BELKOMUR:
Construction project of the railway
Arkhangelsk – Syktyvkar – Perm (Solikamsk)

October 2012
Belkomur Railway is the key project of economic integration and development of Russian northern regions

Content of the Belkomur project - construction of lacking parts and modernization of existing railway sections for launching through rail link on straightening route Arkhangelsk – Syktyvkar – Solikamsk (Perm)

The Belkomur Railway
Arkhangelsk – Syktyvkar – Perm (Solikamsk)

- Total mileage - 1,155 km
  - new construction: 715 km
  - modernization: 440 km
- Required investment
  - new construction: ~ USD 4.5 bln
  - modernization: ~ USD 1.2 bln
- Project implementation period: 5 years
- Traffic forecast: up to 35 mln. per year

Goals and objectives of the Belkomur project:

- to provide social and economic development of regions of the European North of Russia, development of resource and industrial potential of transport unreachable areas
- to connect by the shortest route Ural with northern regions and sea ports of Arkhangelsk and Murmansk
- construction of a new international transit transport corridor in the direction of the northern regions – East Asia (China)
Strategic and politico-social intent of the Belkomur project for Russia

- **Improves transport efficiency of railways in Russia**
  - development of an alternative transport direction from Ural to ports of White and Barents seas.
  - reduction distance on 800 km between Ural and North Seas of Russia
  - development of ports in Murmansk and Arkhangelsk
  - disclosing of transit potential of the country by optimizing the load on Trans-Siberian Railway and unloading transport hubs in Moscow and St.-Petersburg

- **Belkomur is an important component of revival strategy of Northern Sea Route** and protection of interests of Russia in Arctic, realization of development projects of the Arctic shelf.

- **Provides infrastructure foundation for economic growth**
  - arrangement of conditions for development natural raw and forest materials in the north of European part of Russia
  - increase the investment attractiveness of Russian regions
  - industrial expansion and creation of new industries (worth over USD 16 billon)

- **Strengthening social and economic relations between the regions**, improving mobility and human wellbeing
Investment projects of the Belkomur complex program

Komi Republik

- “Usinsk 3” coal-mining complex construction for the development of stocks of the No.3 mine field of the Usinsk coal field (Novolipetsk Steel (NLMK)).
- Construction of the Sosnogorsky aluminous plant (RUSAL).
- Mine and "Usinskaya" concentrating factory construction for development of stocks of the No.1 mine field of the Usinsk coal field (Severstal).
- Implementation of the second phase of the Usinsk complex construction for oil and gas processing and refining (Enisey-Usinsk LLC).
- Yarega Mining Chemical Complex Construction Project (Yaregaruda).
- High level timber-processing center construction in the territory of the Ust-Kulomsky area.
- High level timber-processing production construction for LLC Azimut
- Production modernization on “Lesozavod № 1”
- Expansion of bauxite ore production in the Mid-Timan Area (RUSAL).
- Pulp and paper mills construction projects in Troitsk-Pechorsk.

Perm Krai

- Construction of Usolsky mining and processing integrated works for extraction and production of potash fertilizers (JSC EuroChem).
- Mining and processing integrated works construction (JSC Uralkali).
- Mining and processing integrated works construction on the Verkhnekeamsky potassium-magnesium salts field (JSC Acron).
- Development of the Ust-Yayvinsky site (JSC Uralkali).
- Expansion of extracting and concentrating capacities of Solikamsk-3 mine (JSC Uralkali).
- Modernization and production expansion at Bereznikovsky soda plant.
- Modernization and equipment replacement on Berezniki-2, Berezniki-3, Solikamsk-2, Solikamsk-3 mines (JSC Uralkali).
- Production modernization on “Soda-hlorat plant”.
- Expansion of polystyrene production (Sibur-Khimprom)
- “Kama” pulp and paper mill modernization
**Investment projects of the Belkomur complex program**

### Arkhangelsk Oblast
- Construction of stationary crushing and sorting industrial complex in the Holmogorsky area (Knauf Gips Kolpino LLC).
- Development of the Myandukh field: crushing and sorting complex construction, equipment supply («National aggregates company»).
- Development of the Pavlovsk polymetallic ores field, mining and processing integrated works construction (First Ore-Mining Company).
- Cardboard and paper production modernization for OJSC Ilim Group
- Modernization of processing productions of "Solombalales" holding.
- Modernization of processing production of Ustyanskaya Timber Processing Company LLC.
- Production modernization on “Onezhsky LDK”.
- Production modernization on “Sawmill 25”.
- Construction of sawmill and modernization of existing woodworking production (Velsky wood-processing plant).
- Production modernization on Arkhangelsk Plywood Plant JSC.

### Murmansk Oblast
- Mining and processing integrated works construction on the basis of the Fedorov's tundra field (“Fedorovo Risorses”)
- Mining and processing integrated works construction on the basis of the Cervine stream field (North West Phosphoric Company).
- Mining and processing integrated works construction and modernization ("KOVDORSLYUDA", LLC)
Belkomur Railway is a part of international corridor Northern East – West (N.E.W.)

- **N.E.W.** – intercontinental project of a combined maritime and railway transport corridor linking the U.S.A and China to expedite delivery time

The project provides multimodal transportation in the following route: from China and Southeast Asia by rail through Russia and Kazakhstan to the port in Murmansk and then to U.S. East Coast by sea

Belkomur is a key project in the N.E.W. corridor, effectively optimizing existing ways of delivery and reducing distance and time of rail freight from China to Europe and the U.S.A
Belkomur Railway is a key project in the international transport corridor «Barents Link» / «Northern axis»

- «Barents Link» / «Northern axis» - development project of the rail transport corridor in the Barents region – from Scandinavia to the Urals. The project is included in the list of priority projects for implementation under the policy “Northern Dimension” (EU, Iceland, Norway, Russia)

- The project assumes formation of the transport collector connecting the Barents logistical platform (a system of sea ports in the Barents region) with its artery – North transnational axis – and with access to the Trans-Siberian and Kazakhstan (then to China)

- Belkomur is a key project of a new transport corridor, which reduces delivery time and the length of the distance from Nordic countries to Souhteast Asia and China by 800 km
Transport availability in the federal subjects of Russia (railways and highways with a firm covering)

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<tr>
<th>Federal subjects</th>
<th>Coefficient</th>
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<tr>
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<td>1% - 15%</td>
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<td>99% - 100%</td>
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<td>Менее 1%</td>
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<table>
<thead>
<tr>
<th>Russia</th>
<th>Total</th>
<th>Railways</th>
<th>Highways</th>
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<tr>
<td></td>
<td>35.8%</td>
<td>21.6%</td>
<td>33.5%</td>
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*Цифры на карте - коэффициент транспортной доступности
K = Sх/Kx*100%
где S = площадь территории с расстоянием до ближайшей ж/д/дороги менее R
(в данном случае K = 30 км)
S - площадь Субъекта Федерации
Expansion of transport availability

Before construction of the Belkomur railway

After construction of the Belkomur railway
The Belkomur project in the system of international transport corridors
Traffic forecast of the Belkomur railway

- With complex and timely implementation of the Belkomur project the track will have the full level of capacity utilization by 2020.
- Forecast freight traffic by more than half is provided by demand of existing facilities. New regional industrial projects implemented in the area of fixation to the Belkomur railway will essentially increase the load of the road, making a promising freight traffic at 11-12 million tons per year.
- The forecast freight nomenclature includes:
  - coal
  - mineral fertilizers
  - base metal ores
  - containers
  - wooden and building freights
- Due to the Belkomur strategic location in the system of international transport corridors one can expect additional freights (multimodal container transport) at about 10 million tons per year.

Note: The forecast freight is defined as a maximum loads of existing facilities and new projects. The actual volume of freight traffic along the railway will be limited by its capacity.

Sources: Lengiprotrans, Uralgiprotrans, GiprotransTEI, SOPS, Belkomur complex program, Komi Republic, Arkhangelsk region, Perm region.
The key factors of competitiveness and feasibility of the Belkomur project

- **Essential delivery time saving** – new route will significantly shorten the distance (up to 800 km) and time of delivery.

- **Existing and future demand** – Belkomur meets the needs of regional manufactures in communication with the northern ports of Russia and the Trans-Siberian Railway that provides a high loading of railway by the 2020.

- **Transit potential** – potential for transit by including railway to international transport corridors is estimated at more than 10 million tons per year after 2020.

- **Competitive rates and transportation cost reduction** – Belkomur will reduce total cost of traffic transportation on the routes from Perm (Solikamsk) to Murmansk and Arkhangelsk in average of 15-20% with higher specific rate providing required rate of return project.

- **Cost effectiveness** – Belkomur shows acceptable level of investment returns similar to other infrastructure projects. With total investment of USD 5 billion:
  - project generates IRR between 10%-16% depending on level of state support
  - project payback period is 11-14 years (undiscounted), 15-26 years (discounted)

- **State support** – Belkomur corresponds state transport policy, provides additional opportunities for development of ports in Northwest of Russia and their shippers.
Status of the project implementation: arrangement of conditions for public-private partnership

- **2008**: the Belkomur project is included in the Transport Strategy of Russia up to 2030 and in the Strategy of railway transport development of Russia up to 2030

- **2009**: the Belkomur project is confirmed by the Ministry of Transport of Russian Federation, approved and coordinated in federal ministries and authorities, approved by Investment Committee of selection projects setting up a claim to budgetary provisions of Invest Fund and recommended for consideration by the Government Commission on projects of national importance

- **2010 – nowadays**: preparation for implementation the concept of construction financing of the Belkomur railway on the principals PPP involving private capital with state support in the model concession:
  - coordination of the basic project parameters according to the concession scheme with the Russian Government, participating ministries and authorities, OAO “RZD” – making decision on starting concession in 2013
  - discussion and agreement with government authorities of Russia the conditions and measures of state support of the Belkomur project under PPP (concession):
    - assignment of lands
    - providing state guarantee for debt financing,
    - providing exploitation of the line (including the existing segments) as a single property complex and economically feasible tariff setting
Investment project "Belkomur" - the complex program for industrial and infrastructural development of Komi Republic, Perm Krai, Arkhangelsk Oblast and Murmansk Oblast.
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