

Prospective for cooperation in telecom industry between Russia and Japan

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International economic relationship between Russia and Japan Development of core telecom market segments:

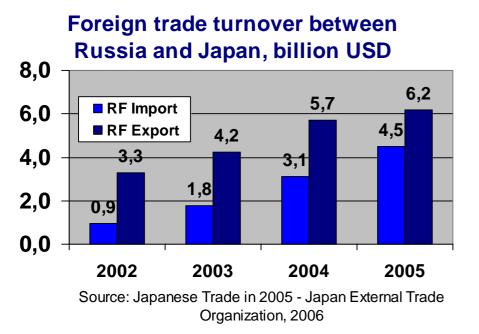
- Fixed telephony
- Mobile
- Internet

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International economic relations

Traditionally Japan is one of the largest foreign trade partners of Russia.



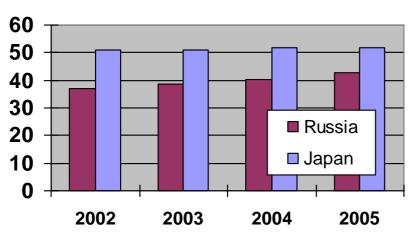
- Foreign trade turnover between Russia and Japan made up 10 billion USD in 2005;
- Today we recognize Japanese investments growth towards Russia: «Sakhalin –2 project» (up to 4.5 billion USD), manufacturing plants of Japanese auto major (Toyota, Nissan, Isuzu);
- Still we face unilateral economic relations: Russia mainly exports oil products; Japan exports tech products, cars in particular.

Telecommunications can become a new step of collaboration in the area of high technologies

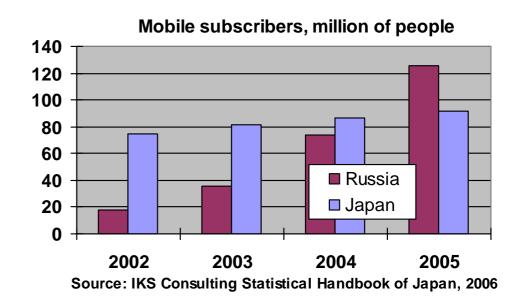


Telecommunications development

Fixed telephone lines, million.



Source: Rosstat, Statistical Handbook of Japan, 2006

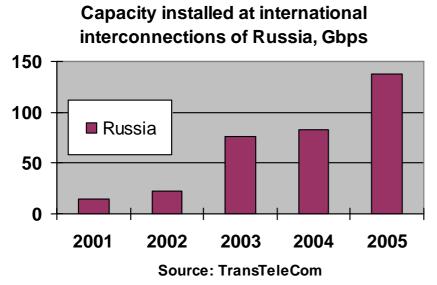


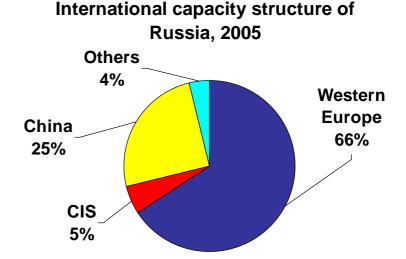
Market liberalization provides a lot of opportunities. Russian telecommunications has been developed very successfully for part years:

- the number of fixed telephone lines exceeds 42 million;
- the number of mobile subscribers is 126 million of people;
- the number of regular Internet users exceed 10 million of people.



Telecommunications Development





Today Internet is the main demand driver on the global networks:

- About 90% of international telecommunication capacity are used by Internet networks (International Bandwidth PriMetrica Inc.);
- In Russia the demand for telecommunication capacity linking the country with the global Internet resources doubles every year(Global Internet Geography PriMetrica Inc.).

Meanwhile, the capacity of straight interconnection between Russia and Japan via RJK cable built under an obsolete technology in 1995 amounts only 0.5% of total international capacity installed in Russia.



Russia and the Global Europe Asia Traffic Transit

Geographically Russia offers the shortest route from Asia to Europe:



TransTeleCom`s fiber-optic network is able to be such telecommunication bridge. Today network spread is more than 50,000km; communications capacity is 50 Gbps and may be increased up to 400 Gbps.



TransTeleCom at Far East

Today TransTeleCom is using the most modern fiber-optic network at Far East:



- Network length is 5,044 km on the territory of the Amur Region and Jewish Autonomous Region, Khabarovsk and Primorie, DWDM equipment installed (40 Gbps);
- Network length is 770 km (180 km are under construction) on Sakhalin), STM-16 equipment installed (2.5 Gbps);
- In 2006, TransTeleCom is implementing a project of optical submarine cable of 214 km between Sovetskaya Gavan and Ilinski, STM-16 (2.5 Gbps) equipment will be installed.



Development of the interconnection with Japan



• Further perspectives of the project on Sakhalin may be related to the interconnection of the two islands Sakhalin (Russia) and Hokkaido (Japan) – the sea gate width is only 43 km;

Realization of the international telecommunication interconnection will allow Japan carriers send traffic straight to Russia and Europe via the shortest route with minimum signal delay, and also improve the interconnection infrastructure with the investment on Sakhalin.



New prospective for cooperation

- <u>Gas & Oil Industry</u>: Modern methods of oil and gas extraction are actively use fiber-optic cables for transfer of telemetric information from sea platforms. Respectively, Sakhalin gas & oil projects will require powerful telecom infrastructure to connect them with corporate departments in Russia and Japan;
- <u>Transport</u>: Global inter-mode carriers use telecom networks for cargo logistics. Today TransTeleCom's fiberoptic network spreads from major Far East sea ports (Vladivostok, Nakhodka, Vanino, Sovetskaya Gavan) to North-West sea ports (S.-Petersburg, Kaliningrad, Vyborg, Arkhangelsk, Murmansk) and further to Baltics and Europe;
- <u>Multinational Corporations</u>: To connect head quarters with production facilities and distribution departments in Russia, new virtual private networks will be required. Today TransTeleCom provides such types of services based on latest IP MPLS technology to various industrial corporations, banks and insurance companies in Russia as well as world-wide brands, for example, to Coca-Cola, Mars, Oriflame and others. We are ready to do this for Japanese companies;



New prospective for cooperation

- •<u>Telecommunications</u>: Traffic transit between Japan and Europe at shortest way and minimal signal delay is very promising area. Direct Russia Japan interconnection will cut the distance for telecom signals;
- <u>Scientific Networks</u>: JGNII Japanese scientific network participates in TEIN2 Asia-Pacific research project. In 2006, TransTeleCom and TeliaSonera (Sweden) has connected this project with with DANTE European research network by circuit of 2,5 Gbps through China and Russia. In future it will be possible to combine scientific potentials of Europe, Russia and Japan.











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