



Rostelecom Analyst Day

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Network infrastructure evolution

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Extensive network upgrade to create the leading integrated next generation network in Russia

Our network today

- 100% digitalised
- 7 levels of networks (transport, data transfer, backbone, zone, urban and rural fixed voice and mobile)
- 8 commercial data centres
- 2.3Tbps of total throughput of backbone network

..but

- still 78% of copper/xDSL-based last mile connections

Our network tomorrow

- Single, full IP-based network
- FTTx-based last mile in urban areas
- Single network protocols
- Development of the largest data centre in Europe focused solely on cloud services
- ✓ Modernization of existing non-commercial data-centres
- Multi-standard mobile network

Our objective is to rationalise the complexity of our current network structure, enhancing its capacity whilst making it more efficient to run



Backbone

- 500,000 km of backbone lines
- Over 350 access points
- Level of select lambda-channels up to 40 Gbps



Access network

- | | |
|----------------------------------|---------------------|
| ➤ Broadband: | ➤ Pay-TV: |
| ✓ c.7mm lines | ✓ c.5.5mm lines |
| ✓ Technologies: xDSL, FTTx, GPON | ✓ Primarily CATV |
| | ✓ Migration to IPTV |

Backbone IP/MPLS

- 40,000km of backbone lines
- 10 backbone and 150 regional nodes
- Over 350 access points, total throughput of the network over 2Tbps

Fixed line – capacity stats

- Capacity of DLD/ILD network – 816,000 channels
 - ✓ DLD – 20 TDM stations, 2 NGN stations
 - ✓ ILD – 10 TDM stations
- Capacity of intrazonal network – 1.026 mm channels
 - ✓ Digital TDM stations (113 transit-zone centers),
 - ✓ Digital NGN stations (16 transit-zone centers)
- Capacity of local network – 33.558 mm last mile connections
 - ✓ Digital TDM stations (12,527 automatic telephone stations),
 - ✓ Digital NGN stations (267 automatic telephone stations),
 - ✓ Analog stations (15,185 automatic telephone stations)

Country-wide fixed line network provides a strong platform for deployment of prospective products

We have embarked upon several modernization programs across our core network and systems

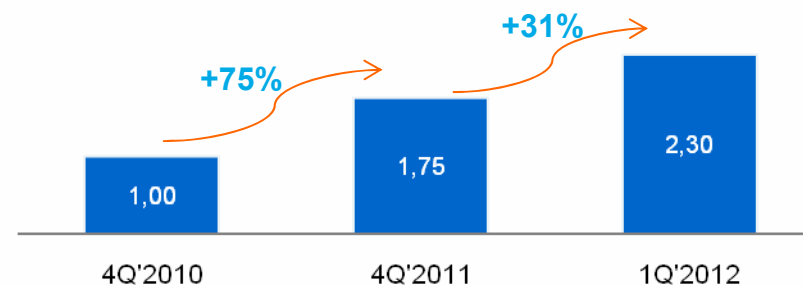
Core network key developments

- Use of DWDM/OTN at optical transport level
 - ✓ 100/400/1000 Gbps in any frequency
- Use of IP/MPLS at the data transport level
 - ✓ Upgrading to IPv6 from IPv4
- IMS basis of commutation centre of voice and media traffic
- Subscriber databases for different networks (HSS, HLR, AAA, others)

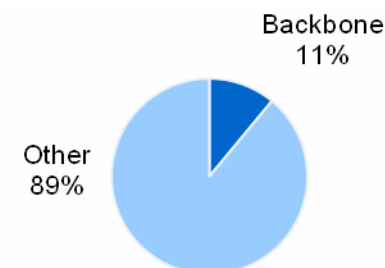
Core systems key developments

- Deep packet inspection systems
- Content delivery systems - CDN
 - ✓ Multi-screen, multi-standard TV
- Unification of BSS/OSS of different networks

Backbone IP/MPLS total throughput (Tbps)



Capital expenditures forecast (2010-2015)



Note: percentage of total CAPEX planned for 2010-2015

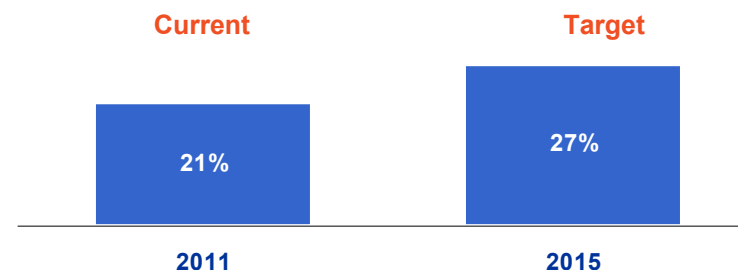
We are investing in transformation of our core networks and systems to efficiently support the provision of next generation of services

We have launched the most ambitious initiative of fibre deployment in Russia

Overview of Rostelecom's FTTx plans

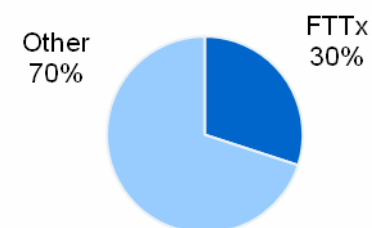
- Based on FTTB primarily
- Broadband speeds for our customers on FTTx will multiply by 10 on average at least compared to current xDSL speeds
- Focus on the big cities with the most competitive broadband markets
- xDSL equipment replaced during FTTx network deployment to be used in smaller cities network modernization and greenfields
- Completion of consolidation of Svyazinvest assets helps further advance FTTx rollout (especially in Moscow – Central Telegraph, and Bashkiria – Bashinformsvyaz).

Rostelecom's FTTx penetration target*



Note: percentage of total Russian Households

Capital expenditures forecast (2010-2015)



Note: percentage of total CAPEX planned for 2010-2015

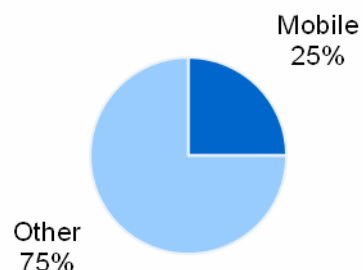
FTTx development plans will put us clearly ahead of our competitors, allowing us to provide superior fixed broadband, IPTV and other premium services to our customers



Overview of Rostelecom's mobile plans

- Development of multi-standard mobile network supporting our strategy to have Federal mobile operations with focus on mobile data and increased customer loyalty
- In 2012 3G network will be launched in 27 regions (incl. Moscow and St. Petersburg)
- MVNO would be considered as an option in some of the areas of specific interest (Moscow, etc)
 - ✓ Yota – based services are to be launched in September 2012
- Network sharing project with BIG3 operators
 - ✓ Development of own subscriber base before own network launch
 - ✓ CAPEX optimization

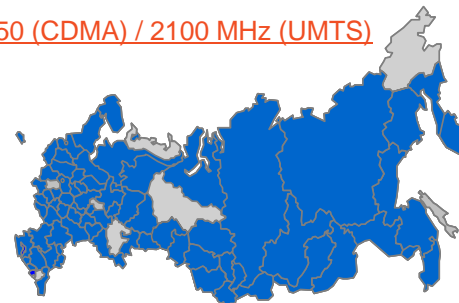
Capital expenditures forecast (2010-2015)



Note: percentage of total CAPEX planned for 2010-2015
Base case mobile CAPEX (assuming a sole development of network, without network sharing)

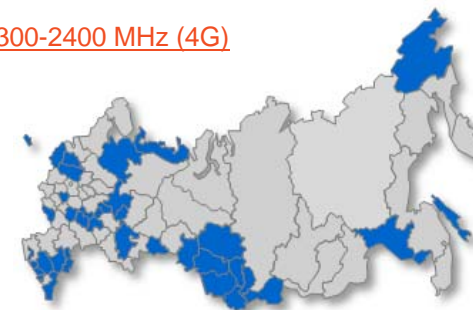
Current frequencies and licensed areas*

450 (CDMA) / 2100 MHz (UMTS)



- Licenses in 69 regions
- 27 regions to be launched in 2012

2300-2400 MHz (4G)



- Licenses in 39 regions

MVNO

Network Sharing

- Federal coverage before own network completion
- Building up own subscribers base before full scale launch of own network
- In heavy-CAPEX regions - CAPEX savings

* Including SkyLink



- Unification of systems and solutions, creation of unified support instruments for business integration
- Achievement of business results during strategic transformation of IT systems
- Minimization of operational risks during transition period, transformation of current IT-systems
- Implementation of effective project management for complex tasks for business processes transformation

IT today

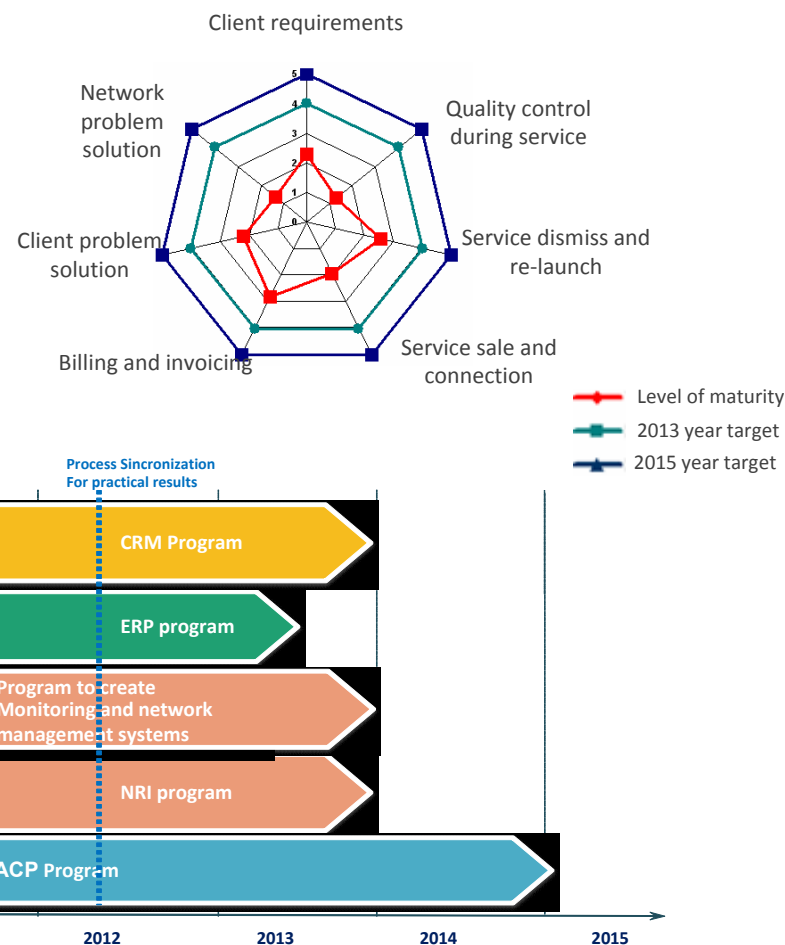
Share of B/OSS systems that ensure process automatization for network and service management	66%
Share of B/OSS Systems, that perform automatization and client service	34%

Total number of installments of B/OSS sub-systems after the merger accounts for 166, total number of sub-systems is 94

Quantity of sub-systems B/OSS

	Sub-systems developed internally	Sub-systems developed by subcontractors	Total
Total number of sub-systems	42	52	94
Systems installed as part of bigger complex solutions	23	35	58
Including systems that can be supplied independently	14	28	42
Systems installed independently	18	17	35
Including systems installed in one company	18	14	32

IT tomorrow



Investment in network development

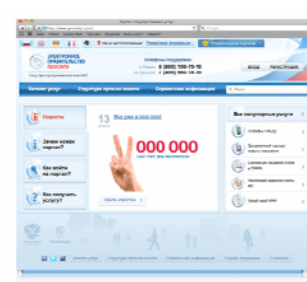


Increased
customer loyalty

Subscriber base
growth



Revenue and margins growth



**Technological developments in core and access networks enhancing
the end user experience**

- Superior broadband speeds
- Differentiating TV experience
 - ✓ More and higher-quality Pay TV channels
 - ✓ Increased number of HDTV channels–ability to offer 3D channels in the future
 - ✓ Multiscreen, anything/anywhere access to content
- Next generation, convergent value-added services
 - ✓ Social media
 - ✓ Location-based services
 - ✓ Pass-through personalisation and authentication in any part of the network
 - ✓ Advanced messaging apps/services
 - ✓ High quality VoIP
 - ✓ Advanced apps for popular devices (e.g. RCS, Mobile Enterprise)