



1st INVESTMENT FORUM TRACECA

BRUSSELS, 12th OCTOBER 2010

PROJECT

**ELECTRIFICATION OF THE “DOSTYK - AKTOGAY”
RAILWAY SECTION**



REPUBLIC OF KAZAKHSTAN

Electrification of the “Dostyk - Aktogay” railway section





GEORAPHICAL DESCRIPTION

- The “Dostyk – Aktogay” railway section belongs to the main EurAsian transport corridors TRACECA and TrasEurAsian railway mainline (TARM)
- The “Dostyk – Aktogay” railway section is non-alternative route for railway transportations from central and south-west regions of China to Central Asian countries, Persian harbor countries and Europe



TECHNICAL DESCRIPTION

- **Length – 309 km**
- **Term of construction – 36 months**
- **Present cargo flow – 15,5 mln. tons**
- **Forecasted cargo flow in 2020 – 20 mln. tons**
- **Maximum permitted speed on section for trains:**
 - for freight – 70 km/h;
 - for passenger – 80 km/h



SOCIAL-ECONOMIC DESCRIPTION

- Project implementation generates new workplaces:**
 - during construction – 1 020 employees;**
 - during operations – 490 employees**

- Project implementation considers to use the newest technologies together with world level modern management approaches**



INVESTMENTS AND PAYMENTS

- **Investments volume – 546 mln.USD**
- **Savings at operating expenses from transition to electric traction (for 30 years) – 2 186 mln.USD**
- **Net Income (for 30 y.) – 1 054 mln.USD**
- **Payback period:**
 - ✓ **simple – 13 years;**
 - ✓ **discounted – 22 years**



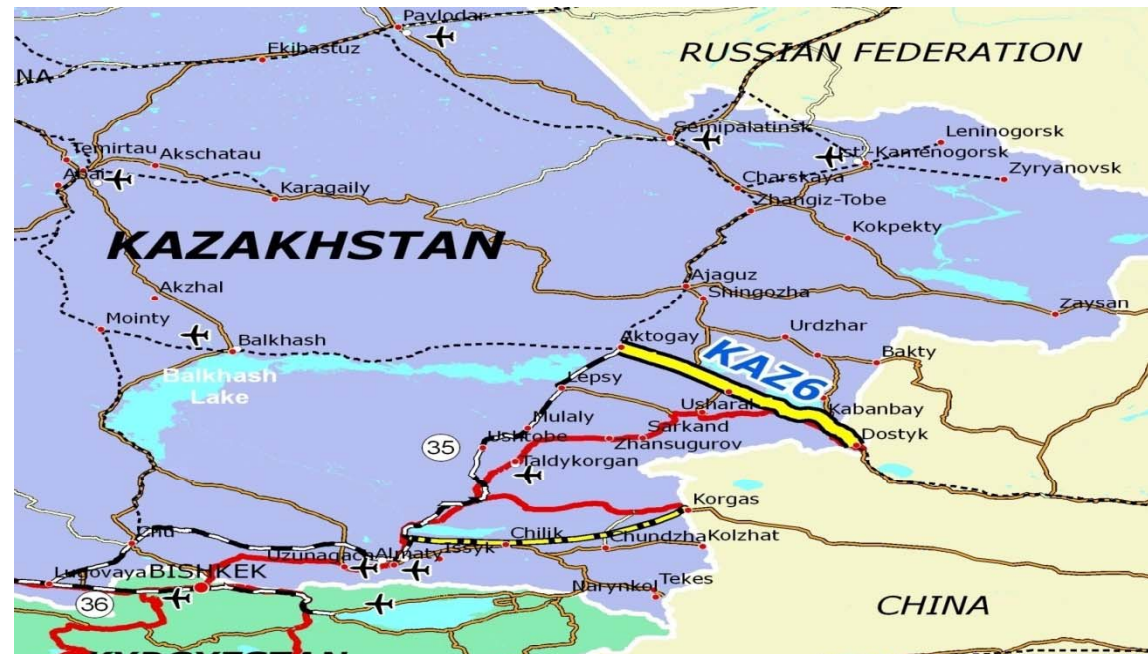
SOCIAL-ECONOMIC DESCRIPTIONS

- Project implementation provides:**
 - ✓ **full liquidation of the pollutions to atmosphere from diesel trains (958 tons/year);**
 - ✓ **transportation costs reduction on 25-30%;**
 - ✓ **reduction of the fuel consumption on 1,5–1,8 times;**
 - ✓ **increase of the average speed at the section on 9–11 km/h;**
 - ✓ **increase of the average weight of train on 500-550 tons;**
 - ✓ **increase of the railway capacity on 15-30%**



CONCLUSION

**Investments volume
546 mln. USD**



The main task of the transport sector is the development of the transport and communication system, which is capable to completely satisfies the needs of economy and population in transport services





FIRST TRACECA INVESTMENT FORUM

Brussels, 12th October 2010

Installation of Railway Optic Fiber Cable Kungrad-Beineu



UZBEKISTAN



North of Uzbekistan border of Kazakhstan on West axis E-40





GOALS and Technical Parameters

- TRACECA route
- Public Private Partnership
- Quick access to neighboring countries
- Cost and Time savings
- Environmentally friendly (reduced pollution)
- Technical Description

Construction of FOC line Kungrad-Karakalpakkia-BEINEU (RK) and modernization of telecommunication equipment for creation of high speed corporate data transfer network with outlet to digital transport network of neighboring countries.



SOCIO-ECONOMIC DESCRIPTION

- Value for Money
- Better Safety Parameters
- New Employment opportunities





INVESTMENT AMOUNT AND REPAYMENT

- **Estimated budget for construction**

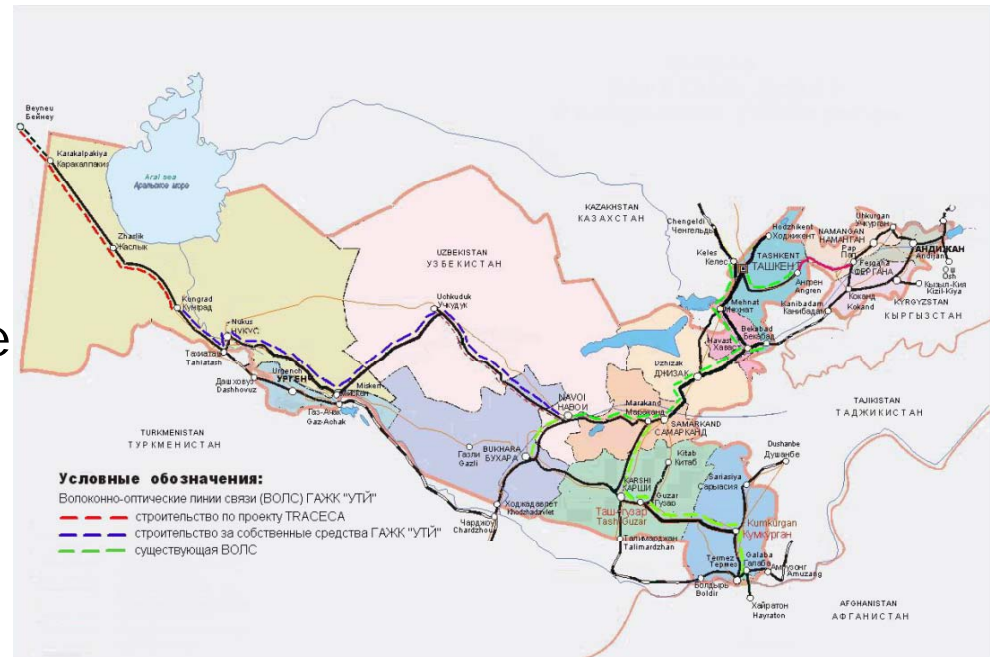
3.0 Million Euro

- After finalising the Feasibility Study, an economic analysis will be done to define an appropriate revenue structure to cover the investment amount
- **5 years** to recover the initial costs



OTHER SOCIO-ECONOMIC DESCRIPTIONS

- Decrease of financing costs and consumption time during operation of telecommunication equipment
- Reduction of maintenance personal
- increase of profit due to additional telecom services offered





SUMMARY

310 km FOC

3 million EUR



- HIGH GOVERNMENT SUPPORT
- READY FOR IMPLEMENTATION





FIRST TRACECA INVESTMENT FORUM

Brussels, 12th October 2010

REHABILITATION OF RAILWAY LINE VARNA – RUSE



REPUBLIC OF BULGARIA



REHABILITATION OF VARNA – RUSE RAILWAY LINE





TECHNICAL DESCRIPTION

- **Total length of Varna-Ruse railway line: 232 km**
- **Scope of the project:**
 - Renewal and/or interim repair of the superstructure of the line
 - Repair of power equipment (partial replacement of posts, bearer cables, catenary). Preparation of the traction substations for the SCADA system
 - Repair and/or replacement of the signaling and telecommunication systems, GSM-R and ETCS Level 1; possible upgrade
- **Construction phases:**
 - LOT 1: Ruse-Kaspichan section, 135 km, single railway line
 - LOT 2: Kaspichan-Varna section: 97 km, double railway line
- **Construction period: 5 years**, expected start **1 January 2012**



SOCIO-ECONOMIC DESCRIPTION

- Reduction of travel time: **15%**. Benefits: **EUR 20.05 mln**
- Benefits due to decrease of accidents: **EUR 2,20 mln**
- Increased capacity: by **25 %** for passenger trains; by **35%** for freight trains
- **On international level:** preferable and convenient corridor between Europe and Asia; increased trade
- **On national and regional level:** contribution to economic development and the increase of employment opportunities of all geographic areas along the line through improvement of the major links between urban centres and subsequently the links to smaller but important settlements with cultural or environmental significance



INVESTMENT AMOUNT AND REPAYMENT

Investment Amount: EUR 313 mln

- **Economic Internal Rate of Return (EIRR): 7.14 %**
- Discount rate **5%**
- **72,81 %** admissible financing from grant programmes
- **27,19 %** financing from other national sources – State Budget or loan
- **Expected revenue from charges, including economic benefits: EUR 85 mln**
- **Expected benefits: 27.19 %**



OTHER SOCIO-ECONOMIC DESCRIPTIONS

Preparedness of Feasibility Study: within “Technical Assistance for the Restoration of Design Parametres along Ruse – Varna Railway Line” project (TEN-T Programme), by the end of 2010

Final goals of the Project:

- Increased transport **quality, reliability and safety** due to the improved technical parametres and the interoperability of the line
- Improved **connections** between Bulgaria and the neighbouring countries and the other EU member states
- Creation of conditions for the development of **intermodal “sea-railway-river” transportations**
- Increased **competitiveness** of the railway transport through improving the quality of the railway services
- Stimulating the **economic growth** of Bulgaria through reliable passenger and freight railway transport



SUMMARY

Investment Amount

EUR 313 Million



5-year rehabilitation period with long-term economic benefits and contribution to the interoperability and to the increase of the railway transport competitiveness

