Broadband Policies in the World

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July 2004

Broadband and Productivity

- ICT viewed as major factor for EU competitiveness
- Mr. Liikanen (2nd/12/03 ETNO conference):
  - I look at broadband as a key enabling technology for the delivery of those services that will help increase the performance of companies and public administrations.
  - Investment in ICT is clearly a critical enabler of productivity growth and, for that matter, of innovation.

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Competitive Report (European Commission)

- The key role of ICT in organisational change suggests that governments must ensure the provision of an efficient infrastructure, especially a high quality ICT infrastructure in view of the externalities involved.

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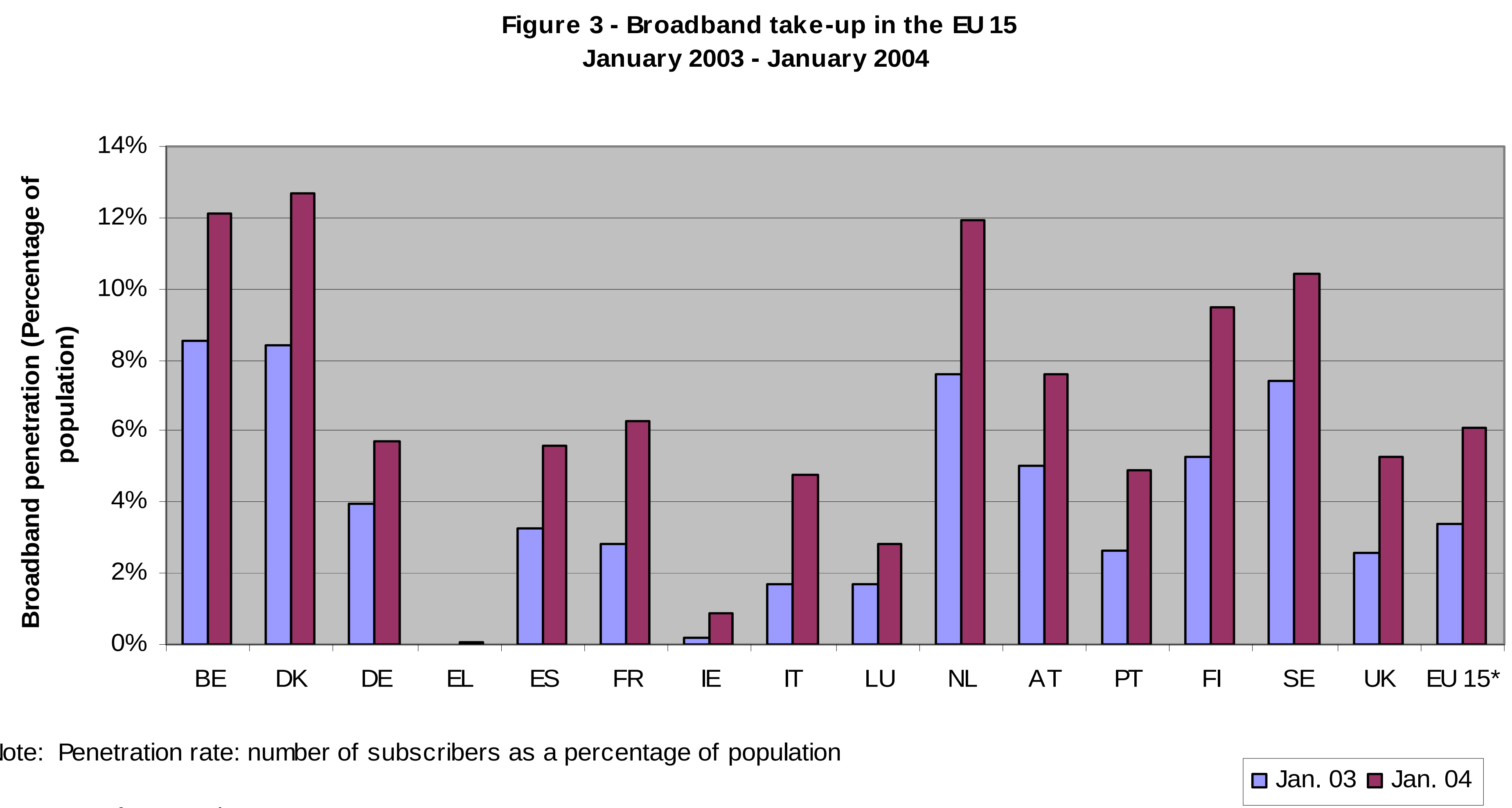
Broadband Penetration in the EU



Note: Penetration rate: number of subscribers as a percentage of population

*Average of 15 Member States

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Title?

	Cable homes passed as a percentage of all households, year end 2001 (in %)	Proportion of network capable two-way, year end 2001 (in %)
Netherlands	96.74	
Switzerland	93.73	60
Belgium	91.52	80
Portugal	91.00	63
Israel	90.32	100
Romania	85.28	12
Luxembourg	74.85	>1
Estonia	71.94	35
Germany	69.10	10
Sweden	67.77	20
Czech Republic	66.85	50
Slovenia	65.60	60
Denmark	65.56	46
Norway	63.68	
Finland	63.55	50
Hungary	61.83	60
Ireland	55.00	10
Austria	54.20	70
Poland	52.09	14.5
U.Kingdom	46.52	99
France	34.32	80
Spain	33.48	90
Italy	7.11	**

** e-Biscom provides total two-way communication capabilities to its customers (10Mbits each way)

Source : *ScreenDigest*, European Cable Yearbook 2002

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Belgacom & VDSL

- Belgacom to invest 300 million EUROs until 2006 to deploy VDSL (http://www.europeftthcouncil.com/extra/Day_1_event/Corluy.pdf)
- **Main driver for these investments is the competitive threat from cable TV companies**
- Main services to offer will be TV over VDSL, music, digital pictures, online gaming, and video on demand at a later stage

FCC Ruling in the U.S.

- The FCC removed all ex-ante regulation from FTTH deployments
- In response to this, Verizon announced FTTP deployments in their area
  - Plan to connect 1 million households by end of 2004
  - Deployments HAVE started
- SBC also announced 4-6 billion USD of investments within the next 5 years in order to upgrade to FTTH and VDSL
- U.S. President publicly supported the FCC decision as an important cornerstone for bringing critical high bandwidth to every U.S. citizen (speech at Department of Commerce, 24/06/04) http://www.whitehouse.gov/news/releases/2004/06/20040624-7.html).

Business Week article, May 24, 2004

- Reality TV doesn't get any more painful than this. The cable-television companies have smacked around their telecom rivals in broadband over the past few years, grabbing most of the fast-growing market. Even worse, the cable players have started to swipe customers in the traditional voice market in recent months. "Cable companies have emerged as telecom's fastest-growing threat," says Brian Adamik, chief executive officer of researcher the Yankee Group. Now, Verizon Communications Inc. is striking back. *BusinessWeek* has learned that the nation's largest telecom provider is preparing to seek cable-TV franchises in parts of Texas and eight other states so that it can offer video in head-to-head competition with cable companies. The service would provide a powerful new source of competition in the pay-TV market, where most consumers have a choice of one local cable-TV company and two satellite operators.

France

- New law allowing local/regional authorities to become ‘wholesale operators’
- Caisse des Depots et Consignations (CdC) has been given mandate to assist local and regional authorities in deploying open access telecom infrastructure.
- According to the Bank, 31 projects with an approximate budget of 930 million Euros are likely to be launched during the next 24 months

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France

© ORTEL (Tactis - Idate) - Projets Infrastructures Télécoms des Collectivités locale

LOCALISATION	PROJET	Budget Total (millions d'euros TTC)	Part publique (millions d'euros TTC)
Alsace	Réseau d'infrastructures télécom régionales	**30**	**20**
Aquitaine	Infrastructures régionale HD	**56**	**56**
Corse	Réseau HD à l'échelle de l'ile	**41**	**29**
Guadeloupe	Réseau régional HD	**25**	**20**
Guyane	RIRG (Réseau Informatique Régional Guyanais)	**25**	**20**
Limousin	Syndicat DORSAL	**60**	**43**
Poitou Charentes	Epine dorsale et pénétrante métropolitaine	**40**	**30**
Réunion	Réseau régional HD	**20**	**20**
Allier	Réseau D'in,frastructures	**10**	**4**
Ariège		**20**	**17**
Cher	Réseau haut débit	**20**	**15**
Eure		**12**	**12**
Herault	Réseau départemental HD de l'Hérault	**35**	**10**
La Manche	BUS de la Manche (Backbone Universel de Services)	**20**	**15**
Loiret	Réseau HD départemental	**50**	**30**
Maine et Loire	Meliss@	**28**	**20**
Moselle	Réseau départementale de la Moselle	**40**	**30**
Nievre	Schéma directeur TIC	**34**	**34**

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France

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LOCALISATION	PROJET	Budget Total (millions d'euros TTC)	Part publique (millions d'euros TTC)
Oise	Infrastructures départementale HD	**44**	**24**
Pyrenees Atlantiq	Infrastructures départementale HD	**71**	**50**
Rhone	Infrastructures départementale HD	**200**	**120**
Sarthe		**34**	**34**
Seine-et-Marne	Etude d'opportunité d'une infrastructure HD	**60**	**34**
Seine-Maritime		**50**	**25**
Somme	SAXO - CG Somme	**10**	**10**
Tarn	Infrastructures départementale HD - (E-Tera)	**14,3**	**13,15**
Yvelines		**18**	**15**
Montpellier	Réseau HD PEGASE	**3**	**3**
Cosne sur Loire	Réseau métropolitain	**4**	**2,5**
Pau	Pau Broadband Country	**35**	**35**
Vannes	Réseau métropolitain	**3**	**1,5**
CA CAEN	CA Caen - Infrastructure HD	**8**	**5**
CA Castres Maza	Réseau métropolitain HD (SEM Intermediasud)	**5,3**	**5,3**
CA Grand Amien	PhileasNet (CA Amiens)	**8**	**8**
CA Quimper	CA Quimper	**5**	**3**

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France

© ORTEL (Tactis - Idate) - Projets Infrastructures Télécoms des Collectivités local			
LOCALISATION	PROJET	Budget Total (millions d'euros TTC)	Part publique (millions d'euros TTC)
CA Toulouse	IMT Garonne Networks	**6**	**6**
CA Troyes	Boucle locale	**6**	**4**
CAPA	Infrastructure C.A.P.A	**12**	**6**
CEE Massy Sacl	Infra neutre	**10**	**5**
CINOR	Infrastructures HD	**5**	**5**
CU - Bordeaux	Réseau Métropolitain HD	**20**	**10**
CU - Nantes	Réseau O-MEGA (Ouverture MAN /RI aux opérateurs T	**8**	**5**
CU Grand Nancy	RMT CU Grand Nancy	**8**	**5**
EPA Plaine de Fr	Plaine de France	**25**	**13**
Lille Métropole - (	Réseau HD pour des accès 2Mbps	**60**	**23**
SIPPEREC	Concession fibre noire	**22**	**0**

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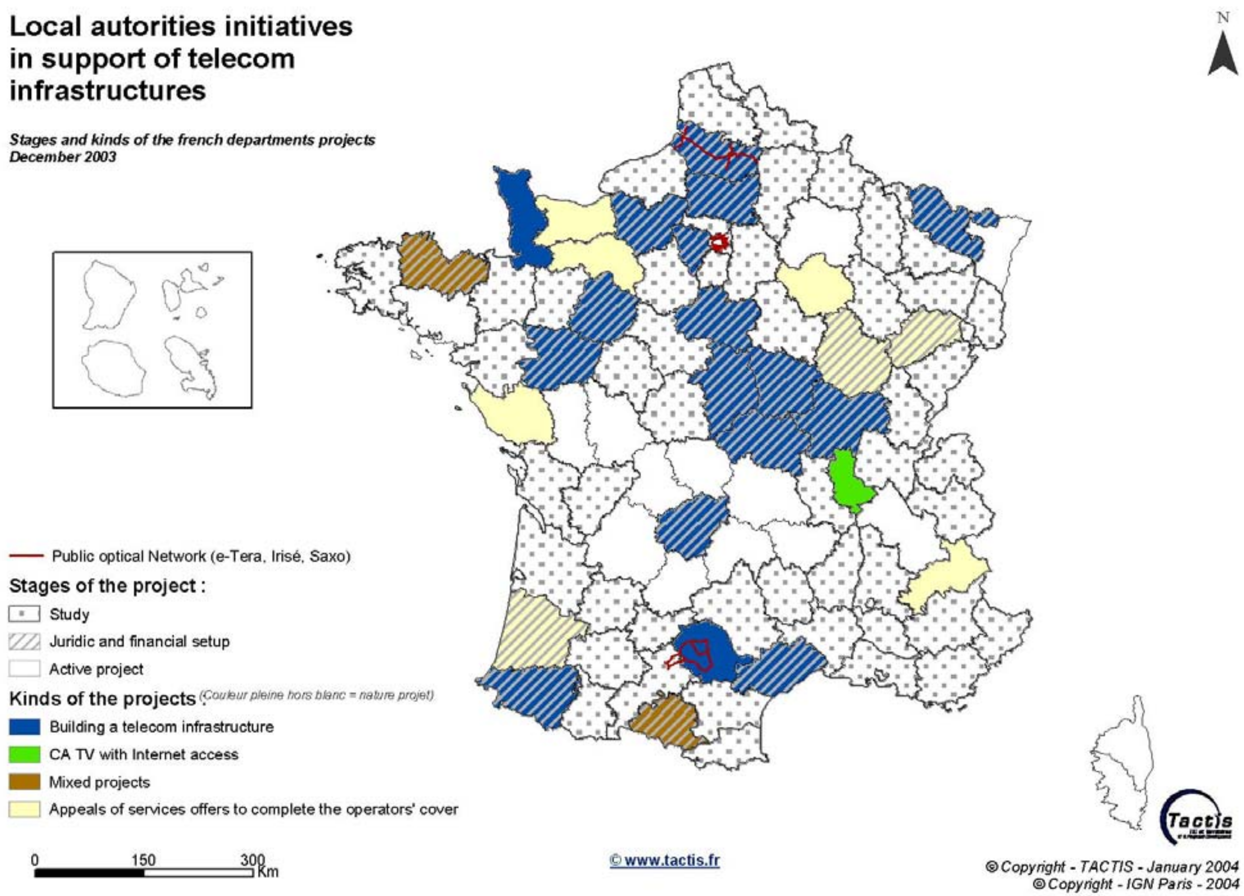
France


Local autorities initiatives
in support of telecom
infrastructures
Stages and kinds of the french departments projects
December 2003
N
Public optical Network (e-Tera, Irisé, Saxo)
Stages of the project :
Study
Juridic and financial setup
Active project
Kinds of the projects : (Couleur pleine hors blanc = nature projet)
Building a telecom infrastructure
CA TV with Internet access
Mixed projects
Appeals of services offers to complete the operators' cover
0
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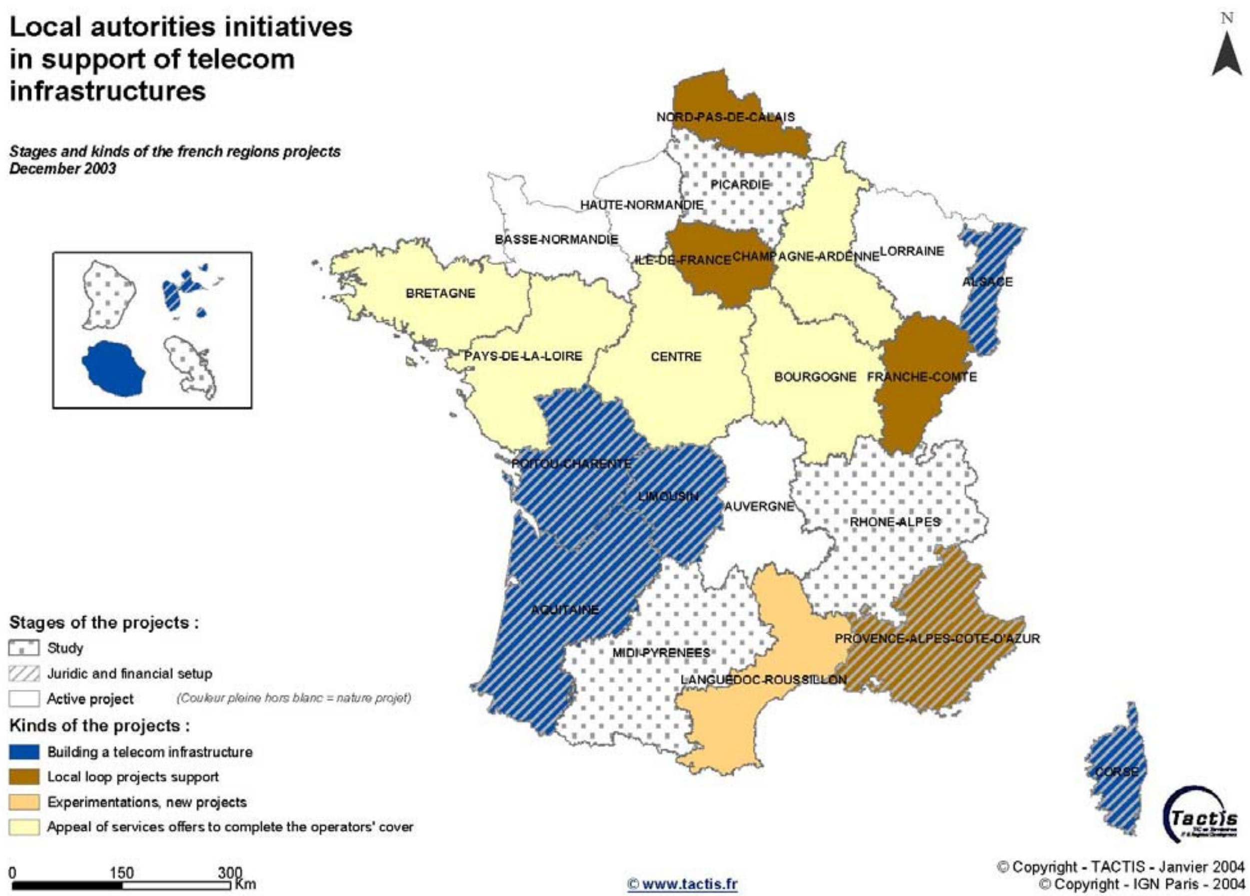
France



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Italy

Government: Project to cable the south of Italy

- Campania, Abruzzo, Malise, Calabria, Basilicata, Puglia, Sicily, and Sardinia
- 67 MAN in town with more than 500,000 and in 205 industrial districts
- Support of demand through development of broadband services
- Overall cost estimated at 1.6 billion EUROs
- 300 million EUROs have been allocated already
  - 150 million for infrastructure
  - 150 million for broadband services
- 1st Phase:
  - 21 metropolitan area networks
  - 41 industrial districts

Italy

Regions:

- Emilia Romagna (May 2003-2005)
  - 760 km of infrastructure
  - 80,000 km of optical fiber
  - 19.3 million EUROs of public investment
  - Regional backbone connections between the backbone and municipalities MANS
- Piemont
  - Regional backbone with a POP in each municipality with more than 40,000 inhabitants
  - Estimated cost of 35-40 million EUROs (not yet approved)

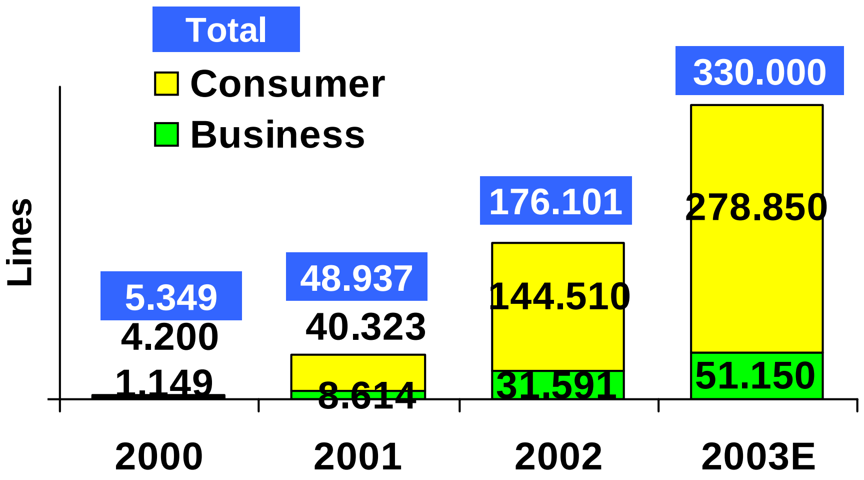
Italy

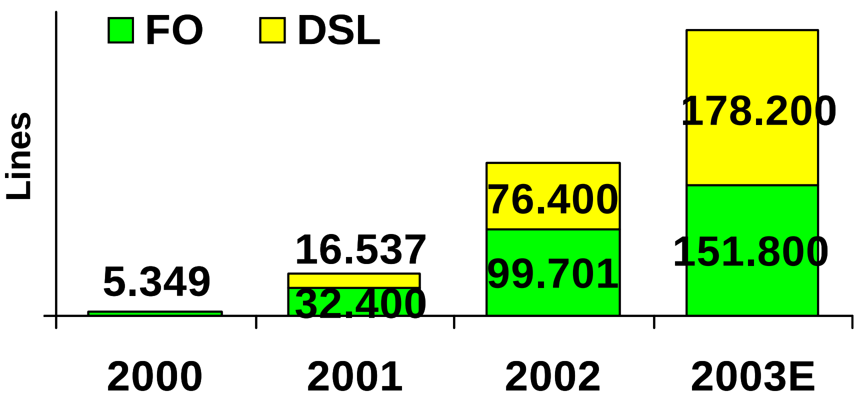
Fastweb

- Set up in 1999 as a JV between eBiscom and a local utility
- Fastweb provides services and the local utility deploys and maintains civil infrastructure and fiber
- Divorce with the local utility (for anti-trust reasons) in 2003
- Expands in the rest of Italy using the ‘Socrates’ network

Italy

Fastweb





Trend of Fastweb's customers per year, 2003
Source : Fastweb

The Netherlands

- Rotterdam and Amsterdam announce FTTH projects
- KPN responds by soliciting government’s support for a ‘Delta Plan Glass’

The Netherlands

- Fast growth of demand shows the necessity of fiber
- One open access network in the interest of customers
- Cooperation among current network operators needed

- Clear regulatory environment essential to receive funding

- Open access based on non-discrimination (no theoretical costing)
- Clear provision for funding of U.S. requirements (if any)
- Access to EU structural funds to get things going

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Sweden

- 600 million EUROs of public funding for local networks
- 50% of projects are being implemented
- 25% of projects deploy alternative fiber infrastructure

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Sweden

Market leader in the field of broadband

Bredbandsbolaget is the market leader in the field of broadband communication in Sweden. Our network now reaches 51 locations all over the country and is constantly growing. The company was founded in 1998 and currently has about 160 employees.

Internet connection is fixed and has a capacity of up to 10 Mbits/s. We supply both via property networks based on Ethernet LAN and via phone sockets using DSL technology.

Efficient and challenging
Since the start-up, company growth has been particularly successful. In just a few years we have installed broadband in 260,000 households and have over 90,000 customers. This success is the result of our attitude of challenging existing structures and having the courage to try new approaches. Our flexibility and efficiency give us competitive advantages.

Bredsbandbolaget and Stokab

- They lease dark fiber from Stokab
- They only deploy active equipment and provide the final drop
- They are big advocates of the ‘primary infrastructure model’ whereby public sector and/or a utility provides civil infrastructure and dark fiber to all operators on an open access basis

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European Commission Structural Funds

- European Commission approved the usage of 10 billion of EUROs of structural funds for deployment of ‘open access infrastructure projects’
- Guidelines on the usage of these funds specify that they should be used for ‘open access infrastructure projects’ and in accordance with state aid rules

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Should Germany Worry?

- Are the market dynamics in Germany likely to lead to similar developments?
- If not, could this become a problem for Germany's competitiveness and within what timeframe?
- If there is a worry, what are the options?

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Thank You

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