / Petrobel / Saipem / Tecnomare

Location: Nile Delta, Egypt

Period: 2013 - ongoing

Zohr is the largest gas discovery in the Mediterranean. ENI is developing these resources using a deepwater wells and subsea infrastructure tied back to an export pipeline to shore.

RINA is supporting the project on a number of fronts.

Environmental: ESIA exploration, drilling, sealines and onshore Gas Treatment Plant

Surveys: Offshore geotechnical lab & reporting, onshore environmental baseline

HSE: HAZID onshore/offshore, HAZOP and QRA for early production facilities, HSE coordination services

Civil / Geotechnical: geotechnical, hydraulic and seismic design of causeway

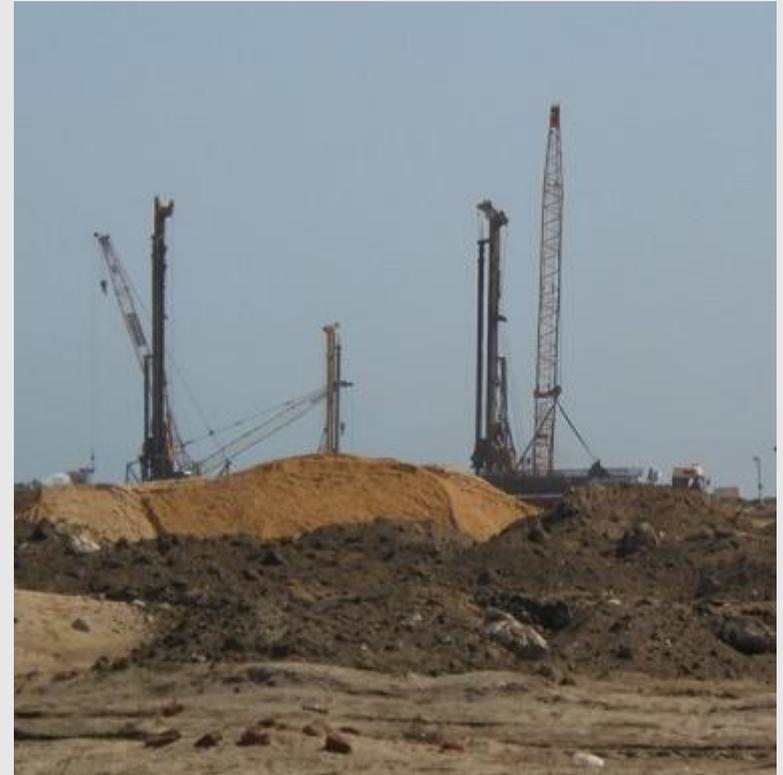
Coastal Engineering: sediment transport, definition of shore protection groins

FEED of deepwater pipelines, spools and jumpers for Phase II of the project

Design Appraisal of pipeline and subsea structures

Vendor Inspection at Fabrication Yards & Coating Factory

Material Management Services



Egypt (2/2)

ENVIRONMENT & SUSTAINABILITY



Benban Solar Development Project, Environmental Engineering Services, Technical Advisory (FMC, EBRD)



Gas Midstream Sector, Resource Efficiencies / Technical - Economic Due Diligence (EBRD)



6th October Power Plant, Environment and Sustainability studies (SACE Compliance), External Monitoring during Construction of the expansion of the Power Plant (Ansaldo Energia, EEHC)



Strengthening the National Quality Infrastructure for the Agri-business sector - Task 2: Traceability: Main Objective is to guide the Egyptian export chains to implement effective traceability procedures in line with the international market requirements (UNIDO).

Georgia / Azerbaijan

ENERGY

- South Caspian Pipeline Expansion Project (Georgia), Welding Inspections (SAIPEM-AZFEN)



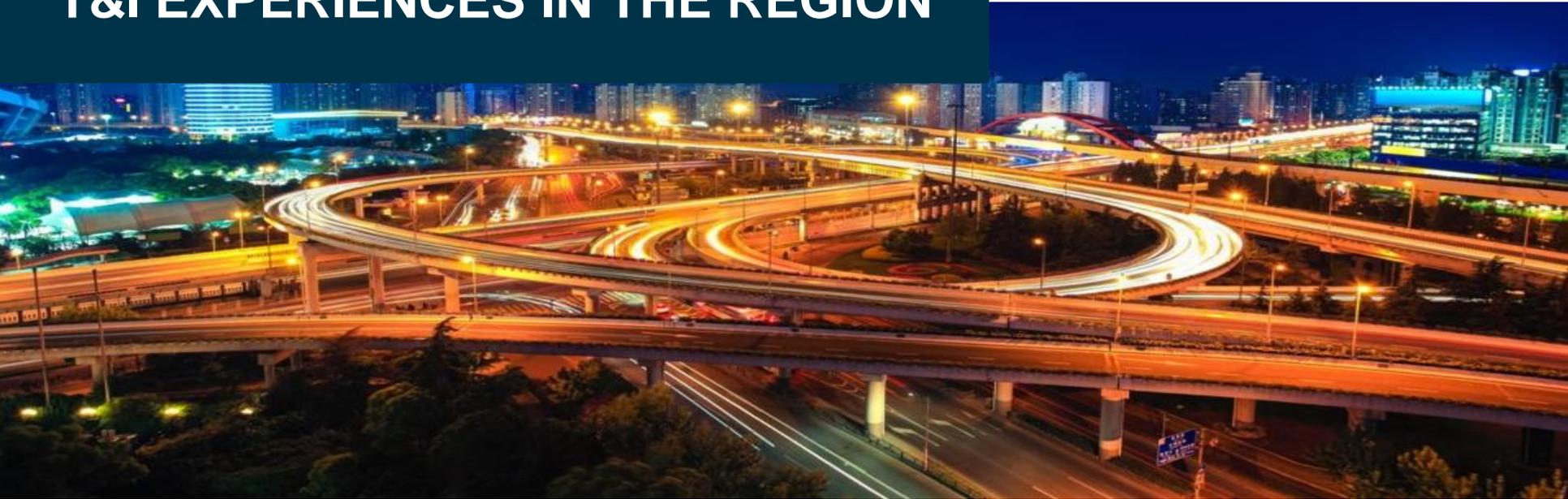
ENVIRONMENT & SUSTAINABILITY

- Geosteel Company (Georgia), Resource Efficiency Audit (EBRD)
- Baku - Tbilisi - Ceyhan pipeline (Georgia - Azerbaijan - Turkey), Environmental & Social Compliance and Monitoring (EBRD and Commercial Banks)





T&I EXPERIENCES IN THE REGION



TEL AVIV LRT NETWORK

(Israel)



- We are the Program Assurance Company, i.e. providing the Supervision of Designers, Contractors, and PMC during both planning, design and construction phases.
- A core team of resident engineers coordinate and manage a set of Audits through the mobilization on site of specialists.
- The project involves currently more than 50 engineers from different disciplines including the resident team in Tel Aviv and the resident team in Changchun (China) supervising the manufacturing of trains.
- When the other LRT Lines will be contracted (starting from the Green Line, expected to enter into the tendering phase in 2018), the team is expected to grow up to 100 engineers involved.

- Operation: • Conventional
- Length: • >200 Km
- Signalling: • TBD
- Rolling Stock: • CRC (red line)
- Status: • Construction



PROJECTS (1/4)

ZOHR PROJECT



Client: Eniprogetti SpA

Location: Zohr, Egypt

Scope of work: Design for Onshore Maritime & Coastal Engineering

ENR - New Rolling Stock Fleet



Client: ENR

Location: Cairo, Egypt

Scope of work: Assistance to Rolling Stock Procurement

PROJECTS (2/4)

Modernization of the Signalling System on Beni Suef - Asyut Railway Section



Client: Alstom Egypt

Location: Beni Suef - Asyut, Egypt

Scope of work: System Integration Consultancy Services

ENR - Energy Assessment



Client: ENR

Location: Cairo, Egypt

Scope of work: Energy Assessment of Egyptian National Railways

PROJECTS (3/4)

GOLDEN TRIANGLE Consultancy services for developing a comprehensive Master Plan for an area in Upper EGYPT



Client: Government of Egypt

Location: Upper Egypt

Scope of work: Regional Master Plan - The study manages how to capitalize on the wealth of resources that exist at the GOLDEN TRIANGLE via a master plan for the period (2015-2045) in view of achieving a sustainable development through the integration of industrial and social services as well as relying on existing and planned **infrastructure and transport assets**. Detailed objective: to prioritize the investments needs and to elaborate a Pilot Phase for the development of the project area during the first 5 years of the project implementation (**pre-feasibility studies of industrial-logistic areas, port terminals, urban centers, new-concept farms, tourism eco villages**).

PROJECTS (4/4)

Development of certification centers for the transportation of perishable goods



Client: European Union Delegation in Kazakhstan

Location: Kazakhstan, Uzbekistan, Turkmenistan, Kirghizstan, Tajikistan

Scope of work: The scope of the project is to facilitate trade and transport of Perishable Goods (PG) in the Central Asia Region through improving and harmonizing the legal base, technical standards certification systems in the road transport at the both regional and national level.

International Logistics Centers/Nodes Network for Central Asia



Client: European Union Delegation in Kazakhstan

Location: Kazakhstan, Uzbekistan, Turkmenistan, Kirghizstan, Tajikistan

Scope of work: develop the financial, technical, environmental and institutional conditions and studies for a network of Logistics Centers along the TRACECA corridor; identify, rank and promote priority Logistics Centers projects; provide a set of feasibility or pre-feasibility studies for selected Logistic Centers to be developed on the TRACECA corridor.



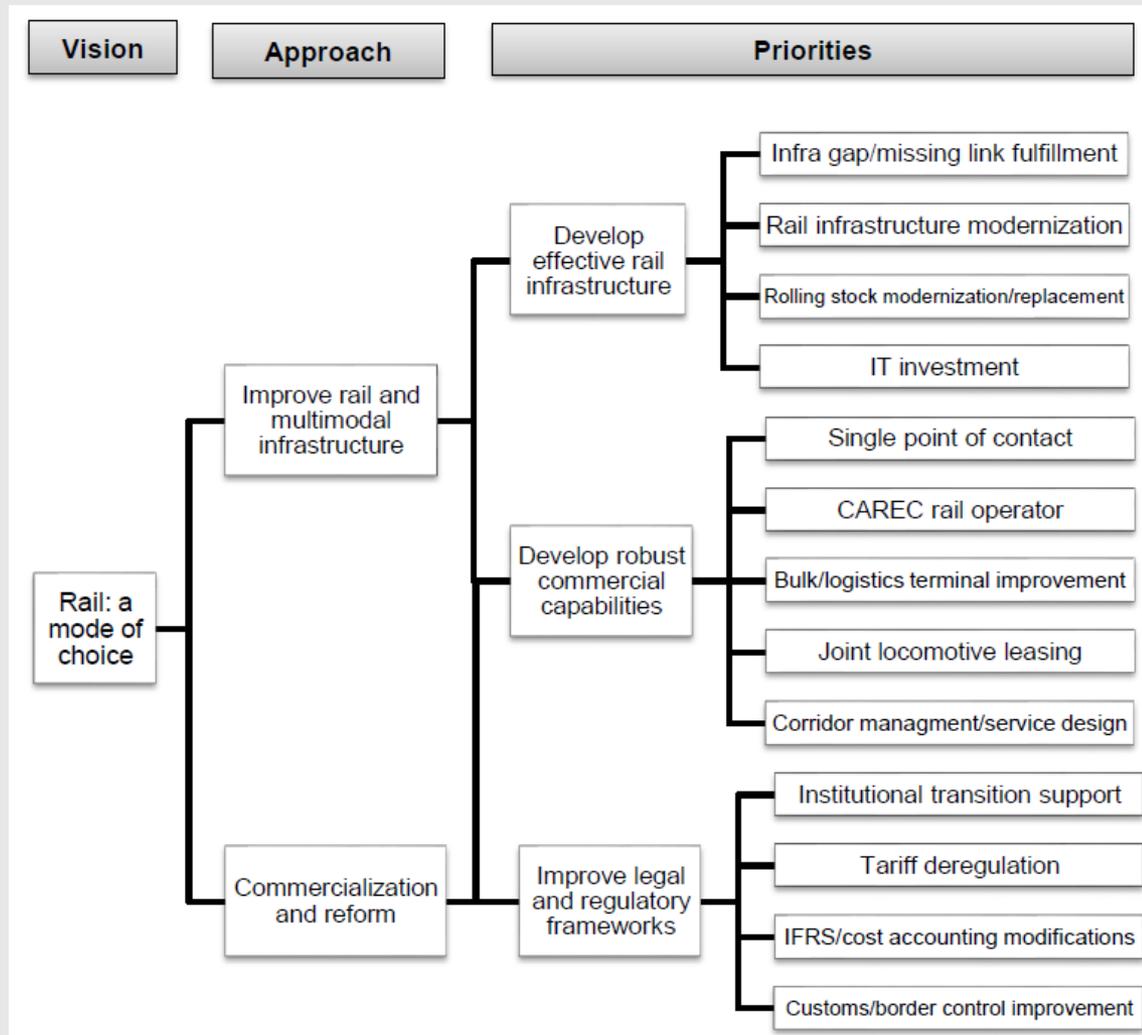


OUTLOOK AT THE COUNTRIES

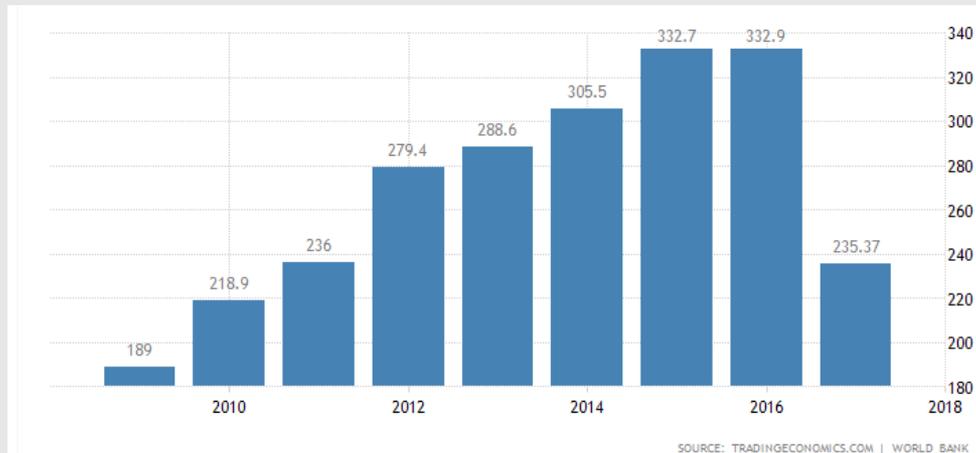


General Context

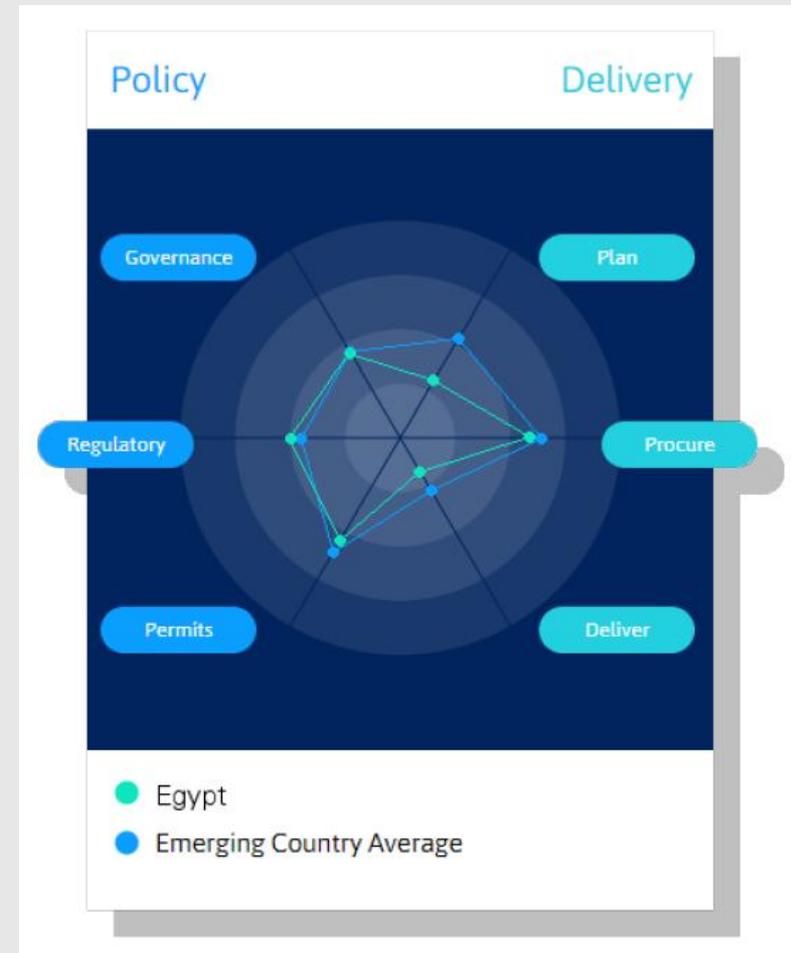
- The countries need a more developed and alive Local Private Sector. The presence of large construction companies (Orascom Construction Industries in Egypt for instance) is a key factor for future growth. Turkey can be seen as a model in this respect.
- The link between International Private Companies (Engineering / Consulting, Civil Construction / Technology providers) and funding entities / donors strongly unbalances the competition.
- A strategical cooperation among countries of Central Asia should pass through common vision, approach, and priorities (Central Asia Regional Economic Cooperation).



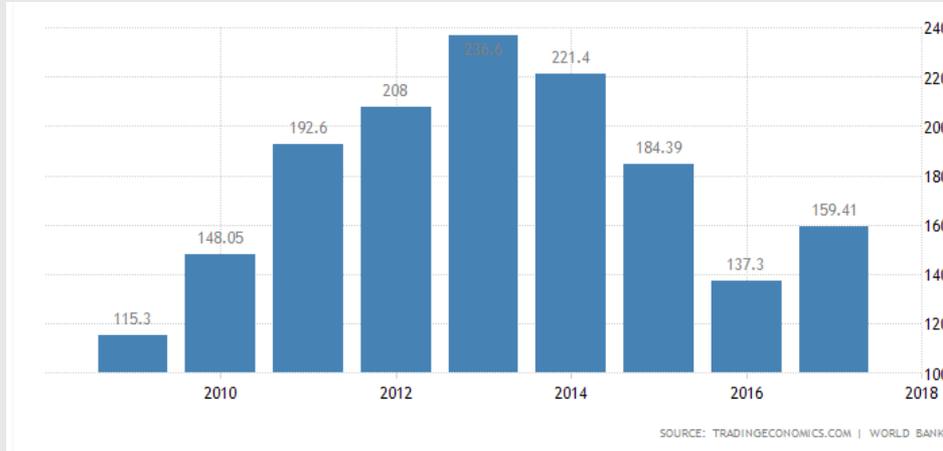
Egypt



- Recent Chinese investments but large part of them not in Infrastructure projects
- Minor investments in Ports (Alexandria, Damietta) due to limited additional traffic in the Suez Canal
- More than 90% of transport in Egypt is on roads >> high priority on rehabilitation and expansion of the network
- Rail Network under development
- Cairo Metro Line 3 concluded and Line 4 ready to start , (French and Japanese investments respectively)

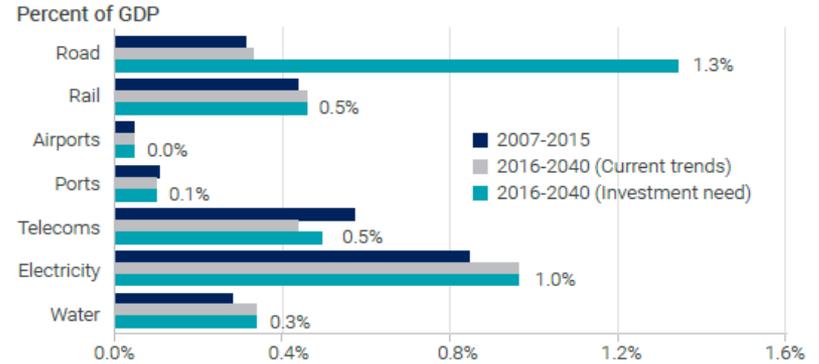


Kazakhstan



- The Center for Strategic and International Studies (CSIS) estimates that traffic incidents cost the Country 9 BUSD annually.
- IFI's such as EBRD support investments in infrastructure projects

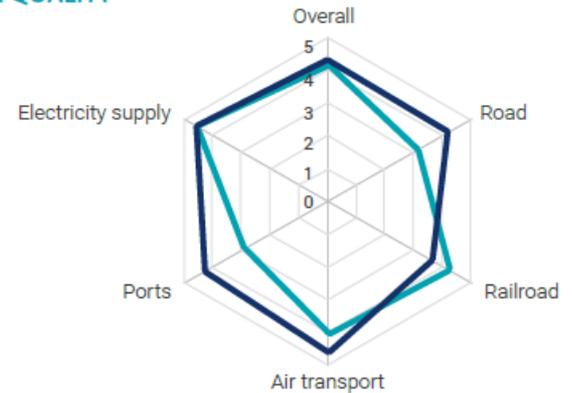
INFRASTRUCTURE INVESTMENT AS A PERCENTAGE OF GDP



INFRASTRUCTURE QUALITY

1-7 (best)

— Kazakhstan
— Asia



Source: The Global Competitiveness Index Historical Dataset © 2005-2015 World Economic Forum



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GRAZIE

