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Data collection on broadband mobile services in Portugal

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6th WORLD TELECOMMUNICATION/ICT INDICATORS MEETING
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1. UMTS services in Portugal: An overview

1. UMTS services in Portugal (II)

Date	Milestone
04/2004	Full commercial launch. Contracted download speeds – up to 384 Kbps.
03/2006	HSDPA upgrade (High Speed Data Packet Access): 1.8 Mbps download speeds.
09/2006	Network upgrade: 3.6 Mbps download speeds ... with USB connection
11/2006	Network upgrade: 7.2 Mbps download speeds.
11/2007	Announced: 1,4 Mbps upload speed offers
2007	Coverage: 80% of the population.

2. The need to collect broadband data in Portugal

2. The need to collect mobile broadband data in Portugal (I)

- Mobile broadband marketed and advertised as an alternative to fixed broadband connection for desktop PCs (via USB port).



2. The need to collect mobile broadband data in Portugal (II)



- **Similarities between mobile and fixed broadband offers**

	Fixed broadband	Mobile broadband
Typical tariff models	Connection price, monthly rental, bit cap, price for extra data	Connection price, monthly rental, bit cap, price for extra data
Level of prices	€ 20 – 30 (Residential, 4/8 Mbps, excl. VAT)	€ 19 - 25 (Resid., bit caps 1-6 MB, excl. VAT)
Download Speeds	Up to 24 Mbps Most popular: 4/8 Mbps	Up to 7.2 Mbps
Connection	USB, etc...	PCMCIA and USB

In spite of the fact that there are obvious differences: broadband (mobility, speed...)

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2. The need to collect mobile broadband data in Portugal (IV)



- **Program e.escola**

- The penetration of broadband in PC-owning households in Portugal is similar to the EU average. But, the % of households which own a computer is lower than average.
- The government promoted the creation of a fund to develop the information society in Portugal. The fund is financed by the mobile operators under the commitments assumed in their 3G licenses.
- Program *e.escola* (<http://www.eescola.net/>)

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2. The need to collect mobile broadband data in Portugal (III)



- Government Program e.escola (<http://www.eescola.net/>)



- The aim is to make available to 500.000 citizens (students, teachers and trainees) a laptop and a mobile broadband connection at subsidized prices.

- Laptop for €150 (or free for low income students).
- Mobile broadband Internet for €5 -15 / month (depending on income).



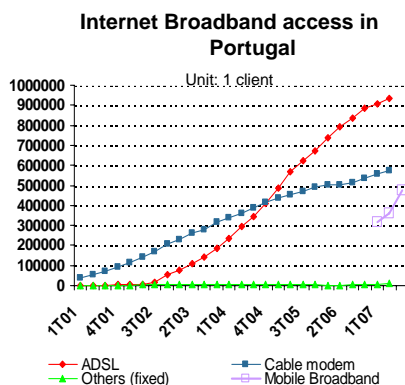
- 100.000 people have already enrolled in the program.
- (The e.escola program received the "Best European Project Award" from Toshiba.)

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2. The need to collect mobile broadband data in Portugal (III)



- Broadband growth in Portugal



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- Market research: Considerable number of active mobile broadband subscribers.
- Apparently, the rate of growth of fixed broadband as slowed-down just as mobile broadband took off.

2. The need to collect mobile broadband data in Portugal (V)



- **Conclusion:**

- Operators behavior
- Public policy
- Apparent consumer behavior

⇒ Mobile broadband already is and will continue to be a major form of access to the Internet in Portugal.

- In order to get an accurate picture of the development of broadband in Portugal we have to take into account mobile broadband.

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3. ANACOM's mobile Internet broadband indicators



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3. ANACOM's mobile broadband indicators (I)



- **Timeline**

Date	Milestone
09/2005	First data collection attempt: data plans per download speed and device based on operators sales reports
07/2006	Operators objections, doubts & suggestions led to new indicators based on UMTS standards
08-09/2006	Legally mandated public consultation
10/2006	Adoption of the new indicators
4th quarter 2006	Implementation period
April 2007	Operators reported figures for 1st quarter 2007

But it's still work in progress ...

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3. ANACOM's mobile broadband indicators (II)



- First set of indicators based on sales data were criticised by operators:
 - not feasible: users may buy their PCMCIA cards from a vendor who is not their mobile operator; There are tariff plans that don't charge monthly subscriptions for Internet access. (ex: € 0,99/day or post-paid pay-as-you-go by volume of traffic).
 - comparability issues (not sure what offers other operators were considering);
- ⇒ ANACOM cannot use sales data to account for mobile broadband 3G users. Instead we need to rely on UMTS standards in order to make sure the indicators are feasible and comparable.

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3. ANACOM's mobile broadband indicators (III)



- **Issue 1:** What is a mobile broadband user ?
 - ⇒ ANACOM defined a broadband user as someone who had a SIM/USIM (Subscriber Identity Module/Universal Subscriber Identity Module) card and who had the service in question provisioned.
- **Issue 2:** What is Internet Access ? (Mobile web portals)
 - ⇒ ANACOM defined Internet access as one PDP (Packet Data Protocol) session to access the Internet (APN Internet - Internet Access Point Name). We have thus excluded access to operators (WAP) web portals.

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3. ANACOM's mobile broadband indicators (V)



- **Definitions.**
 1. **No. of users with mobile broadband internet access:** Number of SIM/USIM (Subscriber Identity Module/Universal Subscriber Identity Module) cards which have established at least one PDP (Packet Data Protocol) session to access the Internet (APN Internet - Internet Access Point Name). Cards deactivated prior to the end of the reported period are excluded. SIM GSM migrations to USIM UMTS, should be considered, where applicable.
 2. **Total of above which were active in the period being reported:** Number of SIM/USIM (Subscriber Identity Module/Universal Subscriber Identity Module) cards which, during period being reported, have established at least one PDP (Packet Data Protocol) session to access the Internet (APN Internet - Internet Access Point Name). Cards deactivated prior to the end of the reported period are excluded. SIM GSM migrations to USIM UMTS, should be considered, where applicable.

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3. ANACOM's mobile broadband indicators (IV)



- Feasibility and comparability.

⇒ Operators can determine the number of broadband mobile users using this type of indicators because we relied on the UMTS standards:

- Each mobile subscriber has a unique IMSI (International Mobile Subscriber Identity) which is resident in the HLR (Home location Register).
- Every transaction made in or through the UMTS network produces a CDR (Call Detail Record) which includes information on the provisioned services and actual use.

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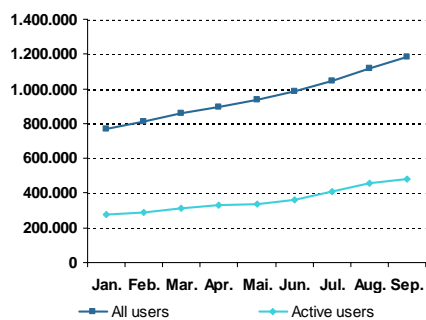
3. ANACOM's mobile broadband indicators (VI)



- Mobile broadband access in Portugal (users)

Mobile broadband access in Portugal

Unit: 1 user



► 1,1 million users in September.

► 478 thousand active users in September.

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FLUIDEZ NAS COMUNICAÇÕES



Thank You



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