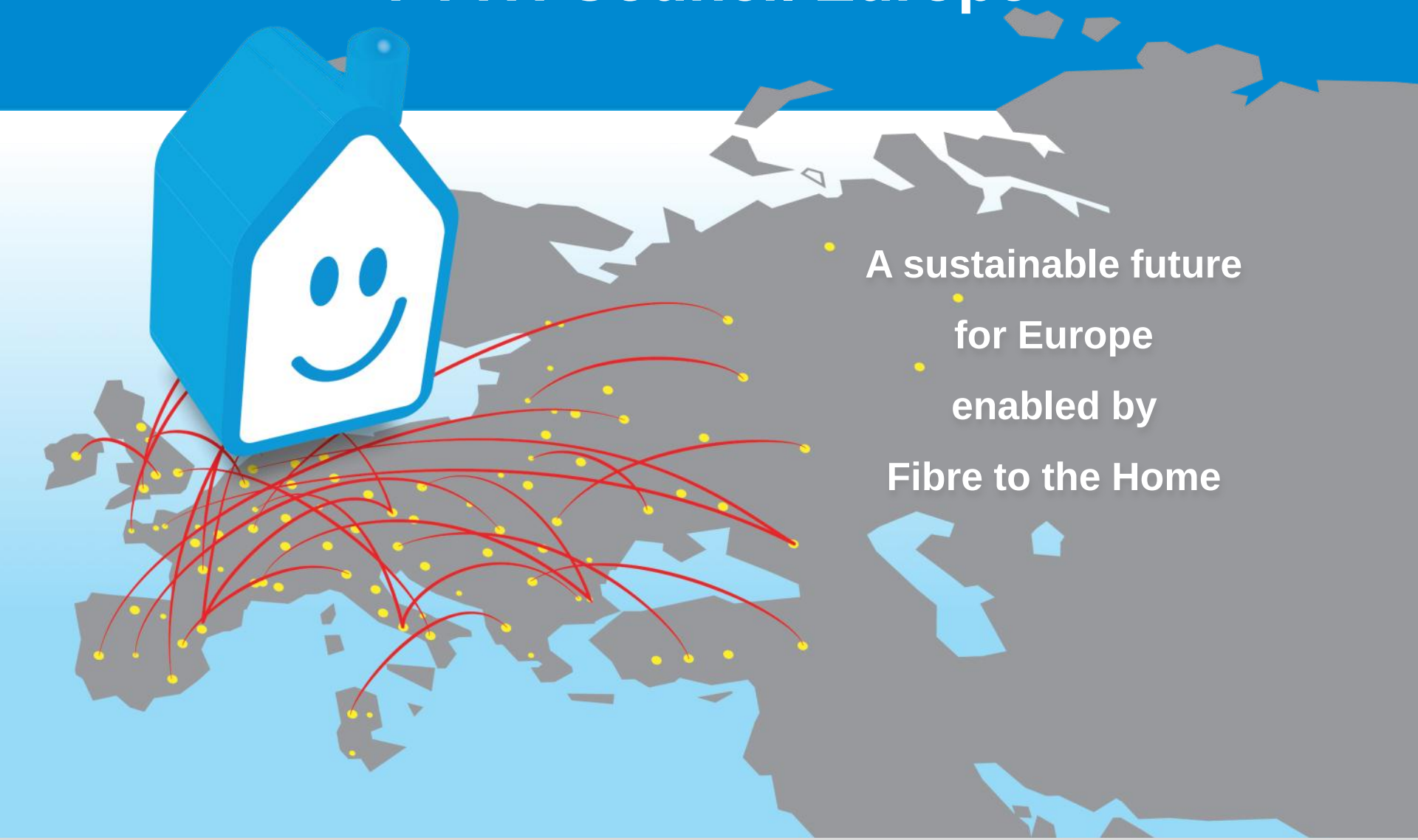
# Creating a brighter future

**CANTO2015 “Improving lives through broadband innovation”**

Edgar Aker, Member of the board, FTTH Council Europe

CANTO2015, Paramaribo, 26 Januari 2015

# FTTH Council Europe



**A sustainable future**

**for Europe**

**enabled by**

**Fibre to the Home**

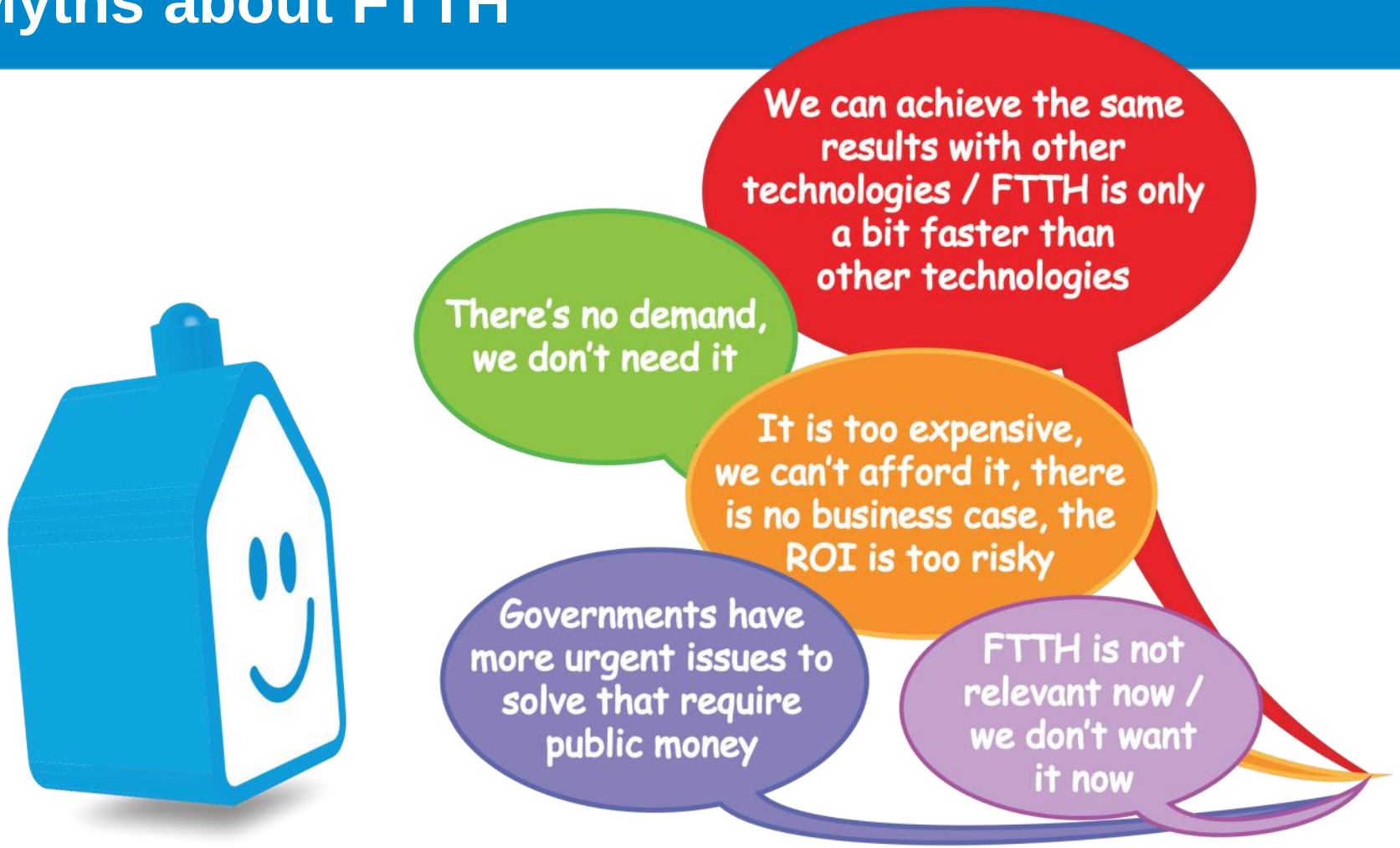
# What is FTTH Council Europe?

- Industry organisation created in 2004, today powerful organisation with over **150 member companies** from across Europe, deployers of fiber, vendors, universities and academics.
- Our vision: "**a sustainable future for Europe with enhanced quality of life, enabled by FTTH**"
- Our mission: *"to accelerate the availability of fibre-based, ultra-high-speed access networks"*
- Our job is to provide information about FTTH to a wide range of broadband stakeholders (European and National policy makers, journalists, operators, investors, etc)
- Go to our web site: www.ftthcouncil.eu "Resources" tab, for all our collection of reports/studies, case studies, opinion articles, monthly newsletter, but also clips and photos

## Our job is to help YOU

We are promoting FTTH because it is the **leading access solution today** and widely recognised as the **ONLY future-proof technology.**

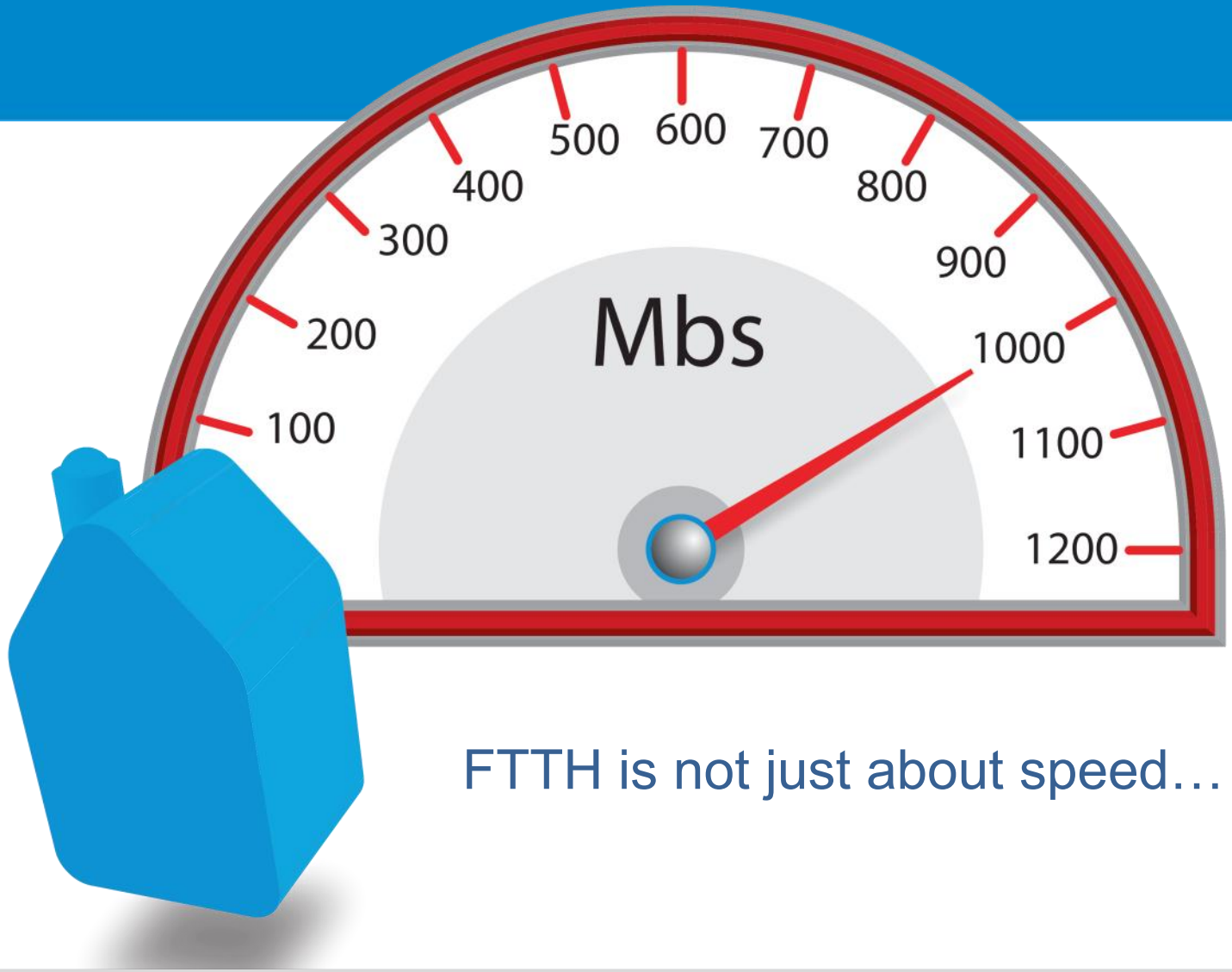
# Myths about FTTH



# Myths about FTTH

- Considering all we know today, how come we still hear these myths about FTTH?
- Sounds familiar?

**Let‘s have a closer look...**




FTTH is not just about speed…

# FTTH is not just about speed

- FTTH is not just about speed, it is an enabler, because it offers:
  - The fastest possible speeds with virtually unlimited bandwidth
  - Symmetrical/ almost symmetrical speeds, enabling video intensive interactive services
  - Reduced latency, i.e. no buffer, no delay, no interruptions, this is necessary for real-time services
  - Resilience: failures are rare and if they do occur they don't have much effect on Quality of Service
  - Limited contention: better chance to get what you pay for at any time than DSL (FCC 2012)
  - No sharing frequencies with other users, no interferences, same speed regardless of the number of users (versus mobile) or distance from the cabinet (versus copper)

**We are not talking about adding a few Mbps downstream,**

**we are talking about a revolution in the way people live and work**

# There is Demand for FTTH

- Fact = there is demand when there are services (Diffraction Analysis 2012).
- By 2025 80% of German homes will need 60+Mbps **upstream**, 43.5% will need 170+Mbps **upstream** (Breko 2012)
- FTTH subscribers are more satisfied (53% Verizon FTTH customers, vs. 37% on AT&T FTTN)
- They use the bandwidth (Ovum 2009: FTTH users use 3-4 times more bandwidth than with other broadband technologies)
- They would never go back to previous technologies
- They are willing to pay for value added services (Diffraction Analysis 2012)
- They rank **speed** + **reliability** higher than price in operator choice (Internet Society 2012)
- Some dig up their own trenches to get FTTH (Altibox/Norway, rural projects/UK…)
- As with railways or smartphones, awareness + availability = demand

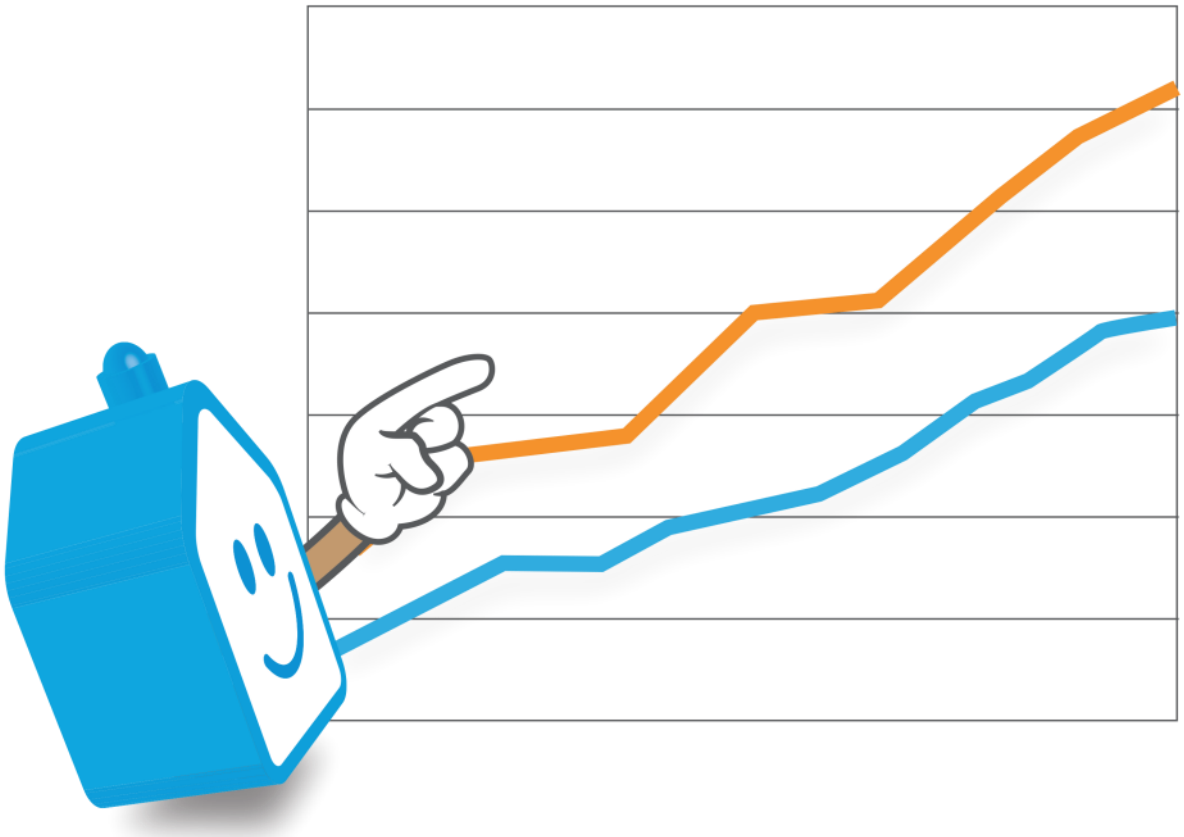
**European consumers will soon be demanding services available in other parts of the world and operators won't be able to deliver!**

# Don’t just take our word for it!

*“When people get access to fibre, they don’t just use more bandwidth, they find new ways of using it, too”*

*Jacob Bolin, Project Manager, Swedish Broadband Forum*

# Costing and funding Fibre roll-out



Food for thought:

EU operators invested €24.8 billion on fixed infrastructure in 2011. Over 9 years to 2020 = **€216 billion**

Estimated cost of deploying FTTH = **€202 billion**

# The cost of deploying Fibre

- The cost of building future-proof FTTH cannot be compared to short term fixes (e.g. upgrades of obsolete copper networks).
- A costing model was generated (by Comsof and Atesio) to calculate the total expected cost of achieving DAE targets (100% of homes passed and 50% of homes with subscribers) for EU27 countries: Initial result = €202 billion

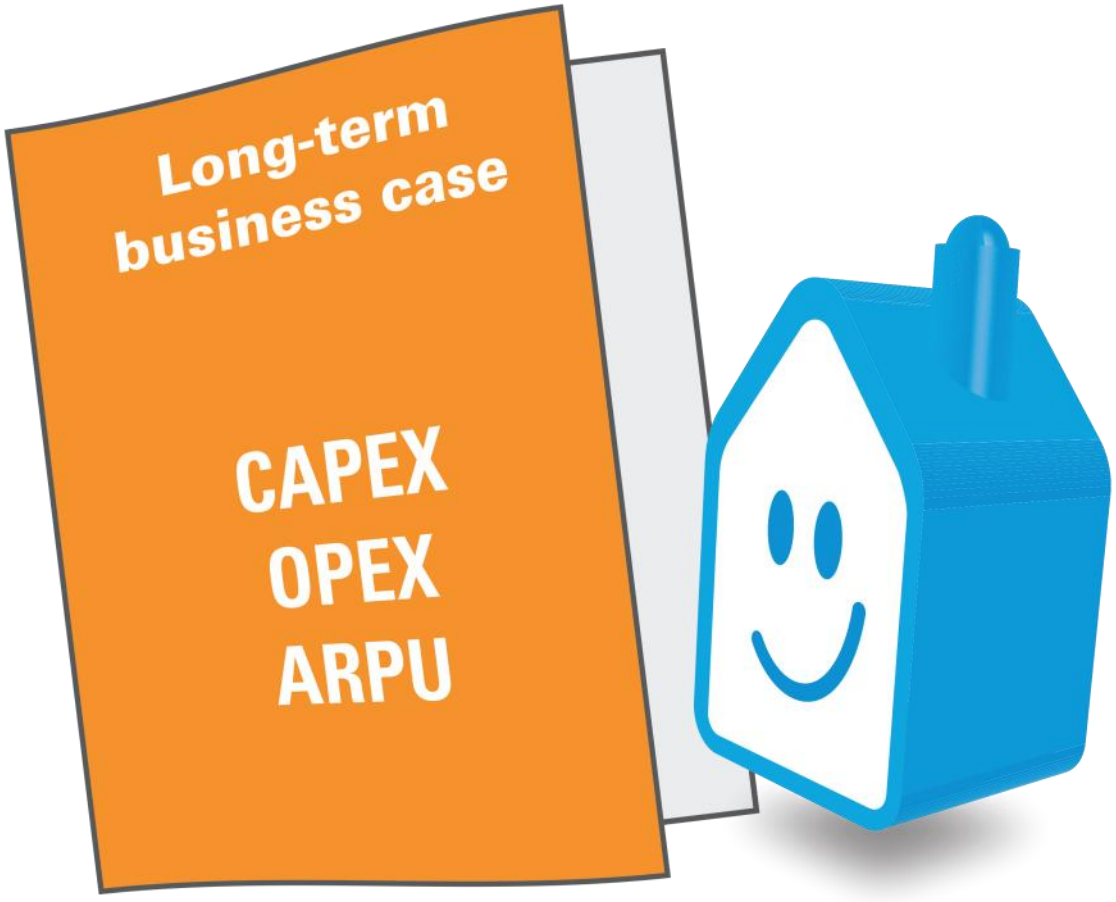
This total cost can be met by different means, for example:

- ETNO announced that in 2011, incumbents investment in fixed = €24.8 billion!!
- Private investors are willing to invest in FTTH as an asset class – e.g. EIB, Soros, pension funds - small projects can be regrouped to be on the investors radar
- Governments also have a role to play to provide incentives

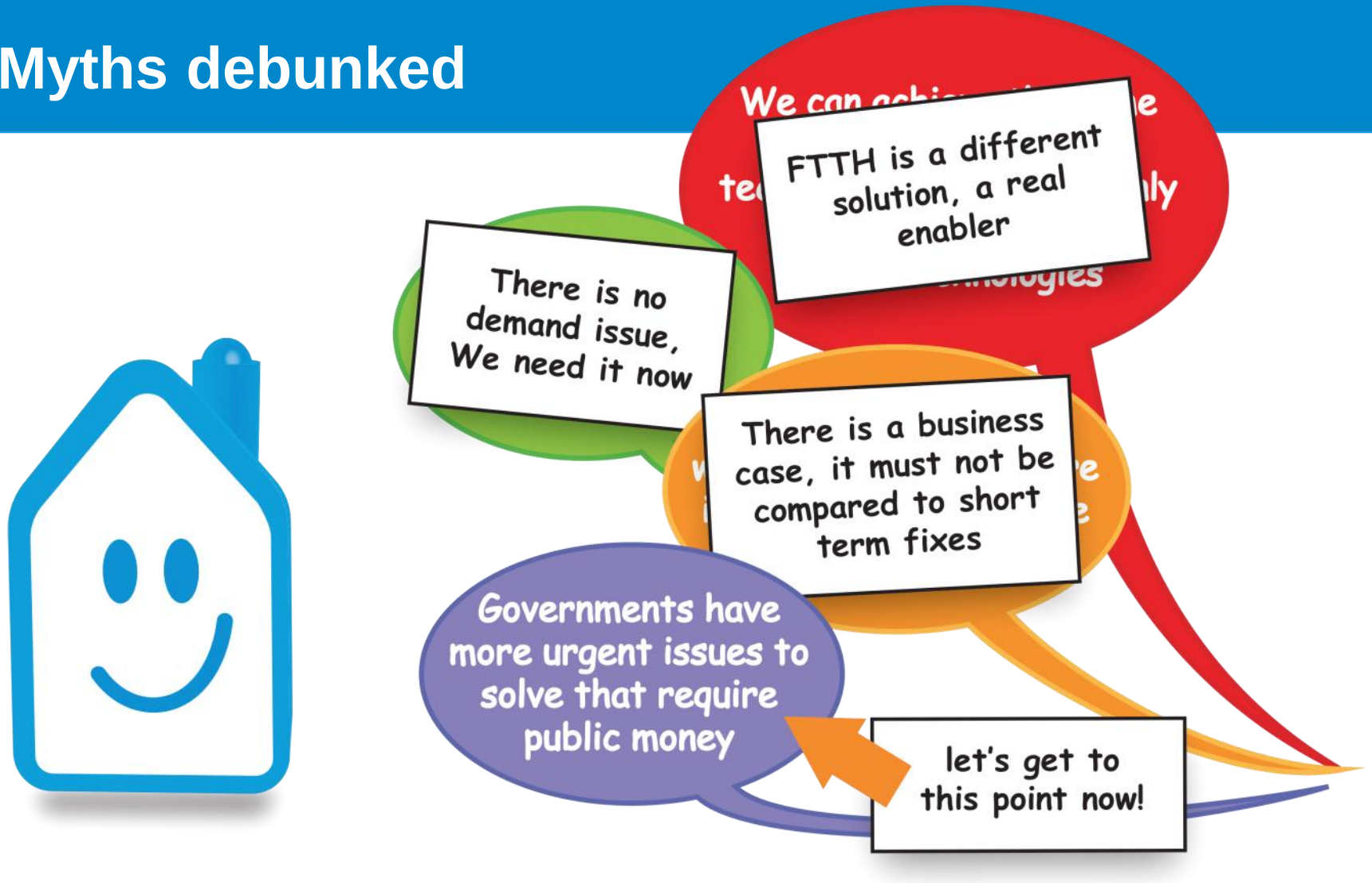
**Investing in a future-proof infrastructure for Europe is not unaffordable**

***"Do smart roll-out with reliable partners and focus on deployment cost!"***

# What about the business case?



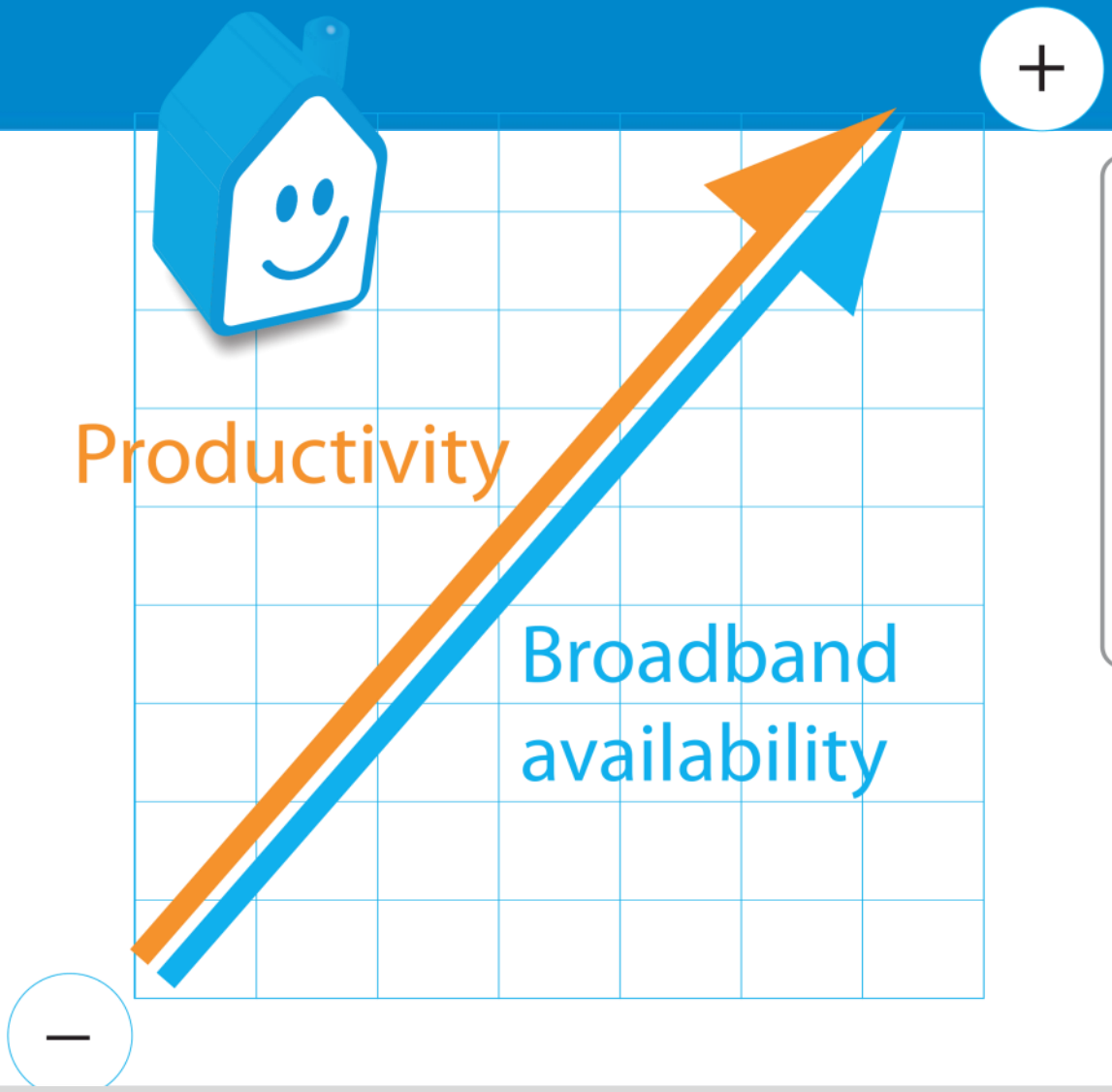
# Myths debunked



# Public authorities have a role to play

# What economical issues are we facing?

# FTTH contributes to economic growth




*"Europe's economic future requires smart, sustainable and fully interconnected transport, energy and digital networks."*

*Anna Krzyzanowska, DG Information Society & Media, European Commission*

# FTTH contributes to economic growth

Issue = economic downturn

- We should invest in our future and deploy FTTH
- Why? Because FTTH contributes to Europe's economic recovery

There are plenty of economists' reports about this, pick your choice:

- **10% increase in broadband penetration = 1% GDP increase (Arthur D Little 2011)**
- 10% increase in broadband penetration = 1.5% labour productivity growth over next 5 years (Booz & Company 2012, used by World Bank).
- Broadband speeds X2 = 0.3% GDP increase (Ericsson/Arthur D. Little/Chalmers Uni. 2011)
- Cloud computing in 52 countries = $800 billion net new business revenues from 2009-2013 (IDC 2012)
- 10% more internet = 24% higher revenues + 7% reduced costs for businesses
  The positive ROI on e-solutions for improving productivity is 8.9% higher for fibre users than for cable users and 14.2% higher than for DSL users (Strategic Networks Group, USA, 2012)

**FTTH contributes to macroeconomic growth, business productivity.**

**Europe needs FTTH to remain competitive in the Global market.**

# Rolling out FTTH creates jobs

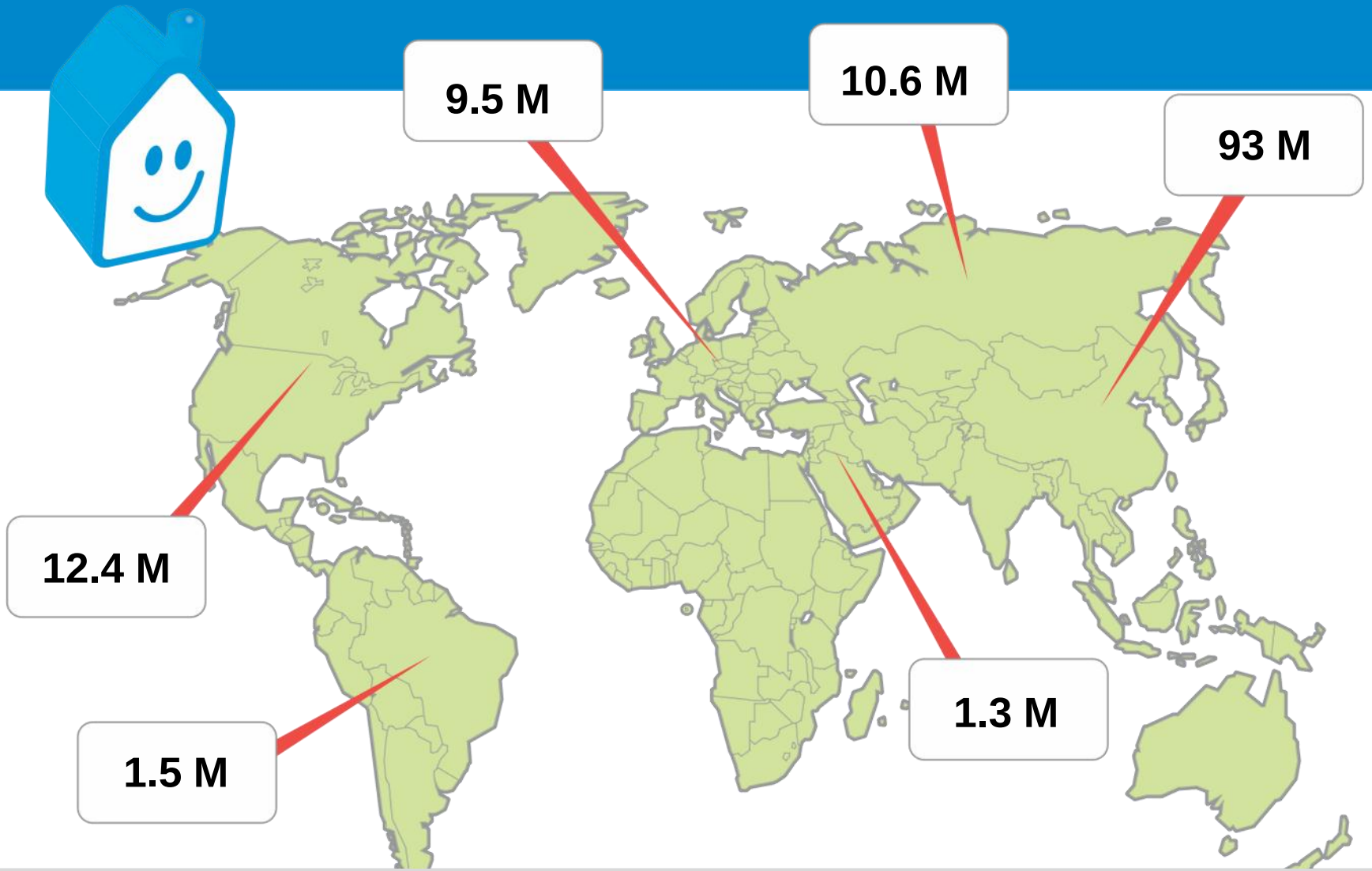
# Rolling out FTTH creates jobs

**Issue = unemployment**

- 1,000 new broadband customers = 80 new jobs (Arthur D Little 2011)
- In France, building FTTH network = 360.000 new jobs per year (European Commission 2012).
- Australia expects the national FTTH network = 25,000 new jobs/year during 8-year build, peaking at 37,000

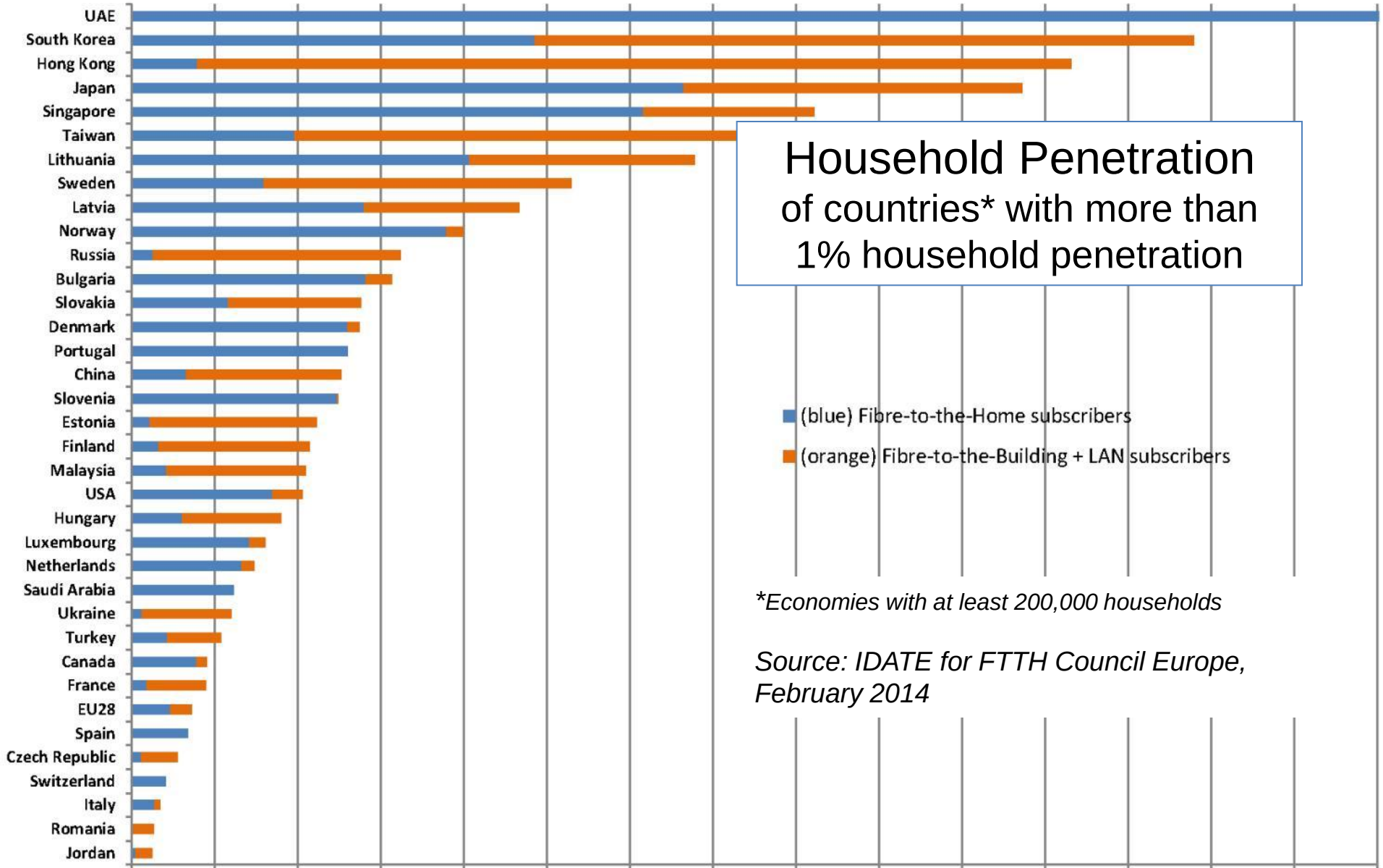
**It is a fact that rolling-out FTTH creates jobs,**
**and the skills gained in the process**
**are a competitive advantage for early adopters**

# FTTH/B Global Panorama end 2013 – total subscribers




*Source: FTTH Global Councils, February 2014*

# FTTH/B Global Ranking – end 2013




**Economies with at least 200,000 households*

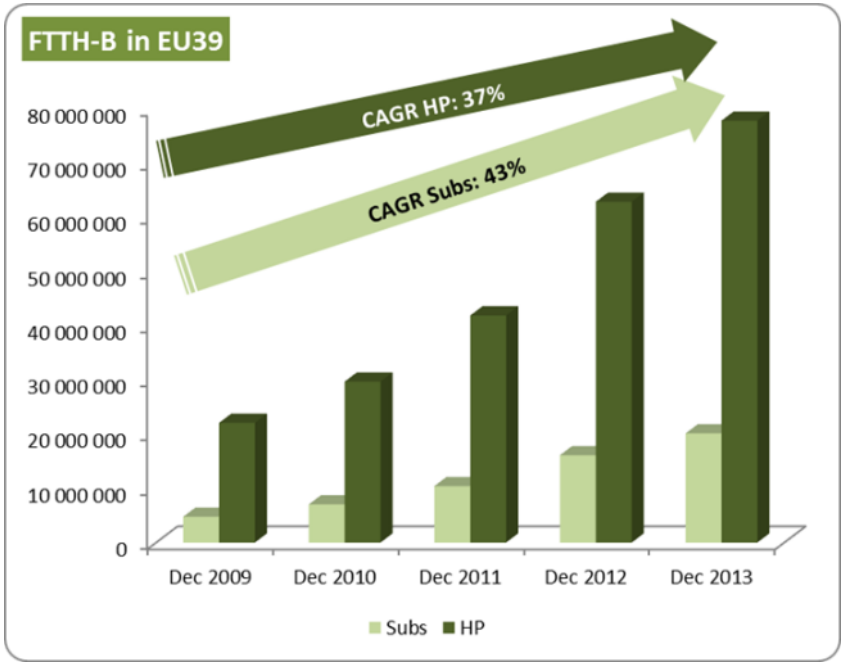
*Source: IDATE for FTTH Council Europe, February 2014*

# FTTH/B figures at end 2013

**EU39: 20.1 M subscribers and 77.8 M Homes Passed**

**CIS countries (*): 10.6 M subscribers**

Number of FTTH/B subscribers and Homes Passed (Dec 2009 to Dec 2013)



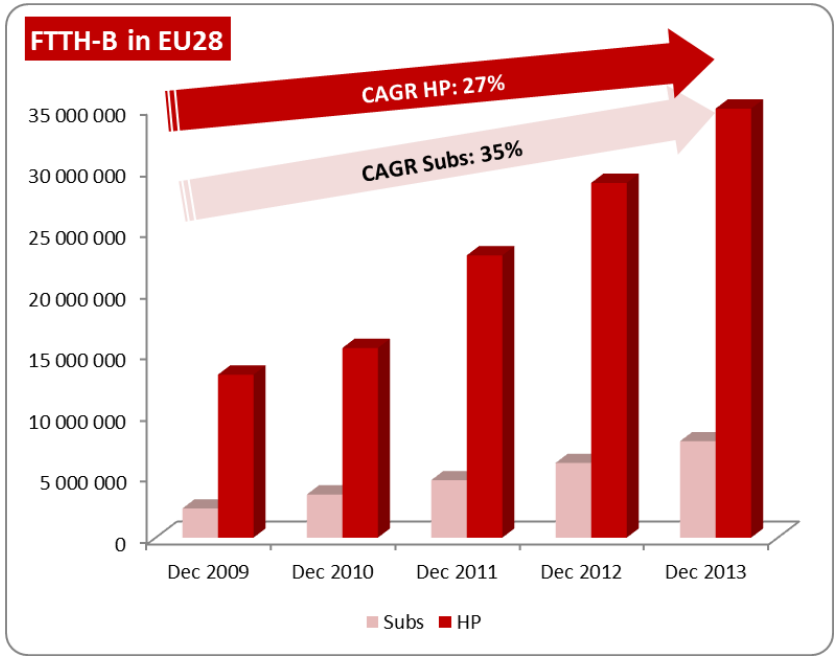

**Average take up rate in EU39 at end 2013: 25.9%**

*Source: IDATE for FTTH Council Europe*

# FTTH/B figures at end 2013

## EU28: 7.8 M subscribers and 34.9 M Homes Passed

Number of FTTH/B subscribers and Homes Passed
(Dec 2009 to Dec 2013)



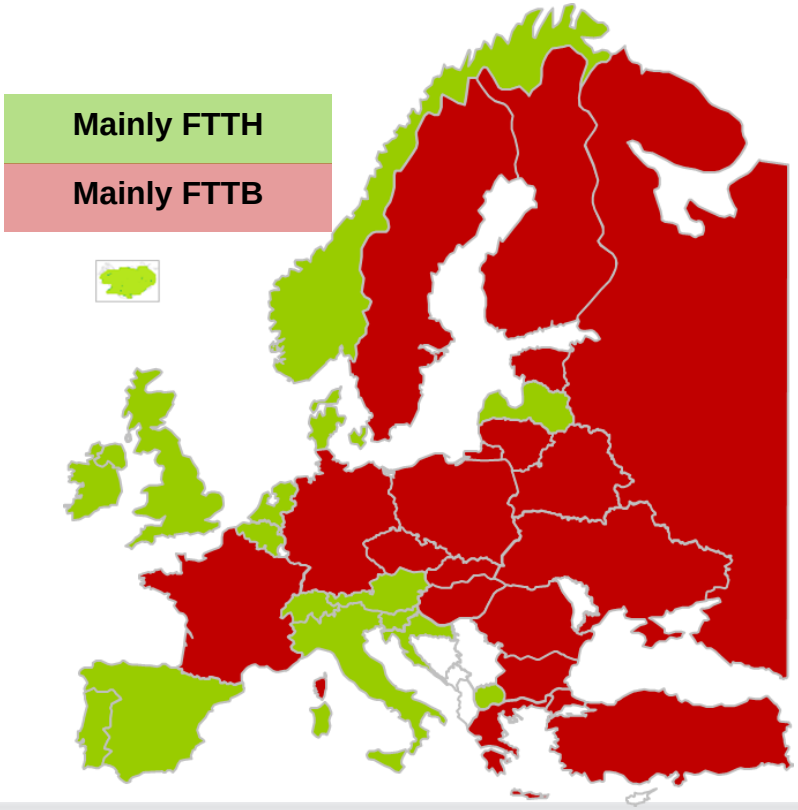

**Average take up rate in EU28 at end 2013: 22.5%**

*Source: IDATE for FTTH Council Europe*

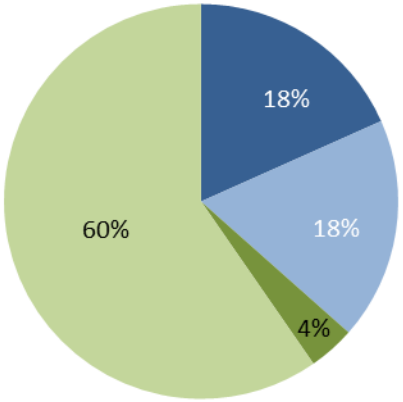
# Technologies and architectures

**EU39: 66% FTTB vs 34% FTTH - 29% PON vs 71% P2P**

**EU28: 43% FTTB vs 57% FTTH - 45% PON vs 55% P2P (Homes Passed segmentation)**




% of HP per technology in EU28




**Countries where coverage is:**

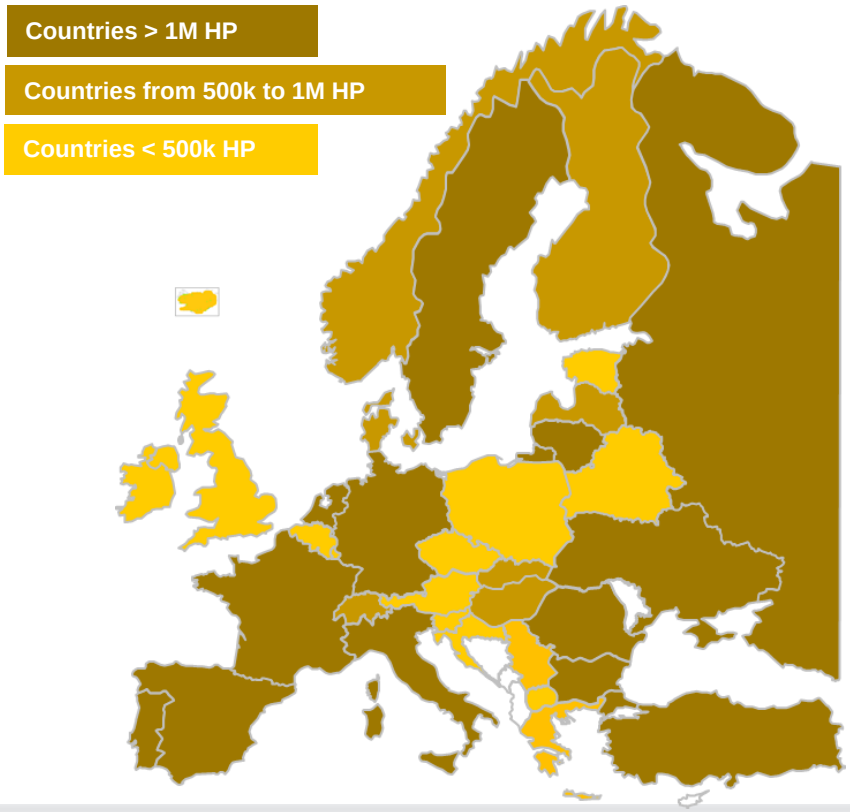
100% PON >= 50% PON 100% P2P > 50% P2P

*Source: IDATE for FTTH Council Europe*

# General ranking: FTTH/B Homes Passed

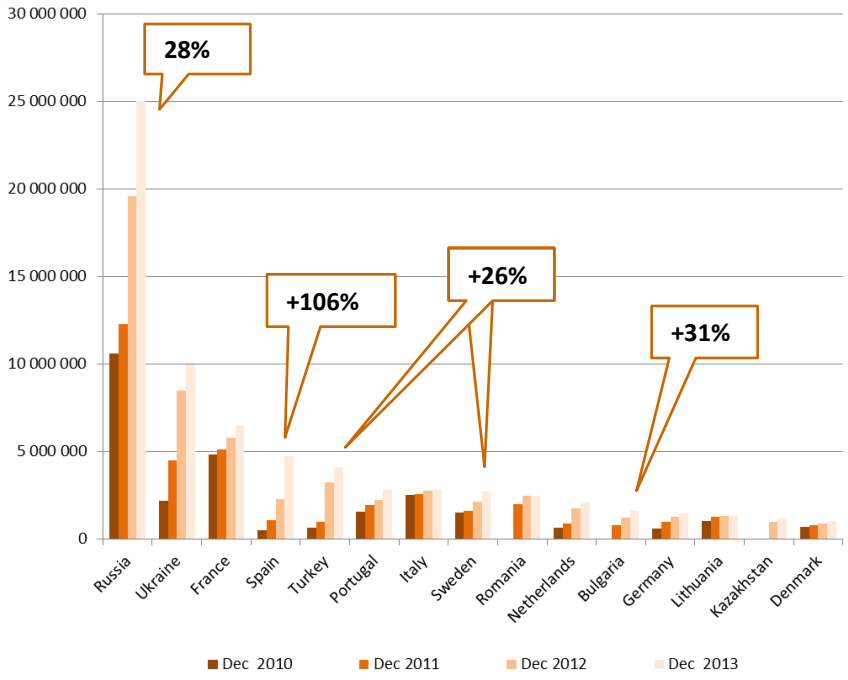
**15 countries with 1 M HP or more in EU39**

**11 countries in EU28**




Countries with 1M HP or more at end 2013

[Top 5 Growth rates 2013]




*Source: IDATE for FTTH Council Europe*

# General ranking: FTTH/B Coverage

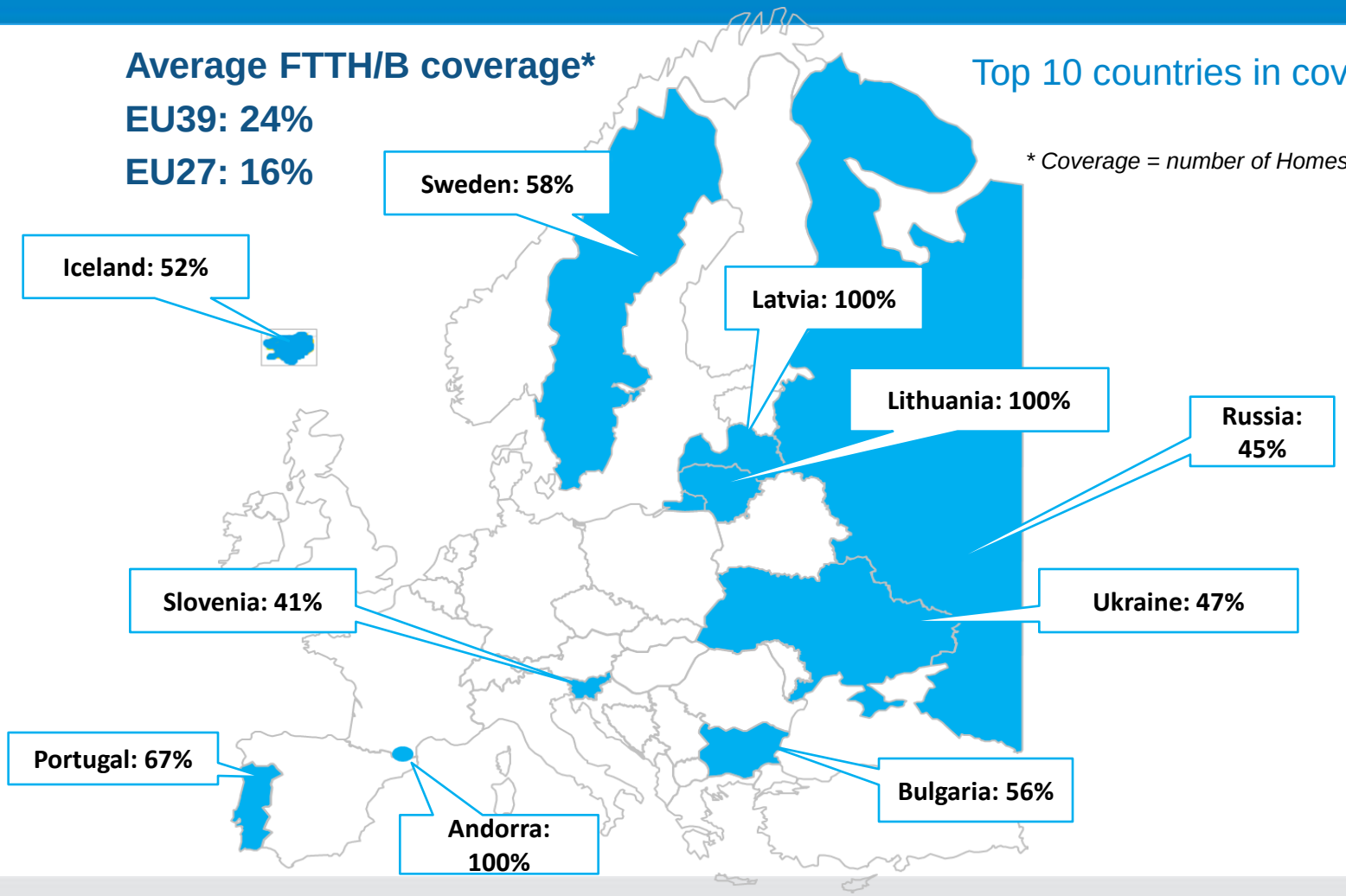
**Average FTTH/B coverage***

**EU39: 24%**

**EU27: 16%**

Top 10 countries in coverage at end 2013

** Coverage = number of Homes Passed / Total Households*




Fibre to the Home Council Europe

*Source: IDATE for FTTH Council Europe*

# Highest growths: New FTTH/B subscribers in 2013

**20% of FTTH/B subscribers in EU39 are 2013 "new subscribers"**

**This rate reaches 22.5% in EU28**

Top 4 countries for 2013 new subs in EU39

| | |
|---|---|
| Russia | + 1,423 K |
| Turkey | + 510 K |
| France | + 373 K |
| Spain | + 227 K |

% of EU28 2013 new FTTH/B subscribers

France + Spain + Portugal => 31%

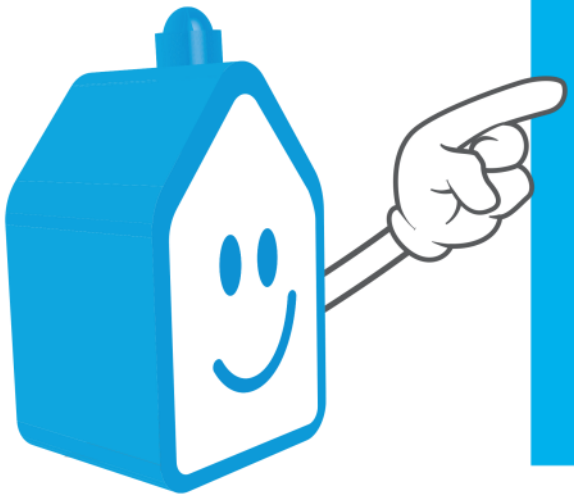
Scandinavian countries + Netherlands => 31%

Eastern countries => 25%

Rest of EU27 => 12%

*Source: IDATE for FTTH Council Europe*

# THE FUTURE IS NOW



# Final conclusions

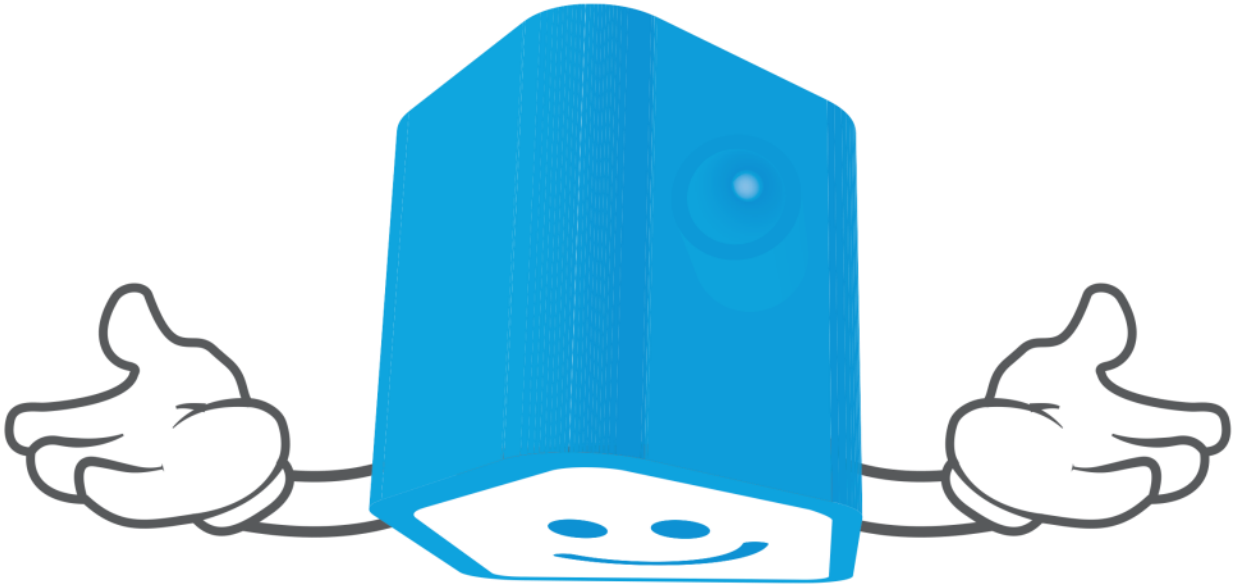
- Who really demanded roads and railways?
- Who really needed the internet and mobile devices?
- Not so long ago, we were happy with three channels on TV to choose from and had to go to the library to find the answers to most questions. Remember?

- We can't predict what will happen in 10 or 20 years, we only know that we are in the midst of the **Internet revolution** and have seen nothing yet!
- All we can do is get ready by putting in place the right tools & platforms not only for ourselves when we grow old, but mostly for our children, to ensure a sustainable **future for Europe**.

**So the question isn't: 'Do we need fibre?'.**

**The real question is: "How long can we afford to wait?"**

# FTTH Conference 2015
# Join us in Warsaw (Poland)!
# 10-12 February 2015



www.ftthcouncil.eu