

Next Generation Networking

Le tecnologie per l'accesso ultrabroadband

Università degli Studi di Roma Tor Vergata

Villa Mondragone

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Quattro rivoluzioni nelle reti TLC

- I sistemi analogici per la lunga distanza 1955-1970
- Il passaggio dai sistemi analogici ai numerici 1970-1990
- La telefonia personale: i cellulari 1985-1995
- Internet e la larga banda - ADSL 1995-2008

e ora

- L'accesso ultrabroadband 2008-20??

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- Ma cos'è la larga banda?
- Le definizioni non ci aiutano

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*Transmission capacity that is faster
than primary rate Integrated Services
Digital Network (ISDN) at 1.5 or 2.0
Megabits per second (Mbits)*

(Recommendation I.113 ITU-T)

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The Federal Communications Commission (FCC) defines broadband as 200 kbit/s (0.2 Mbit/s) in one direction, and advanced broadband as at least 200 kbit/s in both directions.

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- The Organisation for Economic Co-operation and Development (OECD) defines broadband as 256 kbit/s in at least one direction.

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The OECD definition is probably the most common baseline "broadband speed" around much of the world, but the puritans will likely disagree.

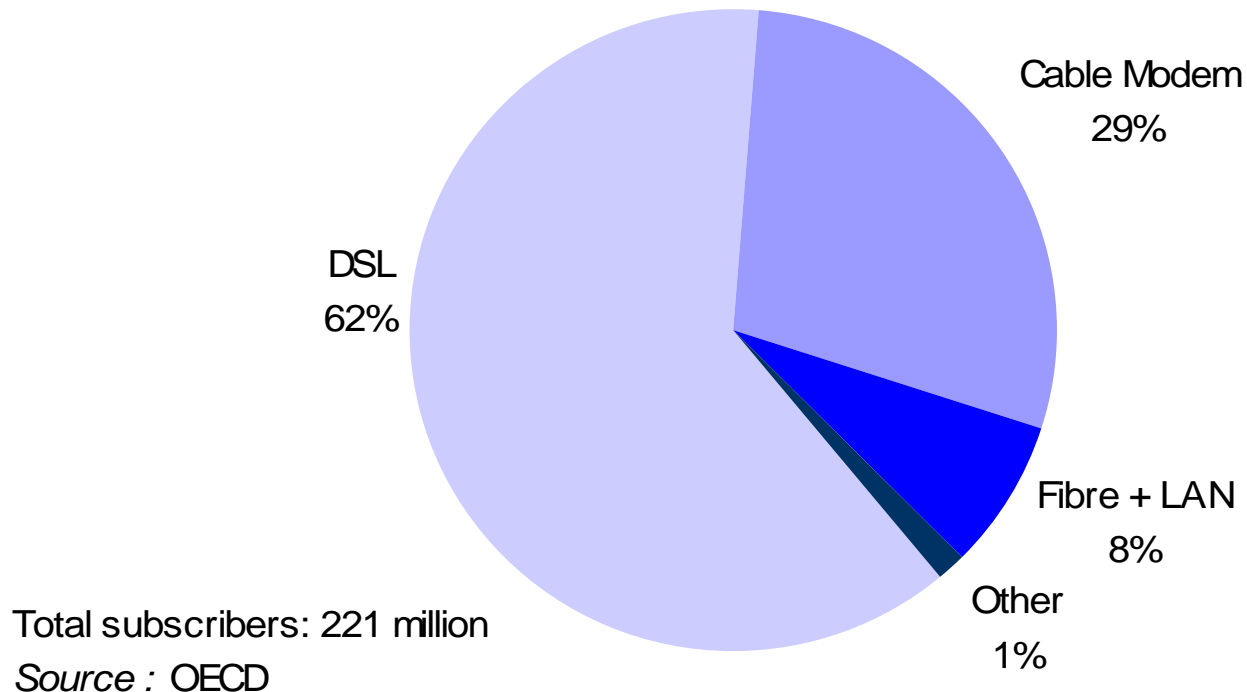
Ripreso da : http://singh-a-blog.blogspot.com/2006_04_01_archive.html

E io sono nelle file dei puritani

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OECD Broadband subscriptions, by technology, June 2007

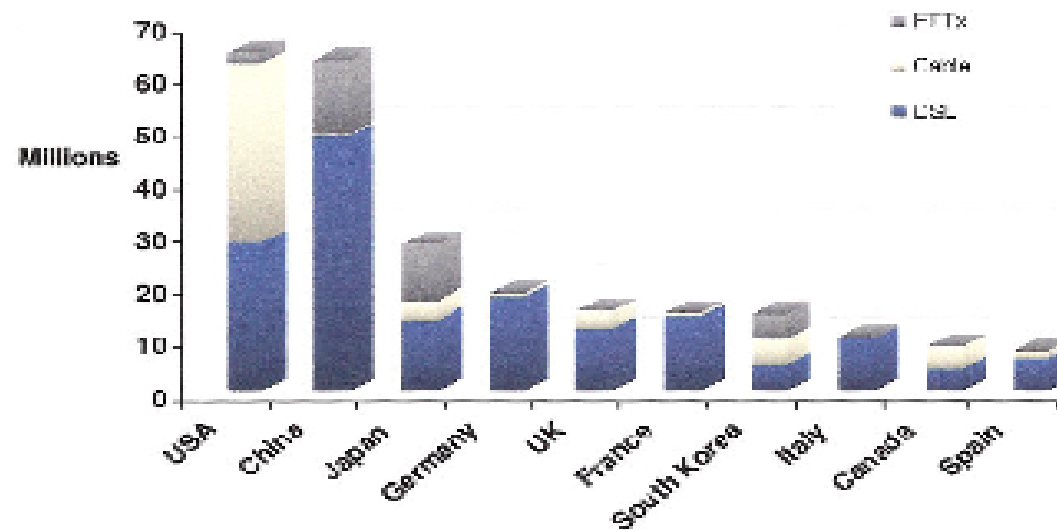


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(source point topic)

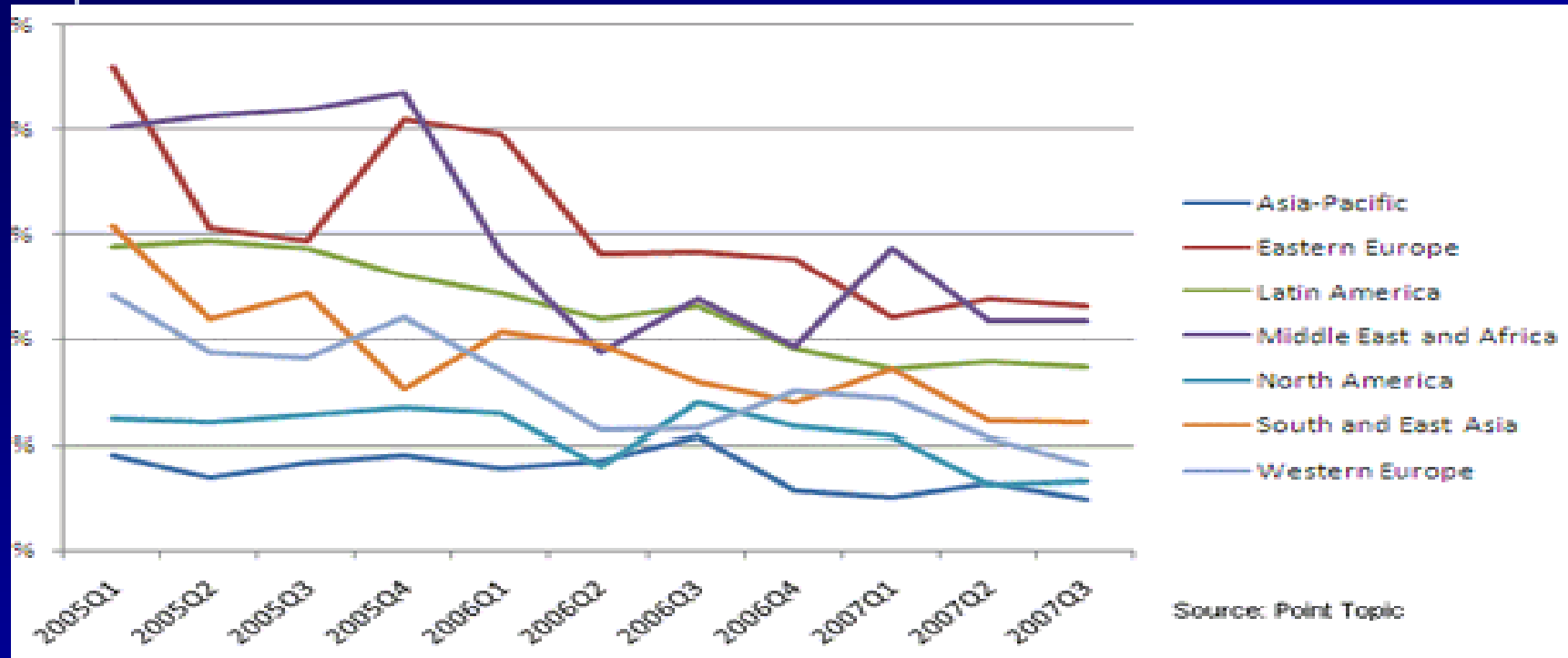
Figure 12: Total Subscriber Numbers by Technology Adopted in Q3 2007



*0.60 per cent of this total consists of various "other" technologies, which have been deemed too small in subscriber base to be included for analysis.

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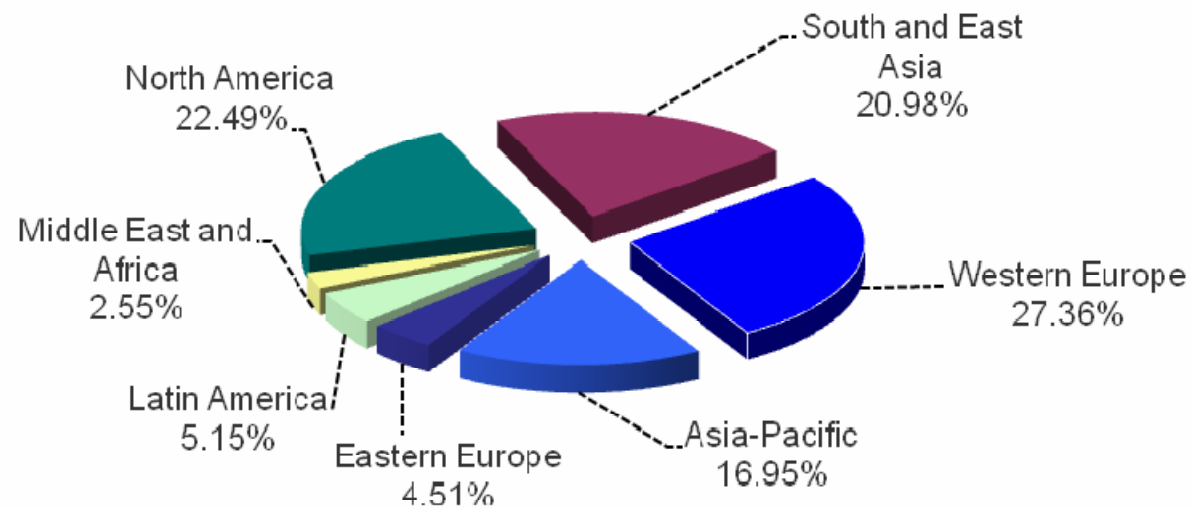
Broadband subscribers, June 2007

United States	66.213.257
Japan	27.152.349
Germany	17.472.000
Korea	14.441.687
United Kingdom	14.361.816
France	14.250.000
Italy	9.307.000
Canada	8.142.320
Spain	7.483.790
Netherlands	5.470.000
Mexico	4.804.282
Australia	4.700.200
Turkey	3.767.912
Poland	3.040.000

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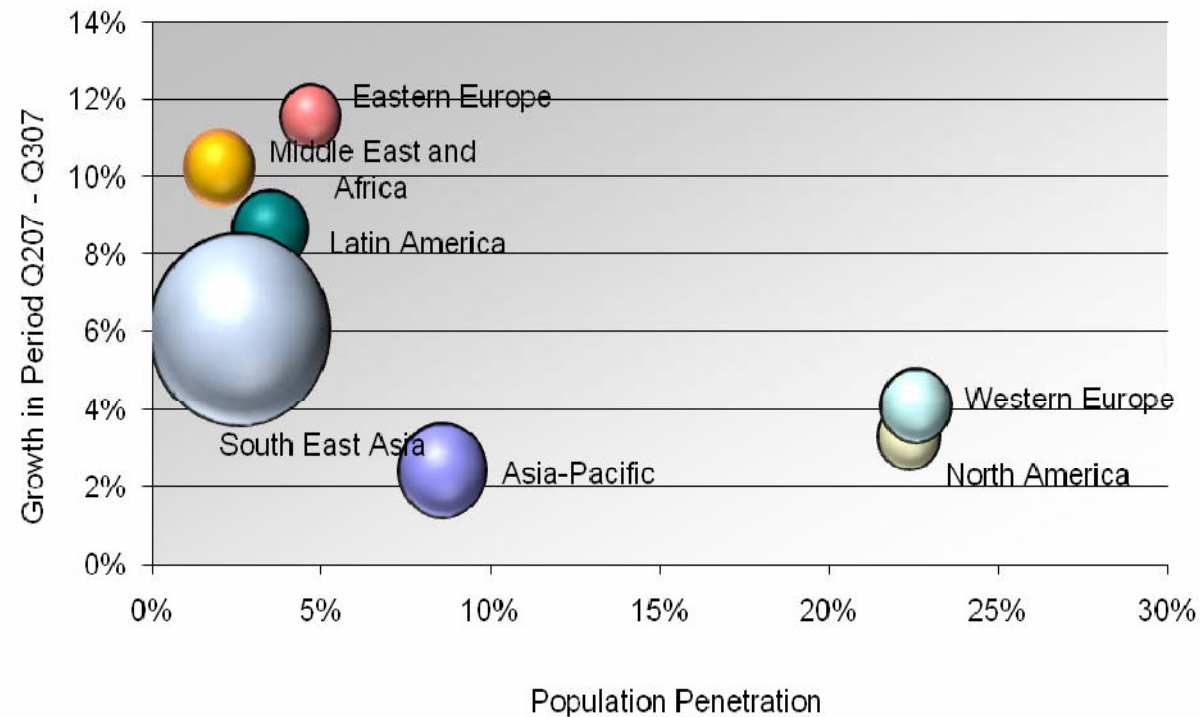
(source point topic)



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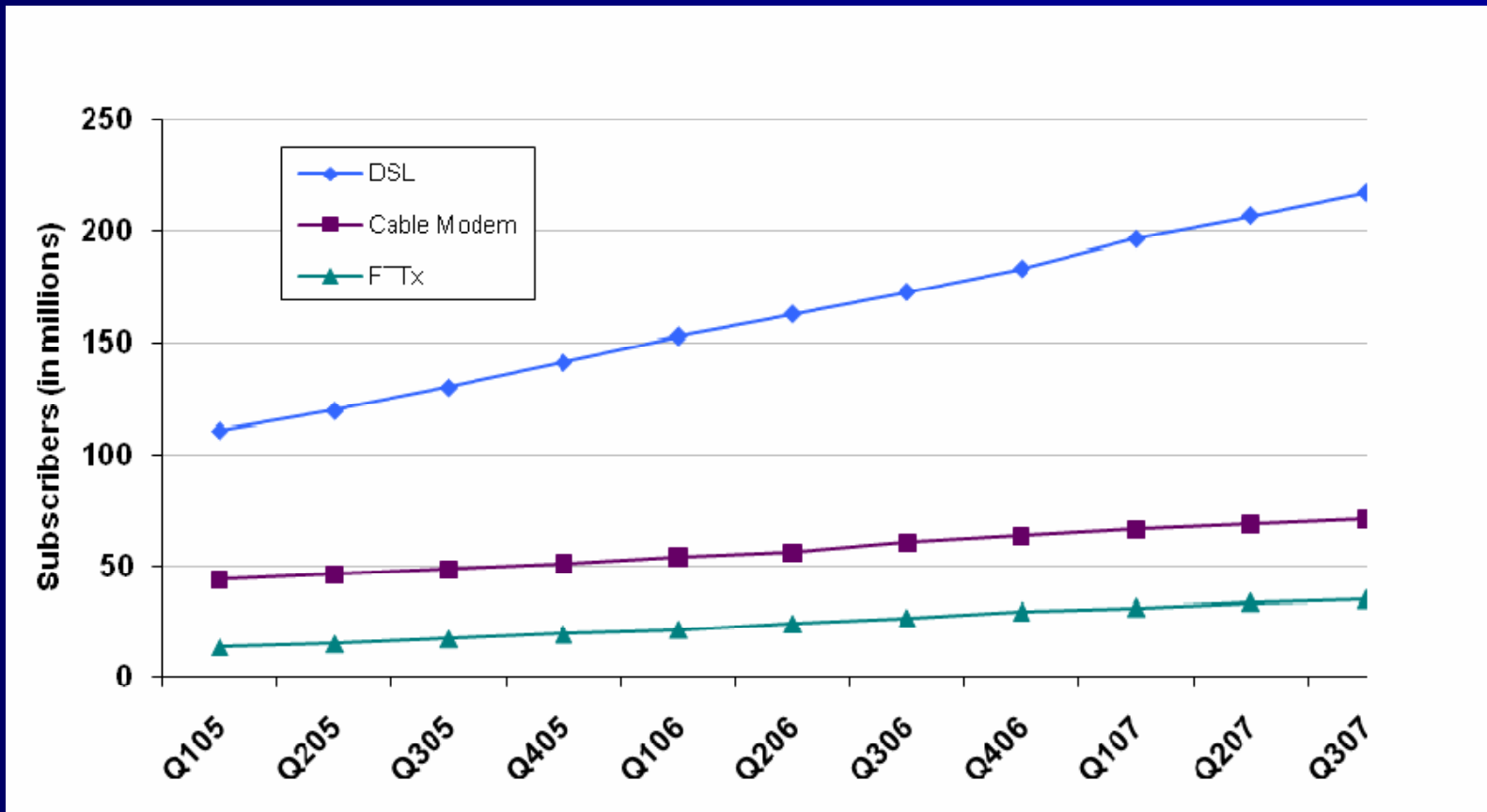
(source point topic)



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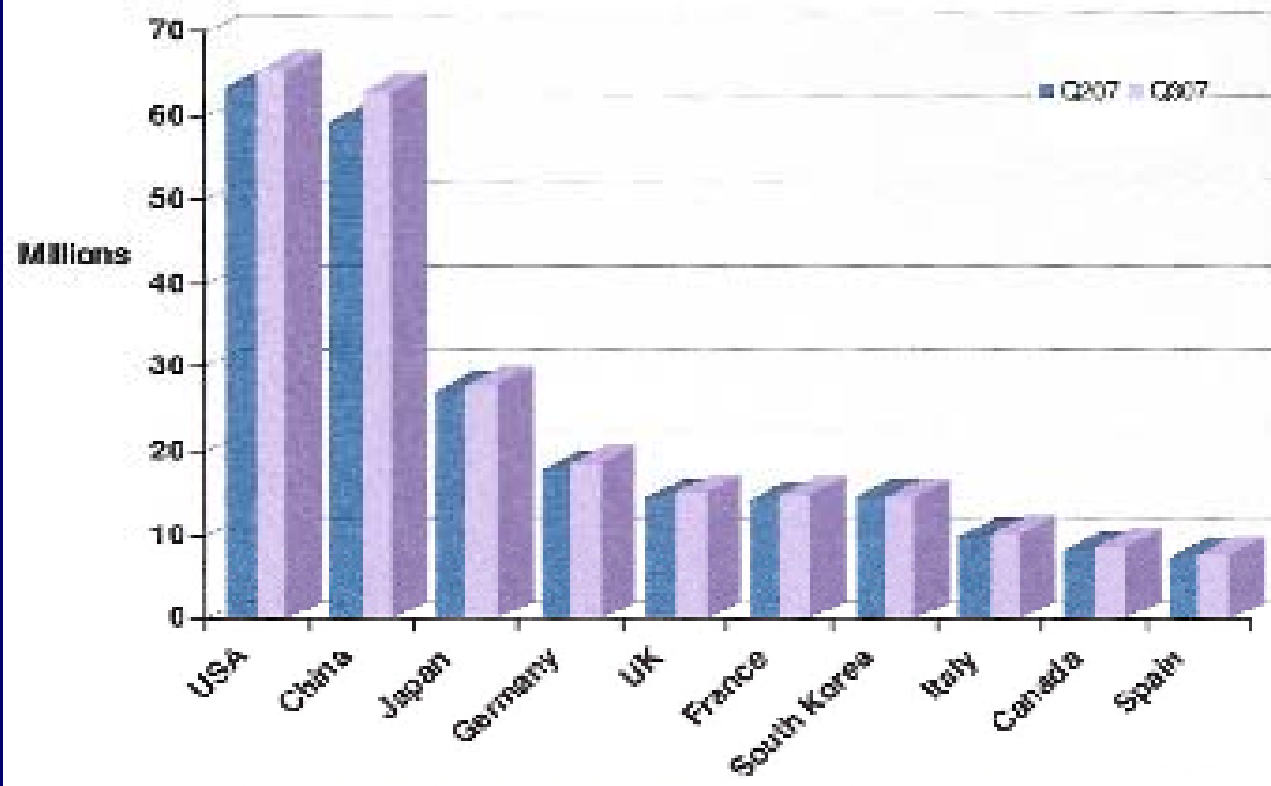


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Figure 8: Total Number of Subscribers in Q3 2007

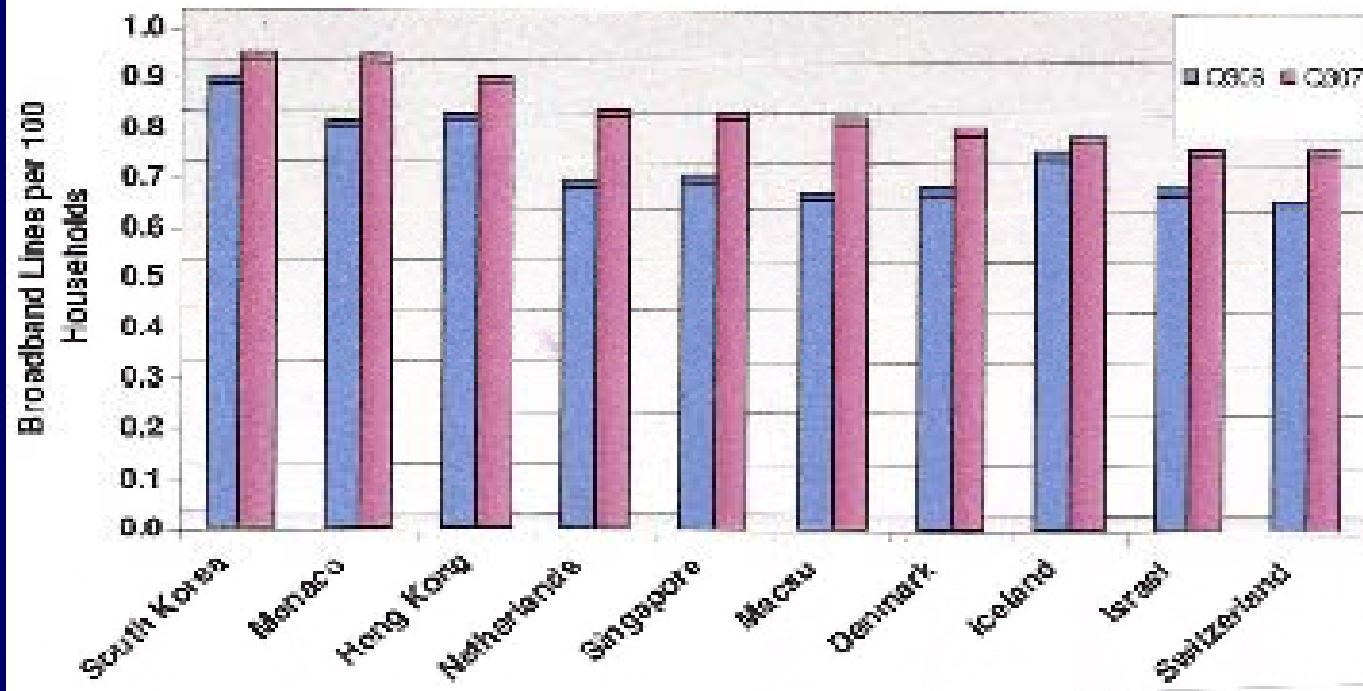


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(source point topic)

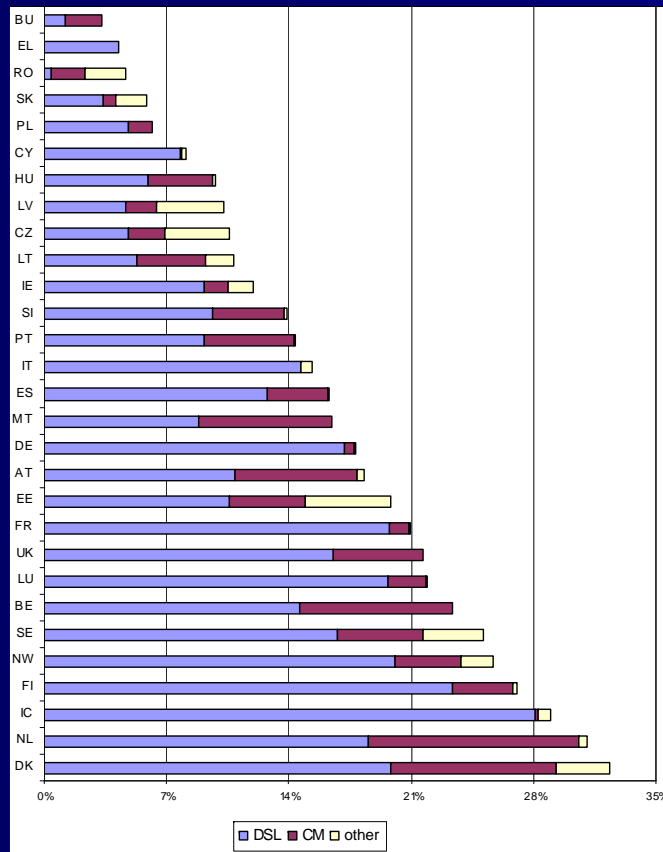
Figure 14: Broadband Penetration by Household in Q3 2007



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(source IDATE)



- At end 2006, Broadband penetration in EU-29 reached 16.6% (12.5% at end 2005)
- Penetration rates still vary greatly from one country to another
- From 3.3% in Bulgaria to 32.3% in Denmark !
- Penetration at end 2006 in the USA reached 19.3%
- 11 countries in Europe are doing better
- but 7 countries in Europe below 10% of Broadband penetration
- Penetration at end 2006 in South Korea reached 31.8%
- Denmark is at 32.3% and The Netherlands at 31.1%

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(source OECD)

Rank	Nation	Penetration	Speed	Price	Overall Score
		Subscribers per Household	Average Speed (Mbps)	Price per Month for 1 Mbps, Fastest Technology (USD PPP)	
1	Korea	0.90	45.6	0.45	15.73
2	Japan	0.52	61.0	0.27	14.99
3	Iceland	0.83	6.0	4.99	12.14
4	Finland	0.57	21.7	2.77	12.11
5	Netherlands	0.73	8.8	4.31	11.87
6	Sweden	0.49	18.2	0.63	11.54
7	France	0.49	17.6	1.64	11.41
8	Denmark	0.70	4.6	4.92	11.37
9	Norway	0.64	7.4	4.04	11.29
10	Canada	0.62	7.6	6.50	11.11
11	Belgium	0.54	6.2	6.69	10.60
12	US	0.51	4.8	3.33	10.47
13	Switzerland	0.68	2.3	21.71	10.40
14	Australia	0.50	1.7	2.39	10.23
15	Austria	0.42	7.3	5.99	10.08
16	Portugal	0.42	8.1	10.99	9.92
17	UK	0.50	2.6	11.02	9.92
18	Germany	0.38	6.0	5.20	9.81
19	Italy	0.38	4.2	3.36	9.78
20	Luxembourg	0.51	3.1	18.48	9.71

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Quali sono allora i dati veri?
Restano avvolti nelle nebbie

In ogni caso la larga banda serve,
l'impiego cresce e l'accesso va
predisposto per permetterlo a tutti.

Grazie dell'attenzione