ITU/BDT Regional Seminar on Broadband Wireless Access (BWA)
for CIS, CEE and Baltic Countries
Moscow (Russian Federation), 26-29 November 2007

CDMA450 status in Russia and experience of promoting BWA on the base of EV-DO technology in SkyLink

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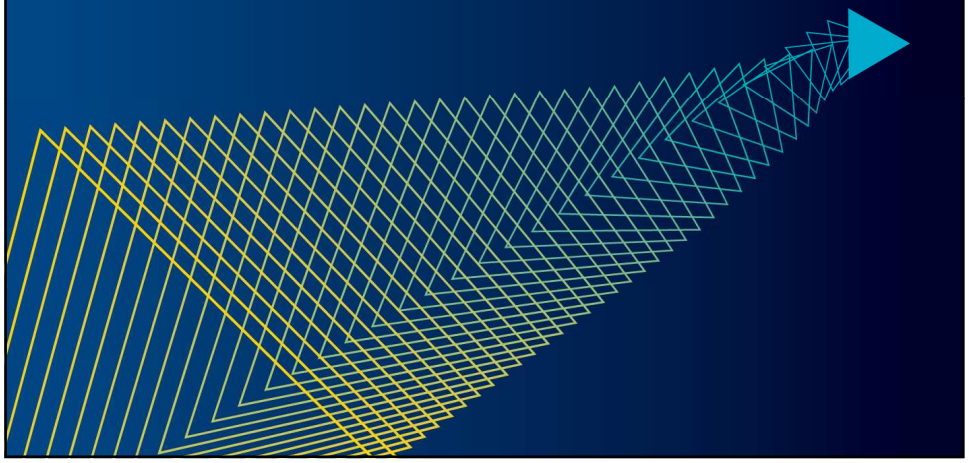
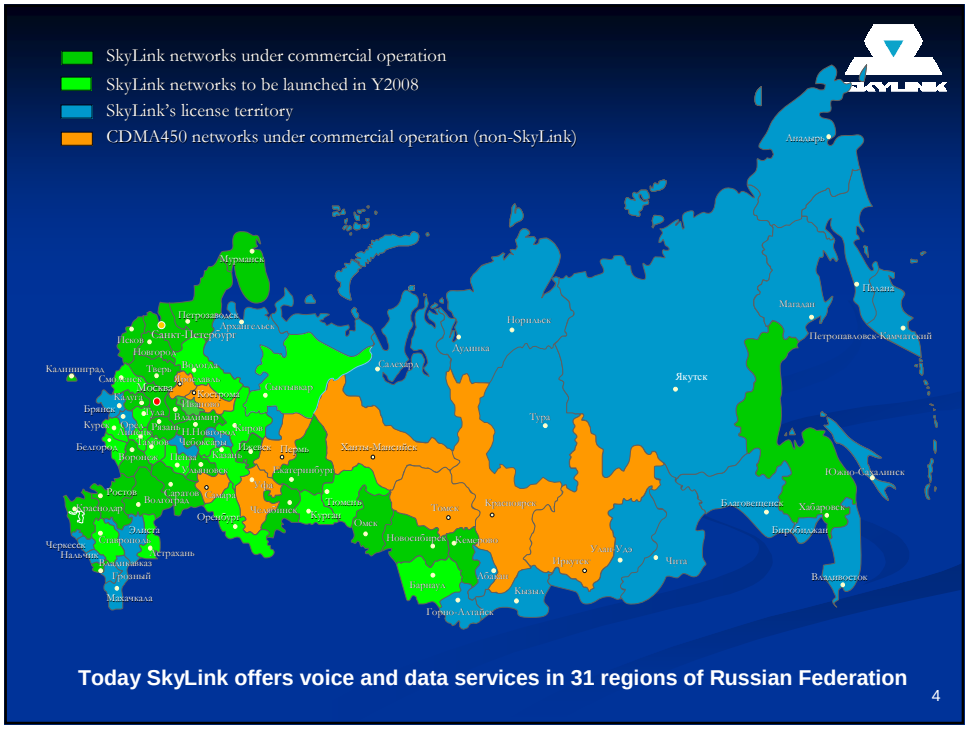
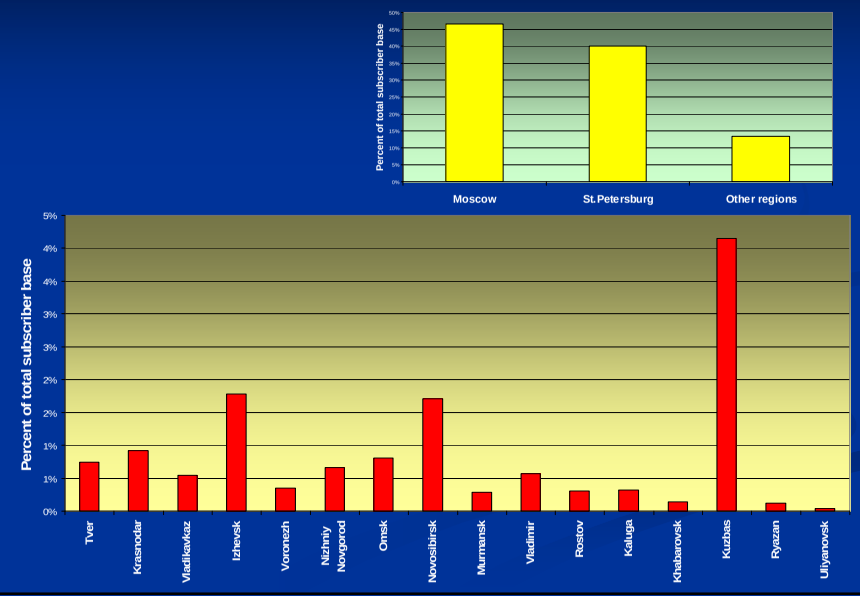
- Current status of SkyLink networks
- EV-DO: results of commercial operation
- Mobile Internet: marketing study results
- Nearest future: Rev.A and dual band network in 450/2100 MHz
- Conclusions

- Current status of SkyLink networks





Subscriber base distribution



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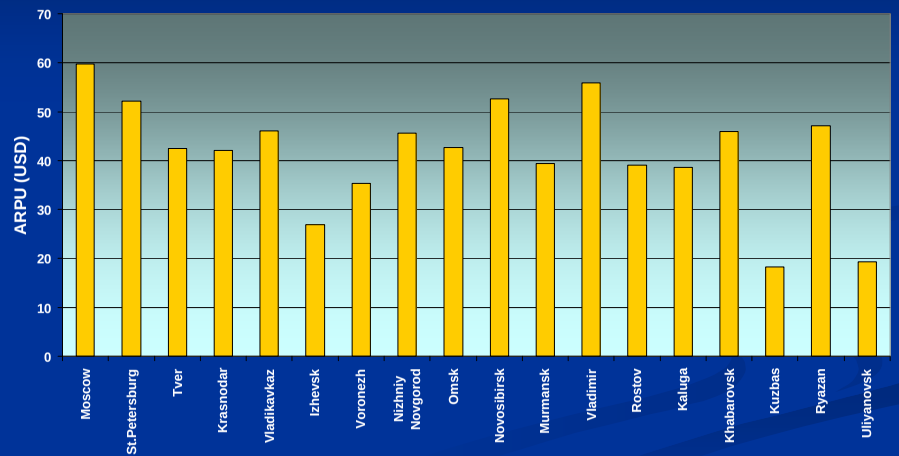
ARPU distribution



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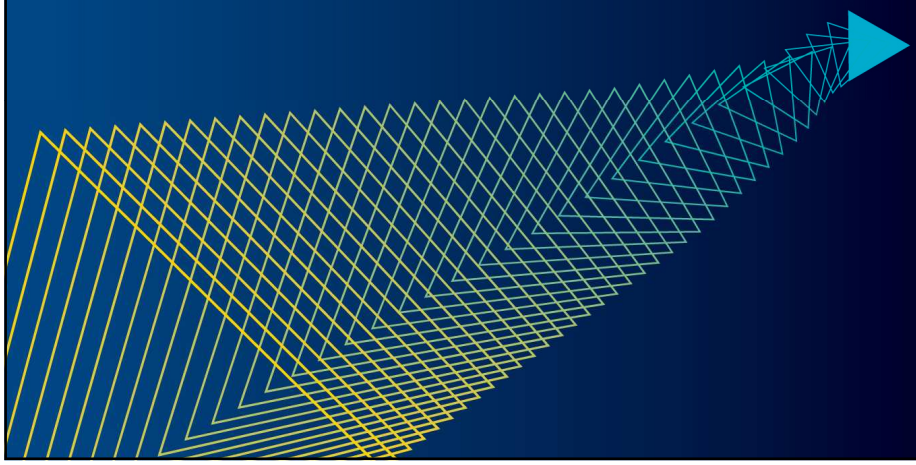
- EV-DO: results of commercial operation



SkyLink technology roadmap

CDMA2000 1x EV-DO Revision 0 (Rev.0) – up to 2,4 Mbps in FL, up to 307,2 Kbps in RL.
CDMA2000 1x EV-DO Revision A (Rev.A) – up to 3,1 Mbps in FL, up to 1,8 Mbps in RL. Support of QoS.
CDMA2000 1x EV-DO Revision B (Rev.B) – up to 4,9 Mbps at single 1.25 MHz band. Composing 1.25 MHz frequency bands up to 20 MHz, up to 78 Mbps in FL.

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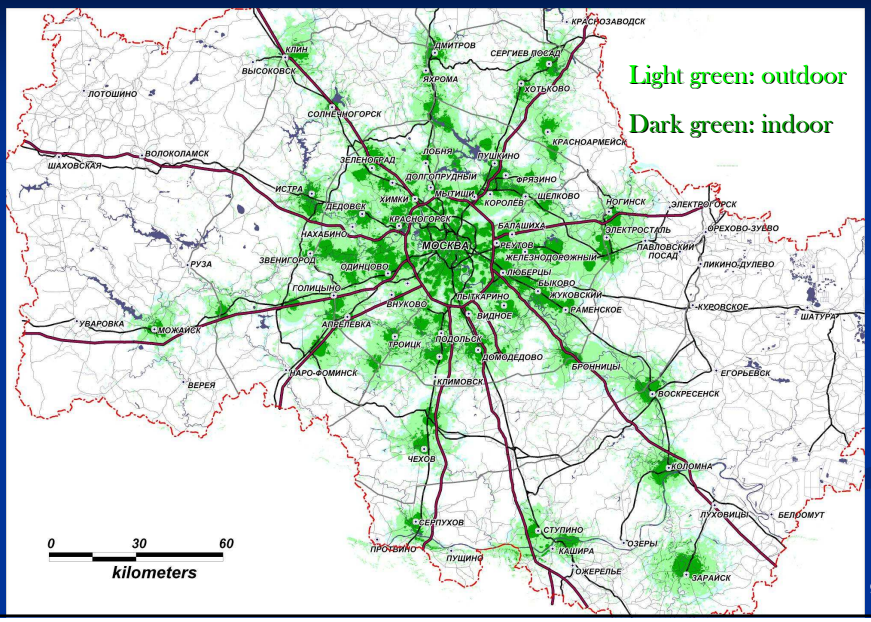
EV-DO coverage of Moscow and Moscow region



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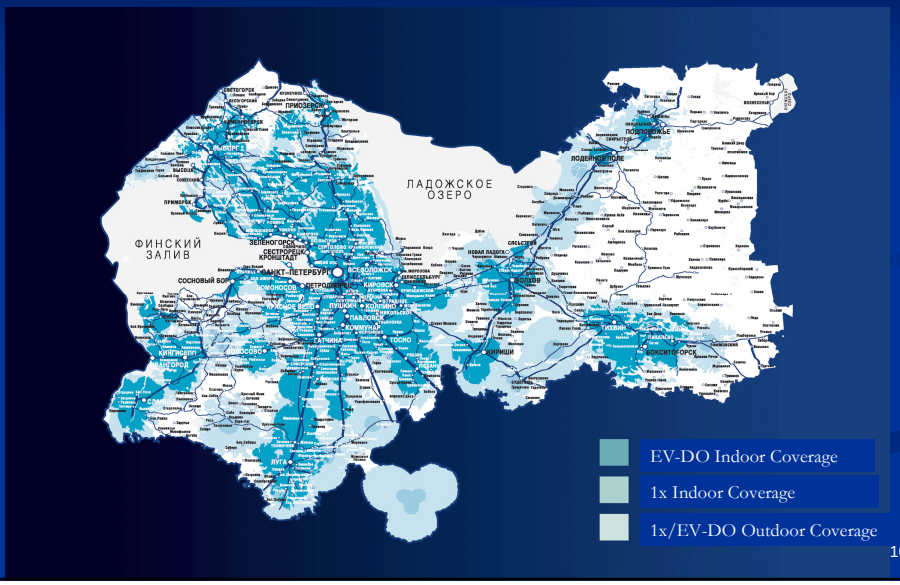
EV-DO coverage of St.Petersburg and Leningrad region



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CDMA450 terminals for SkyLink networks

Beginning of offering EV-DO services with only one handset available (Ubiquam U300)

CDMA450 modems supporting EV-DO have become available only since Q2 2006

2002 | 2003 | 2004 | 2005 | 2006 | 2007

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Handsets supporting EV-DO

Ubiquam U-300

Ubiquam U-520

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Modems supporting EV-DO

Ubiquam

Um-300

ADU-300A

ADU-310A

AnyData

ADU-E100A

CMOTech

CNU-550

CNU-550PRO

Examples of EV-DO rate plans (1)

Turbo

Monthly fee,	0
Data traffic included, MB	0
Price per 1 MB	RUB 2.90 ~ USD 0.12
Price per min for local PSTN calls	RUB 2.00 ~ USD 0.08
Price per min for local SkyLink calls	RUB 0.50 ~ USD 0.02

St.Petersburg and Leningrad region, w/o VAT

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Examples of EV-DO rate plans (2)

Turbo 500

Monthly fee,	RUB 950 ~ USD 39
Data traffic included	500 MB
Price per 1 MB beyond the limit	RUB 2.90 ~ USD 0.12
Price per min for local PSTN calls	RUB 1.75 ~ USD 0.08
Price per min for local SkyLink calls	RUB 0.50 ~ USD 0.02

St.Petersburg and Moscow, w/o VAT

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Examples of EV-DO rate plans (3)

Turbo 1000

Monthly fee,	RUB 1500 ~ USD 62
Data traffic included	1000 MB
Price per 1 MB beyond the limit	RUB 2.90 ~ USD 0.12
Price per min for local PSTN calls	RUB 1.75 ~ USD 0.08
Price per min for local SkyLink calls	RUB 0.50 ~ USD 0.02

St.Petersburg and Moscow, w/o VAT

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Examples of EV-DO rate plans (4)

Turbo Light

Monthly fee,	0
Data traffic included	0
Price per 1 MB	RUB 4.00 ~ USD 0.16
Price per min for local PSTN calls	RUB 4.00 ~ USD 0.16

Moscow and Moscow region, w/o VAT

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Examples of EV-DO rate plans (6)

Turbo unlimited night

Monthly fee,	RUB 1500 ~ USD 62
Data traffic from 0 a.m. to 8 a.m.	unlimited
Data traffic from 8 a.m. to 12 p.m.	RUB 4.00 ~ USD 0.16
Price per min for local PSTN calls	RUB 4.00 ~ USD 0.16

Moscow and Moscow region, w/o VAT

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Examples of EV-DO rate plans (5)

Turbo unlimited

Monthly fee,	RUB 2800 ~ USD 115
Data traffic included	unlimited
Price per min for local PSTN calls	RUB 4.11 ~ USD 0.17

Moscow and Moscow region, w/o VAT

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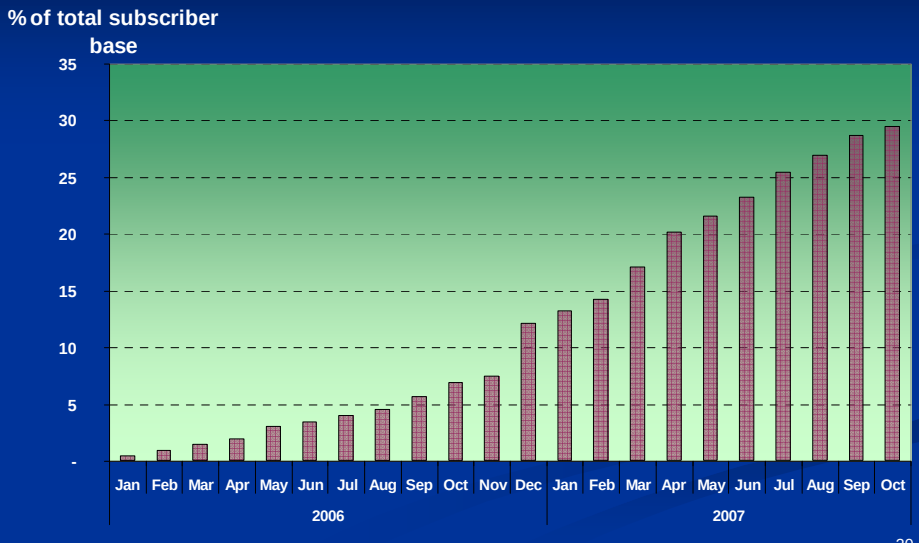
Subscribers (actually using EV-DO services)



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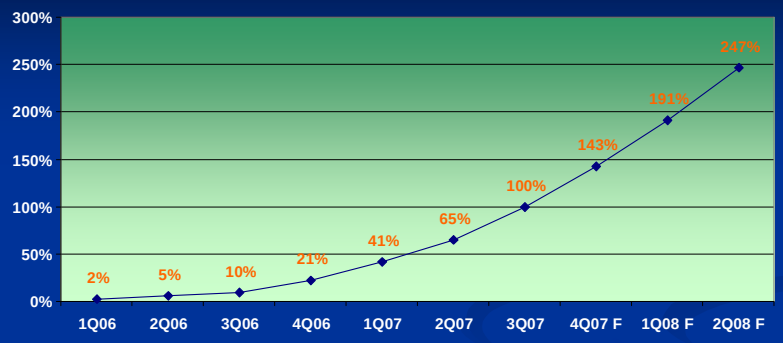
Total EV-DO traffic growth



Impressive rate of growth though prices of EV-DO terminals are quite high

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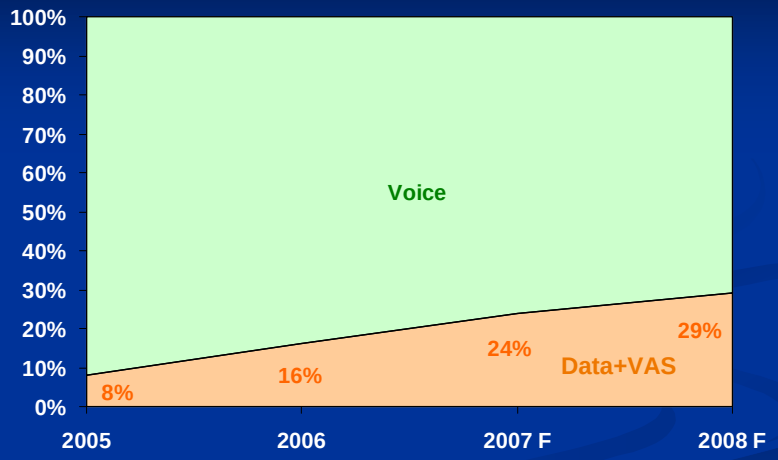
SkyLink services income structure



Data services (especially EV-DO) implementation has noticeably influenced SkyLink income structure

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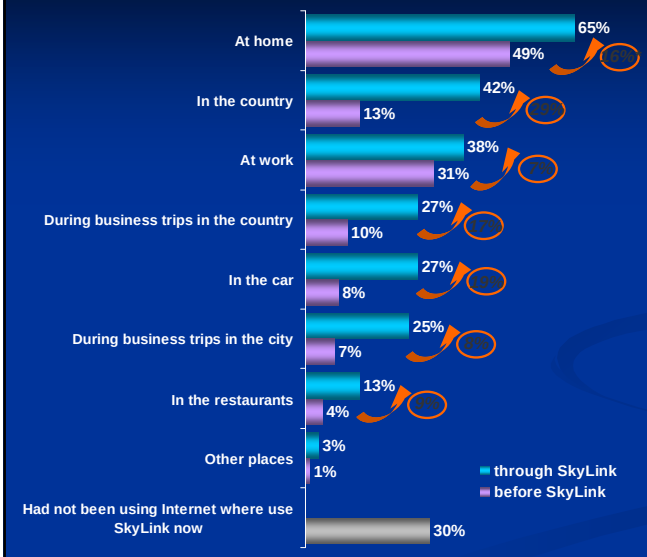
- Mobile Internet: marketing study results

Using mobile Internet (1)



70% of users had been using another Internet access at the same places before buying BWA from SkyLink

3G is an alternative for fixed Internet access?

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SkyLink Internet user portrait

- **SkyLink mobile Internet user portrait:**
  - **Man (84%)**
  - **25-44 years**
  - **Top manager, businessman**
- **36% of total number of respondents are SkyLink mono-users (not having another Internet access or switching to SkyLink):**
  - **Women (24%) – more often than in general selection**
  - **25 years or less (28%) – more often**
  - **Students, technical and servicing staff (28%)**
  - **Top managers – rarely**

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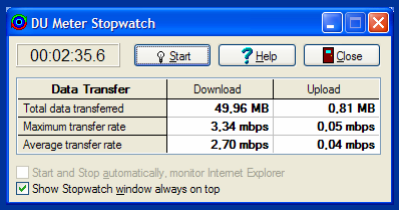
- Nearest future: Rev.A and dual band network in 450/2100 MHz

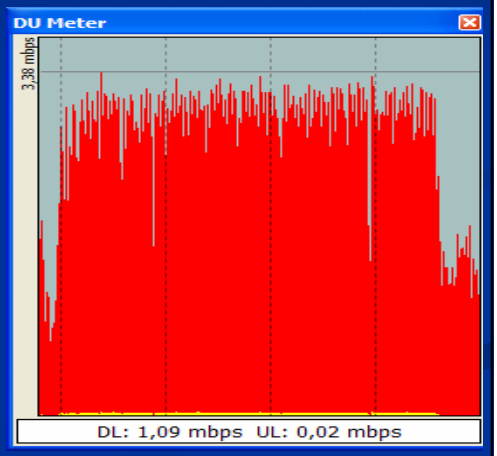
Rev A first test results (downlink)

HW/SW upgrade for transition to Rev A:

BTS HW: EV-DO Modem (Rev. A ready)

SW: RNC and BTS SW upgrade





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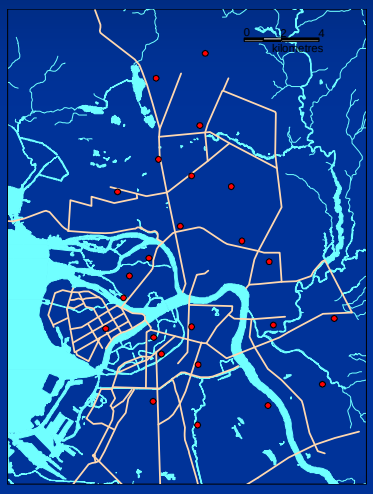
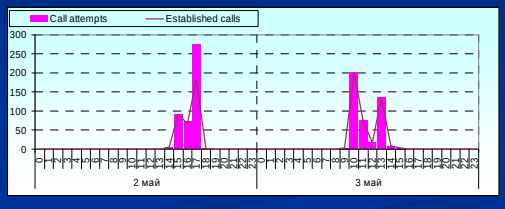
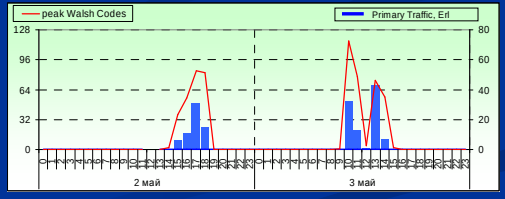
450/2100 Test Zone (1)







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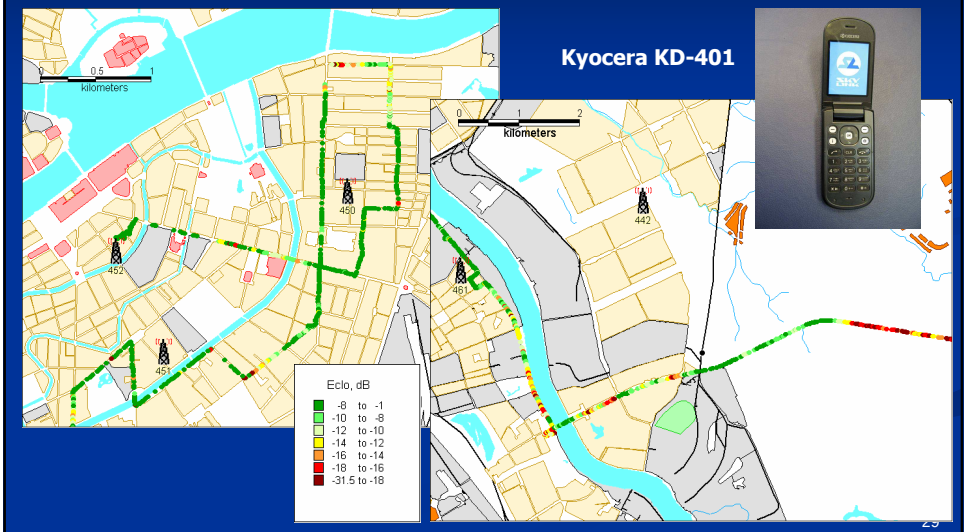
450/2100 Test Zone (2)



Conclusions

- SkyLink is growing in terms of territory and total subscriber base
- EV-DO service is quite successful in terms of increasing subscriber base and data traffic
- SkyLink has launched the first CDMA450/GSM handset and is actively testing new types of CDMA450 terminals (including Rev. A modems)
- SkyLink is testing EV-DO Rev. A and going to put it into commercial operation in the beginning of 2008
- 450/2100 MHz trial networks have been rolled-out in Moscow and St.Petersburg (50 BTS). SkyLink is going to be an applicant for IMT-MC 2100 MHz license in Russia

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