ALBANIAN RAILWAY MAIN PROJECT

PROJECT TITLE:

“REHABILITATION OF THE EXISTING RAILWAY LINE FROM DURRËS TO TIRANA PUBLIC TRANSPORT TERMINAL (PTT) AND CONSTRUCTION OF THE NEW RAILWAY CONNECTION UP TO TIRANA INTERNATIONAL AIRPORT “NËNË TEREZA”

CAPACITY BUILDING WORKSHOP

29-NOV-2018

ATHENS, GREECE
Who we are:

- The Albanian Railways S.A. operates under the status of a joint-stock company with 100% state capital.
  Management and administration of the company is realized by:
  a. The Supervisory Council
  b. The Administrator of the company
  The Albanian Railways S.A. is technically supervised by the MIE and it is financially supervised by the Ministry of Finance and Economy.

- In Albanian railways today work in total 1046 staff.

- The Albanian railway network has in its use 363 km of main line and approximately 100 km secondary lines in stations and industrial branches.

- The railway line is built on single track with standard gauge of 1435 mm.

- The speed of rail vehicles mobility does not exceed the limit of speed 55 km per hour for trains of passengers and 45 km per hour per trains of goods.


The process of enlargement of the European Union countries through the involvement of new countries and geographic regions, leads the need to expand the European Transport Networks (TENs).

The priority projects are in line with the SEETO priorities and part of the National SPP package.
The Stakeholders

- The Promoter: Ministry of Infrastructure & Energy of Albania
  Ministry of Finance and Economy
- The Beneficiary: HSH - Albanian Railways
- Lead IFI: EBRD
- The local communities served by the railway line
General Plan of the Tirana PTT – Durres Project and new railway connection to Rinas Airport
THE MAP

DURRES - TIRANA RAILWAY LINE
AND NEW RAILWAY LINE TO RINAS AIRPORT

SCALE: 1:80000

- Provision of future duplication of the rail line to cope with increased capacity requirements (6Km)
- The Project under tender process
- Extension up to Tirana central Station (4Km) currently in Preliminary Design Stage
FINANCIAL ASPECTS

RAILWAY INVESTMENT DURRES - TIRANA - RINAS

EBRD Loan 36.87 mln euro
EU Grant 35,435 mln euro
Albanian Government 16 mln euro

* Estimated Loan Repayment Period: 15 years
## Detailed Financial Aspects

<table>
<thead>
<tr>
<th>Costs of the Project and Financial Sources (mln EUR)</th>
<th>EBRD Loan</th>
<th>EBRD Grant</th>
<th>EU/WBIF Grant</th>
<th>Albanian Government</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Works (contingency fund included)</td>
<td>36.87</td>
<td>32.935</td>
<td></td>
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<td>69.8</td>
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<tr>
<td>Detailed Design and Tender Documents</td>
<td></td>
<td>1.215</td>
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<tr>
<td>Supervision of Works</td>
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<td>Support of Implementation</td>
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<td>Strengthening Institutional Capacities</td>
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<tr>
<td>Land Expropriations</td>
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<td></td>
<td>1</td>
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<tr>
<td>VAT</td>
<td></td>
<td></td>
<td></td>
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<td>15.06</td>
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<tr>
<td><strong>Total</strong></td>
<td>36.87</td>
<td>0.87</td>
<td>36.65</td>
<td>16.06</td>
<td><strong>90.45</strong></td>
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</tbody>
</table>
TECHNICAL ASPECTS

Is the first project to be implemented with the European railway infrastructure engineering standards.

- The Durres – Tirana line starts at the platform of Durres Terminal Station and ends at KP 33+532 at Tirana PTT station, featuring a total length of 34.170m.
- It currently operates with 5 stations: Durres (terminal station), Shkozet, Sukth, Vore and Kashar to be complemented by a new terminal (Tirana Public Transport Terminal), at KP 33+500 of the existing line.
- There are currently two major rail junctions along the existing line:
  - with the line Vore – Shkoder – Hani-i-Hotit (Montenegro Borders)
  - with the south branch towards Vlore and Pogradec
- A new railway intersection is to be developed for the connection of the Tirana Airport railway connection at the Domje area.
- Total rehabilitation of the existing line infrastructure and replacement of the line superstructure has been planned, in order to ensure long term efficient infrastructure for the busiest section of the national network.
According to the Design, the Durres to Tirana line project features:

- Upgrade of the existing line by replacing the existing superstructure
- Improvement and/or expansion of the drainage network and formation setting along the line and in stations as required
- Rehabilitation of stations' secondary lines and switches rehabilitation of station platforms, along with introduction of additional platforms as necessary
- Improvement of the existing bridges and culverts of the existing line
- Fencing of the entire railway corridor (both sides)
- Signaling of at-grade (level) intersections with the road network.
- The rehabilitated line will comply with the standards of 100 km/h up to 120 km per hour. The turnouts of station lines will allow for train speeds on the curves of 50 km/hr (EW 300-1:9)
- Installation of a new signaling - telecommunications system in compliance with EU Technical Specifications for Interoperability.
- In principle, the system sets ETCS Level “0”, which enables easy upgrade to Level “1” in the future
Profiles & Plan View
LEGEND
1. Rail 8-60 kg/m
2. Monoblock concrete sleeper
3. Ballast of 50 cm minimum thickness under the sleeper
4. Subbase 30 cm (2x15 cm)
5. Cover of fill embankment with top soil of 30 cm minimum thickness
6. Embankment
7. Blasting natural ground
8. Fence
9. Coated or uncoated open ditch of variable dimensions
10. Fill slope
11. BLW side slopes
12. Cut slope

TYPICAL CROSS SECTIONS

TYPICAL R/W SECTION ON TANGENT
Scale 1:100

TYPICAL R/W BRIDGE CROSS SECTION ON TANGENT
Scale 1:50
Albanian Railway Company “Hekurudha Shqiptare” (HSH) has signed a sovereign loan with European Bank for Reconstruction and Development (29th Dec 2016) and has profited a GRANT from the European Union through the Western Balkans Investment Framework (signed on 9th May 2018) for the rehabilitation of the existing railway line between Tirana and Durrës, the construction of a new rail link and its interchange with the existing line.

This project was one of the three winning projects at the Paris Summit, held in July 2016, running for EU / WBIF GRANT funds (Western Balkans Investment Fund) projects from the six Western Balkan countries.

The Tirana-Durrës railway existing line has an approximate length of 34.17 km. The new rail link will be approximately 5.7 km in length and will connect Durrës and Tirana with Tirana International Airport “Mother Theresa”.

Tendering for the construction works has started on 25th of April and the PQ stage is ongoing. The client and PIU are under evaluation and selection of the applicants applications for this PQ stage which will be closed within July. The awarding of the contract and the start of works are foreseen by the end of 2018.

The project has a total estimated cost of EUR 90.45 million. The contract includes works for the rehabilitation of the Tirana-Durrës railway line and construction of the new rail link, as well as consultancy services for the supervision of works, for which the Tendering processes are ongoing too.
BRIEF DESCRIPTION

- This project fulfills the objectives of the National Strategy for Development and Integration (NSDI) 2015-2020 for the modernization of the railways, and is in line with the Sectoral Transport Strategy and its Action Plan 2016-2020.
- The railway segment Tirana - Durrës and the connection to Rinas Airport is now part of the TEN - T Indicative Network Extension for the Western Balkans: Corridor VIII.
- This project will affect the quality of citizens' movement between the two largest cities in Albania. The time it will take to travel from the center of Tirana to Mother Teresa Airport will be about 12 minutes with express train while from Tirana center to Durrës center it will take about 22 minutes.
- It should be mentioned that this project is a novelty in the movement of the passengers towards Mother Teresa Airport through the use of the train that will compete directly with the use of private cars, buses and taxies, affecting also the improvement of the traffic at peak hours.
- The project realizes with full effectiveness the multimodality of the transport system in the metropolitan area of so called DURRANA (joint words of Durres and Tirana).
- Works for construction starts by the end of 2018 and last for 30 months (ends on June 2021).
Project Objectives

- The Project is part of Corridor VIII of the Western Balkans Core Network also a junction with ROUTE 2, connecting the cities of Podgorica in Montenegro and Vore in Albania and has been established as an indicative extension to the Trans-European Transport Networks (TEN-T) to the Western Balkans core railway network as well as South East Europe Transport Observatory (SEETO)’s Core Network.

- The Project will support Albania’s national economic development and contribute to Albania’s regional integration by improving connectivity of its main cities to the Port of Durres and TIA.

- **Green Economy:** the provision of high-quality rail services which is fundamental for the development of sustainable transport systems which reduce CO$_2$ emissions in line with national and EU transport policy targets.
SOUTH EAST EUROPE /WESTERN BALKANS CORE RAIL NETWORK
## SOUTH EAST EUROPE / WESTERN BALKANS CORE RAIL NETWORK

### RAILWAY CORRIDORS

<table>
<thead>
<tr>
<th>Corridor V B (308 km)</th>
<th>Sapjane (Slovenian border) — Zagreb (Croatia) — Botovo (Hungarian border)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridor V C (554 km)</td>
<td>Beli Manastir (Hungarian border) — Osijek (Croatia) — Sarajevo (Bosnia and Herzegovina) — Ploce (Croatia)</td>
</tr>
<tr>
<td>Corridor VIII (planned for 617 km, of which 411 km exist at present)</td>
<td>Tirana/Durrës/Vlore (Albania) — Lin/Pogradec (Albania)</td>
</tr>
</tbody>
</table>

**Plus Planned Extensions:** (206km)

- **Albania:** Lin — the former Yugoslav Republic of Macedonia border
- Pogradec — Korce (Greek border)

**The former Yugoslav Republic of Macedonia:**
- Kafasan (Albanian border) — Kicevo (the former Yugoslav Republic of Macedonia)

<table>
<thead>
<tr>
<th>Corridor X (1,177 km)</th>
<th>Savski Marof (Slovenian border) — Zagreb (Croatia) — Beograda (Serbia) — Skopje (the former Yugoslav Republic of Macedonia) — Gevgelija (Greek border)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridor X B (151 km)</td>
<td>Subotica (Serbia) — Stara Pazova (Serbia)</td>
</tr>
<tr>
<td>Corridor X C (97 km)</td>
<td>Nis (Serbia) — Dimitrovgrad (Bulgarian border)</td>
</tr>
<tr>
<td>Corridor X D (179 km)</td>
<td>Veles (the former Yugoslav Republic of Macedonia) — Kremenica (Greek border)</td>
</tr>
</tbody>
</table>

### RAILWAY ROUTES

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<thead>
<tr>
<th>Route 1 (326 km)</th>
<th>Ostarije (Croatia) — Split (Croatia)</th>
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<tbody>
<tr>
<td>Route 2 (143 km)</td>
<td>Podgorica (Montenegro) — Vlore (Albania)</td>
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**Routes**

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<thead>
<tr>
<th>Route 4 (579 km)</th>
<th>Vrsac (Romanian border) — Beograda (Serbia) — Bar (Montenegro)</th>
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<tbody>
<tr>
<td>Route 9 (94 km)</td>
<td>Banja Luka (Bosnia and Herzegovina) — Doboj (Bosnia and Herzegovina)</td>
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<tr>
<td>Route 10 (252 km)</td>
<td>Kraljevo (Serbia) — Pristina (Kosovo (under UNSCR 1244/99)) — Gorce Petrov (the former Yugoslav Republic of Macedonia)</td>
</tr>
<tr>
<td>Route 11 (138 km)</td>
<td>Pozega (Serbia) — Stalac (Serbia).</td>
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Economic, Environment & Social Impact

- The Tirana – Durrës railway project and the connection with Tirana International Airport complete and fully achieve the multimodality of the infrastructure network between the two metropolises, creating an efficient network between the road infrastructure, the international airport and the largest port in the country and one of most important in the region, Port of Durres. In this way this project will have a great economic and social impact between the city of Durres, Tirana and more.

- In addition, a parallel project objective is to ensure a friendly environment regime, reducing road traffic jams between Durres, Tirana and Rinas Airport, and contribute to the reduction of air pollution from road traffic in the Durrës-Tirana region.

- The project is expected to affect the opening of many new jobs, both during construction of works and during the operation of this railway line.
Light Rail on Tirana New Boulevard Station
The extension of the railway line from Tirana PTT to Tirana New Boulevard (4 Km)

- In the beginning of 2018, several technical parameters have been studied by the Consultant for the further modernization of the railway infrastructure such as railway line electrification, incorporation of the "light rail" system within the city of Tirana and increase of the number of stations for the railway to better serve the industrial zone of Tirana.

- These additional parameters will be incorporated in the future contract with EBRD, that of the extension of the railway line (4 Km) from the Public Transport Terminal (PTT at Kamza curve) to the former City Center Train Station of Tirana, at the beginning of the New Boulevard of Tirana, with a new rail terminal in the heart of the capital.

- This project has been completed as a detailed Preliminary Design and is close to financing finalization for its Implementation Project through EBRD within this year.
Light Rail on Tirana New Boulevard Station
Light Rail on Tirana New Boulevard Station
TIRANA MULTIMODAL PUBLIC TRANSPORT TERMINAL (PTT)
TIRANA MULTIMODAL PUBLIC TRANSPORT TERMINAL (PTT)
FUTURE OPERATION SCENARIO FROM Durres – Tirana Center – TIA RINAS

MAIN SCENARIO N°1 - already developed on the Detailed Design and under tender process.
OTHER RAILWAY PROJECTS IN ALBANIA

- **PREPARATION OF THE DETAILED DESIGN OF VORË – SHKODËR – HANI I HOTIT – BORDER WITH MONTENEGRO.**

- Within the Western Balkans Investment (WBIF-IPF 6) with EBRD financial leader, in the field of railway investment this project is ready to get started within December 2018.

- The 4.5 million Euro grant approved in December 2016 finances the preparation of the detailed design and tender documents for rehabilitation works.

- The length of this railway segment is 120 km and the rehabilitation of 12 railway and cargo passenger stations.

- This project also enables rail standardization with Montenegro and focuses on the creation of efficient rail links between the Western Balkans and the EU.

- The estimated costs for the rehabilitation works of this rail segment is around 170 million Euros.
THE FEASIBILITY STUDY OF DURRËS – POGRADEC – LIN AND NEW RAILWAY LINK LIN – BORDER WITH MACEDONIA (PART OF RAIL CORRIDOR)

THE PRELIMINARY DESIGN OF DURRES – RROGOZHINA

This project aims at rehabilitation of Durrës - Pogradec - Lin railway line (152 km) and the construction of 2.8 km of new railway line between Lin and Macedonian border.

This investment will improve multimodal links with Italy, through the Port of Durres (Albania) as well as with Macedonia and Bulgaria.

The study is being prepared by Infrastructure Project Structure (IPF 4), through a 720,000-euro EU grant, allocated by WBIF, in June 2015.

The pre-Feasibility study of Durres-Lin-Pogradec and the preliminary design of Durres – Rrogozhina railway line has already completed January 2018, the rehabilitation of Durres – Rrogozhina segment is around 80 million Euros.

The estimated costs for the rehabilitation of Durres – Rrogozhina segment is around 80 million Euros (excluding VAT).
THE PRE-FEASIBILITY STUDY FOR THE RAIL LINK ALBANIA - GREECE BY KAPSHTICA

- Total cost of the project: 887,000 euro
- Ministry of Infrastructure and Energy of Albania (Albanian territory 55Km): 280,000 euro

Today we are confirming the possibility to connect our rail network with the TEN-T Orient / East Mediterranean railroad corridor in Greece via Kapshtica and Follorina respectively in the Durrës - Elbasan – Pogradec (existing railway line) - Kapshtice - Thessaloniki / Athens (Piraeus) linking the port of Durres on the Adriatic Sea with the ports of Thessaloniki and Piraeus in Athens, which are the largest ports of the Mediterranean sea.

The pre-feasibility study for the rail link Albania - Greece by Kapshtica is a joint application between Greek Railways and our Ministry of Infrastructure and Energy, under the INTERREG Program regional cooperation Albania - Greece amounted to €850,000, which will start this month, June 2018.

The railway connection with Greece will significantly increase the amount of goods from Northern Europe through Albania and Greece.
Thank you for your attention

Bashkim Kasoruho
Head of Project Implementation Unit

Albanian Railways
Ministry of Infrastructure and Energy