

# What Drives and what Hinders Development of Broadband in the Czech Republic

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# Agenda



- **Introduction**
- **Policies, regulation and funding BB projects**
- **Situation in Czech BB market**
- **E-services and e-readiness**

# Introduction (1)

## Geography and population



Area: 78 866 km<sup>2</sup>

Population:

10.2 mil. (31.1.2006)

Population centres:

**Praha (1.2 mil.)**

Brno (0.37 mil.)

Ostrava (0.31 mil.)

Plzen (0.16 mil.)

Olomouc (0.1 mil.)

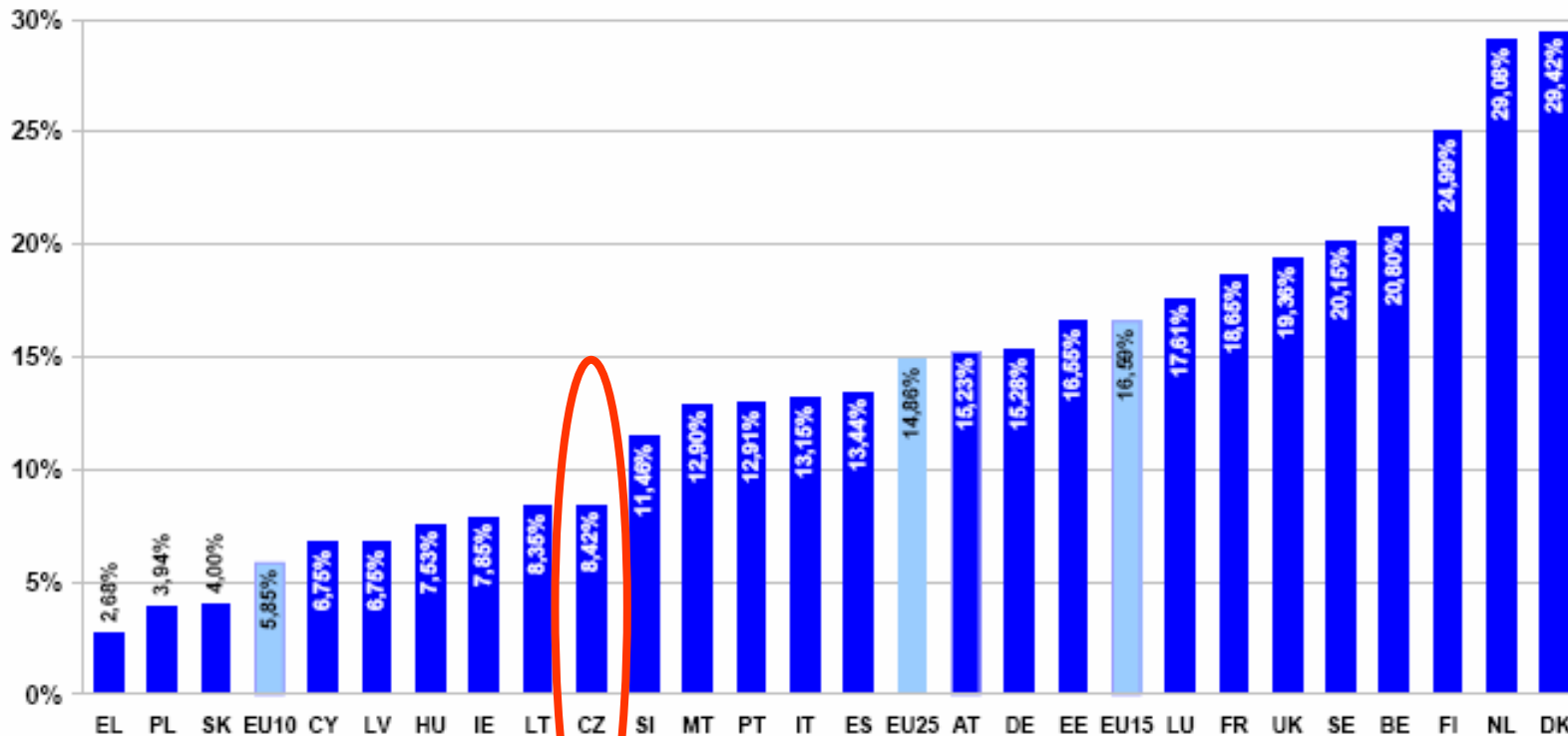


# Introduction (2)

## BB penetration compared with EU countries



EU Broadband penetration rate, 1 July 2006



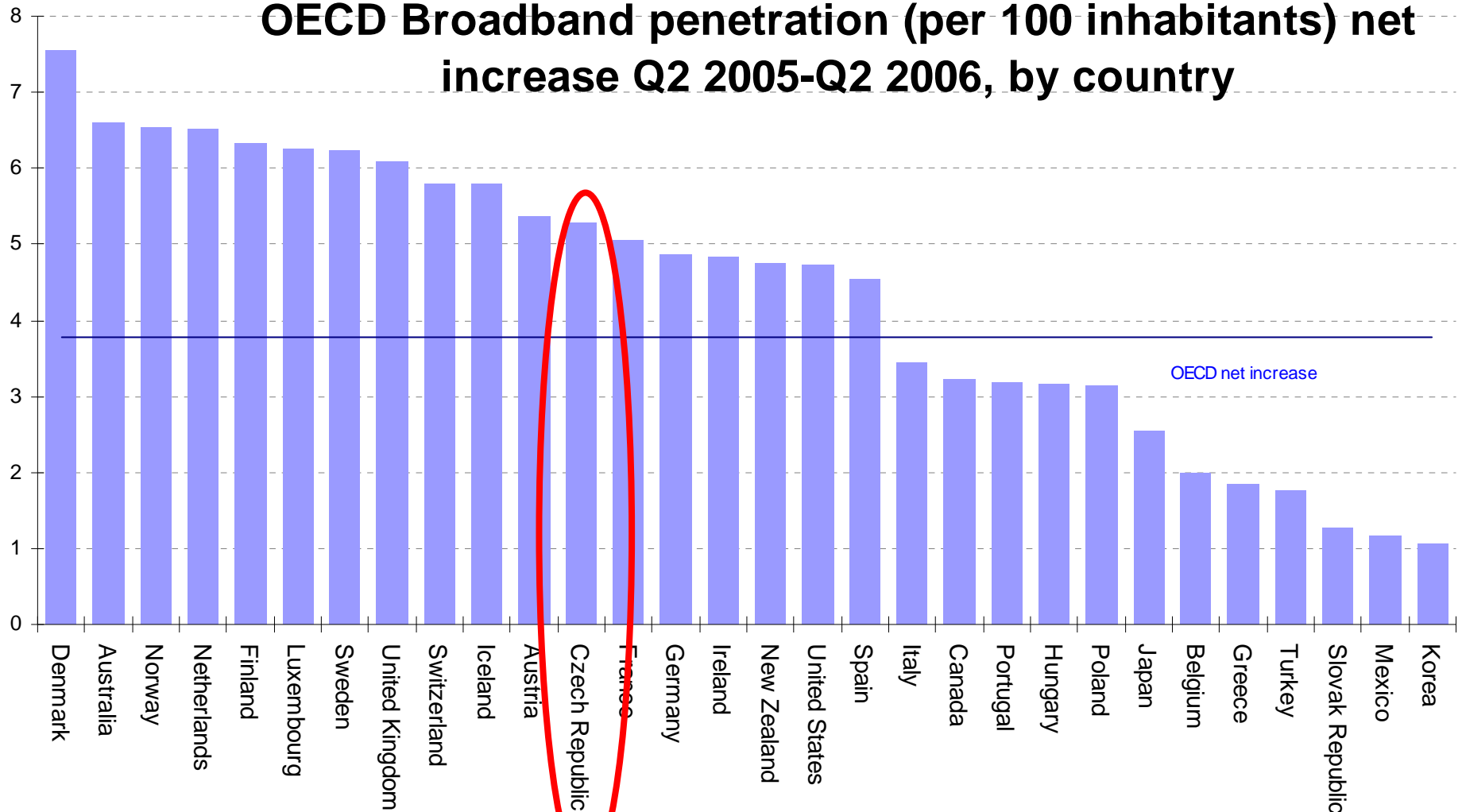
Source: IP/06/1504

# Introduction (3)

## Growth rate (%) compared with OECD countries



OECD Broadband penetration (per 100 inhabitants) net increase Q2 2005-Q2 2006, by country



Source: OECD Broadband Statistics to June 2006

# Government involvement in developing BB

- Ministry of Informatics (is to be dissolved by 31.12.2006)
- Czech Telecommunication Office
- Antimonopoly Office
- Radio and Television Council



**BB strategy approved on 26.1. 2005**

## Main goal:

- All public institutions connected to BB Internet by the end of 2006, **50% of the population by 2010**

## Main instruments:

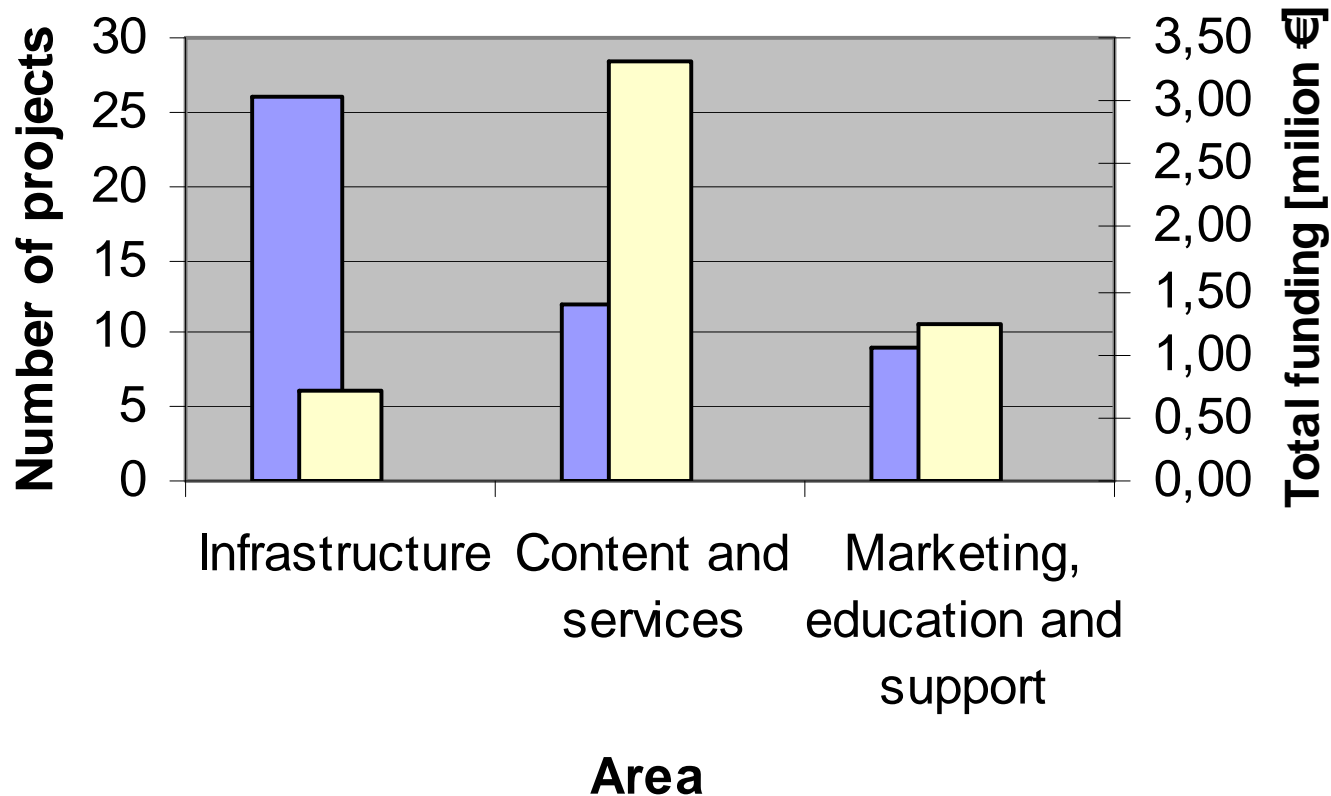
- BB fund provided by the government to finance BB-related projects (no tax deductions)
- BB Forum = an advisory body to the Ministry of informatics to define strategy, evaluate projects submitted for funding, editorially manage the National Broadband server
- National BB server running since 31.5.2005

# Funding BB projects



- **Structural funds** and other EU instruments – administered by Regional authorities
- **(Czech) Broadband Fund**
  - Almost **30 mil. EUR** assigned **over 4 years**
  - **In 2006**, over **5 mil. EUR** awarded to **47 projects**, 2 mil. EUR put aside for preparing transition to digital TV
  - To support the development of content, e-services, education and building infrastructure in deprived areas

# Projects supported by the national BB fund



■ Number of projects    ■ Total funding proposed [€]

# Situation in Czech BB market (1)

## Main providers of BB Internet connection



- **Telefónica O<sub>2</sub> Czech Republic** (established on July 1, 2006 by fusion of the Czech Telecom - the incumbent and Eurotel - the largest Czech mobile operator)
- **GTS Novera** (the largest Czech alternative operator of fixed landline network)
- **Radiokomunikace** (alternative, operates wireless and wireline networks)
- **UPC Czech Republic** (the largest CATV network operator in CR)
- **Karneval Media** (the second largest CATV network operator in CR)
- **T-mobile Czech Republic** (the second largest mobile network operator in CR)
- **Vodafone Czech Republic** (the third largest mobile network operator in CR). Only GPRS and EDGE over GSM offered.
- Many **WiFi net providers** (including community initiatives)

# Situation in Czech BB market (2)

**BB connections** – latest data (**11/2006, unofficial**)

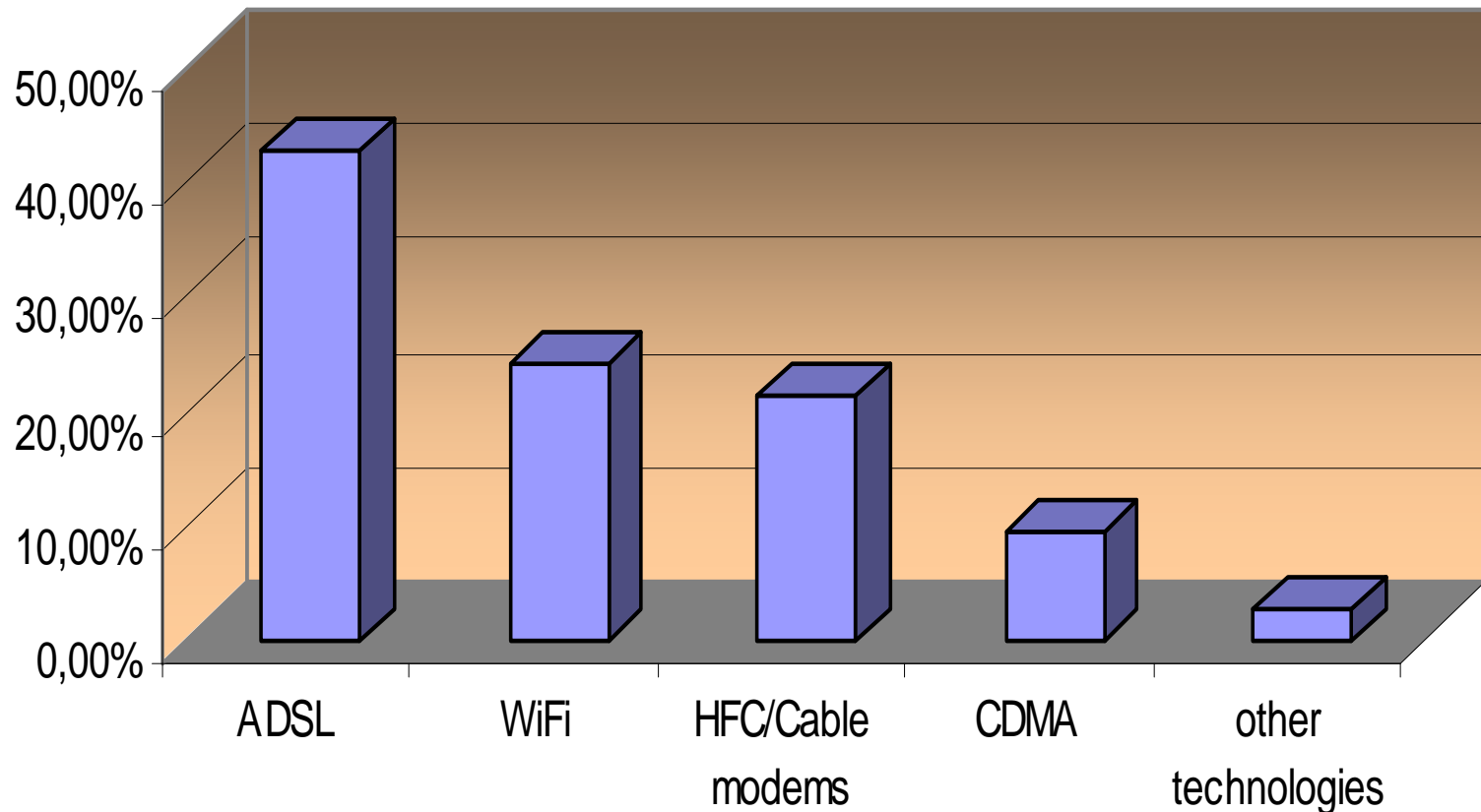


	12/2005	most recent
Incumbent's ADSL (including "wholesale")	225 701 + 48 465 (self/supply + wholesale, incumbent)	427 000 (30.9.2006)
Other ADSL	7 151 (Source: ARM 12)	45 000
cable Internet	132 944 (Source: ARM 12)	210 000
Wi-Fi	200 000 (Source: ARM 12)	<b>300 000</b>
CDMA	70 342 (Eurotel)	90 000 (TO2 CR, 23.10.2006)
FTTx	17 049 (Source: ARM 12)	30 000 (Estimated, FTTB)
FWA	8 875 (Source: ARM 12)	8 000

Approx. **1.1 mil.**, **11%** penetration

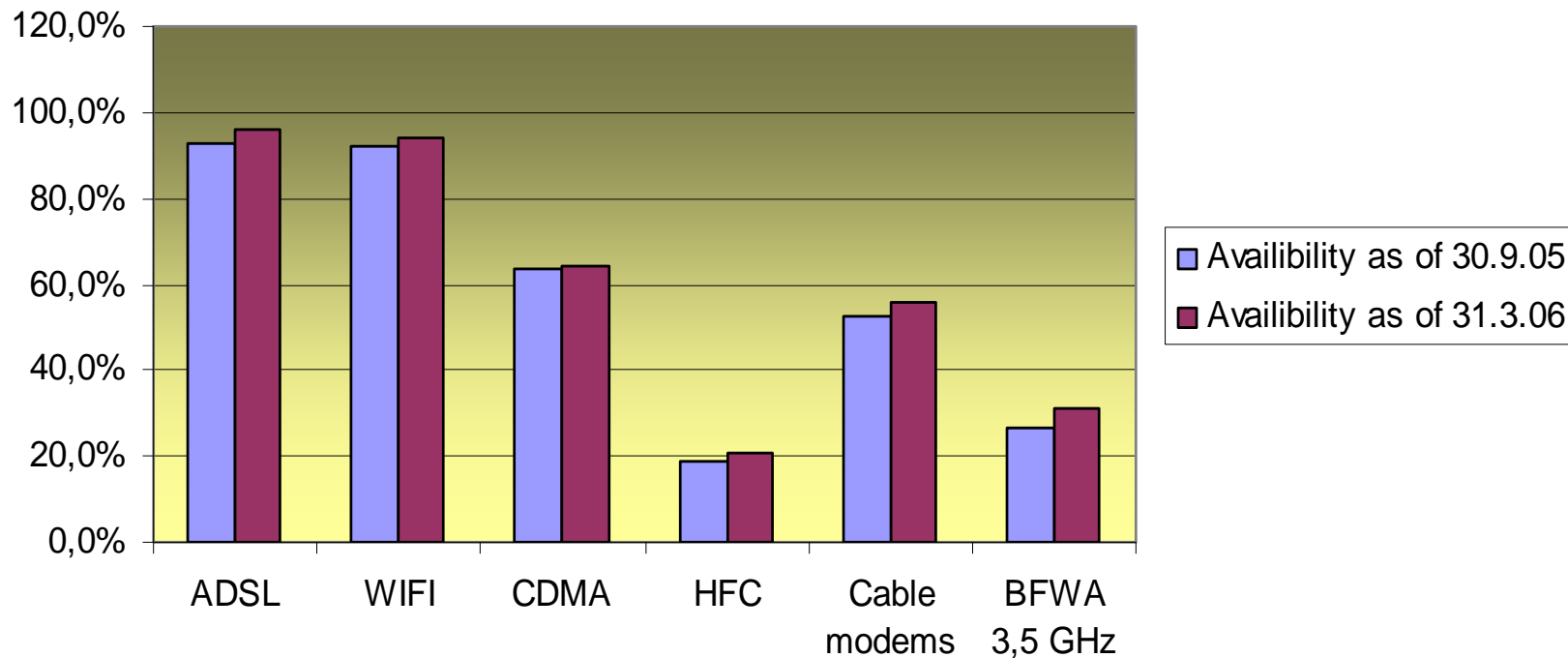
# Situation in the BB market (3)

Share of individual **technologies** in the broadband access market in the Czech Republic



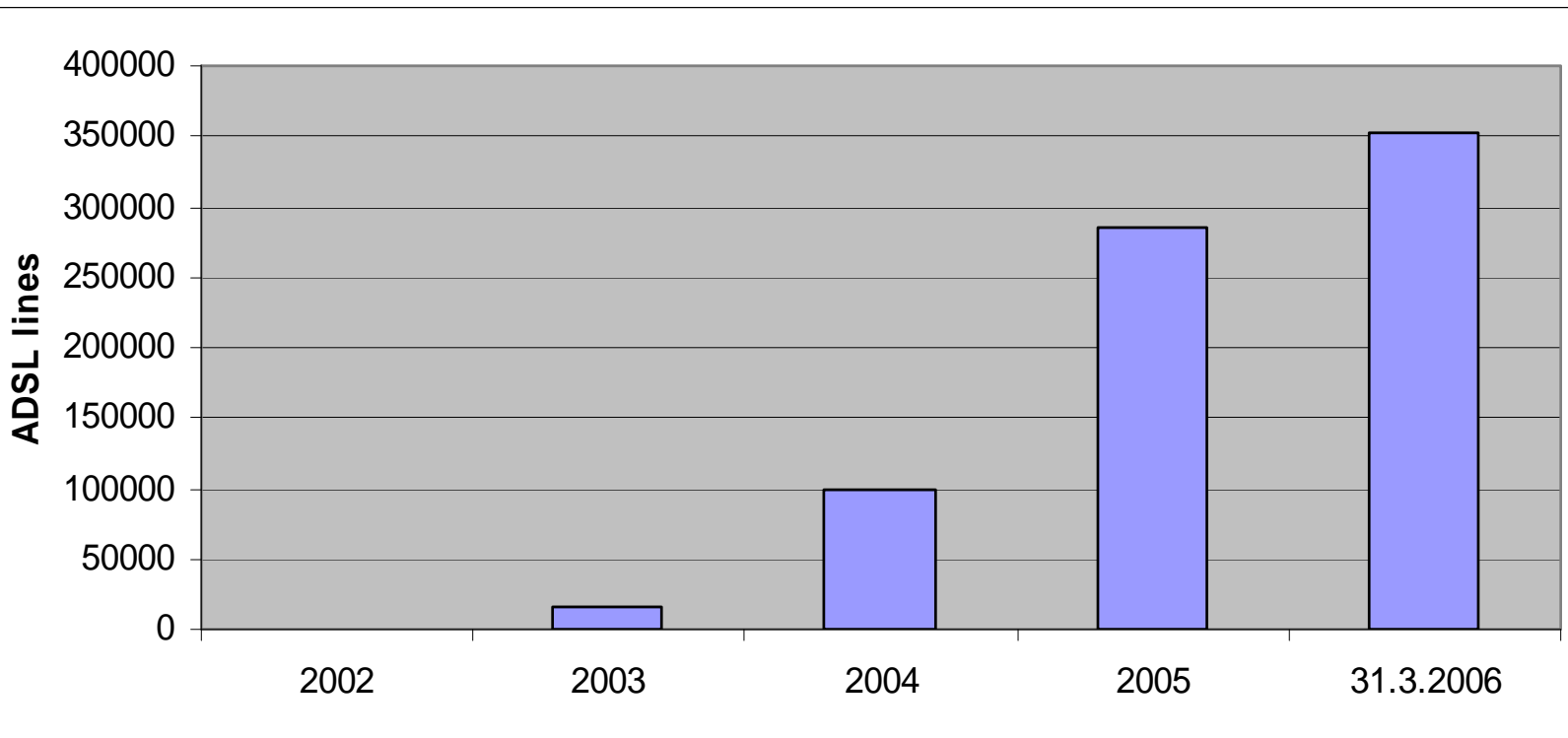
# Situation in the BB market (4)

## Availability of Broadband Access by Using Various Technologies in Czech Municipalities



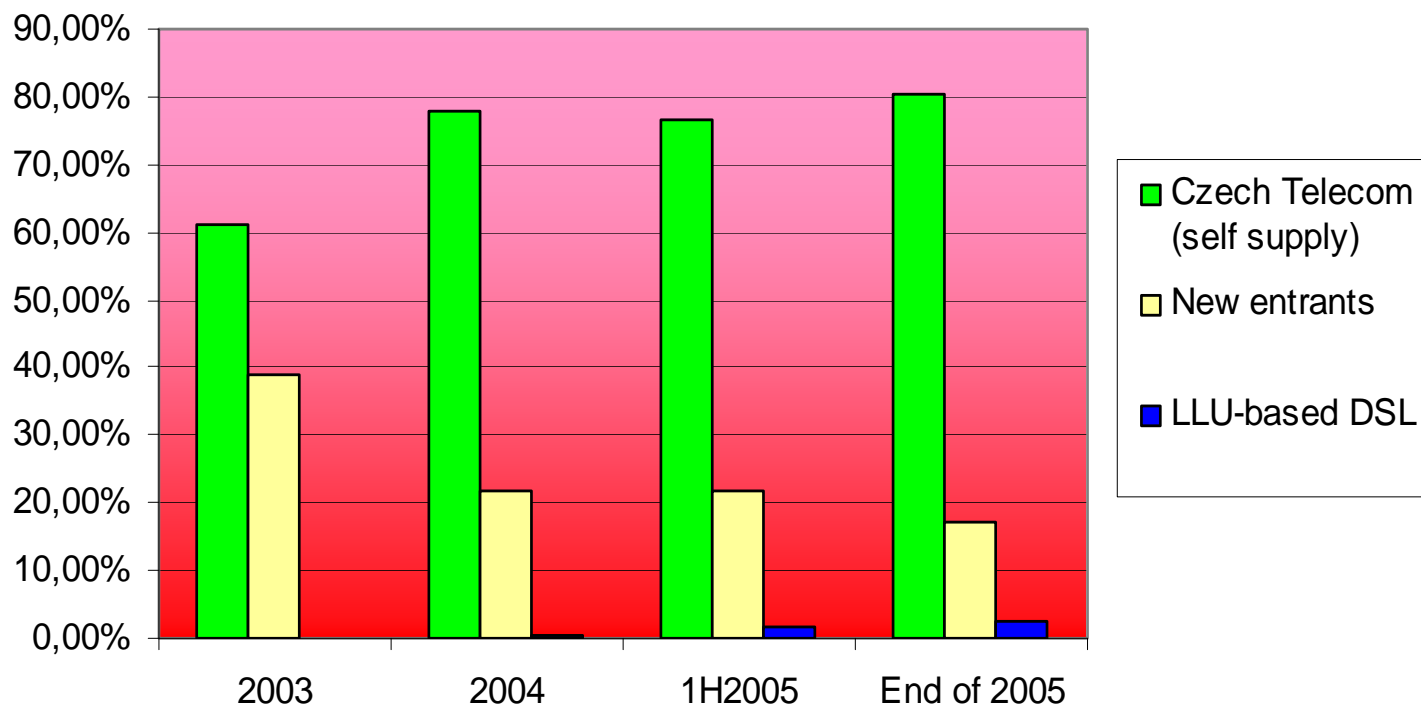
# Situation in the BB market (5)

**Growth** of no. of **ADSL** lines over the last 4 years



# Situation in the BB market (6)

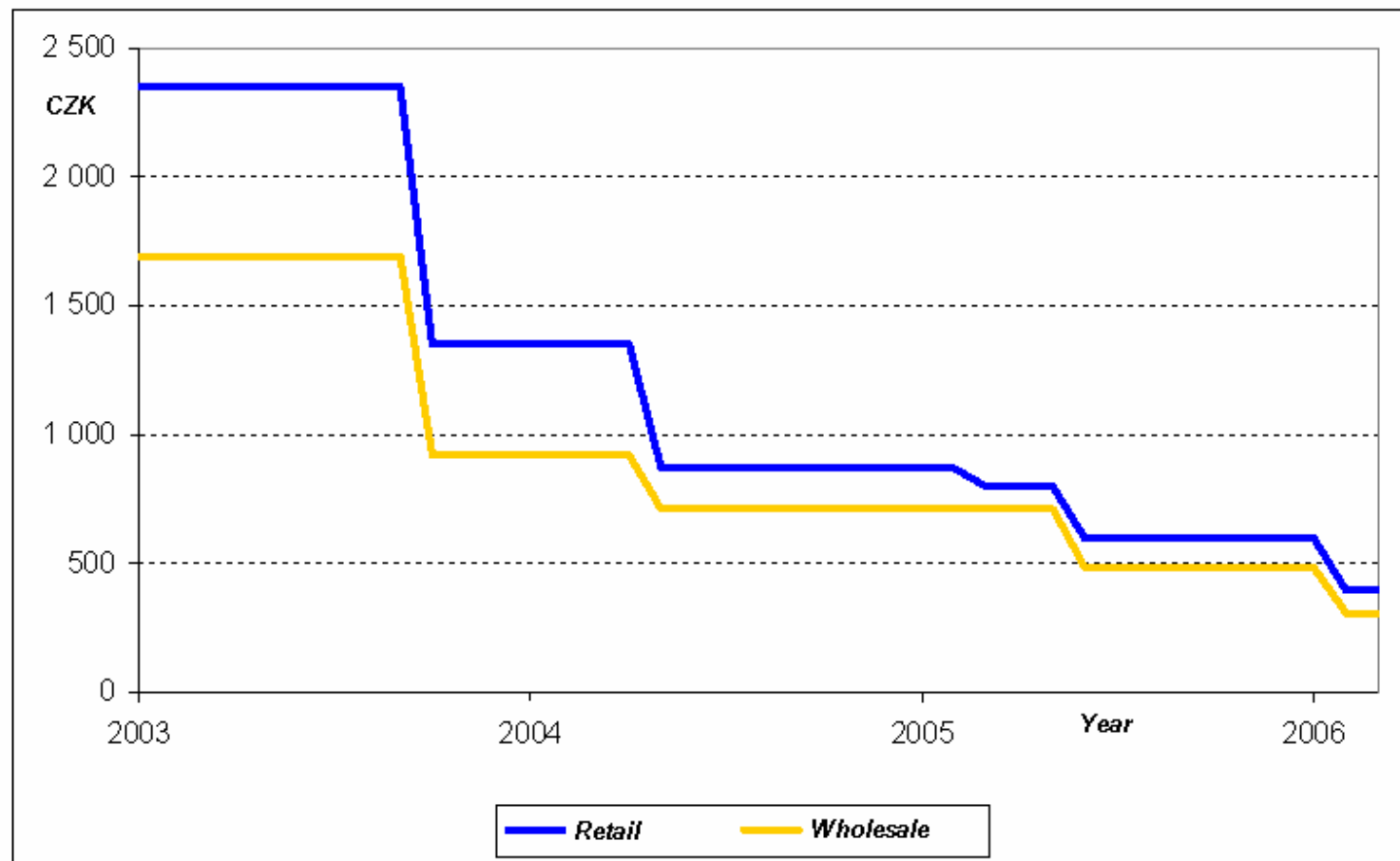
Evolution of **ADSL market share** in the Czech Republic.  
(Source: Czech Telecommunication Office)



# Situation in the BB market (7)



Development of monthly **retail and wholesale rates** charged by **Czech Telecom** over the last three years for 512/128 kb/s **ADSL** lines with 1:50 aggregation. (1 € = cca 28 CZK).  
Source: CTO.



# E-services and readiness of the Czech population to use the services (1)

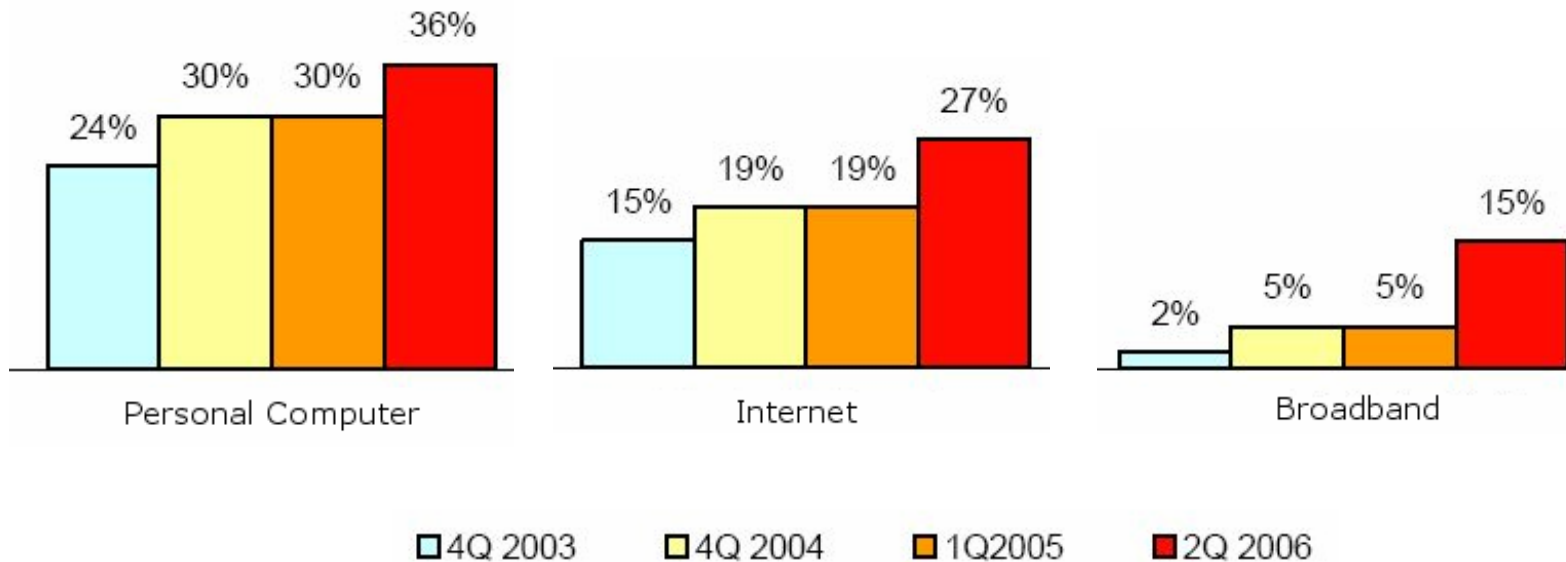


- **e-Government:**
  - Governmental portal
  - Tax declaration
  - Social security applications
- **e-Learning**
  - All secondary and primary schools connected
  - Distance education – role of CESNET (Academic net)
- **e-Health**
  - IZIP: Almost 1 mil. patients and over 8 000 healthcare workers registered
- **e-Banking, e-Business**
  - All banks, thousands of e-shops ...
  - E-transactions: recognizing e-signature still a problem

# E-services and e-readiness (2)

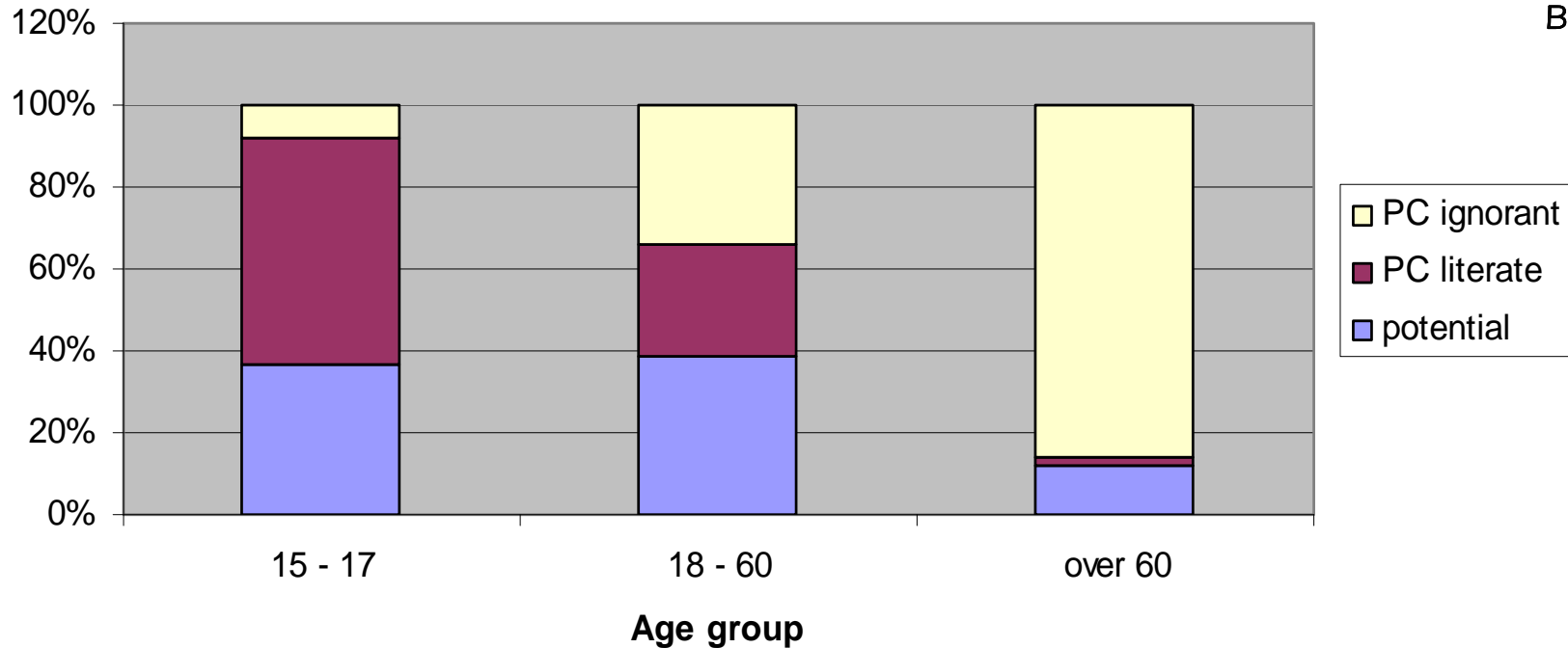
PCs, narrowband and broadband Internet in Czech households

(survey, Czech Statistical Office)



# E-services and e- readiness (3)

**Computer literacy** (Source: STEM/MARK, 2006)



# Conclusions: What hinders development of broadband in CR



1. **Commitment of central government** to develop BB in the CR is rather weak and inconsistent
2. The **Law on electronic communications** is not yet quite mature
3. The regulator still has to solve the problem of the **incumbent's strong position on the market**. The alternative operators is just resale of the incumbent's ADSL services
4. **Scope of e-services** that enable online com-n of citizens with state institutions is not yet sufficient
5. The potential of private public partnerships is not sufficiently used
6. **Awareness** of benefits of using ICT has to be increased among the population as well as decision makers.

# Thank you for your attention



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