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FTTH Council Europe

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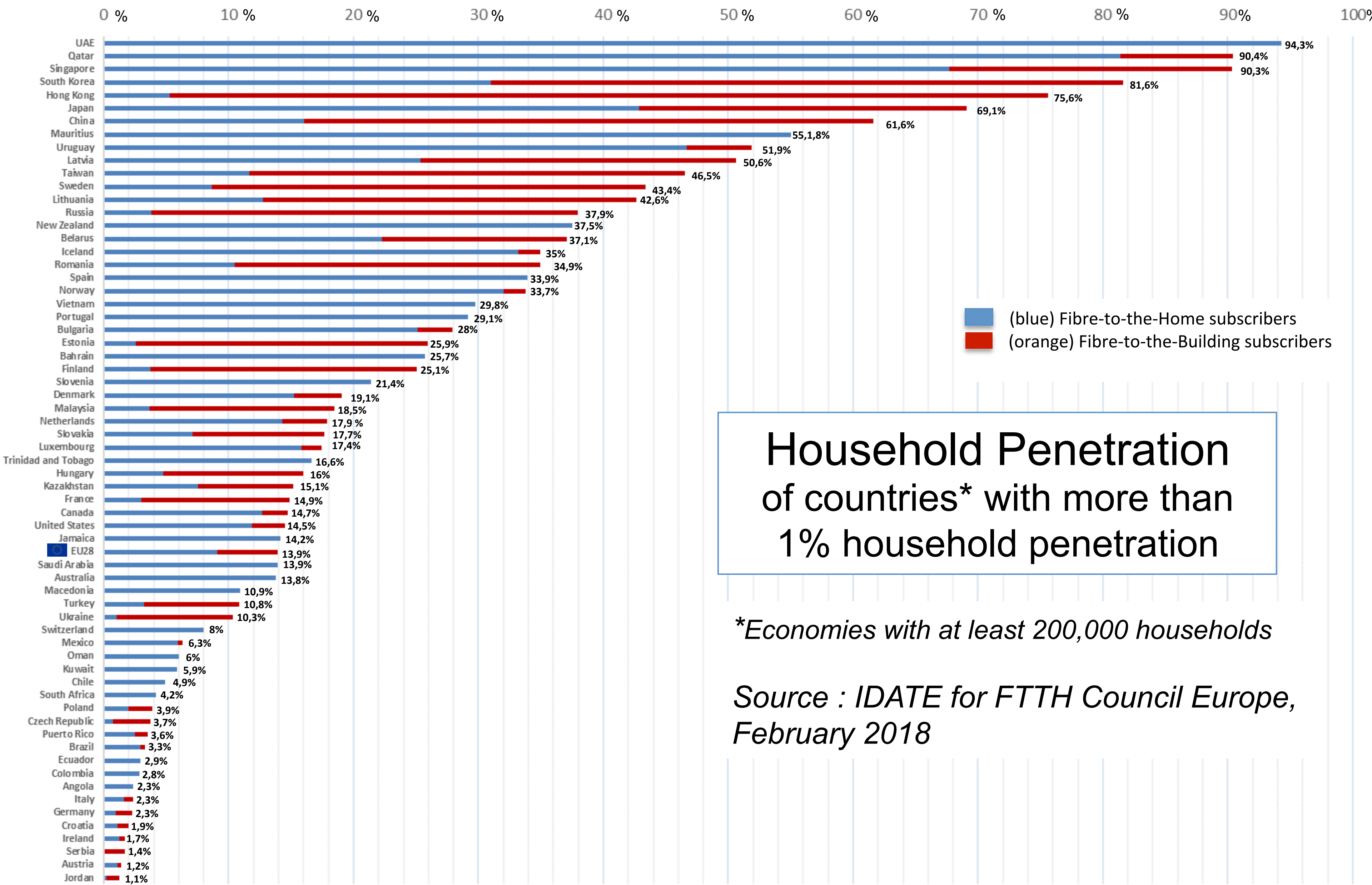
Overview

- The State of Fibre : FTTH/B Market Panorama
- Socioeconomic Benefits of Fibre
- Driving Fibre Investment : Policy & Regulation
- Concluding remarks

The State of Fibre :

FTTH/B Market Panorama

FTTH/B Global Ranking – Sep 2017

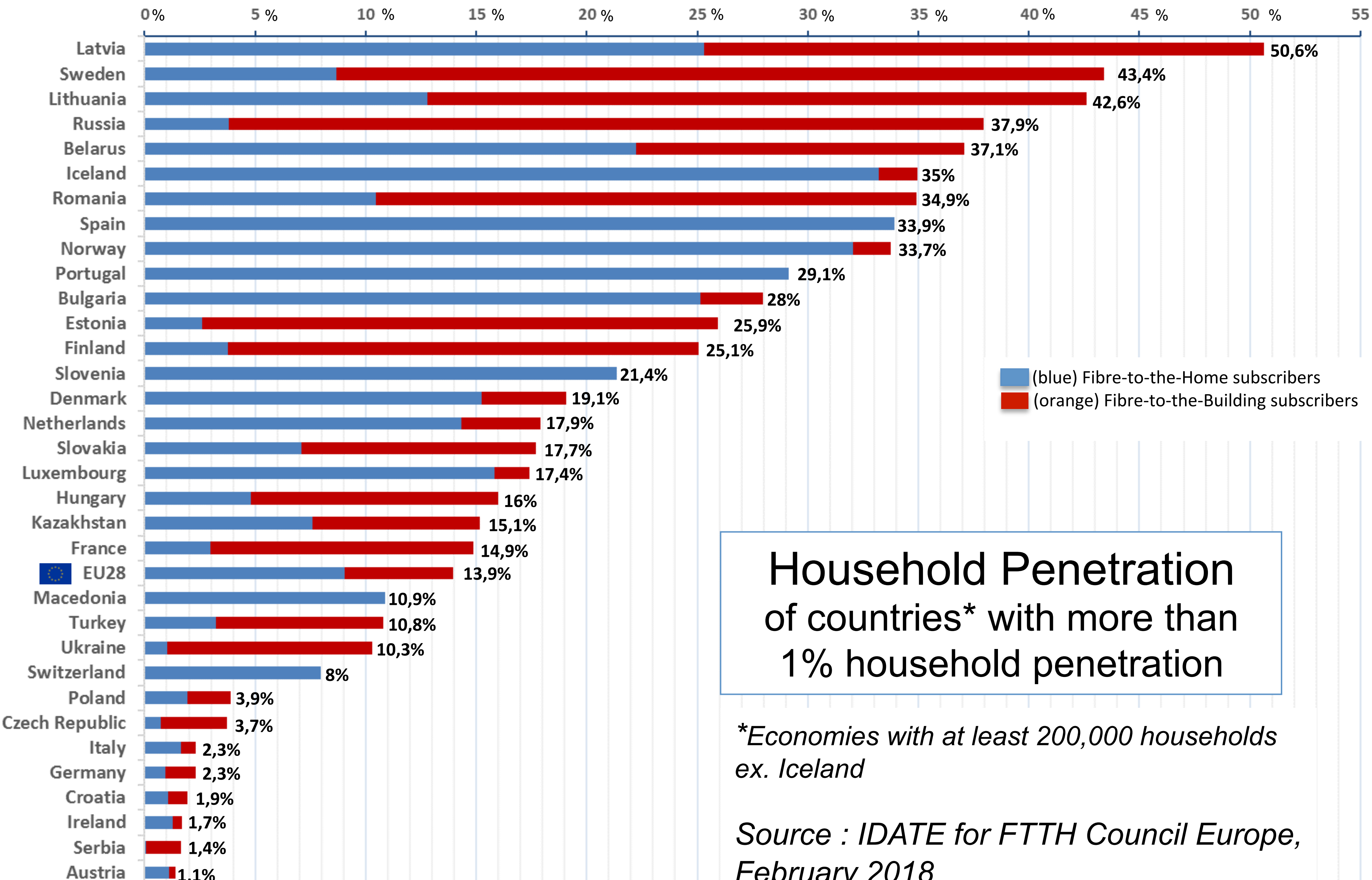


Household Penetration
of countries* with more than
1% household penetration

**Economies with at least 200,000 households*

Source : IDATE for FTTH Council Europe, February 2018

FTTH/B European Ranking – Sep 2017



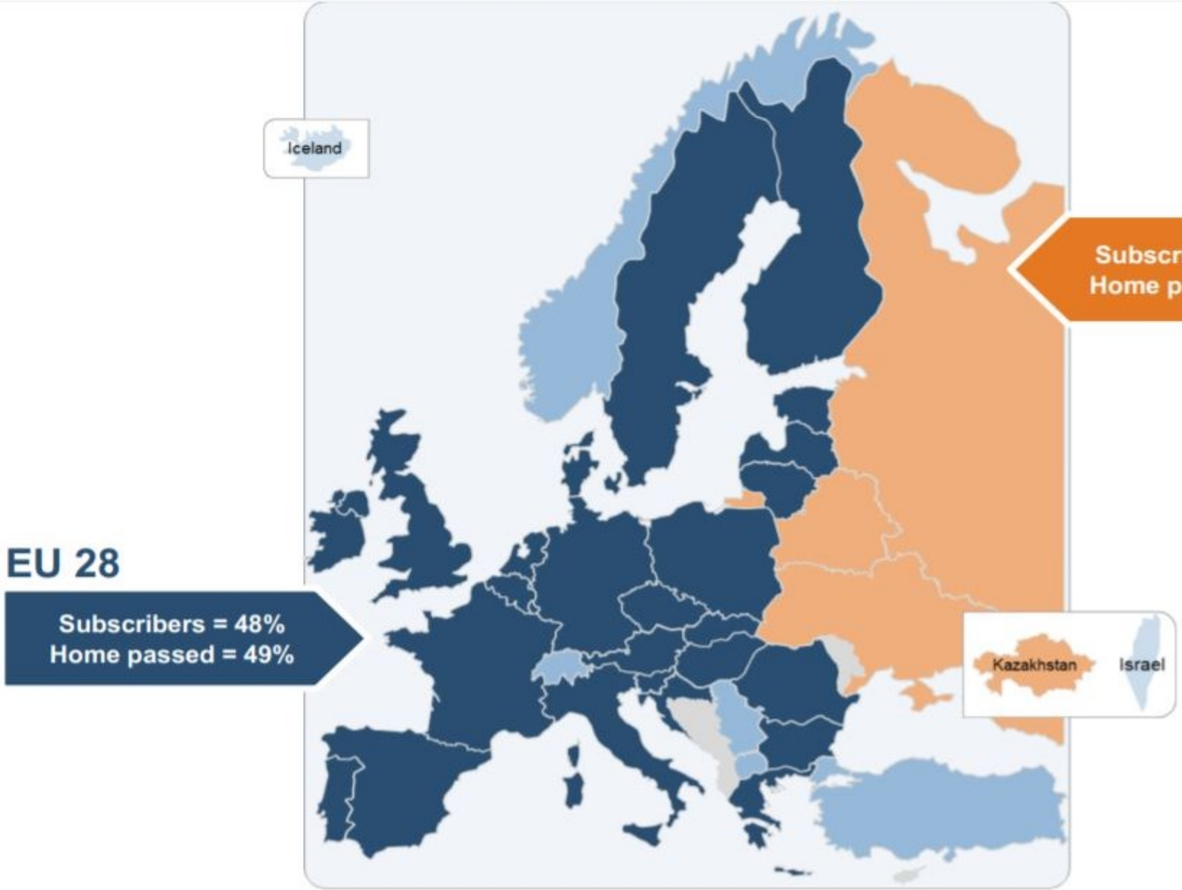
Household Penetration
of countries* with more than 1% household penetration

**Economies with at least 200,000 households ex. Iceland*

Source : IDATE for FTTH Council Europe, February 2018

FTTH/B figures – September 2017

FTTH/B Figures, September 2017 – Close to 51.6 million FTTH/B subscribers and more than 148 million FTTH/B Homes Passed in EU39

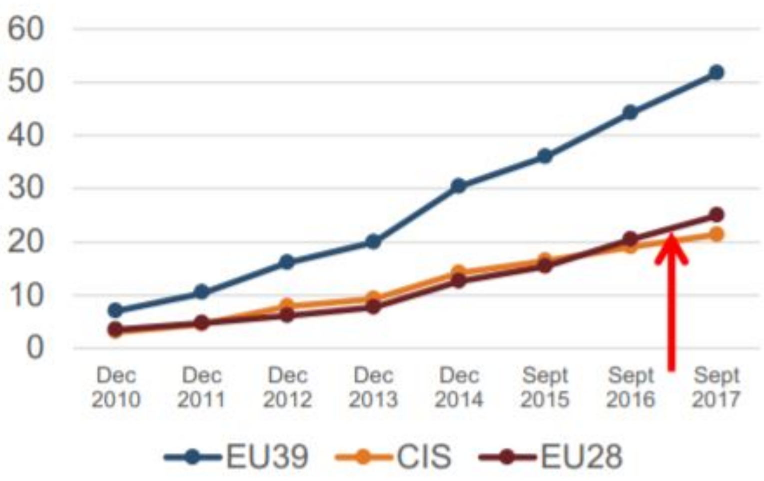


Source : IDATE for FTTH Council Europe

FTTH/B figures – September 2017

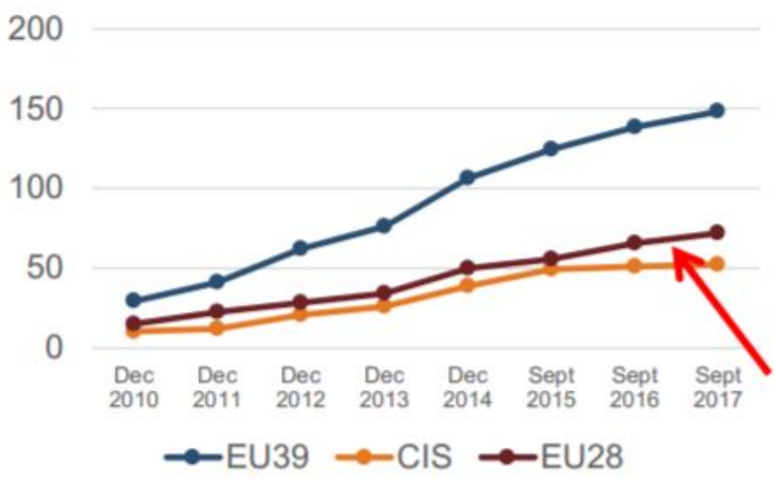
- Interesting dynamics in the European Union since 2013
- CIS countries : higher growth rates for subs since 2015 ; flat growth for HP between September 2016 and 2017
- Momentum towards fibre in the EU : the growth rate for subs. and HP notably increased since 2015 !

Growth of FTTH/B subscribers (million)



Source : IDATE for FTTH Council Europe

Growth of FTTH/B Homes Passed (million)



Source : IDATE for FTTH Council Europe

Major projects / categories of players

- **Around 400 FTTH/B projects analised in EU39 at September 2017 :**

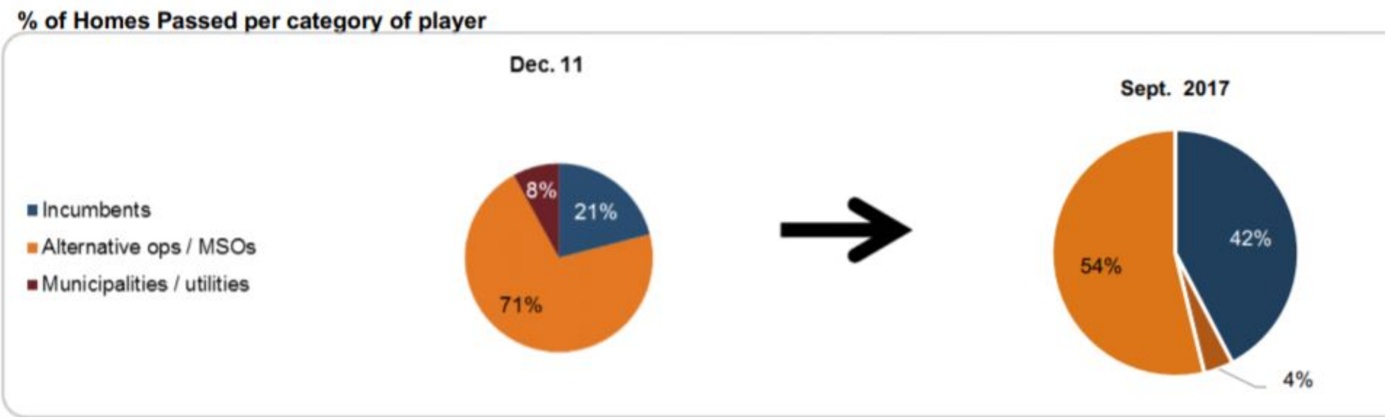
- All major operators, among which **35 incumbents,** are involved in fibre advancement in each country
- **Small players** will most probably be increasingly more involved in **local** deployment in the coming years (Rural and Suburban)

- **Incumbents now cover 42% of the total number of Homes Passed**

- The ratio was only 21% at end 2011
- **Alternative players**, which launched FTTH/B in most countries since 2008-2009, now cover 54% of the total number of HP, and this ratio is increasing

- **The market is clearly dominated by those two categories of players.**

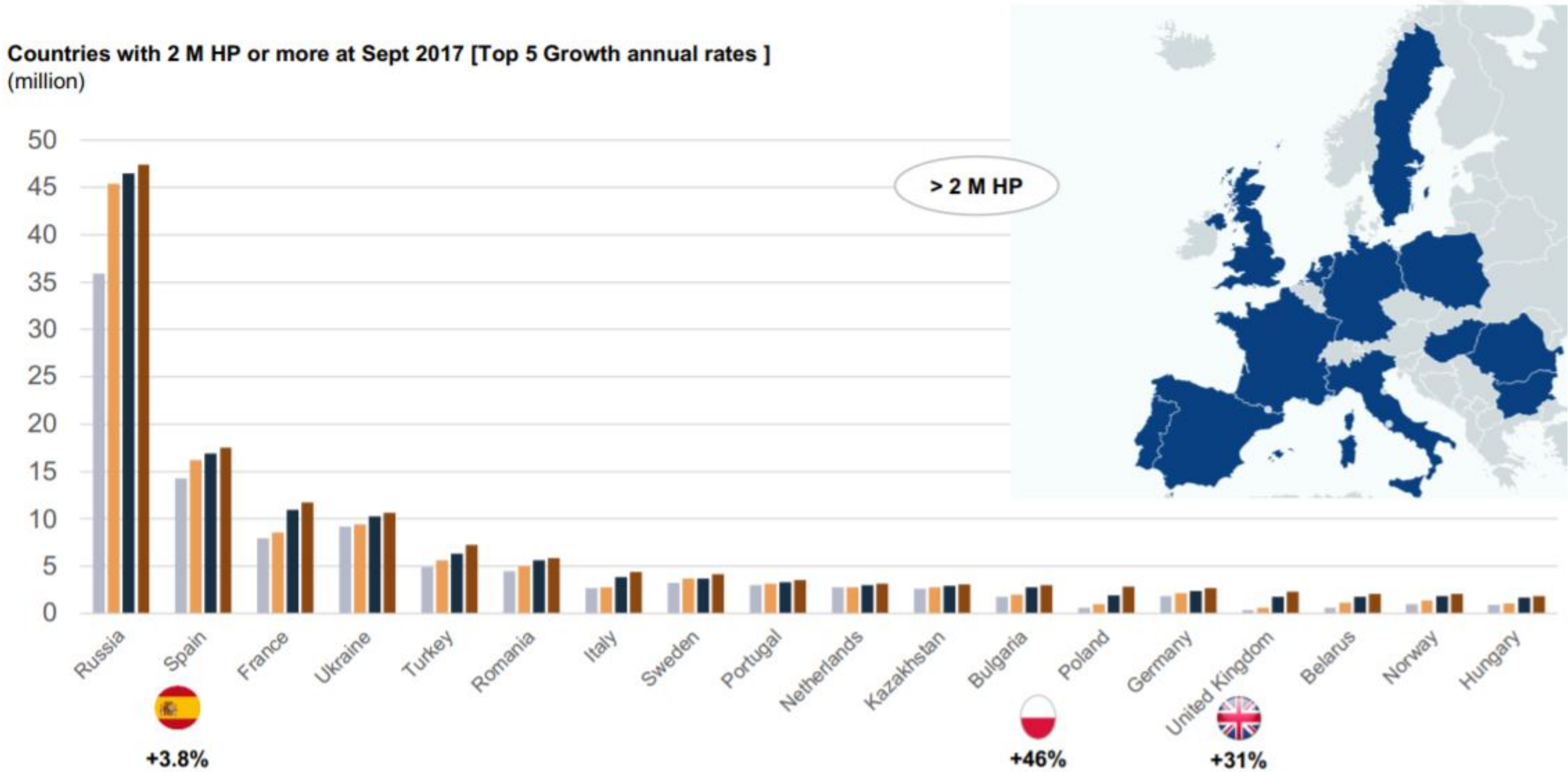
- **However, municipalities/Local Authorities, along with utilities, will have an important role in facilitating the achievement of full-scale coverage**



Source : IDATE for FTTH Council Europe

General ranking : FTTH/B Homes Passed

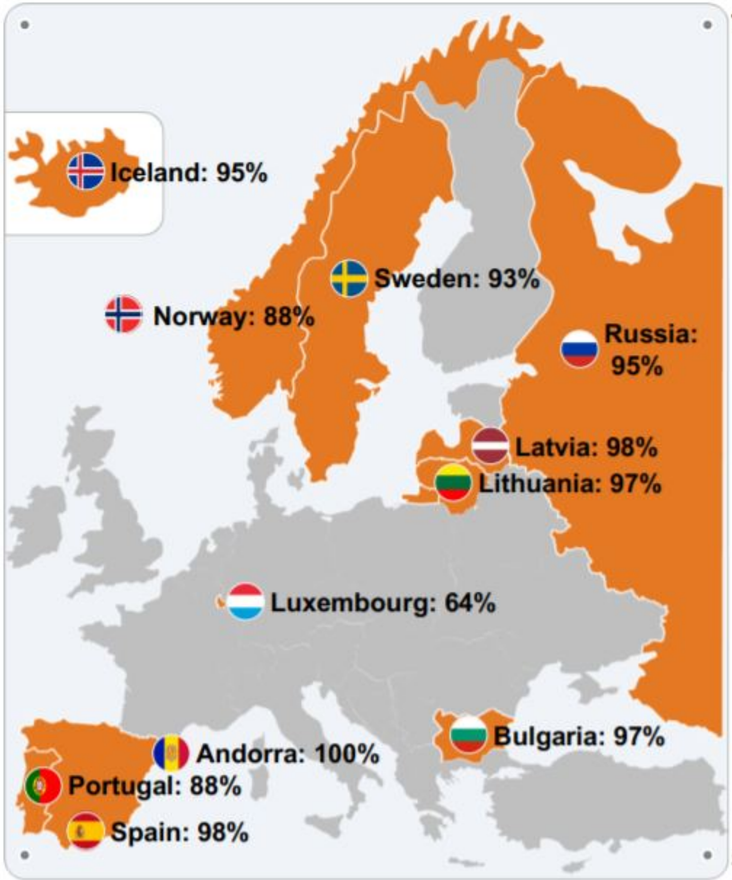
- 18 countries with 2 M HP or more in EU39 (12 countries in EU28, in blue on the map)
- Highest growth rates do not necessarily occur in the largest markets and this confirms that the interest on FTTH/B is growing (e.g. Poland : +46% and UK : +31%) even in countries where it is not the leading NGA solution



Source : IDATE for FTTH Council Europe

Top Ten - FTTH/B Coverage

General ranking : FTTH/B coverage



Top countries in coverage at September 2017

Average FTTH/B coverage stable in 2017 (*): EU39 → 45%

EU28 → 33%

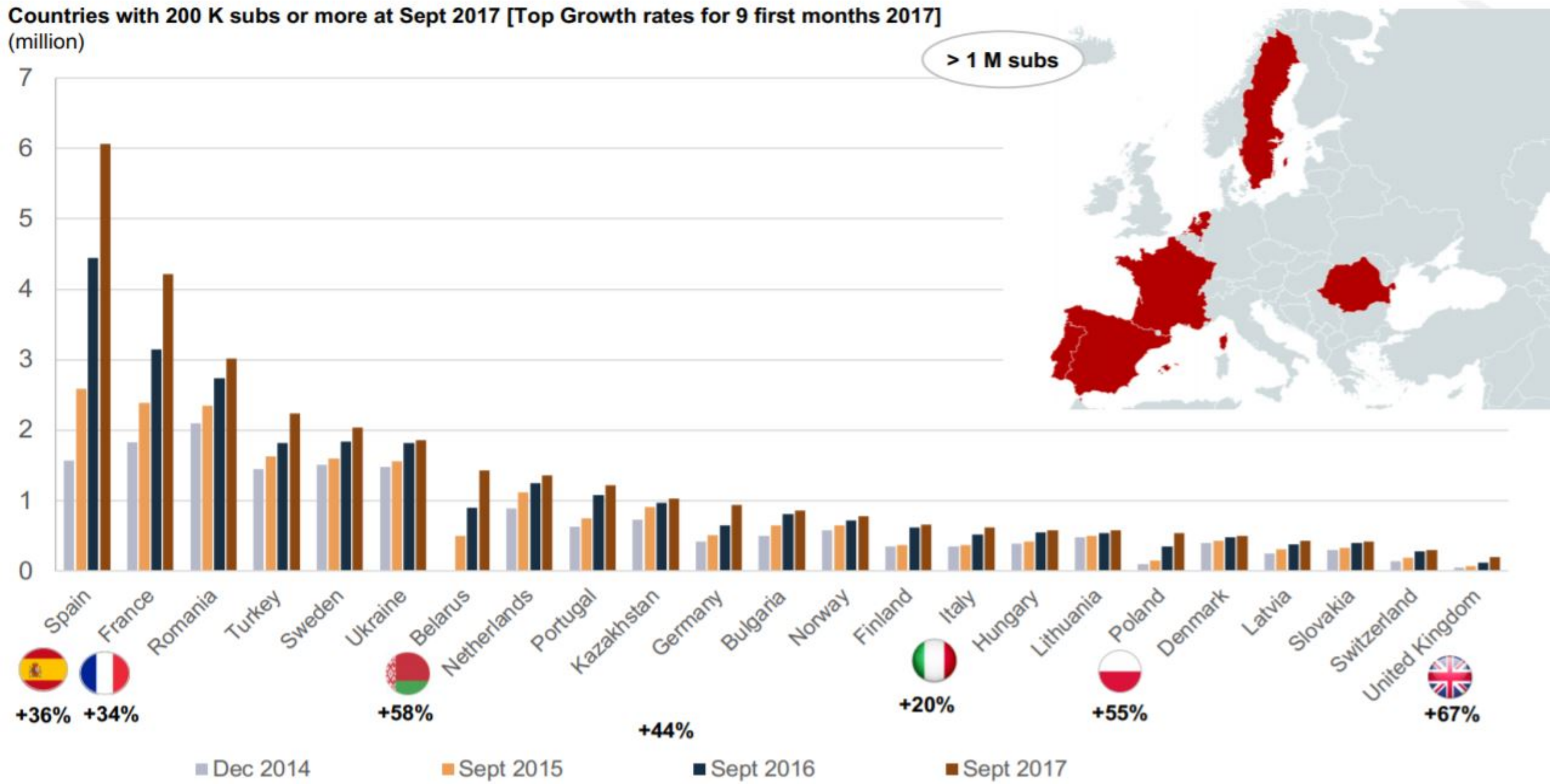
(*) Number of HP/total number of Households

Source : IDATE for FTTH Council Europe

FTTH/B Take-up

General ranking : FTTH/B subscribers

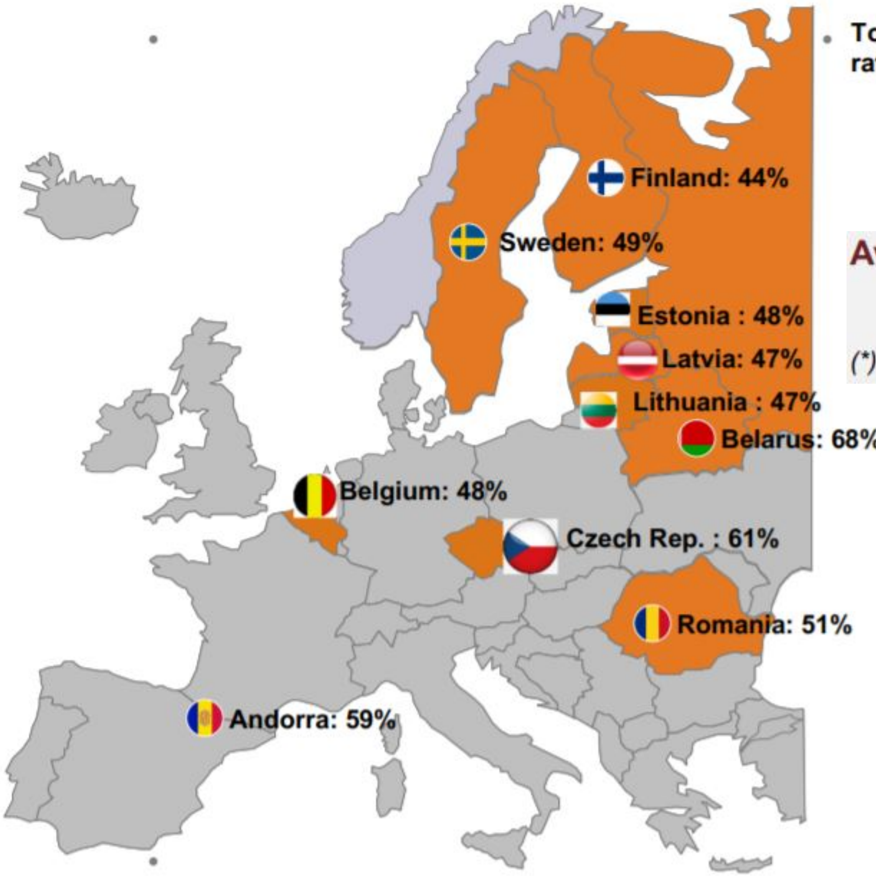
- 11 countries with 1 M subscribers or more in EU39 (6 countries in EU28, in red on the map)
- Strong growth in Belarus, Germany, Poland and UK
- Sharp advances in France, Spain and Italy



Fibre to the Home Council Europe

Source : IDATE for FTTH Council Europe

Top Ten - FTTH/B Takeup



- Top 10 countries of more than 200 K subs in take-up rate at September 2017

Average FTTH/B take up rate (*): EU39 → 35%

EU28 → 32%

(*) Take up rate = number of subscribers / number of Homes Passed

Source : IDATE for FTTH Council Europe

FTTH/B Market Panorama – Key Conclusions

- There are now **33 European countries in the Global ranking**… a positive sign even if the bottom line is only 1%.
- Even the **"reluctant" countries are moving towards FTTH/B technologies.** Furthermore, **increasingly more countries reach 100% coverage !**
- **End users are migrating to FTTH networks**. However, the switch to FTTH/B connection is not systematic yet and operators have still room to improve their communication on fibre advantages.
- **Governments and local authorities are now clearly in the game** and on track with regards to DAE objectives

1. *DAE's main requirements are respected in all EU28 countries*
2. *Local authorities are more dynamic in Scandinavian countries and in France : they should impulse a new dynamic to reach more rural areas and in countries where FTTH/B is lagging far behind other architectures*
3. *"French Model" as an example for Europe ? (in Poland around 60 regions engaged in deploying FTTH Open Acces Network)*

- **Open Fiber in Italy** has been the **most dynamic player in FTTH deployment** (reaching now 2.5 M Homes Passed)
- **Highest take up rates in Northern and Eastern countries** : still strong competition from other architectures elsewhere.
- **Nearly all players**, even if less involved in FTTH/B than other architectures, **consider that FTTH is the end game** !… and **5G will need Fibre**!

Socioeconomic Benefits of Fibre

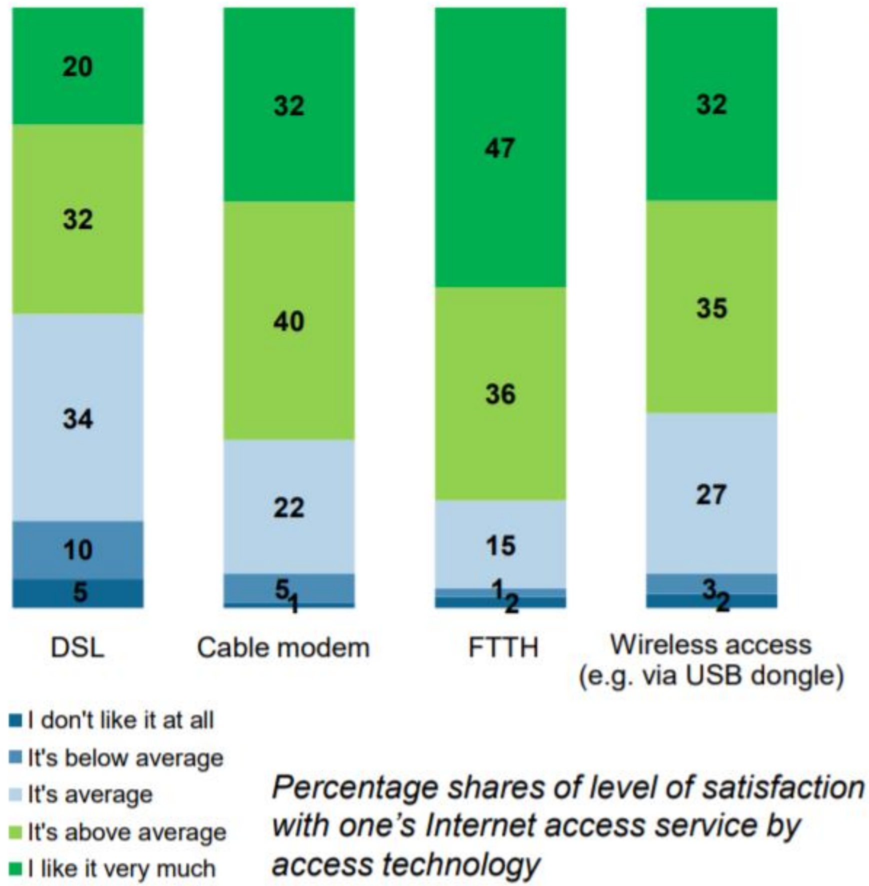
Study by WIK

Socioeconomic benefits of FTTH

Socioeconomic benefits of FTTH Study 2017 by WIK Consult

- Study launched & presented at the FTTH Conference 2018 in Valencia, on 15 February
- Based on a consumer survey conducted in Sweden by YouGov
- Final sample size was 1018 consumers
- Methodology : Computer-aided web interview
- Questions on consumers' Internet service providers (ISPs), the access technology used, their level of satisfaction, typical online activities and socio-demographics.

Satisfaction is highest with FTTH –
82% of FTTH customers are happy with their service



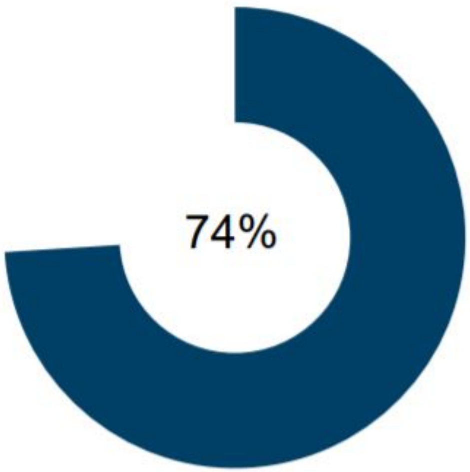
Percentage shares of level of satisfaction with one's Internet access service by access technology

- FTTH customers are the group that is most satisfied with its Internet access service.
- 82% of FTTH customers say that they like their service very much or that it is above average.
- DSL customers are significantly less satisfied. Only around half of them like their service or say that it is above average.
- Satisfaction with Internet access via cable and wireless connections appears to lie between that of FTTH and DSL connections.

Source: Representative consumer survey (2017), N=924.

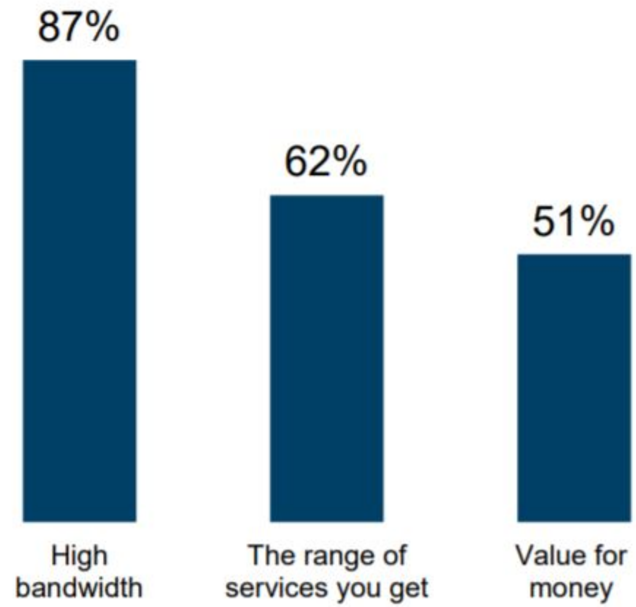
Fibre makes a difference –
Consumers notice a significantly higher access speed

- More than 70% of those who made the switch to fibre noticed a difference to their previous Internet access technology.



Source: Representative consumer survey (2017), N=181

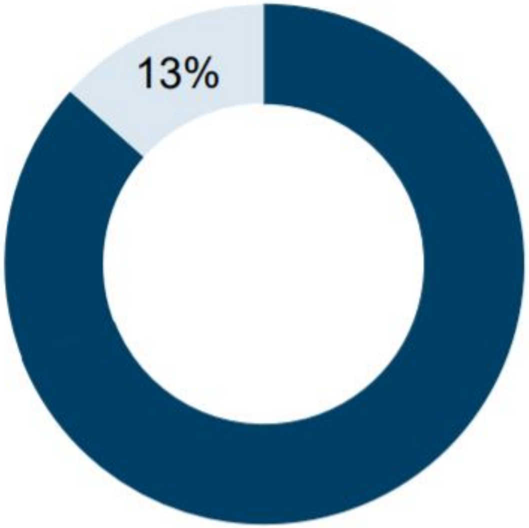
- For the majority of FTTH users fibre is about higher speed and better value for money.*



* Percentage share of the maximum available points in a ranking exercise.
Source: Representative consumer survey (2017), N=347.

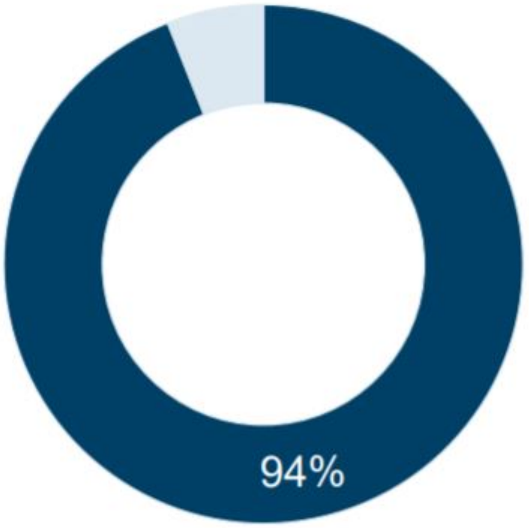
Consumers prefer fibre –
Almost all non-FTTH users would like to have fibre access

- Only 13% of non-FTTH users claim that they have consciously decided against an FTTH subscription.



Source: Representative consumer survey (2017), N=417.

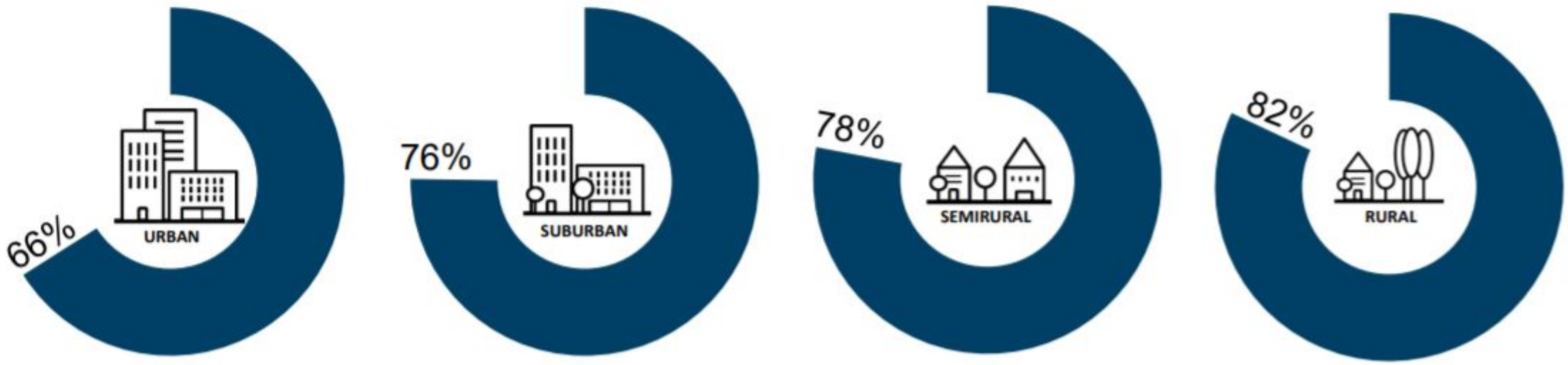
- 94% of non-FTTH users would consider subscribing to FTTH if it was made available in their area.



Source: Representative consumer survey (2017), N=157.

Fast broadband in rural areas –
82% of households with 100 Mbit/s connect using FTTH

Proportion of Internet connections offering download speeds of 100 Mbit/s or more on optical fibre by area



- FTTH is clearly driving take-up rates of higher broadband usage in Sweden. Municipalities mostly choose to deploy future-proof FTTH infrastructure and a wholesale business model.
- Across all types of areas, significantly more than half of the broadband connections offering 100 Mbit/s or more are fibre based.
- In semirural and rural areas around 80% of the connections providing download speeds of 100 Mbit/s or more in 2017 were fibre based.
- In urban areas around one third of broadband connections offering 100 Mbit/s or more were not on fibre.

Source: Representative consumer survey (2017), N=924.

Driving Fibre Investment :

Policy & Regulation

Driving Fibre Investment : Policy & Regulatory Solutions

Political commitment to new Gigabit Society targets and fibre based infrastructure enabling Europe's digital societies and economies

Access to and take-up of very high capacity connectivity as a regulatory objective alongside the existing ones of promoting competition, contributing to the internal market and promoting the interests of citizens

Definition of Very High-Capacity networks proposed in the EECC, which is **ambitious and oriented towards future-proof fibre infrastructure** enabling a plethora of new technologies and services

Priorisation of competitive infrastructure deployment for a competitive market structure and access remedies that directly support the development of infrastructure competition

Regulatory certainty and clarity to promote new fibre investments by existing and new players alike

New regulatory framework for co-investment and wholesale-only business models with the aim of facilitating the deployment of VHC networks deeper including by attracting new capital

Concluding remarks

Ubiquitous future-proof fibre infrastructure enabling a plethora of new technologies & services requires significant investment but realistically achievable across Europe

Political targets & commitment and a policy & regulatory environment promoting competitive fibre deployment are key prerequisites

End-user demand increasing including expectation of further future benefits from fibre

Fibre to the Home
Council Europe

www.ftthconference.eu

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Thank you for your attention!

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