Marketing Fibre to the Global Consumer

SNL Kagan & FTTH Council Europe Webinar

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SNL Kagan

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Presentation Outline

1. Case Study 1: Telefónica
2. Case Study 2: France Telecom - Orange
3. Case Study 3: TeliaSonera
4. Comparison with United States
5. Strategy Comparisons
6. Factors Determining FTTH Deployments

Data Sources: SNL Kagan estimates, Operators, FTTH Council Europe

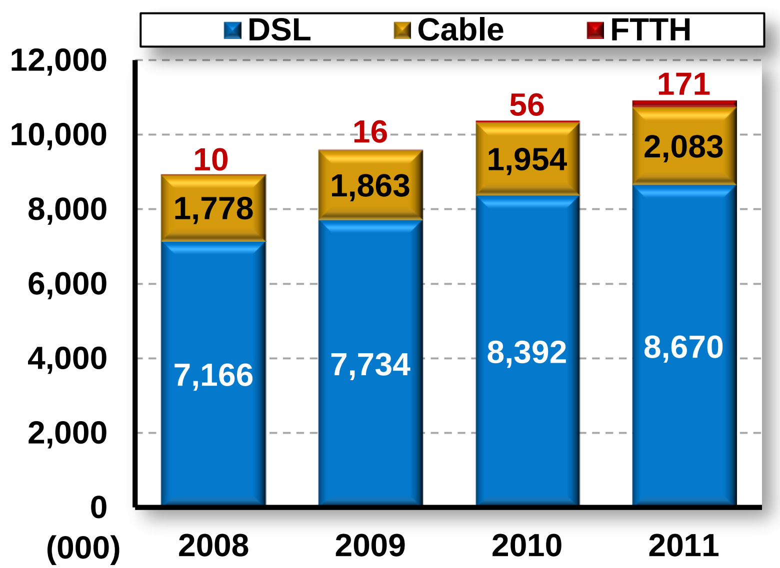
Telefónica

- Present in **25 countries;** Over **313.8 million customers** at September 2012.
- Fixed Broadband Services – Spain, UK, Germany, Ireland, Czech Rep., Brazil, Argentina, Chile, Peru, Colombia
- Commercial FTTH Services (residential) – Spain, Brazil, Chile
- Global Brands: Telefónica, O2, vivo, movistar
- Global Presence:

Telefónica - Spain

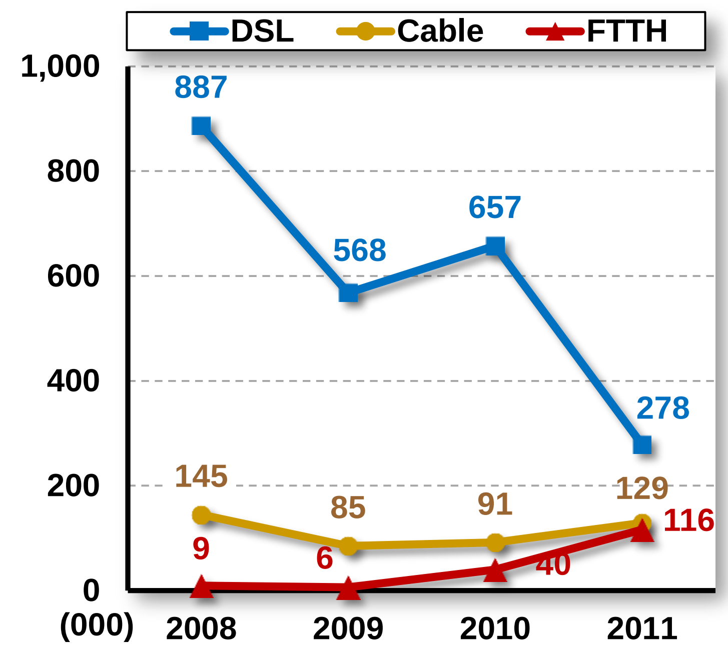
- Telefónica's Home and largest market
- Incumbent Nationwide Fixed Line Operator
- Networks: xDSL, FTTH, Wireless
- 4 Play services – Fixed phone, IPTV, Internet, Mobile voice/data

Spain Major Fixed Broadband Platforms



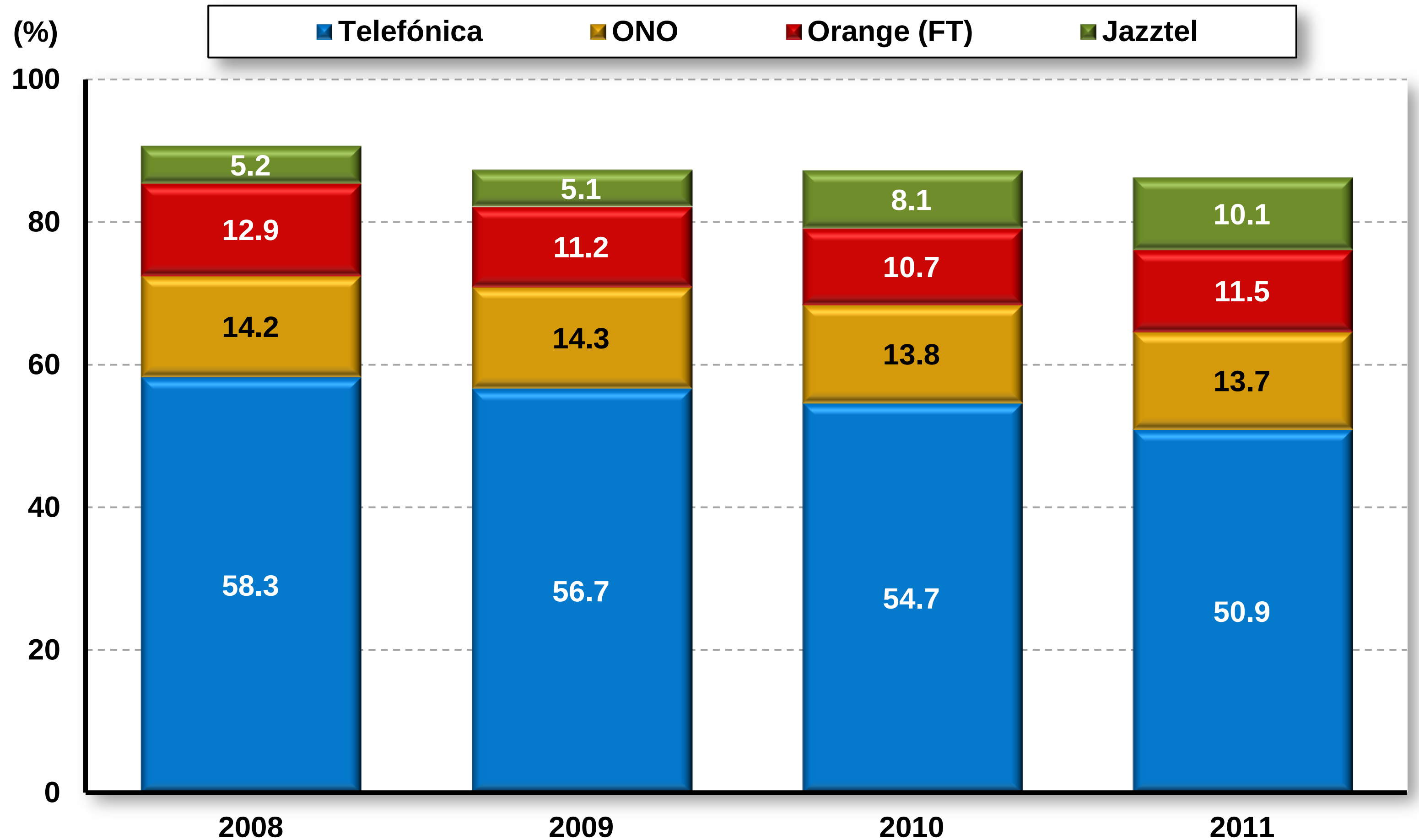
	2008	2009	2010	2011
DSL	79.6%	80.0%	80.2%	78.7%
FTTH	0.1%	0.2%	0.5%	1.6%

Spain Broadband Net Adds by Platform



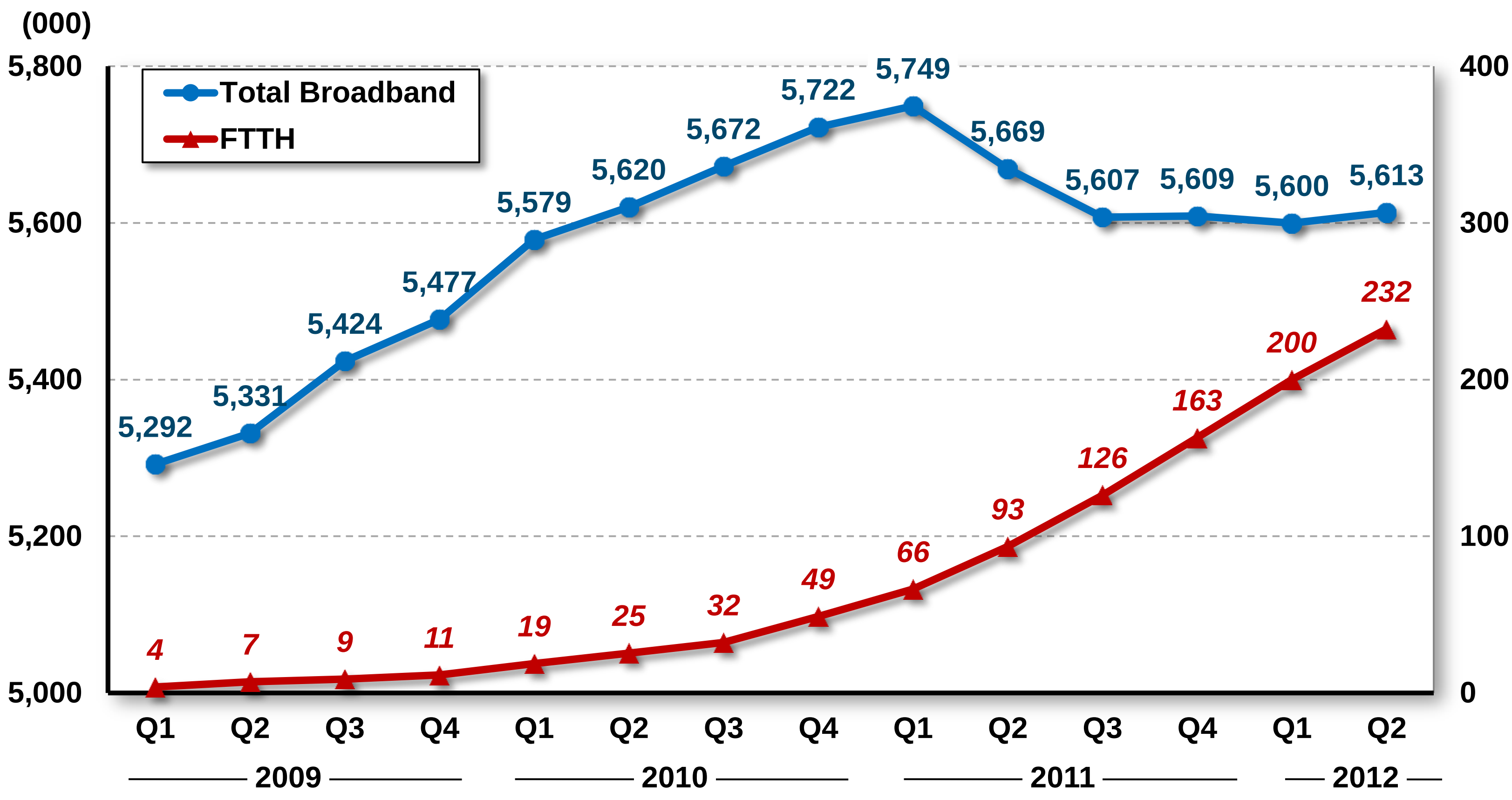
Telefónica - Spain

Spain - Major ISPs by Market Share



Telefónica - Spain

Telefónica Total Broadband and Fibre Subs



	2009	2010	2011	2012
BB Mkt. Share	56.7%	54.7%	50.9%	
% of Total Subs	*0.2%*	*0.9%*	*2.9%*	*4.1%*
% of FTTH Mkt.	*71.3%*	*87.8%*	*95.0%*	

Telefónica – Spain: FTTH Services

- **FTTH services launched 2008 in 12 cities, speeds up to 30 Mbps**
- **Deployments alongside VDSL**

- Response to cable threat

- **2011 - FTTH speeds increased to 100 Mbps**

- Regulation requires Telefónica to unbundle all connections under 30 Mbps

- FTTH Network Coverage – about 12% of HHs in mid-2012
- Target – 50% of premises by 2015
- Main cities nationwide

FTTH Take up rate – over 11%

-> 4% of total broadband subs

Telefónica – Spain: FTTH Marketing & Pricing

- Both xDSL and FTTH require a phone line
- **FTTH is marketed as a premium service :**
  - FTTH only available at 100 Mbps -> the most expensive service at €40/mo
  - **HD IPTV is only available with FTTH**
  - Upgrading from ADSL to VDSL costs 20% more; upgrading from VDSL to FTTH – 30% more (speed x3 with every upgrade)
  - Price/MB of data is cheaper with FTTH
  - However, **bundles present good savings:**
    - 100 Mbps 4 play is only 12% more expensive than 10 Mbps ADSL 4 play
  - **FTTH bundles are only a little cheaper than comparable HFC services**
    - Movistar Fibre 4 Play is 10% cheaper than Ono cable 3 play with 100 Mbps + comparable mobile plan

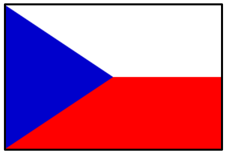
Telefónica –Europe: Other Markets

xDSL Services

UK
- Alternative operator
- Only 3% market share
- Decreasing subscriber base
- Small FTTH market

Germany
- Alternative operator
- 10% market share
- Decreasing subscriber base
- Telefónica aims to sell 20% stake

Czech Republic
- Dominant Incumbent operator
- VDSL deployments offering up to 40 Mbps speeds
- Sole IPTV provider
- Fragmented telco competition
- Sole 4-play provider; largest fixed and mobile network
- Historically small FTTH market
- However: strong cable growth and local fibre network roll-outs putting pressure on the Incumbent



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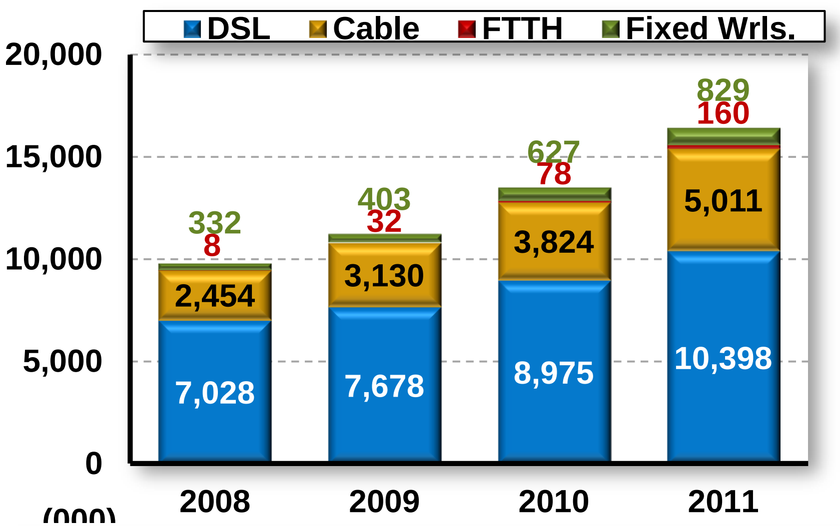
Telefónica - Brazil

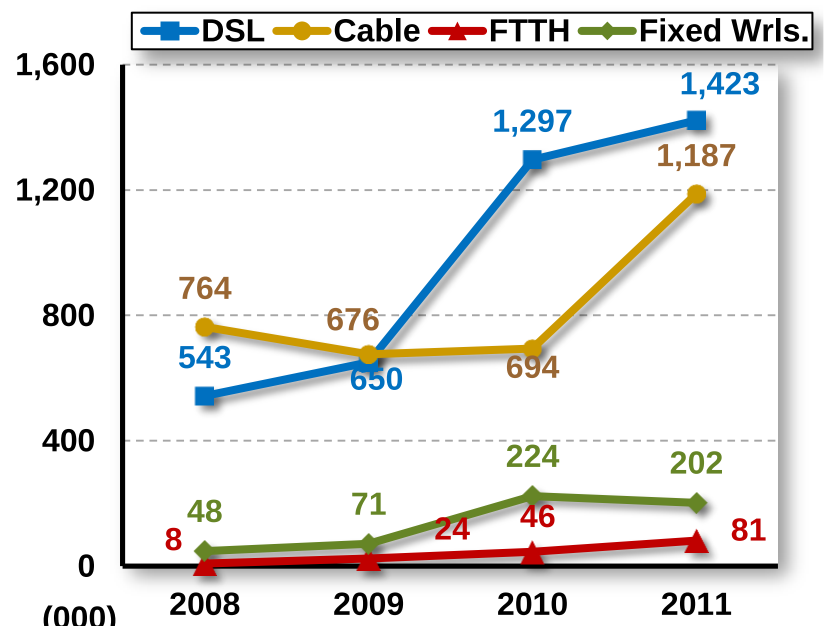
- ➢Telefónica's Second-largest market, largest Latin American Market
- ➢ One of 2 Incumbents
- ➢ Networks: xDSL, FTTH, Wireless
- ➢ 4 Play services – Fixed phone, Internet, Mobile voice/data, CATV, DTH, IPTV in Sao Paulo
- ➢ Long-term regulatory ban on telco IPTV services (lifted 2011)

Brazil - Major Fixed Broadband Platforms

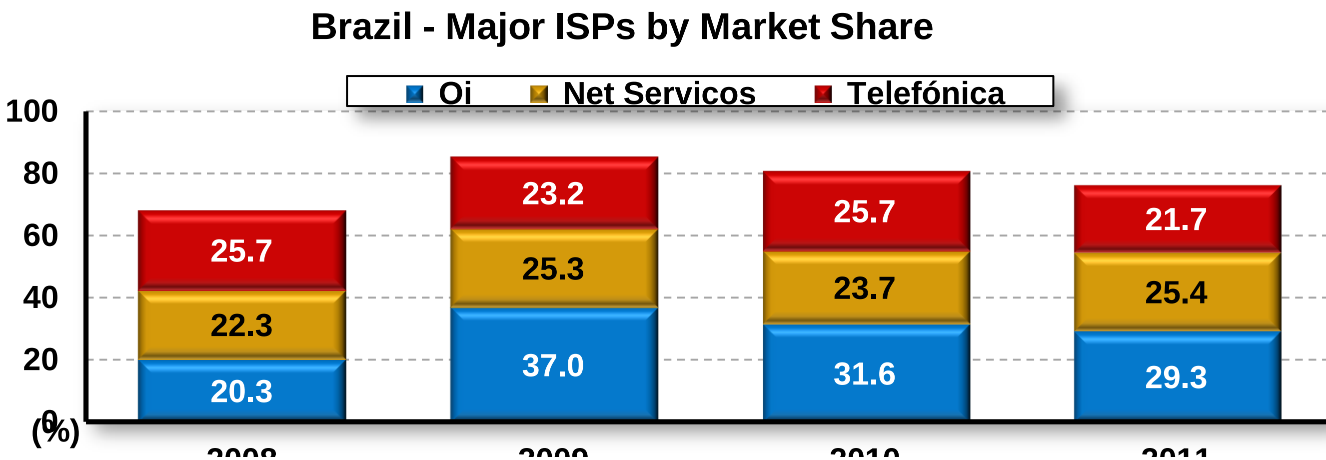


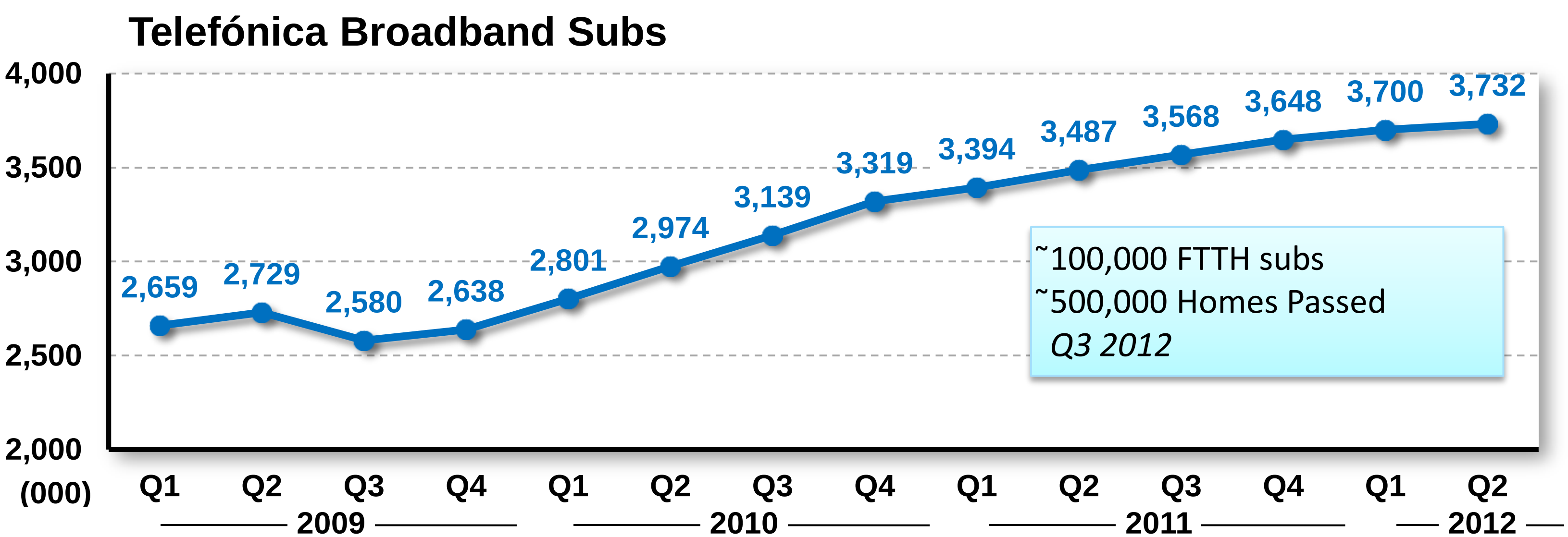
	2008	2009	2010	2011
DSL	70.6%	67.4%	65.0%	61.9%
FTTH	0.1%	0.3%	0.6%	0.9%

Brazil - Broadband Net Adds by Platform



Telefónica - Brazil





	2009	2010	2011
BB Mkt. Share	23.2%	25.7%	21.7%

Telefónica – Brazil: FTTH Services

- **FTTH services available to 500,000 homes in Sao Paulo region, speeds 15-100 Mbps**

- Response to cable threat, competitive FTTH deployments
- **Infrastructure upgrade for IPTV**

- FTTH Network Coverage – about 500,000 HHs in Q3 2012
- Target – 1 million subs by 2015

- About 100,000 FTTH subscribers at Q3 2012

- **Cherry-picked deployment** to densely populated upscale residences

FTTH Take up rate – 20%

-> less than 3% of total broadband subs

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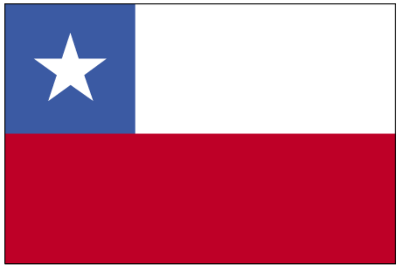
Telefónica – Brazil: FTTH Marketing & Pricing

- xDSL and FTTH available in bundles or naked
- **FTTH is marketed as a premium service :**
  - Marketed to upscale households
  - **FTTH only available at top speeds 15 -100 Mbps**
    -> the most expensive service starting at $R90/mo in a combo pack
  - **IPTV is only available with FTTH**
  - Only Fibre IPTV offers advanced services: Interactive services, Multiroom , Pic in Pic
  - Price/MB of data is cheaper with 10Mbps DSL than with 15Mbps FTTH service (but lower at higher speeds).
  - **One of the cheapest 100 Mbps offer on the market**
    - 30% cheaper than 100 Mbps on HFC from NET
  - Other speed tiers – comparable

FTTH Services have higher ARPUs

Telefónica - Chile



➢ Incumbent and largest operator
➢ Networks: xDSL, FTTH, Wireless
➢ 4 Play services – Fixed phone, Internet, Mobile voice/data, IPTV, DTH

Chile Fixed Broadband Market (2011)

- ❖ **DSL – 50% market share; Cable – 48% share**
  - ❖ Cable: faster growth than DSL, gaining market share
- ❖ **Nascent Fibre market**

- ❖ **Telefónica dominates with a 42.5% market share**
  - ❖ Main competitor: MSO VTR: 37% market share

Telefónica – Chile: FTTH Services

- **FTTH services available in Biobio Region , containing the capital Conception; Speeds 4- 80 Mbps**
- Launched in Q2 2011

- Response to cable threat , competitive Fibre deployments
- **Network upgrade for IPTV**

- FTTH Network Coverage – about 50,000 HHs
- Target – 700,000 (80% of HHs) by end-2014

- **Deployment in selected areas around capital, but target – urban areas nationwide**

Telefónica – Chile: FTTH Marketing & Pricing

- xDSL and FTTH available in bundles or naked
- **FTTH is marketed to a wide audience**
  - **Fibre services are available at all speed levels**
  - **ADSL and Fibre at 4Mbps and 15 Mbps speeds cost same**;
  - Higher speeds – only with FTTH
  - **IPTV is only available with FTTH**
  - Basic IPTV subs access more channels, incl HD, than DTH subs
  - **Matching and undercutting VTR cable prices**

Telefónica – Latin America: Other Markets

Little or No FTTH, but deployments starting

Argentina

- DSL dominates w. 67% share
- Until 2010, cable market grew slower than DSL
- Almost no competitive Fibre deployments
- 3 strong operators (Telefónica, Telecom, Cablevision)
- **BUT: telco competition and DOCSIS 3.0 driving Fibre trials and greenfield deployments**

Colombia

- Telefónica has regional monopoly
- Fragmented DSL and Cable markets
- Almost no competitive Fibre deployments
- *Low broadband penetration*

Peru

- Telefónica dominates the broadband market w. >90% share
- *Very low broadband penetration*

France Telecom - Orange

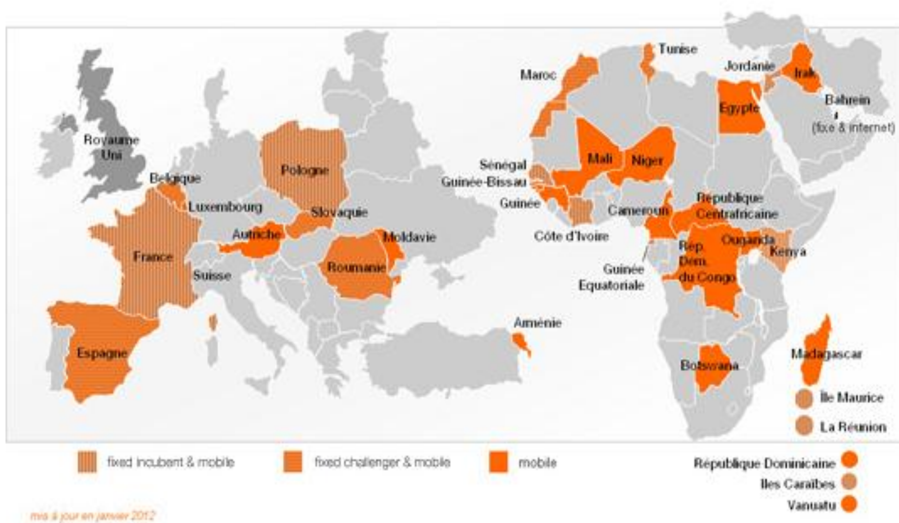
➢ Present in **33 countries;** Over **227 million customers incl 15 million broadband** at September 2012.

➢ Fixed Broadband Services – **France, Spain,** Belgium, **Poland**, **Slovakia**, Moldavia, Romania, **Jordan, Egypt**, Ivory Coast, Kenya, Mauritius, Cameroon, Tunisia

➢ Commercial FTTH Services (residential) – France, Slovakia, (planned in Spain)

➢One Global Brand:

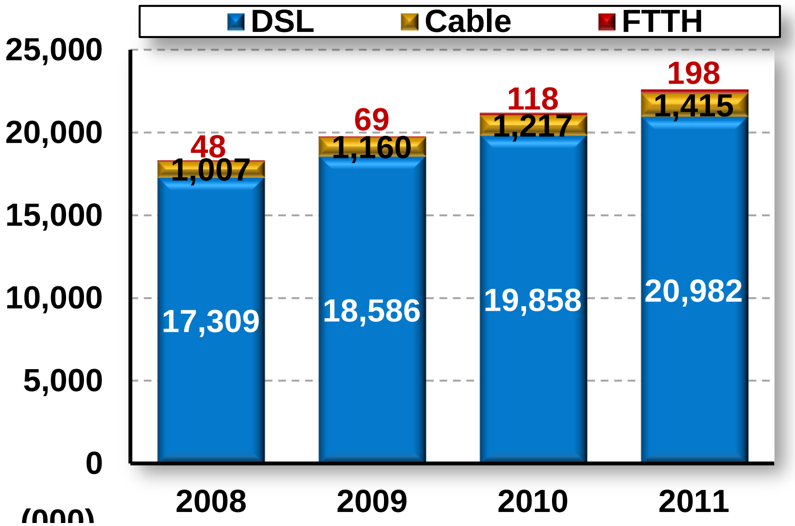
➢ Global Presence:



France Telecom – France

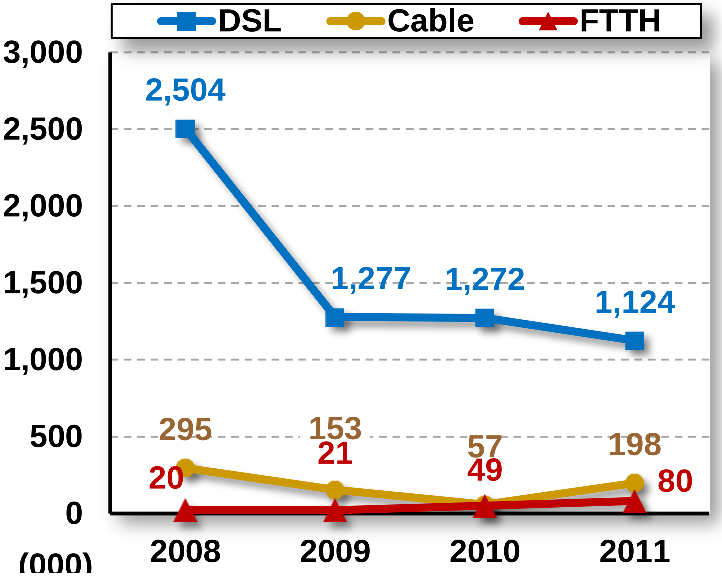
- FT's Home and largest market
- Incumbent Nationwide Fixed Line Operator
- Networks: xDSL, FTTH, Wireless
- 4 Play services – Fixed phone, IPTV, Internet, Mobile voice/data

France - Major Fixed Broadband Platforms



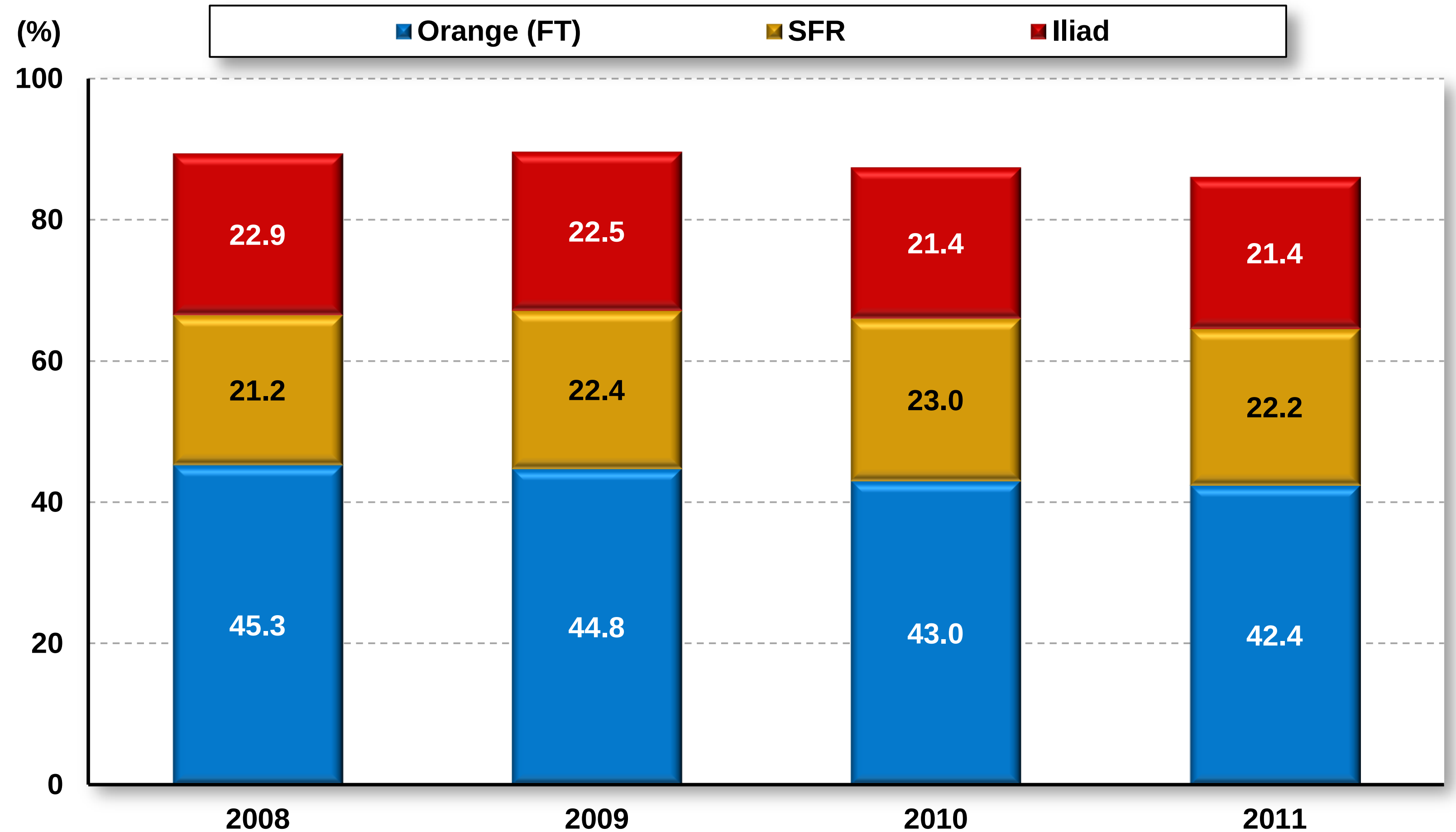
DSL	94.2%	93.7%	93.6%	92.8%

France - Broadband Net Adds by Platform



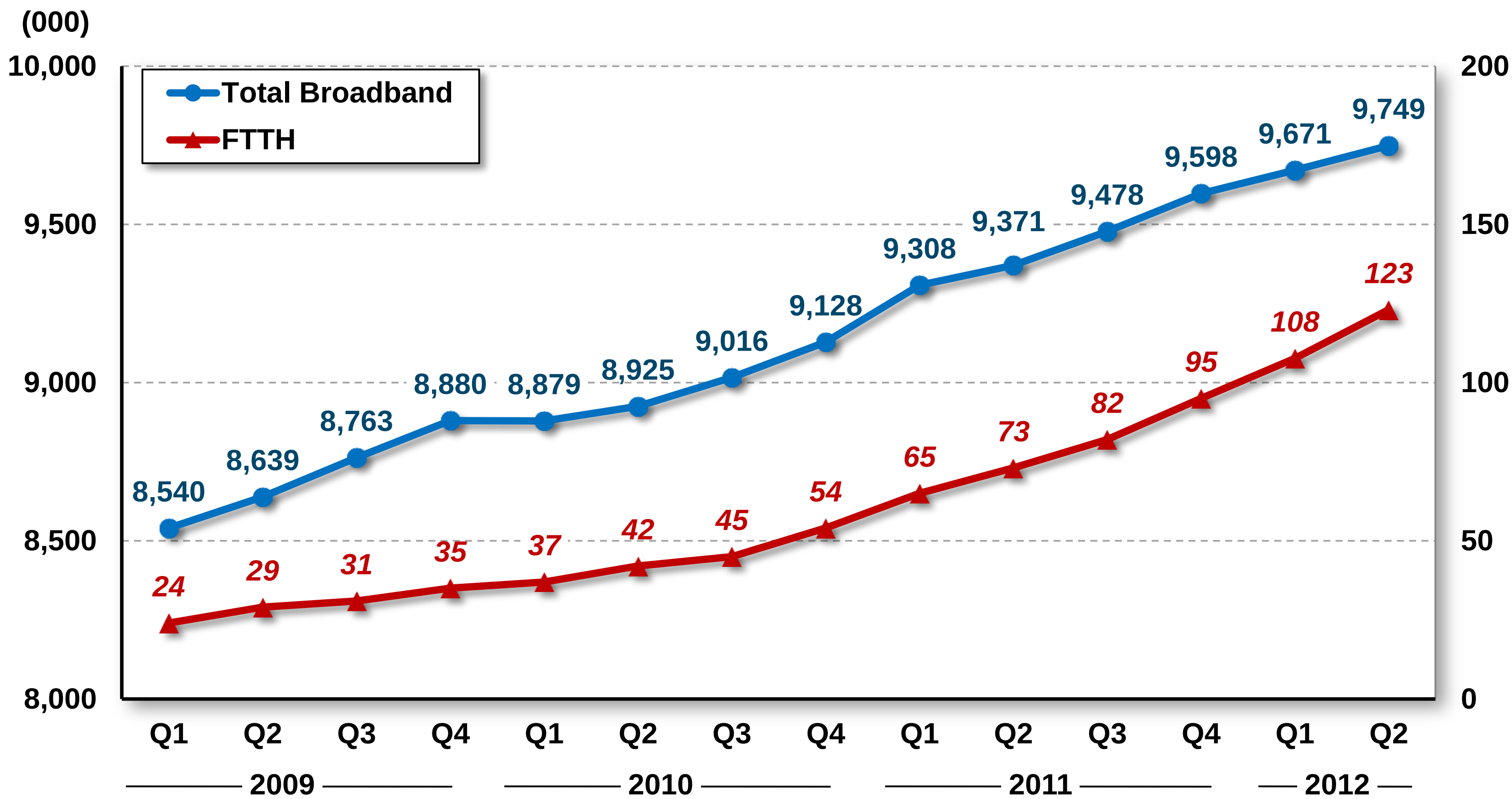
France Telecom – France

France - Major ISPs by Market Share



France Telecom – France

France Telecom -Total Broadband and Fibre Subs



	2009	2010	2011	2012
BB Mkt. Share	44.8%	43.0%	42.4%	
% of Total Subs	*0.4%*	*0.6%*	*1.0%*	*1.3%*
% of FTTH Mkt.	*50.7%*	*45.8%*	*48.0%*	

France Telecom - France: FTTH Services

- **FTTH rollout started in 2007 in 6 major cities, speeds up to 30 Mbps**

- **Primarily, response to competitive Fibre deployments**

- Slow speed of rollout due to lack of clear FTTH regulation

- FTTH Network Coverage – over 900,000 homes in 20 cities at end-2011
- **Target – 2 million homes by 2015, 15 million (60% of HHs) by 2020 across 3,6000 districts 50% of premises by 2015**

- **Infrastructure sharing agreements with competing telcos** (SFR, Iliad-Free, Bouygues)

FTTH Take up rate –11%

-> 1.3% of total broadband subs

France Telecom - France : FTTH Marketing & Pricing

- **FTTH are marketed as a 3 or 4 play bundle only**
- ADSL is available as solo at lowest speed (8Mbps)

- **Strategy – to sell an STB providing access to 3 basic play and encourage upgrades**

- FTTH 3 play is €5 more expensive than ADSL 3 play but **frequent timed promotions often make it cheaper**

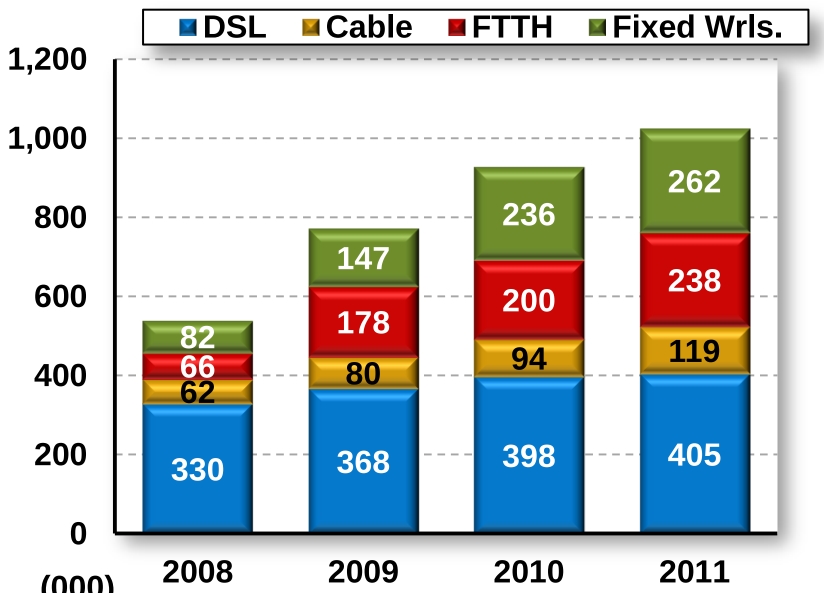
- ADSL to FTTH upgrade increases speed x 5

- **HD and 3D IPTV channels only available with FTTH**

France Telecom – Slovakia

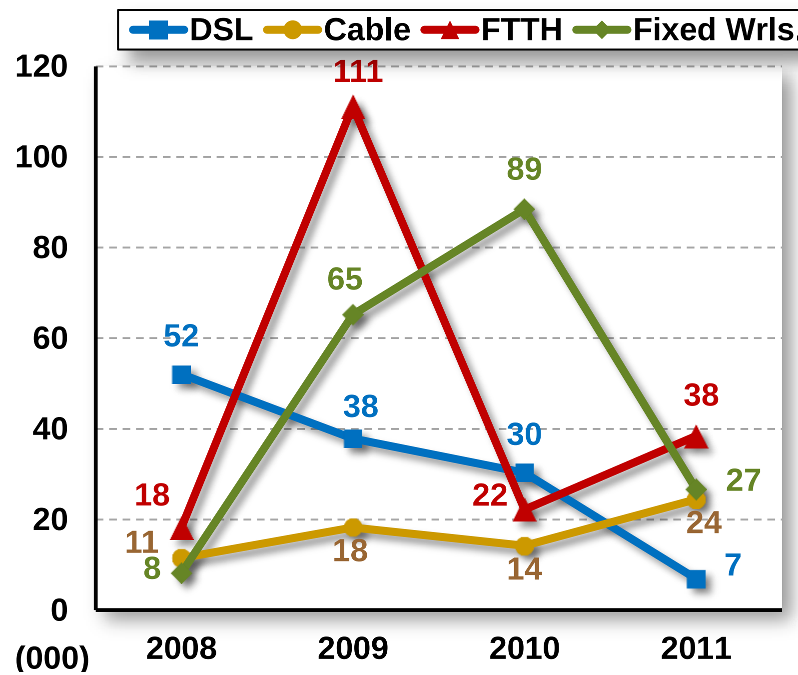
- **Alternative operator**
- 5% broadband market share at end-2011
- Networks: FTTH, Wireless
- 4 Play services – Fixed phone, IPTV, Internet, Mobile voice/data

Slovakia - Major Fixed Broadband Platforms



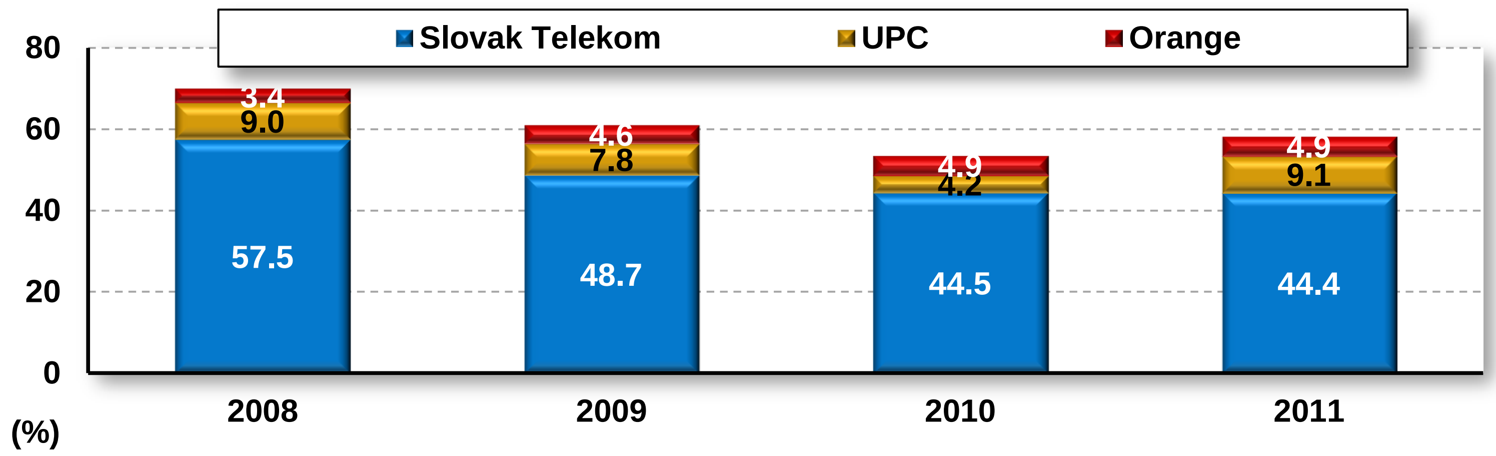
DSL	56.0%	45.8%	41.7%	38.8%

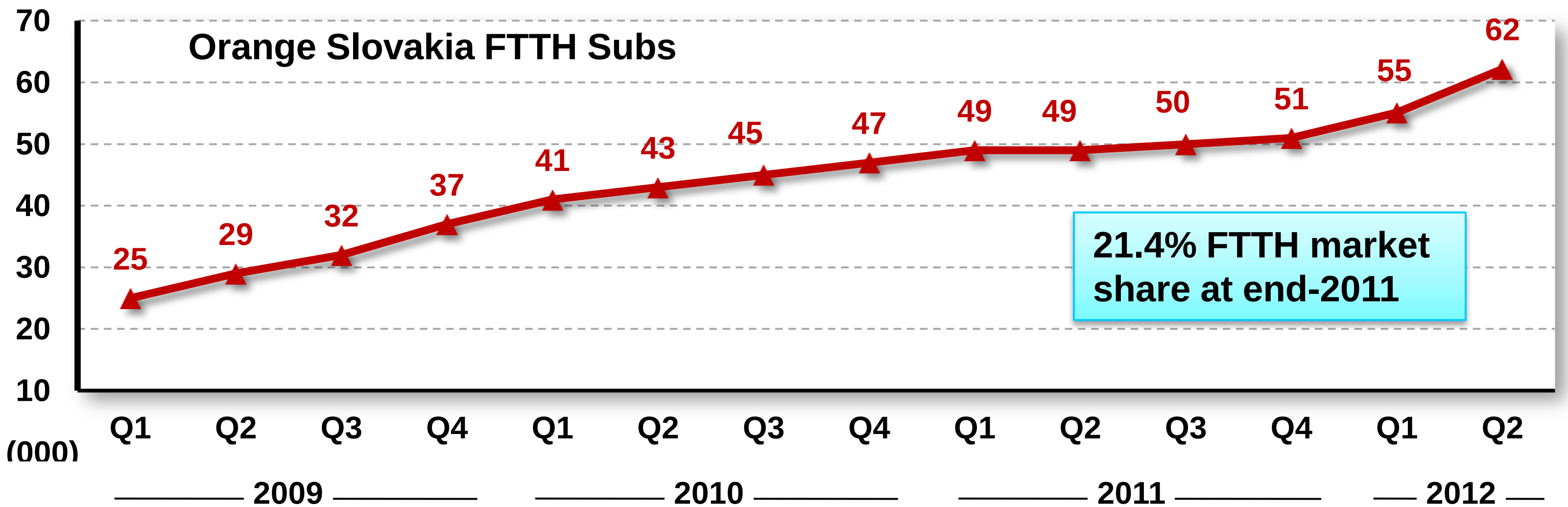
Slovakia - Broadband Net Adds by Platform



France Telecom – Slovakia

Slovakia - Major ISPs by Market Share





BB Mkt. Share	4.6%	4.9%	4.9%

France Telecom - Slovakia: FTTH Services

- **FTTH 3 play launched in 2007, up to 100 mbps**

- **FTTH deployed to supplement wireless network, enable 4 play** to compete with Incumbent‘s DSL and UPC‘s cable services
- **Access to Incumbent’s network is very expensive**

- FTTH Network Coverage – 20% (<400,000) of HHs as of Sept. 2012

- Launched DSL services in late 2011 over Incumbent’s network (access to over 80% of HHs)

FTTH Take up rate – over 12%

France Telecom - Slovakia : FTTH Marketing & Pricing

- FTTH is available as solo or 3 play package
- ADSL is available as solo or bundled with home phone
- **FTTH is prices nearly as low as ADSL (€15 vs. €12, respectively)**
- Fibre 3 Play costs only 30% more than solo Fibre broadband
- **IPTV is available only over FTTH**

France Telecom – Other Markets

xDSL services

BUT: FTTH is gradually being rolled out in hypercompetitive markets

Spain

- FT provides DSL services over Incumbent's local loop
- *Cheaper alternative to Incumbent's services*
- FTTH and cable competition heating up
- **June 2012: €300 mln investment in FTTH over 4 years to cover 1.5 mln premises**

Poland

- FT operates nationwide DSL network, *focus on VDSL*
- Historically: fragmented cable and LAN market, little DSL competition
- Small FTTH market
- Cable, telco consolidation, nascent Fibre → FT losing subs to competition

UK, Belgium, Egypt, Tunisia

- FT provides DSL services over Incumbent's local loop
- *Cheaper alternative to Incumbents' services*
- Little or no FTTH
- *Egypt, Tunisia – no cable broadband*

Other AMEA countries (Jordan, Kenya, etc)

- FT operates its own DSL network
- Little competition
- Little or no FTTH
- *Virtually no cable broadband*

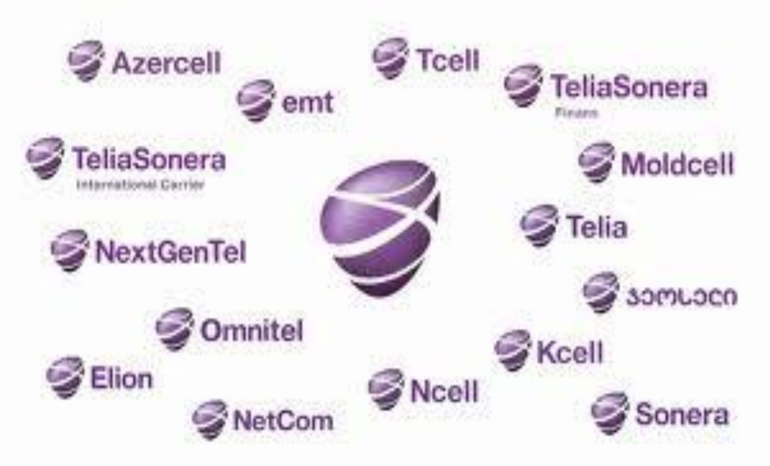
TeliaSonera

- Present in **17 countries;** Over **180 million customers** at September 2012.

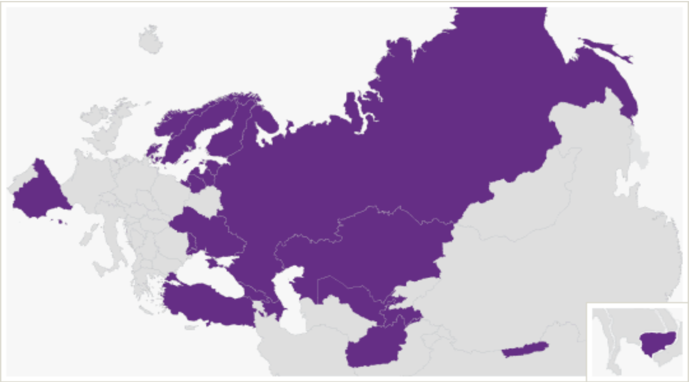
- Fixed Broadband Services – Sweden, Finland, Norway, Denmark, Lithuania, Latvia, Estonia.
  - Incumbent operator – Sweden, Finland, Lithuania, Estonia, (Latvia – 49%)
  - Alternative operator - Norway, Denmark

- Commercial FTTH Services (residential) – all markets where fixed broadband is offered, exc. Denmark (HFC)

- Uses strong local brands:



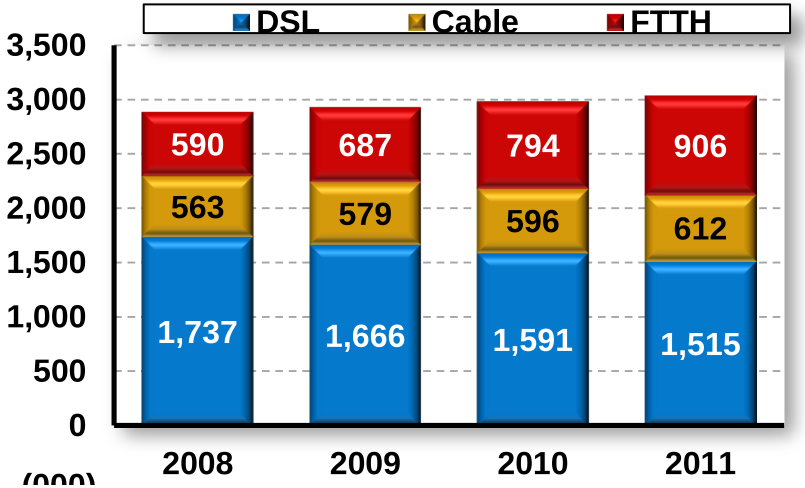
- Global Presence:



TeliaSonera – Sweden, Finland

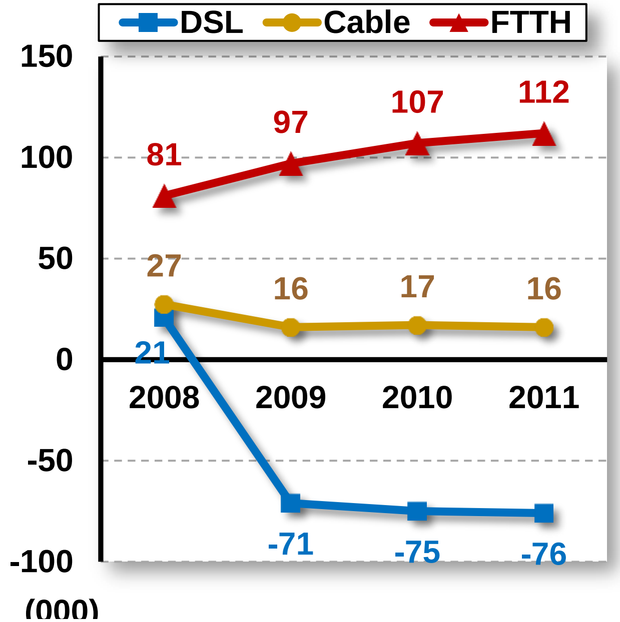
- Largest Markets
- Incumbent Nationwide Fixed Line Operator
- Networks: xDSL, FTTH, Wireless
- 4 Play services – Fixed phone, IPTV, Internet, Mobile voice/data

Sweden - Major Fixed Broadband Platforms



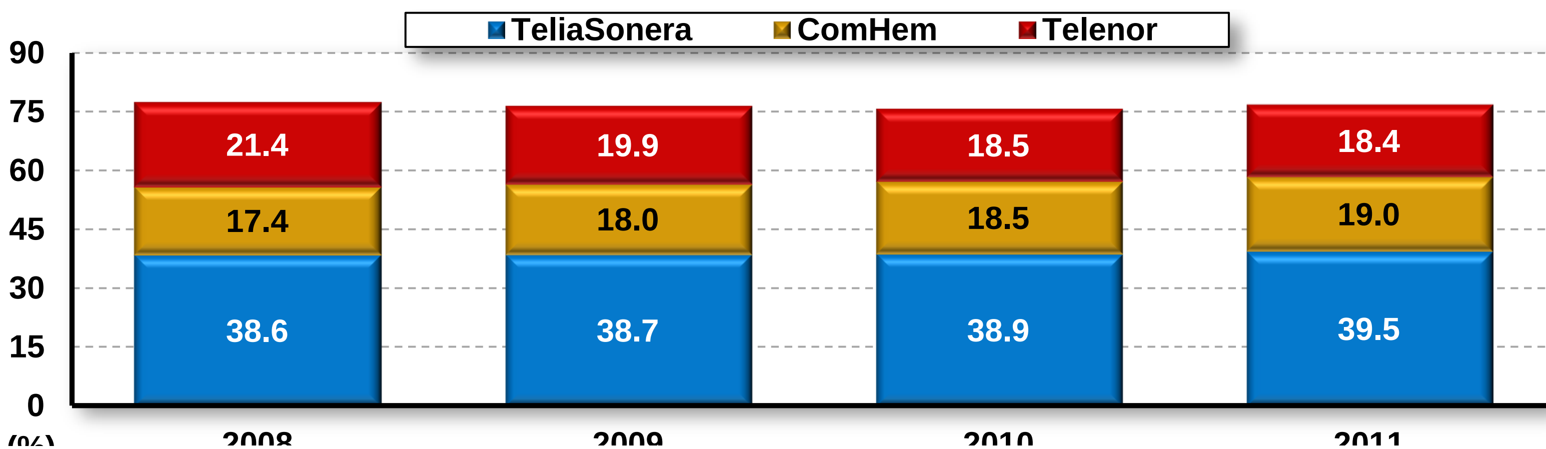
DSL	59.8%	56.6%	53.1%	49.7%
FTTH	20.3%	23.3%	26.5%	29.7%

Sweden - Broadband Net Adds by Platform

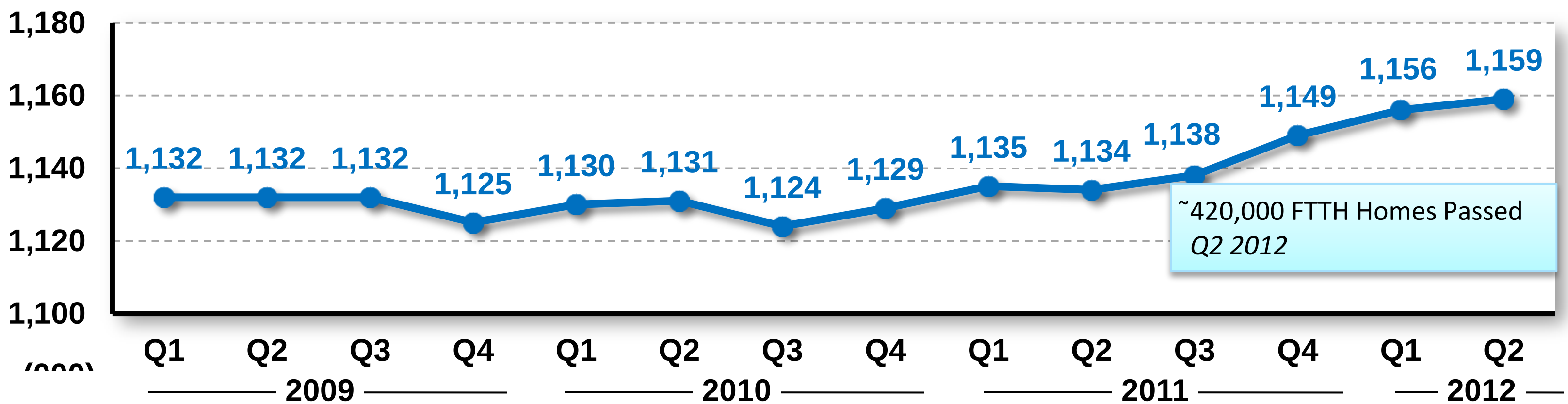


TeliaSonera - Sweden

Sweden - Major ISPs by Market Share



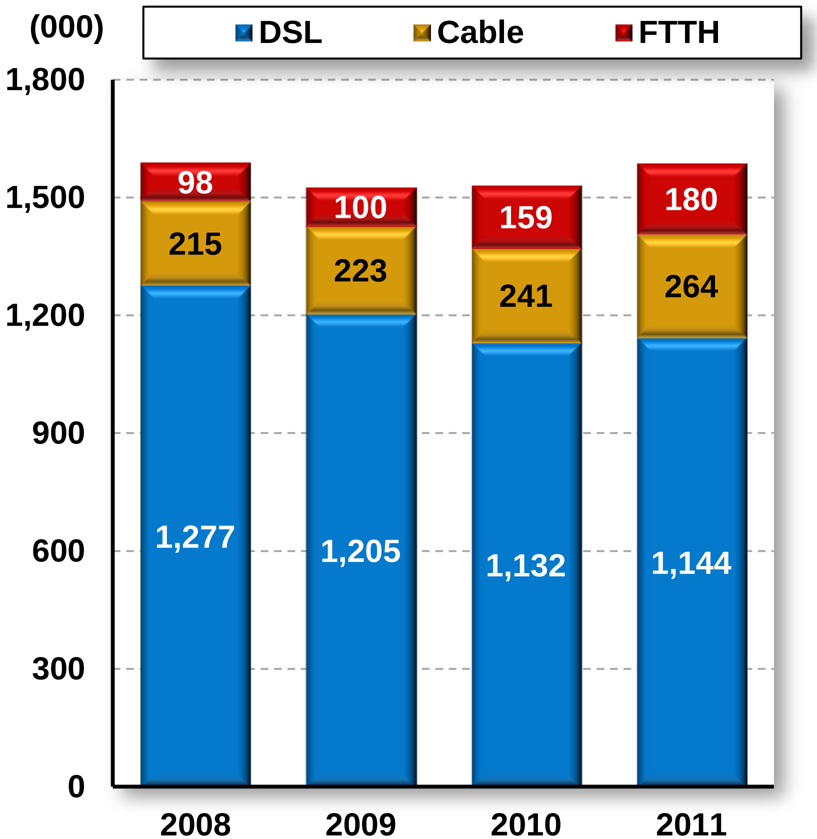
Telia Sweden - Total Broadband Subs



	2009	2010	2011
BB Mkt. Share	38.2%	38.3%	37.7%

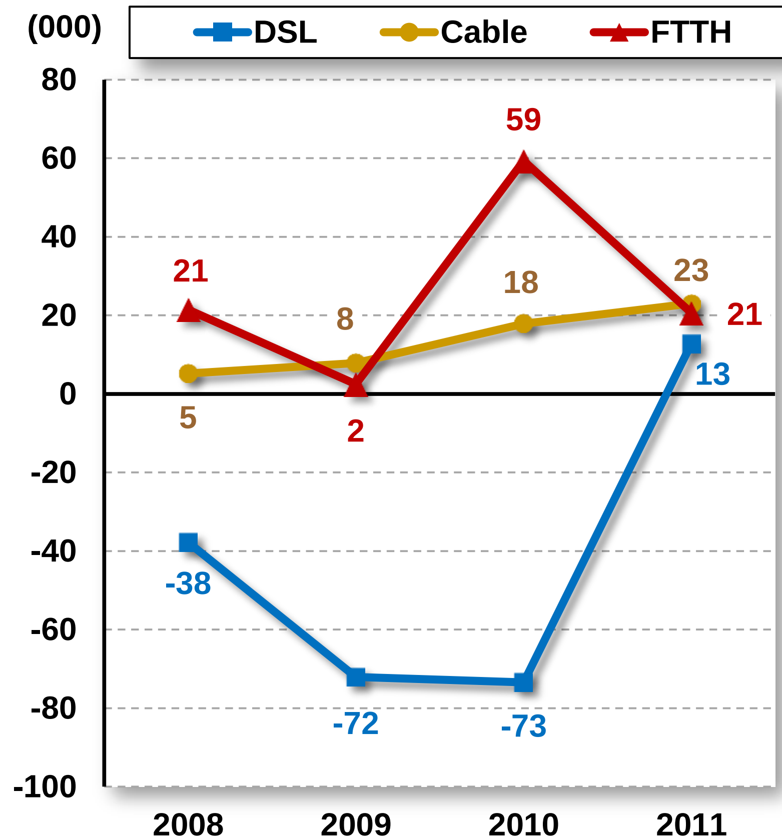
TeliaSonera - Finland

Major Fixed Broadband Platforms



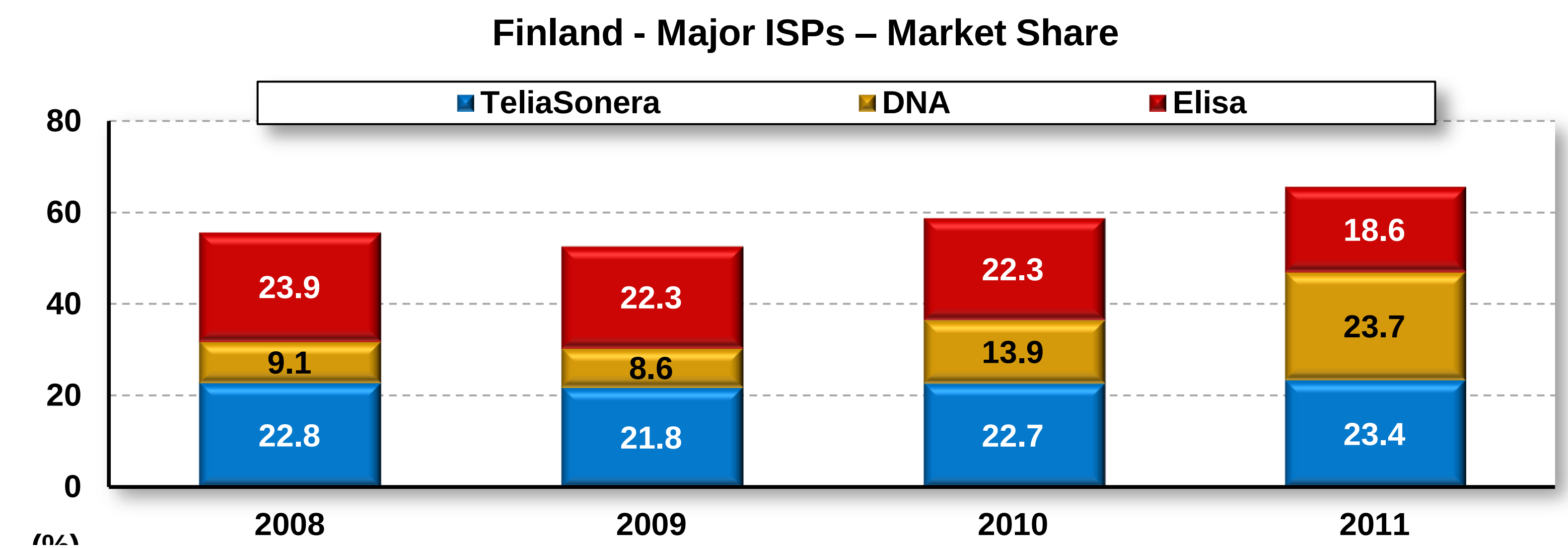
DSL	60.9%	77.0%	72.6%	71.2%

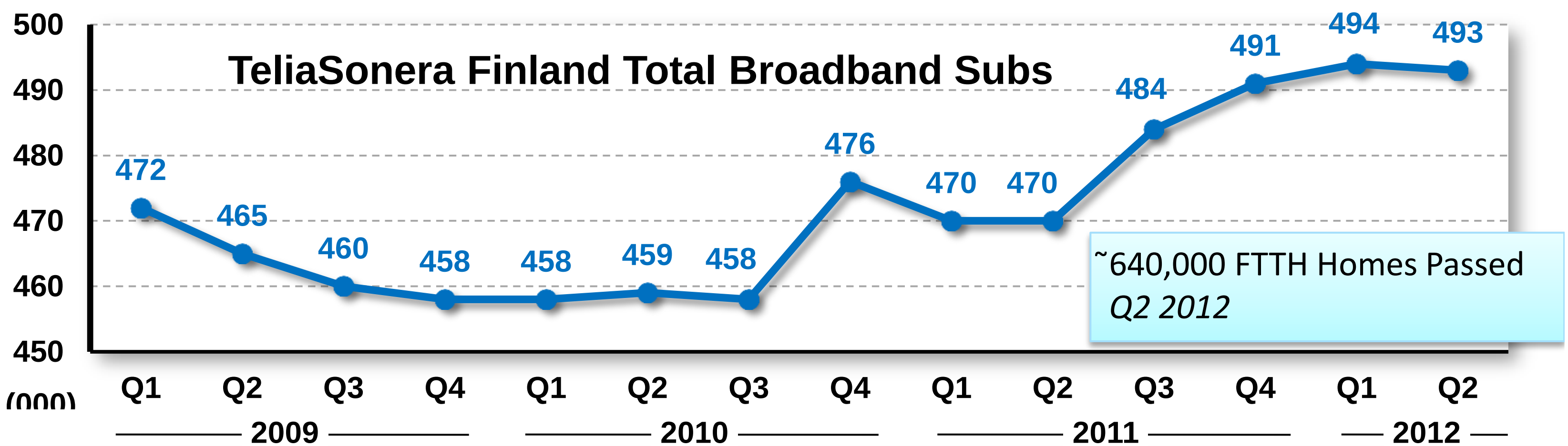
Broadband Net Adds by Platform



TeliaSonera

TeliaSonera - Finland





	2009	2010	2011
BB Mkt. Share	21.8%	22.7%	23.4%

TeliaSonera – Sweden, Finland: FTTH Services

- **Mixed technology NGN strategy:**
  - FTTH**,** VDSL, ADSL

- **Partnerships with muni/utility & property owners**
- **Residents pay for Fibre installation or self-install**

- Response to cable threat, competitive Fibre deployments

Sweden	Finland
•Telia leader in broadband • But: **accounts for <25% of Fibre HP in Sweden (Q2 2012)** • Unbundling obligations •Target - 1 mln HHs by 2014 • Gov. target: 100Mbps speeds for 90% of HHs by 2020	• Sonera #2 in broadband • Early Fibre investment • >550,000 HH covered in main cities in 2011 (30% of HHs) • **Sonera accounts for 95% of Fibre HP in Finland (Q2 2012)** • Gov. target: 100 Mbps to everyone by end-2015

TeliaSonera-Sweden and Finland: FTTH Marketing & Pricing

- FTTH services are marketed **as solo or bundled services**
- Service offers vary depending on type of subscriber: direct or housing assoc.

- **Limited Video options on xDSL**
  - Sweden: HD available only to HH close to exchange
  - Finland: IPTV is not offered on ADSL below 24Mbps

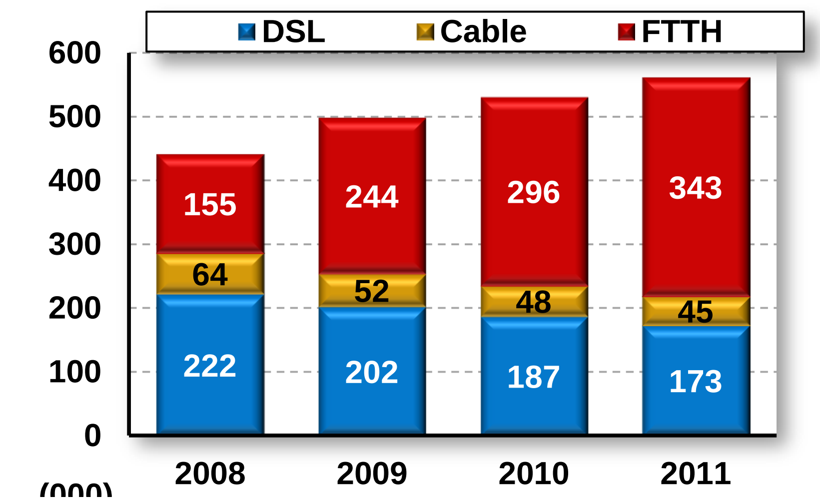
- **FTTH is cheaper than or same price as comparable DSL services**
- **Low-speed FTTH services priced cheaper than comparable cable services**

Sweden	Finland
• FTTH: 10Mbps – 1000 Mbps • xDSL: 2-60Mbps • 30 Mbps DSL is 14% more expensive than 100/10 Mbps FTTH service • Fibre-based 3 play is at least 2% cheaper (start at SEK 428) than DSL-based (start at SEK 439) • Telia's 100Mbps FTTH pack priced similar to ConHem HFC 100 Mbps pack	• FTTH – up to 100 Mbps • ADSL – up to 24 Mbps • FTTB + LAN (EuroDocsis 3.0) – up to 100 Mbps • Price is same for all high speed (over 10 Mbps) broadband services • FTTH is x2 cheaper at 10Mbps than DSL • Sonera 10Mbps FTTH priced similar to DNA cable 10Mbps service

TeliaSonera - Lithuania

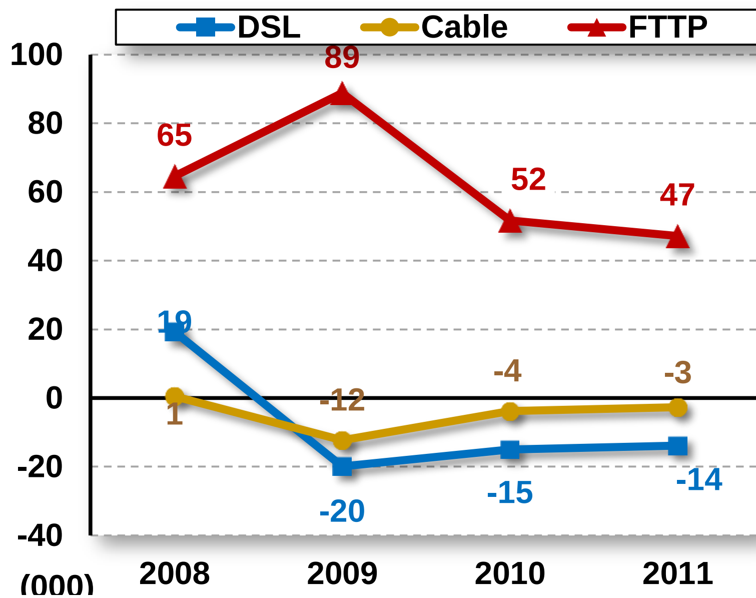
- Incumbent Nationwide Fixed Line Operator
- Networks: xDSL, FTTH
- 3 Play services – Fixed phone, IPTV, Internet

Lithuania - Major Fixed Broadband Platforms



DSL	41.1%	34.6%	29.9%	26.2%

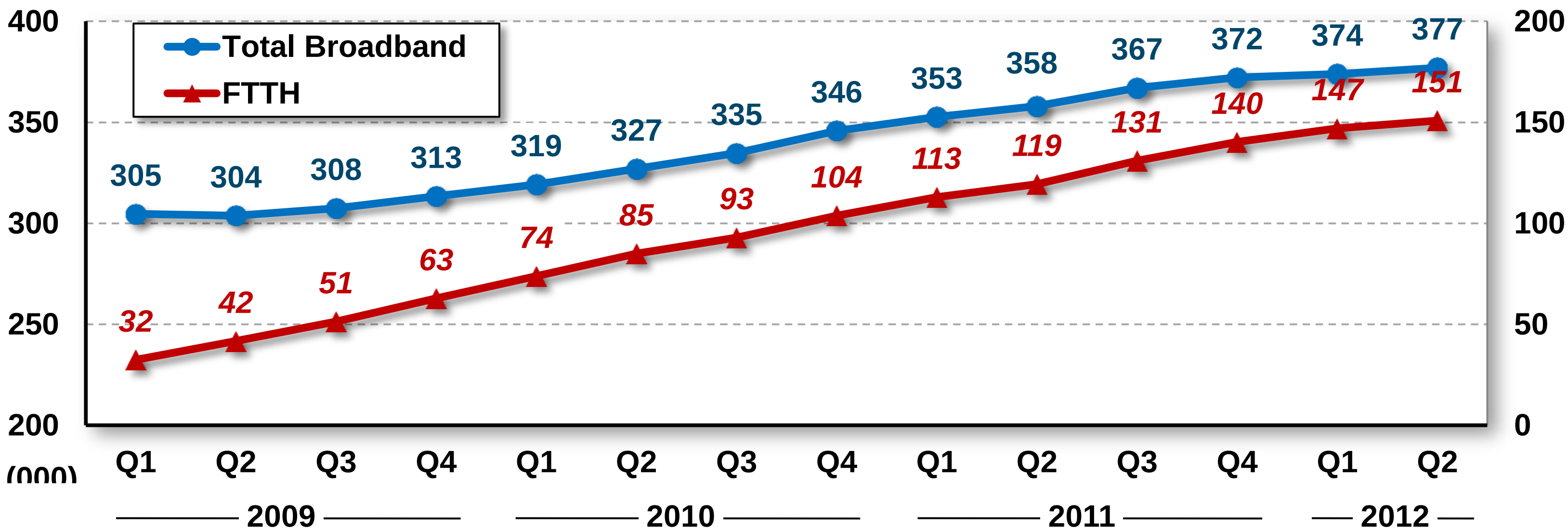
Lithuania - Broadband Net Adds by Platform



TeliaSonera Lithuania

- TEO - Dominant broadband provider – 56% market share in 2011
- Fragmented competition:
  - LRTC (FWA) – 8.7% share
  - Cgates (FTTH) – 5.3% share

TEO Total Broadband and Fibre Subs



	2009	2010	2011	2012
BB Mkt. Share	53.7%	55.3%	56.3%	
% of Total Subs	*20.0%*	*30.0%*	*37.7%*	*40.0%*
% of FTTH Mkt.	*25.7%*	*35.1%*	*40.9%*	

TEO LT: FTTH Services

- **FTTH rollout started in 2007**

- TEO historically controlled close to 99% of all DSL connections
- **Telecom monopoly expired in 2003**

- **Fibre deployed as response to cable threat and competitive Fibre deployments (by telcos and MSOs)**

- **Now available in 100 cities nationwide, speeds up to 300 Mbps**

- TEO FTTH Network Coverage – about 62% of HHs in Q3 2012
  - Rapid deployment due to predominance of MDUs and small country size

FTTH Take up rate – close to 21%

-> 40% of total broadband subs

TEO LT: FTTH Marketing & Pricing

- Both xDSL and FTTH available as solo or in 2-3 play bundles
- **TEO provides some of the cheapest FTTH services and bundles in Lithuania**
    - Comparable FTTH services from MSOs are up to 20% more expensive
- Pay-TV programming inferior to MSOs
- **FTTH is cheaper than DSL services**
- **FTTH and DSL bundles are similarly priced**
    - 1 Mbps DSL pack costs as much as 10 Mbps Fibre pack
    - 50Mbps Fibre pack costs as much as 4Mbps DSL pack
    - 10 Mbps Fibre pack is up to 400% cheaper than 8 Mbps DSL pack or 10 Mbps cable pack
    - Comparable top-tier DSL and FTTH 3-play services cost same (but fibre offers x25 faster bb)
    - Subscribers are encouraged to switch to FTTH

TeliaSonera – Other Markets

Mix of NGN technologies

Norway

- NextGenTel - alternative operator
- *Small market share*
- *Fibre available in some areas, deployed in partnership with utilities*
- Utilities lead in Fibre deployments

Estonia

- Elion – fixed line incumbent
- *Leader in FTTH deployments*
- ADSL – only up to 5 Mbps, FTTH – up to 100 Mbps
- *5 Mbps ADSL and FTTH priced the same; 12 Mbps DSL priced same as 50 Mbps FTTH*
- *Government investment*: Nationwide 100 Mbps FTTH network rollout for 90% of the population by 2012 and 100% by 2015, developed by an independent entity comprised of all major telcos

SNLKagan

Comparison with United States

2011 Market Data:

- **Broadband Penetration: 68.5%**
- **Cable share: 56.8%** - stagnating (56.4% in 2008)
  - Cable broadband net adds peaked in 2011
- **Telco Broadband (xDSL+FTTH) share: 39.3%** - decreasing (41.5% in 2008)
  - Telco broadband net adds falling
- **Wireless broadband** – strong gains

- **Main telcos (4 play):**

verizon

- Wireline: FTTH, ADSL
- FTTH – Greenfield + ADSL upgrade in main cities
- FTTH expansion is effectively over exc. previous contractual obligations
- 77% of telco FTTH deployments (2011)
- But: FiOS accounts for <6% of US broadband subs (2011)

at&t

- Wireline: FTTH, FTTN, ADSL
- FTTH – Greenfield only

- **Main competitors – Cable MSOs (3play)**

- **Cable and Telco 3 play service offers are similar**

Verizon FTTH Services

- *FTTH up to 300 Mbps*
- FiOS achieved 37% service take-up rate in Q3 2012
- 60% of Wireline Broadband subs are on FTTH
- 87% of FTTH broadband subs take IPTV
- Consumer ARPU: upwards of US$100 in 2012

WHY AND HOW?

- ✓ FiOS bb solo is 130% more expensive than DSL
- ✓ FiOS 2-play 43% more expensive than DSL

- ❖ Little or no telco (xDSL or Fibre) competition
- ❖ Targeted deployments, DSL shut off in fibre footprint
- ❖ Leverage wireless network to offer value-added/TV Everywhere services
- ❖ Higher speeds than cable
- ❖ Able to offer IPTV on Fibre to compete with MSOs
- ❖ Able to match or undercut cable prices in some areas
- ❖ Heavy marketing campaigns criticizing cable
  - ❖ Fibre is ‘cool’, ‘modern’, ‘the future’ (and nobody else has it!)
- ❖ Consumer dissatisfaction with cable

Strategy Comparisons

- **No single global strategy**
  - Telia comes close with Fibre deployments in most markets
- **Global Telcos leverage their wireless networks**
- **Integration of Video strategy with Fibre**
- **Fibre priced to make bundles more attractive**

	Telefónica	FT-Orange	TeliaSonera	Verizon
Geographic Reach	Spain: Nationwide Lat. Am.: Cherry-picked	Nationwide	Nationwide	Main cities, quite selective
Brands	Several established	Global brand	Local brands	Distinct brand for Fibre
Bundling	• 1-4 play • Large savings w. bundles • ES: HDTV only on fibre •Lat.Am: IPTV only on fibre	•FR: 3-4 play •SK: 1-4 play • FR: HD, 3DTV only on Fibre •SK: IPTV only on fibre	•1- 4 play • Limited Video options on xDSL	•1-4 play •Large savings w. bundles •IPTV only on fibre
Pricing	•Fibre usually available at highest speeds only •More expensive than DSL (20-30%) • Cheaper (up to 30%) or comparable to than HFC • Premium service	• Fibre available only at highest speed • Priced similar or cheaper than DSL • Priced similar to HFC	• Fibre available at all speed levels • Priced similar or cheaper than DSL • Low-speed fibre cheaper than cable	• Fibre available at all speed levels • More expensive than DSL (130% more on solo, 43% on 2 play) • Premium service
Marketing	• Better alternative to cable • Price competition w. high-end cable	• Price competition	• Price competition	•Better alternative to cable • Price competition w. high-end cable
Target Consumer	• HHs who need speed • Wealthy HHs (esp. Lat.Am)	Everyone	Everyone	• HHs who need speed • HHs unhappy w. cable
DSL -> FTTH migration	Spain: DSL decreasing Lat.Am: DSL – primary business	DSL still growing	DSL subs decreasing	DSL subs decreasing

Factors Determining FTTH Deployments

- **Fibre service take-up increases with time**
- **Cherry-picked, targeted deployments usually have higher take-up rates**

Factors:	Regulation	Economy	Market Size	Competition	Role of Public Bodies
Promote Fibre	• DSL LLU -> incumbent deployments • No functioning LLU -> altnet deployments	• High purchasing power, GDP	• Dense population • Smaller size	• Strong cable market • Competitive Fibre deployments	• National BB Strategies • Public-Private Partnerships • Regional dev. Funds
Inhibit Fibre	• Fibre LLU • Telco TV ban • Uncertain reg.	• Large Income disparity • Small middle class	• Low urbanization • Predominance of single homes	• No/little cable, fibre	• No public incentives

Thank you & Q&A

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