INTERREG Project “BROADBAND”

Deliverable P.5.3.1

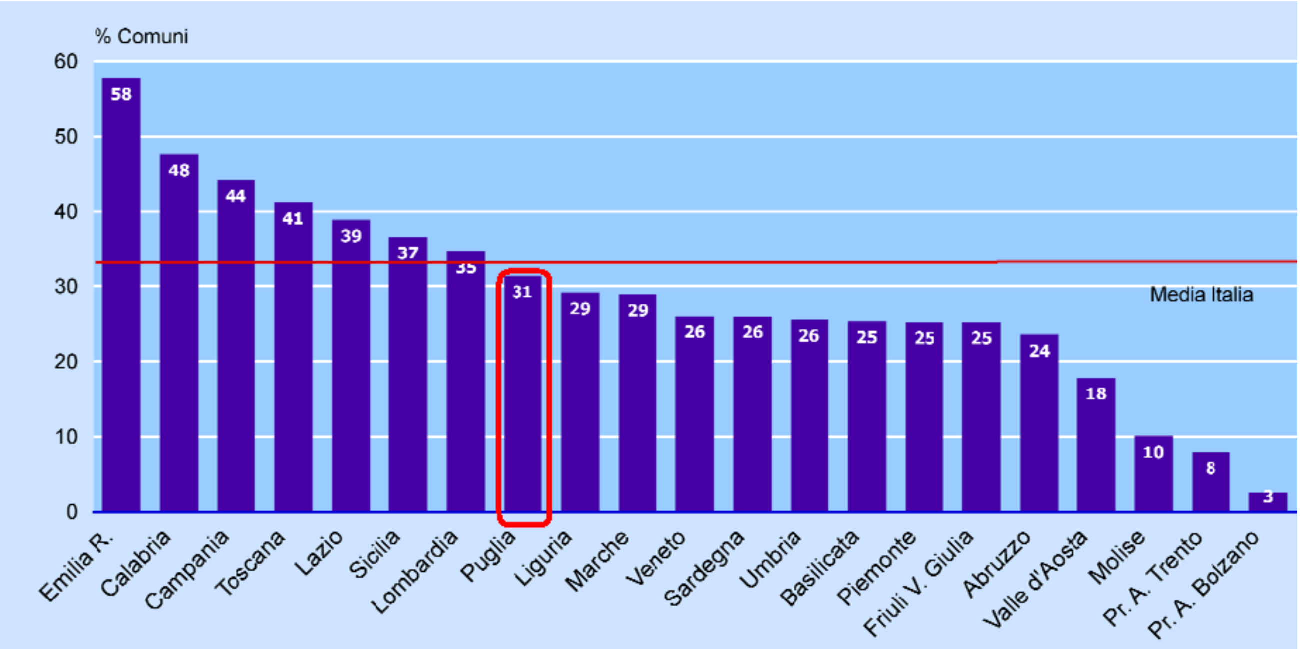
Provincia di Lecce

Report on the spread of the broad band technologies in the Region Apulia and in Italy and comparison with the international situation.

INDEX

1. The covering of the Region Apulia

Statistical information about communes



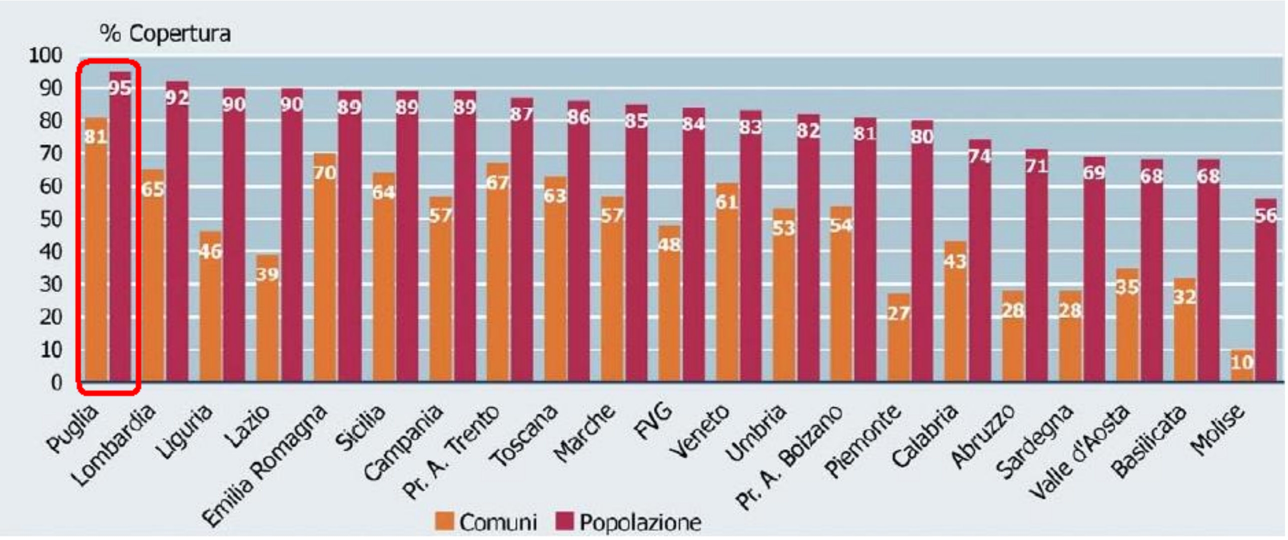
Graph 1 - Communes provided with wide band, 2005

The present analysis is based on the studies carried out from the National Center for Information technology in the Public Administration, about the spread of the broad band technologies in the local public administrations.

The Graph 1 shows the percentage of Communes that declared to possess access to internet in broad band (> 2Mbps), independently from the typology of connection to the net used (ADSL, optical fiber, other systems).

The date which emerges from the search on the Apulian Communes (31 percent), although is little inferior to the national media (33 percent), is better than almost all the regions of South Italy, except for the region Sicily, and places the region Apulia at the eighth place in the national list.

As far as the technology ADSL is concerned, the Graph 2 illustrates that the 81% of the Communes of the Region Apulia is served.

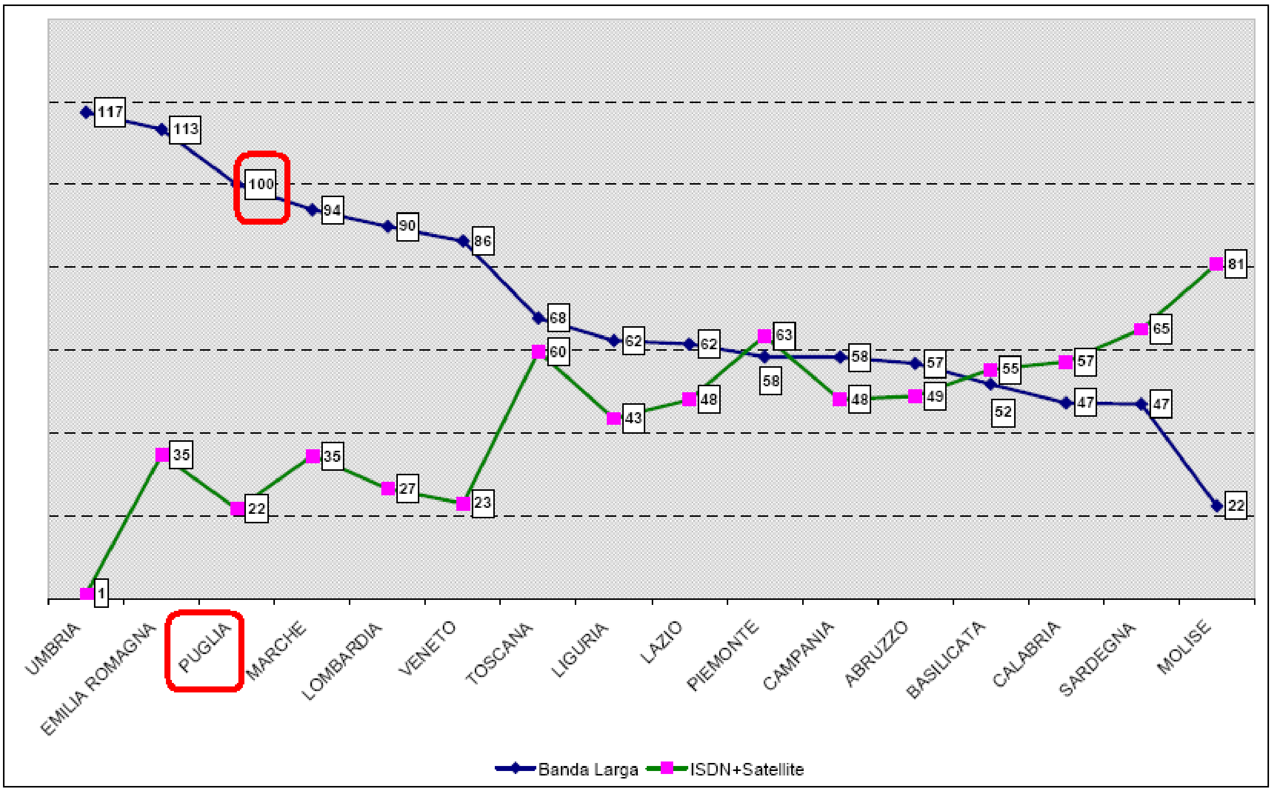


Graph 2 – The covering ADSL for region, March 2006

Interesting data pertain the utilization of the broad band technology made by the communes.

The broad band technology is used to develop and distribute services and function of ICT (Information & Communication Technology) in cooperative. Such stable associations, made mainly of Communes with a population inferior to 5000 residents, some of which are in phase of constitution and start, take the name of Territorial Services Centres (CST).

The broad band is spaciously spread among the CST of the Region Apulia, as regards both the other technologies of access to the net, like ISDN and satellite, and the spread of the broad band among the CST of other regions. That it is illustrated by the Graph 3.



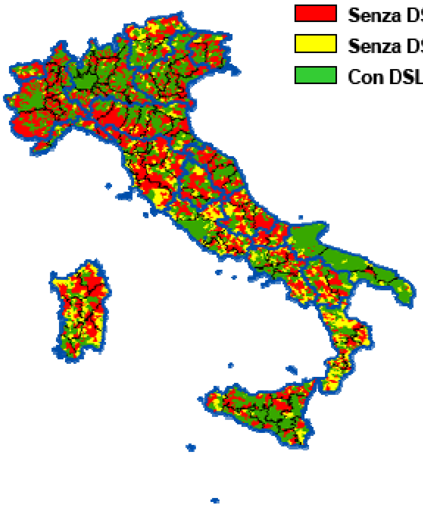
Graph 3– Availability of broad band in the Communes CST (Values%, for region)

Data about the population

With regard to the spread of the wide band among the population, the data that was possible to find are mainly about ADSL, being this technology typically supplied from the operators of telecommunications for the fast access to Internet.

The precedent Graph 2 shows that, in the Region Apulia, 95% of the population is served on the date of the survey (March 2006).

Always with reference to the availability of the broad band among the population, an approach that we can use in the analysis is that of the evaluation of the digital divides, understood like isolation from the information given by means of digital technologies, that can concern a special part of the population or a territorial area. The digital divides can be quantified by the absence of equipment DSLAM (that allow the supply of ADSL) at the telephone stations.



Vincoli strutturali	Centrali (%)	Comuni * (#)	Popolazione (%)	
Senza DSLAM, senza fibra	*34%*	2.786	8%	*DD lungo*
Senza DSLAM, con fibra	*14%*	1.869	2%	*DD Medio*
Con DSLAM	*52%*	3.446 **	90%	*Coperto*
TOTALE	**100%**	**8.101**	**100%**	

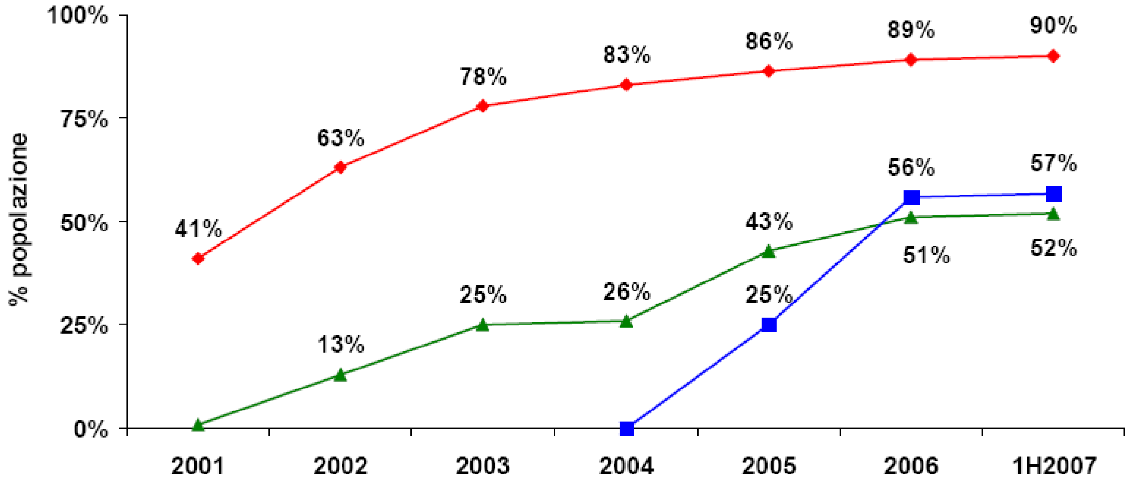
** Situazione prevalente*
*** Copertura broadband oltre il 95%*

Graph 4 – Digital divides of middle and long period, June 2007

The Graph 4 characterizes the territorial situation in Italy, appraising the presence or not of equipment DSLAM in the telephone stations; the Region Apulia emphasizes an excellent situation, such to consider surpassed the gap between who lives in zones equipped with infrastructures and services of broad band and who lives in remote areas, where such infrastructures and services are not available.

The analysis at national level, illustrated in the successive paragraph, confirms the information here illustrated with reference to the Region Apulia.

2. The covering at national level



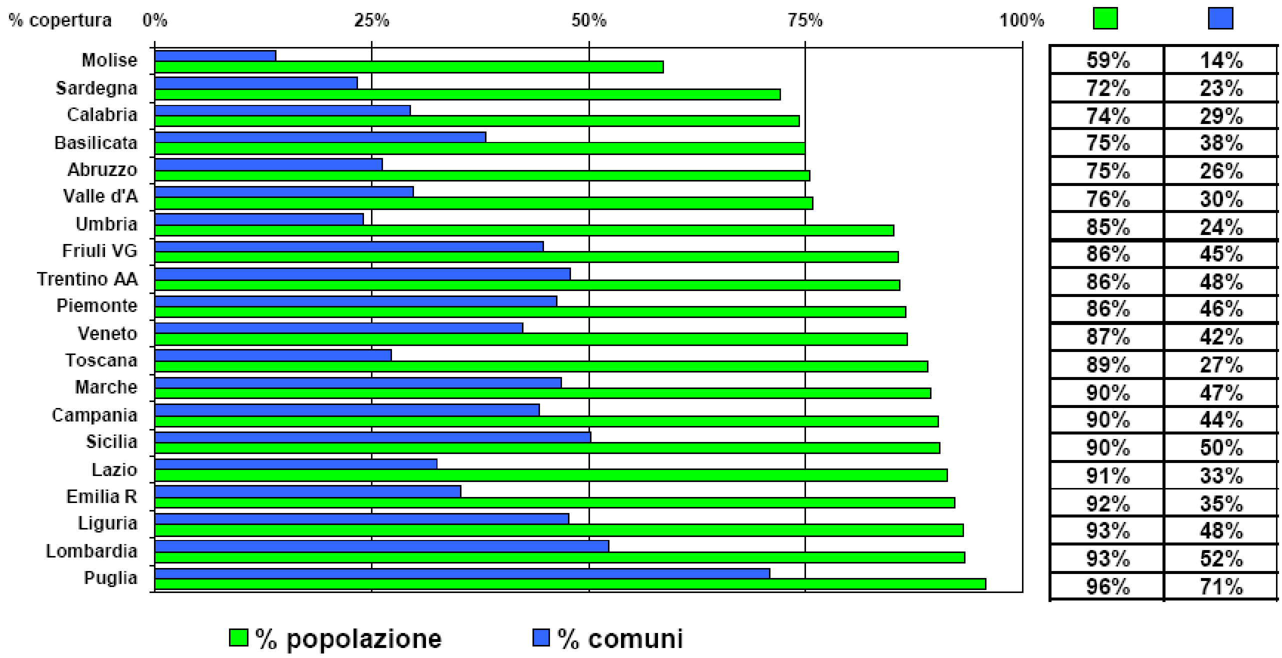
	2001	2002	2003	2004	2005	2006	1H2007	
Digital Divide I generazione	59%	37%	22%	17%	14%	11%	10%	ADSL
Digital Divide II generazione	0%	0%	0%	0%	75%	44%	44%	ADSL2+

Graph 5 - Dynamics of the cover for technology, June 2007

Extending the analysis to the national level, it turns out (Graph 5) that In Italy the infrastructure for the access to wide band has had in the last period a meaningful development, both in qualitative terms and quantitative terms. During the first six month of 2007, cover ADSL has caught up 90% of the population, against 41% at the end of 2001.

The area in which the infrastructural investments have been concentrated, mostly in ULL (unbundling local loop), has exceeded the half of population, by now (52% in June 2007), but it is going to grow in little time.

The main suppliers of broad band technologies have, moreover, started the cover of the second generation of wide band. The availability of technology ADSL2+, that guarantees a meaningful increase of the performances of the connections (up to 20, against the 4-6 Mbps of the ADSL and that is considered the technology of second generation for the wide band), although in fast increase, is still limited to the 56% of the Italian population (during the first six month of 2007).

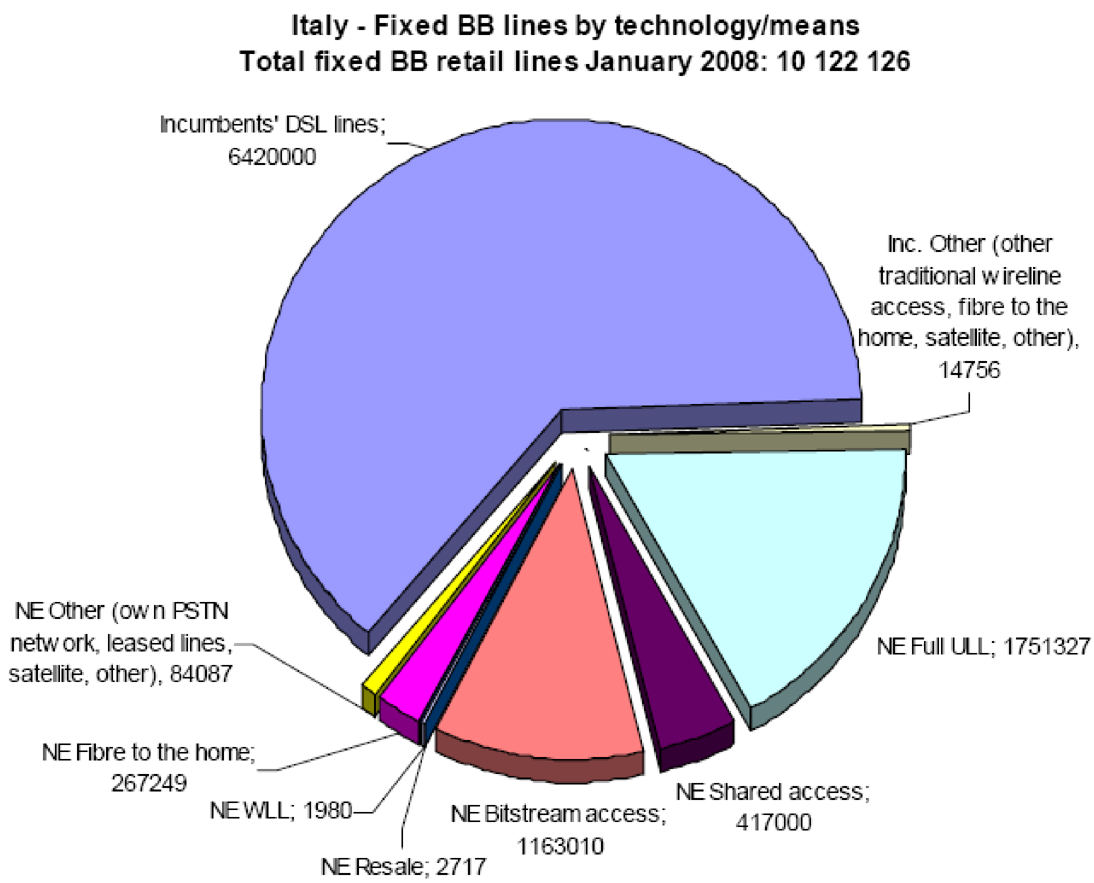


Graph 6 - Regional cover ADSL, June 2007

Cover ADSL is strongly differentiated on the territory and, in spite of the elevated level of national cover (90% of the population, in the first semester of 2007), there are many regions in which the availability of wide band services appears inferior to the average (Graphic 6).

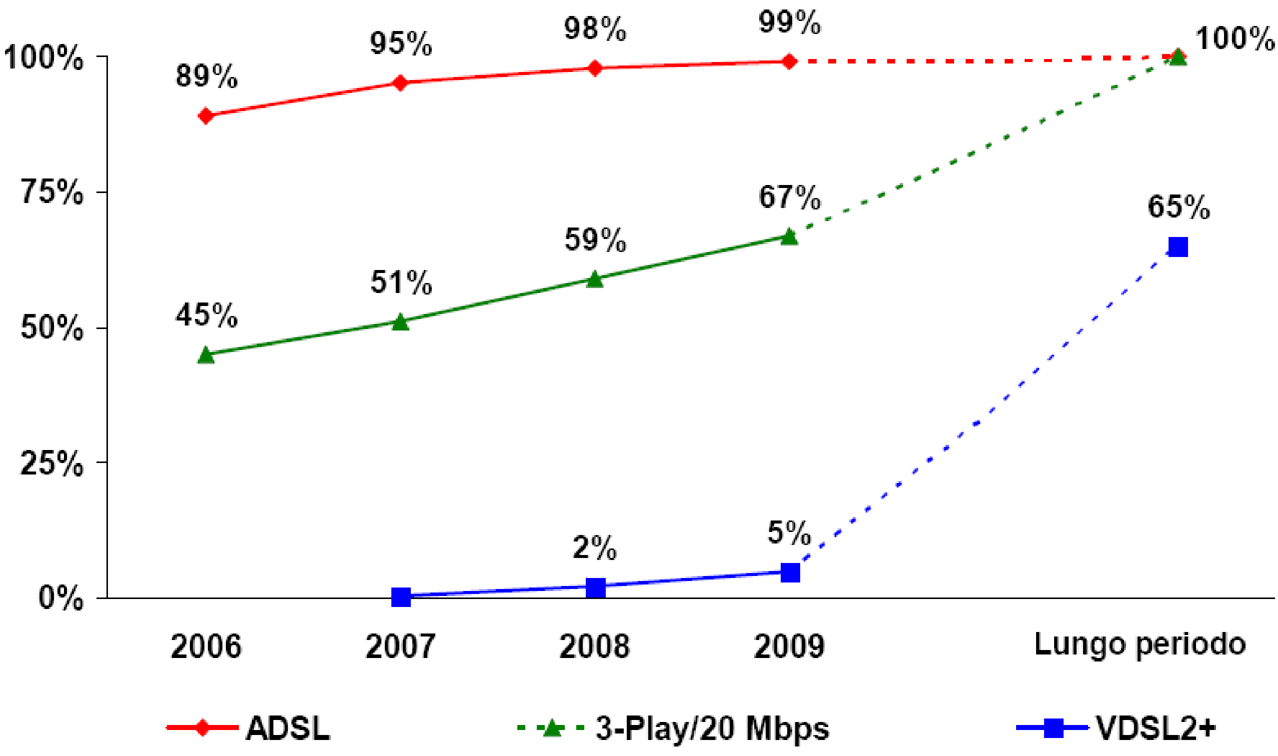
Among the regions for which the difference of cover is marked, there are both regions of Southern Italy and regions of the Center North. Molise, Sardinia, Basilicata, Calabria and Valle d'Aosta have the inferior levels of cover, while Puglia, Liguria and Lombardy show more elevate levels. In addition, it is important to emphasize that, above all in the case of the Lombardy, but also for Lazio and Campania, to the high level of cover in terms of population, actually corresponds an equally elevated number of communes which are not covered from the ADSL.

Also inside the same region, the level of cover does not appear however homogenous. The zones with the more elevate levels of ADSL cover, in fact, correspond to the metropolitan areas and to the zones of the territory morphologically easier to infrastructure (plains and zones with high density of population).



Graph – Fixed broadband lines for technology, January 2008.

Graph 7 distributes the total of the fixed lines of wide band for type of technology.



Graph 8 - Evolution of the cover broadband of the fixed net, March 2007.

Graph 8, taken from the Industrial Plan of Telecom Italy, one of the main suppliers of services of telecommunication in Italy, evidences two distinguished phases of development.

The first phase, of short period (up to 2009), previews the extension of ADSL cover to 99% of the telephone accesses and the attainment of a cover of the triple play services until the two thirds party of the total.

The second one, instead, from a longer period perspective (beyond 2015) previews the progressive completion of the cover of triple services play (100% of the telephone accesses). In such second phase, the gradual extension of the cover ultrabroadband is previewed until catching up 65% of the telephone accesses.

Still with reference to the Territorial Services Centres, that have been previously introduced in the part about the analysis at regional level, Table 1 illustrates the data concerning the Communes which associated for the constitution and the start of the CST.

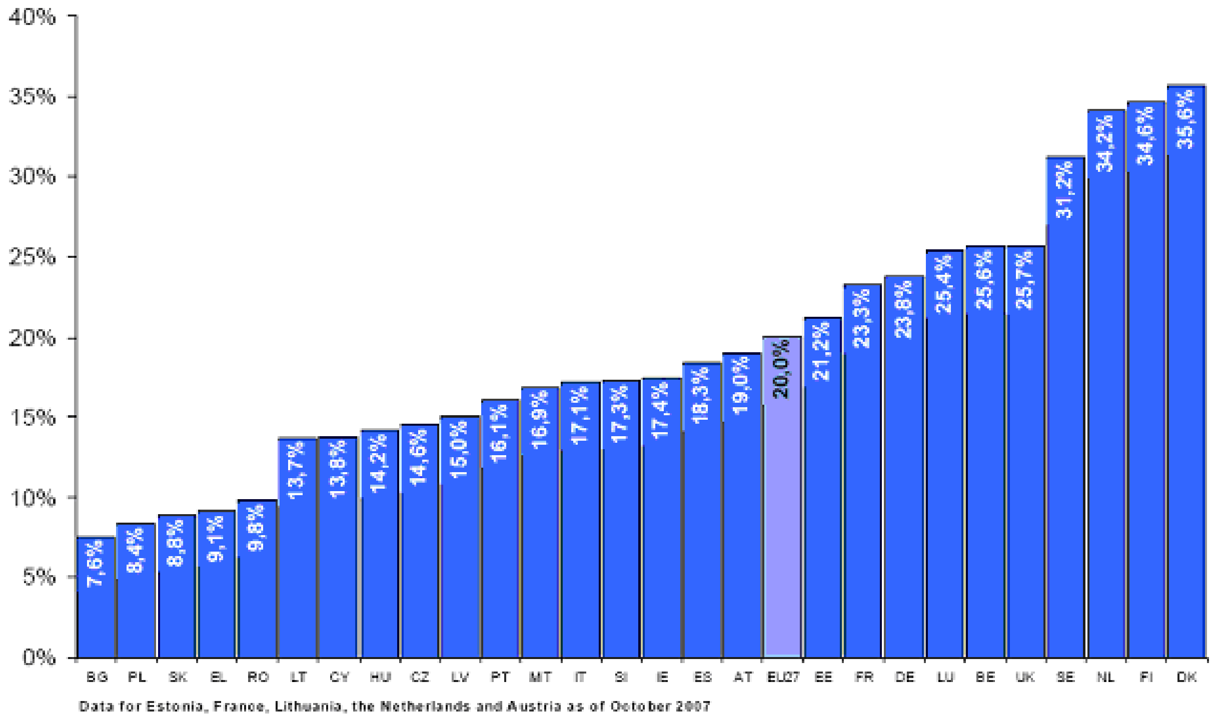
AREA GEOGRAFICA	ISDN (%)	XDSL (%)	ATM (%)	CDN (%)	WIRELESS (%)	SATELLITE (%)	FIBRA OTTICA (%)
NORD-OVEST	48,61	49,94	0,00	0,12	14,60	3,98	1,93
NORD-EST	21,58	56,84	0,00	3,21	11,97	7,26	27,78
CENTRO	27,34	50,09	0,37	16,15	15,96	9,36	0,55
SUD	51,01	43,28	0,24	0,24	7,37	3,33	0,59
ISOLE	56,63	33,73	1,20	0,00	13,25	7,23	0,00
TOTALE	**40,82**	**48,63**	**0,18**	**3,83**	**12,18**	**5,50**	**5,57**

Table 1 - The connection in the CST communes.

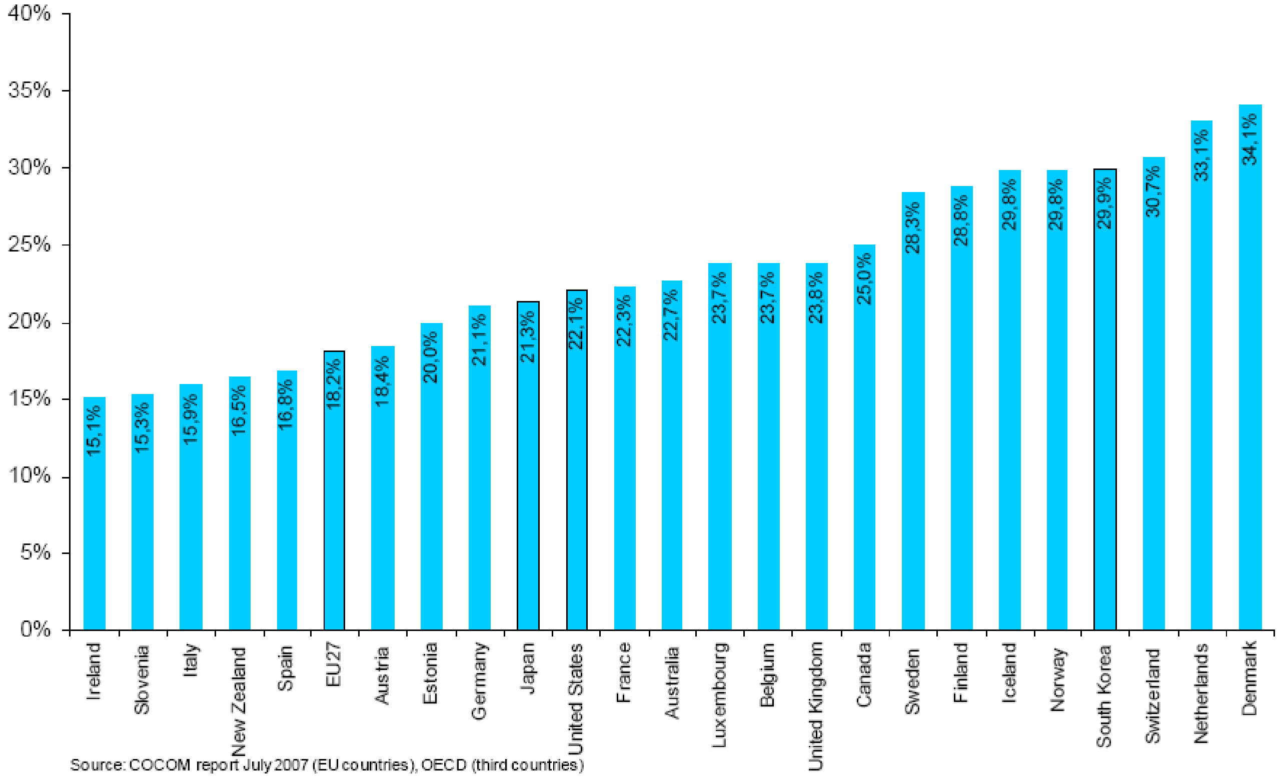
On one side, a uniform distribution of XDSL connection is evident in the Italian geographic macroareas, while the typology of wireless connection turns out to penalize the south macroarea of the Country.

3. Comparison with the international situation

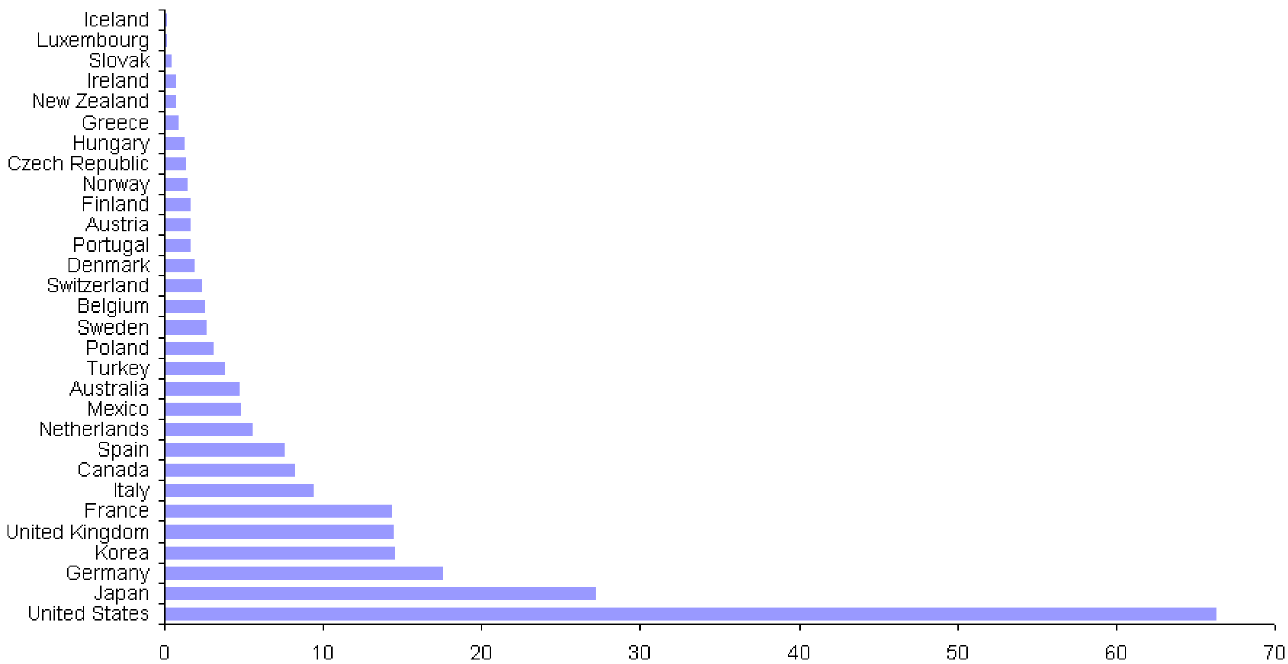
The comparison of the Italian situation with the situation of the other European countries makes it clear that the spread of the broad band technologies in Italy is inferior to the average of the countries in the European Union (Graph 9), as well as to the spread of the broad band technologies in different countries of Asia and North America (Graphs 10 and 11).



Graph 9 – Rate of penetration of the wide band in the EU Countries, January 2008

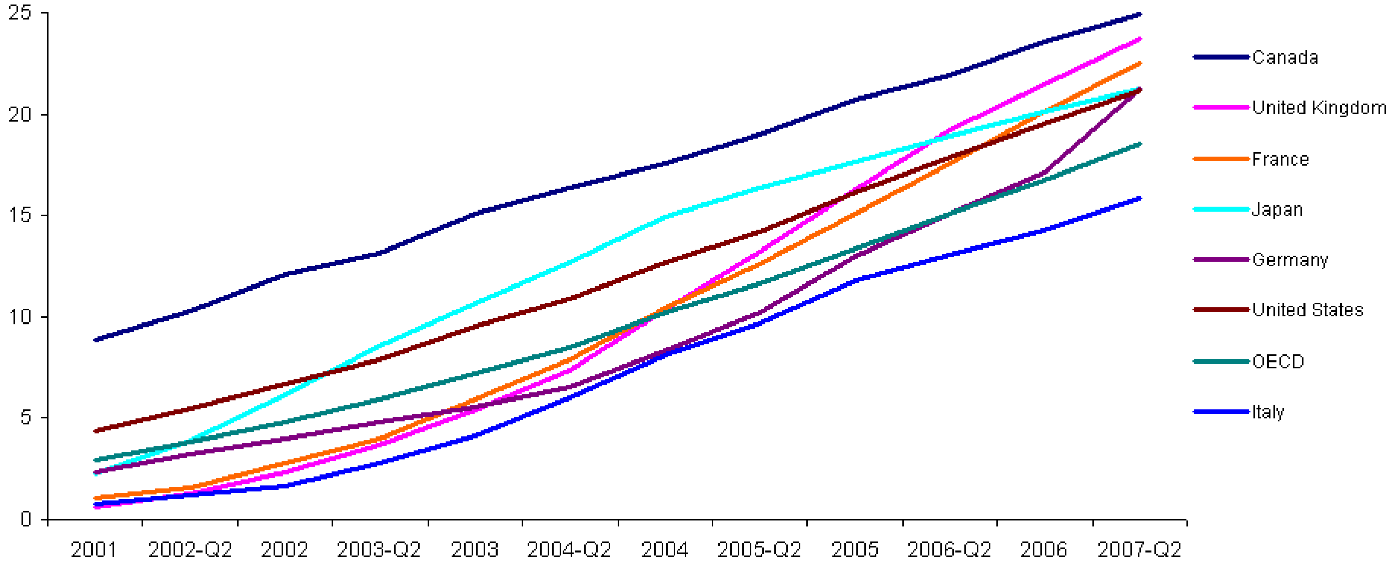


Graph 10 – Rate of penetration of the wide band at international level, July 2007



Graph 11 – Users of broad band services for country (millions), June 2007

The graph 12 shows that such gap is almost steady in the course of the years, to from 2001 until today.



Graph 12 – Dynamics of the penetration of the broad band in the G7 countries

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