Cooperation between Japan & Russia in ICT fields

- Big Potentialities of Win-Win Collaboration -
Why Win-Win Collaboration?

Japanese competitiveness/advantages really meet current needs in Russia
Current Mobile Telephone Service in Russia

Issues to be improved

<table>
<thead>
<tr>
<th>ARPU (as of the end of 2005)</th>
<th>MOU (as of the end of 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Russia</strong> (average)</td>
<td>8.6 US$</td>
</tr>
<tr>
<td><strong>Japan</strong> (average)</td>
<td>56.4 US$</td>
</tr>
<tr>
<td>(Voice: 40.9)</td>
<td>146 mini.</td>
</tr>
<tr>
<td>(Data: 15.6)</td>
<td>134 mini.</td>
</tr>
</tbody>
</table>
How have Japanese mobile operators overcome?

Change of Business Model:
Traffic oriented to Non-traffic oriented

Priority Project (1) 3G Mobile Services

Competition among mobile operators

Basic Service
ISP Service
Non-traffic oriented business

Value-Added

1st Stage 1990~
2nd Stage 1999~
3rd Stage 2006~

Newcomers

Credit e-money
One-segment Broadcasting
Media Contents
Number Portability

Financial Service
Media Service

Packet(Data)
Fixed rate for Packet

Voice
Contents

- Priority Project (1): 3G Mobile Services
- Change of Business Model: Traffic oriented to Non-traffic oriented
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- Basic Service
- ISP Service
- Non-traffic oriented business
- Value-Added
- 1st Stage 1990~
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- Newcomers
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- Number Portability
- Financial Service
- Media Service
- Packet(Data) Fixed rate for Packet
- Voice Contents
Priority Project (2)  Broadband Access Services

- Current Penetration of BB Access Services in Russia: 2.6Mil sub. (2006/end)

Pressing Need: Increasing BB Access Services

Japan is No. 1 BB Access country in the world.

Penetration in Japan:
27 Mil sub. (as of 2006/end)
Current Situation TV Broadcasting Services in Russia

- Only 56% population have access to more than 4 TV programs.
  3.7 Mil has access to only 1 program, 1.5 Mil has not access to TV.
- 80% of existing Analogue equipment over aged
  
  urgent replacement is required!!

- Increase available TV channels
- Introduce new services (High-definition interactive etc.)

In Japan, in July, 2011, Analog TV services will be stopped and replaced to Digital TV services

DTTB Service Implementation Schedule

Service Started by
Dec. 2004
Jun. 2005
Dec. 2005
Oct. 2006
Dec. 2006

Osaka
Tokyo
Nagoya
Priority Project (4)  Optical Network between Russia and Japan

Reliable and economical telecom-infrastructures will bring favorable investment environment in Russia.

- Real-time Interactive Communications
- IPv6 Applications
- Broadband Contents Transmission

Approx 40% shorter, 30% faster data-transmission-speed, More than 1000-folds of capacity
**NEC’s Competencies for contribution of ICT Development in Russia**

**Progressive Convergent & End-to-End Solutions**
- Plentiful Supply Record and Technology Assets in Japan

**Market-proven Reliability**
- Plentiful Supply Record and Cooperation in Russia

1. Fiber Optic Transmission Systems: over 30,000 km
2. Microwave Radio Transmission Systems: over 9,000 km
3. Digital Switching Equipment: over 1.2 mil. lines
4. Satellite Communications, corporate networks etc.

Contribution to ICT Development in Russia
can change.

Can change.

Empowered by Innovation