# FTTH/B Market Panorama in Europe

September 2021

FTTH COUNCIL EUROPE

With thanks to IDATE DIGIWORLD

Full fibre for a digital and sustainable Europe

# Agenda

1. Study Background
2. General overview and main trends
3. Who is leading the race towards full-fibre?
4. European Ranking – September 2021
5. Key conslusions

# 1. Study Background

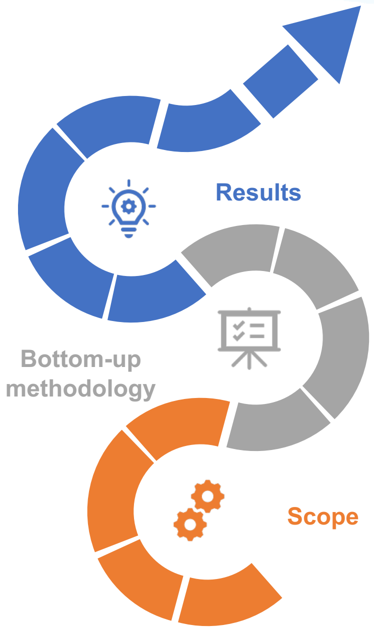
FTTH COUNCIL EUROPE

# Methodology

- Mission on behalf of the **FTTH Council Europe**
  - Provide a complete summary of the status of FTTH/B in Europe measured during September 2021

- This study is based on data and information collected by the European Commission (through DESI studies) and information gathered from local regulators in each country (if available).

- Desk research
- Direct contacts with leading players and IDATE partners within countries
- Information exchange with FTTH Council Europe members




- Both quantitative and qualitative data
- Market status in the country
- Strategic approach of involved players

- Desk research
- Data per player for FTTH/B and other fibre-based architectures
- Key parameters study: technical, financial, business model, figures

# Important definitions

| | |
|---|---|
| **Premise:** | A house or building, that could be connected by an FTTH/FTTHB network |
| **Homes Passed:** | The potential number of Premises which a Service Provider has capability to connect to an FTTH/FTTB network in a service area with minimal additional installation |
| **Sockets:** | The In-Home connection point of a single fibre service provider inside a premises. It is possible to have multiple sockets if the location is serviced by multiple FTTH network operators |
| **Subscribers:** | The number of Premises which are connected to a network and are already subscribers |
| **Take Up rate:** | Subscribers – as a proportion of Homes Passed |
| **Coverage rate:** | Homes passed – as a proportion of Total Households |
| **Penetration rate:** | Subscribers – as a proportion of Total Households |

# 2. FTTH/B Market Panorama

General Overview & Main trends

FTTH COUNCIL EUROPE

With thanks to IDATE DIGIWORLD

# FTTH/B Market Panorama

## Key Figures as of September 2022

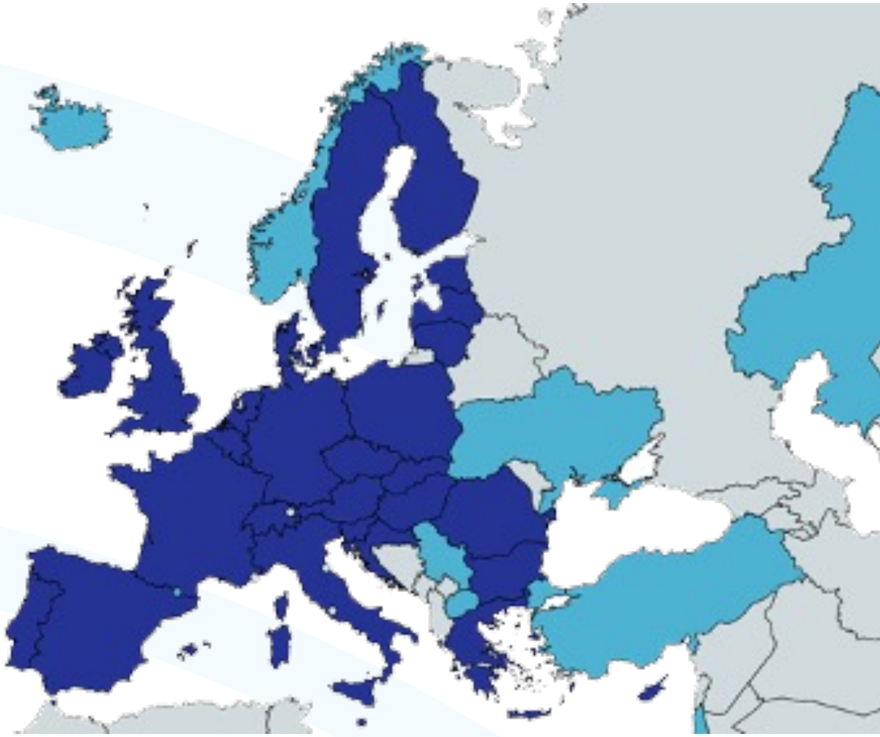
As of September 2021 in EU39*:

**96** million FTTH/B Subscribers

**198** million FTTH/B Homes Passed

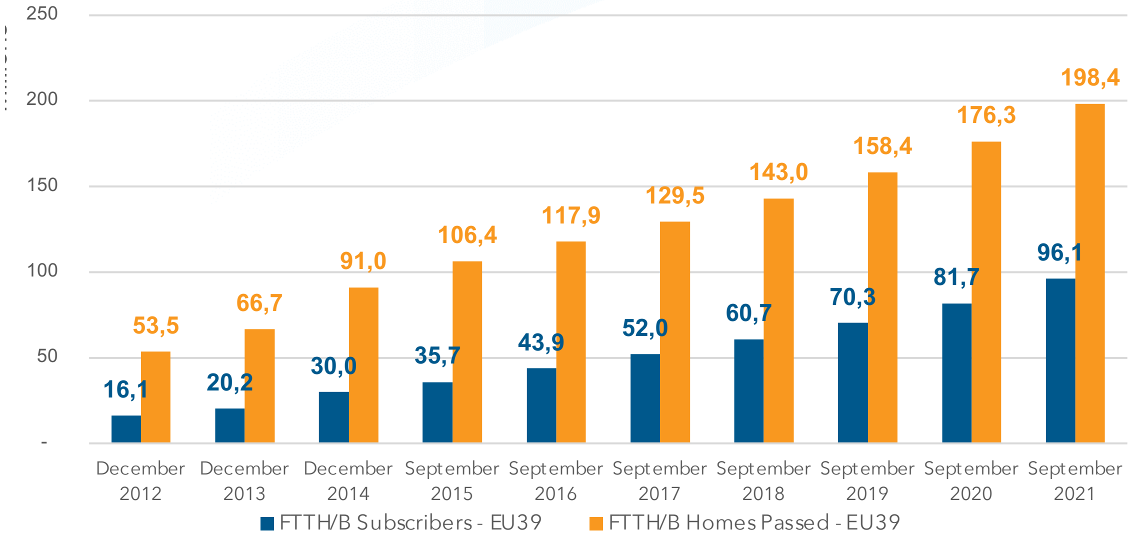
**Detailed FTTH/B Market Panorama scope**

- EU27 countries
- Other European countries under study



### FTTH/B European market evolution (EU39)

In terms of Homes Passed and Subscribers (2012-2021)




**Coverage rate**

EU27+UK: **48.5% (Up 4.6%)**
EU39: **57% (Up 4.5%)**

**Take-up rate**

EU27+UK: **52.4% (Up 5.6%)**
EU39 : **48.5% (Up 3.6%)**

* **EU39 detailed composition:**

- EU27 + United Kingdom
- CIS countries: Kazakhstan, Ukraine, +2
- Iceland, Israel, North Macedonia, Norway, Serbia, Switzerland, Turkey



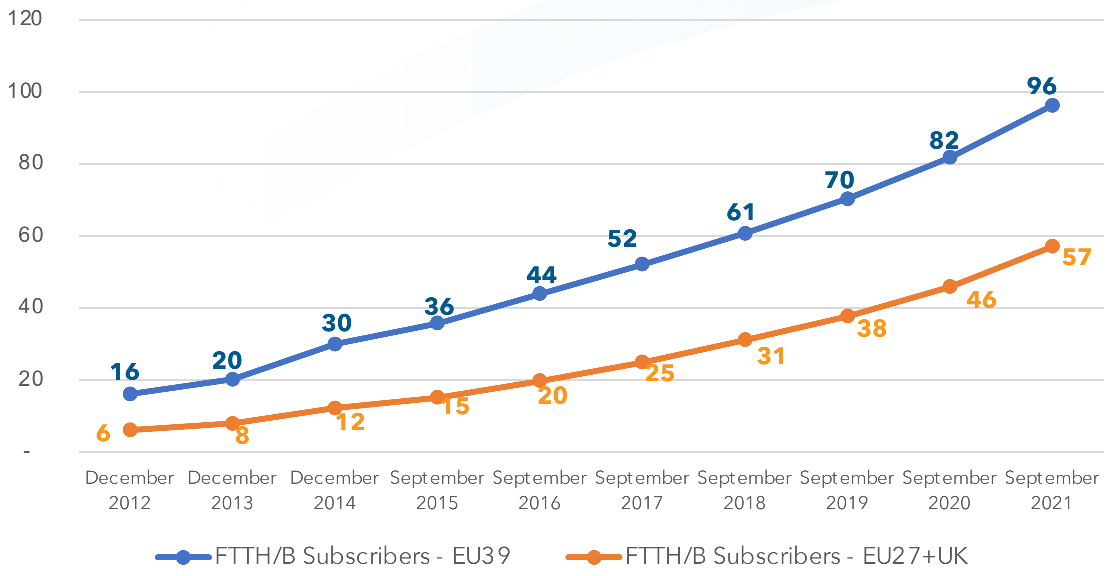
(1) EU39 = EU27+UK + 4 CIS countries + Andorra, Iceland, Israel, North Macedonia, Norway, Serbia, Switzerland, Turkey

# FTTH/B Market Panorama

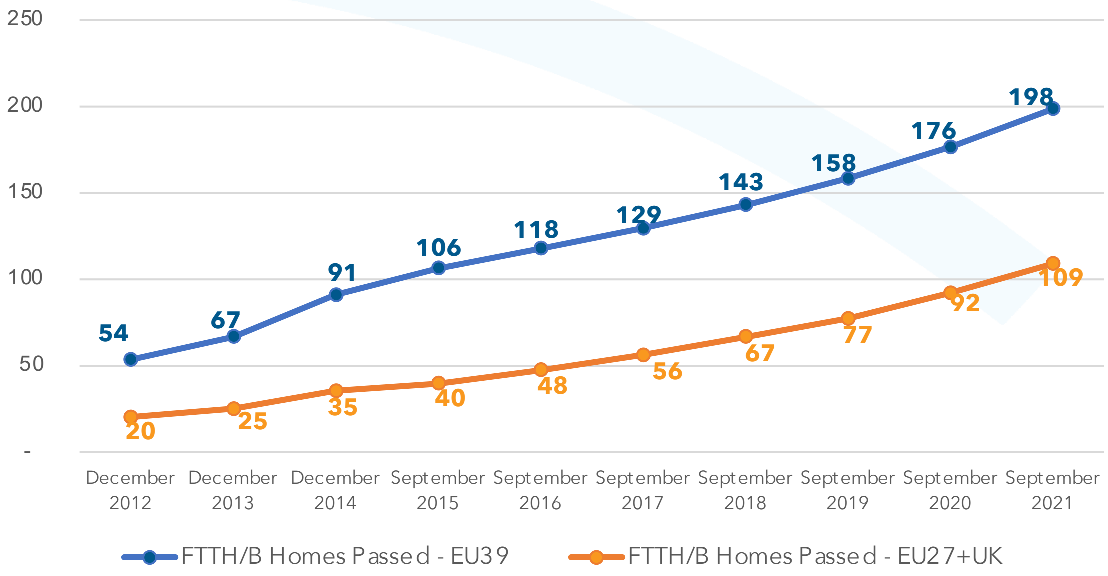
## Market trends (EU27+UK vs. EU39)

- EU27+UK countries account for almost 60% of FTTH/B Subscriptions, an increasing trend over the years (56% at Sept 2020)
- With 108.9 million Homes Passed, more than half (54%) of FTTH deployments are performed inside EU27+UK countries

**FTTH/B Subscribers** (million)
Comparison EU27+UK / EU39




**Evolution of FTTH/B Homes Passed** (million)
Comparison EU27+UK / EU39



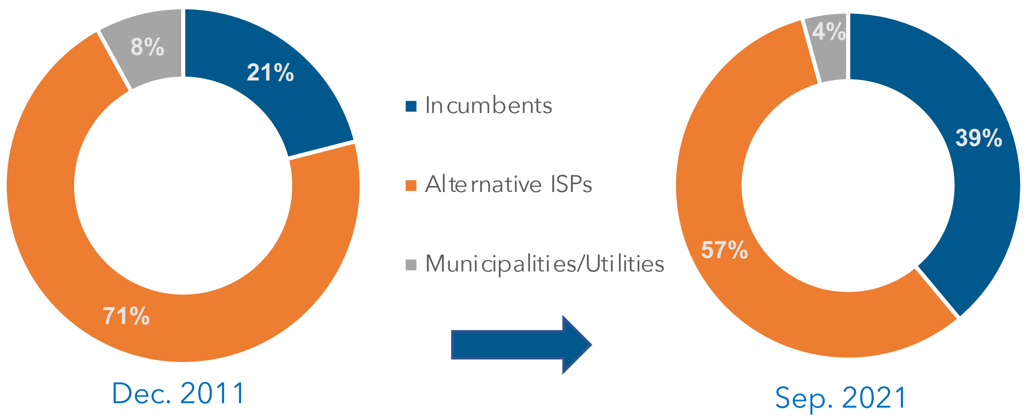
# FTTH/B Market Panorama

## A growing market thanks to convergent initiatives

Around 400 FTTH/B initiatives identified in EU39 by September 2021

- Around 57% of total Homes in the region have been passed by Alternative ISPs, and approx. 39% by incumbents (as compared to 21% by incumbents in 2011)
- Strong acceleration of fibre deployment with a firm commitment to cover both urban and rural areas :
  - Incumbents progressively redefining their full-fibre strategies
  - Municipalities, utilities and alternative ISPs are increasingly covering many remote and isolated areas.

**Breakdown of FTTH/B Homes Passed by type of player** (%)
Data comparison between Dec. 2011 and Sept. 2021



# 3. FTTH/B Market Panorama

Who is leading the race towards full-fibre?

# Note on several important impacts in 2022

- Several countries have made significant progress since September 2021 and deserve a special mention.
- There have also been significant regional actions this year which impact the accuracy of data from Ukraine
- **The FTTH Council have removed Russia and Belarus from individual mention in the report due to their actions and support of the invasion of Ukraine**

United Kingdom is accelerating extremely rapidly since our report data collection point of September 2021, adding up to 600k homes passed per month or about 3.5 million homes passed, reaching over 10.5 million homes passed by the end of March 2022.

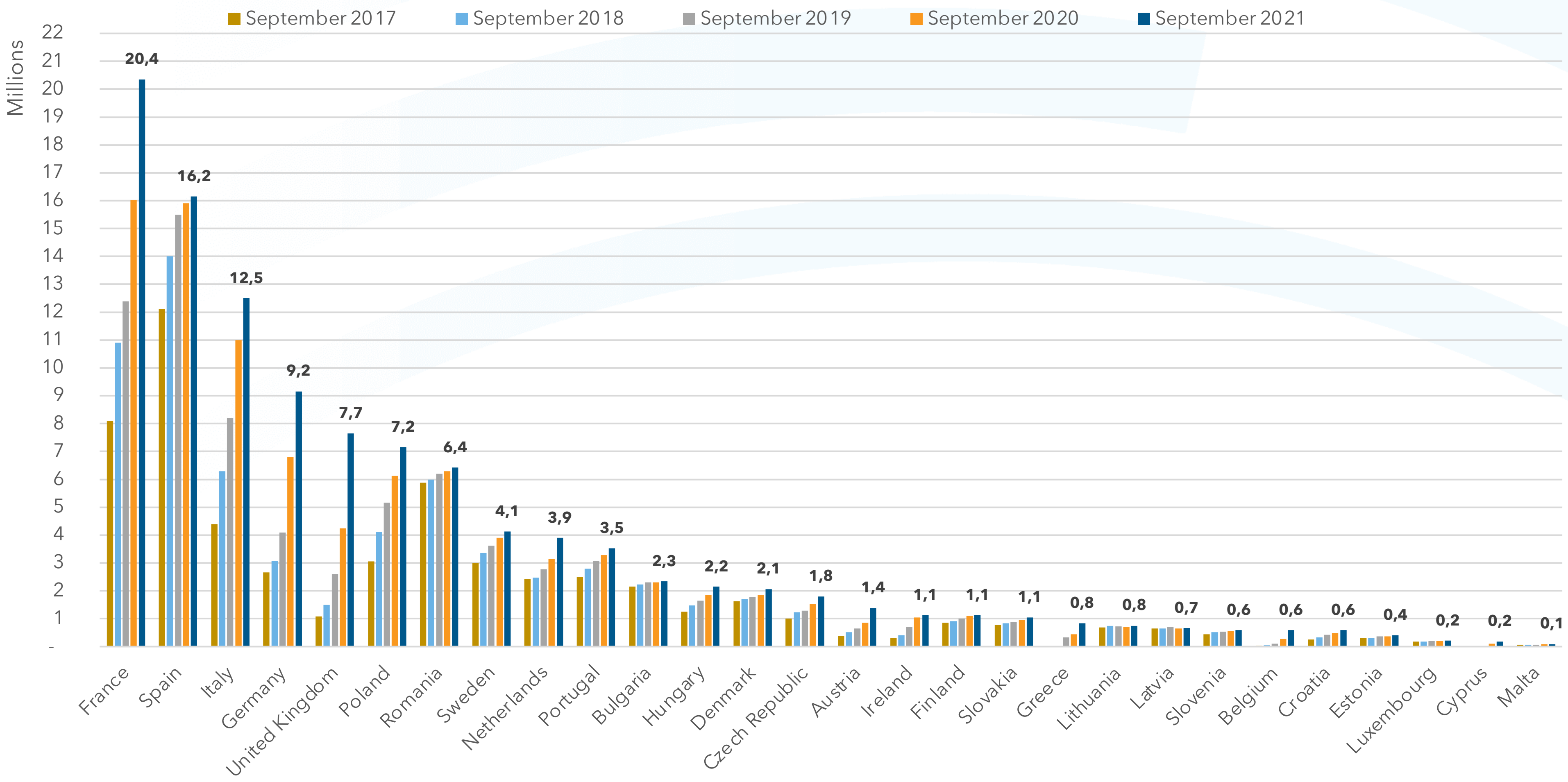
**7.7 M HP** in Sept. 21 → **~ 10.5 M HP** in Mar. 22

Regarding the specific case of Ukraine, FTTH/B coverage in the country was about 68% of total homes in September 2021. We have no current data on the level of damage caused by the War on FTTH networks in Ukraine and despite seeing reports of amazing efforts to maintain the network as much as possible – we do not know yet how fast these networks can be rebuilt.

# FTTH/B Homes Passed - EU27 + UK Ranking

**EU27+UK ranking in terms of FTTH/B Homes passed over time** (in million homes)

Data comparison between Sept. 2017 and Sept. 2021




**5 fastest growing markets (in both volume and %)**

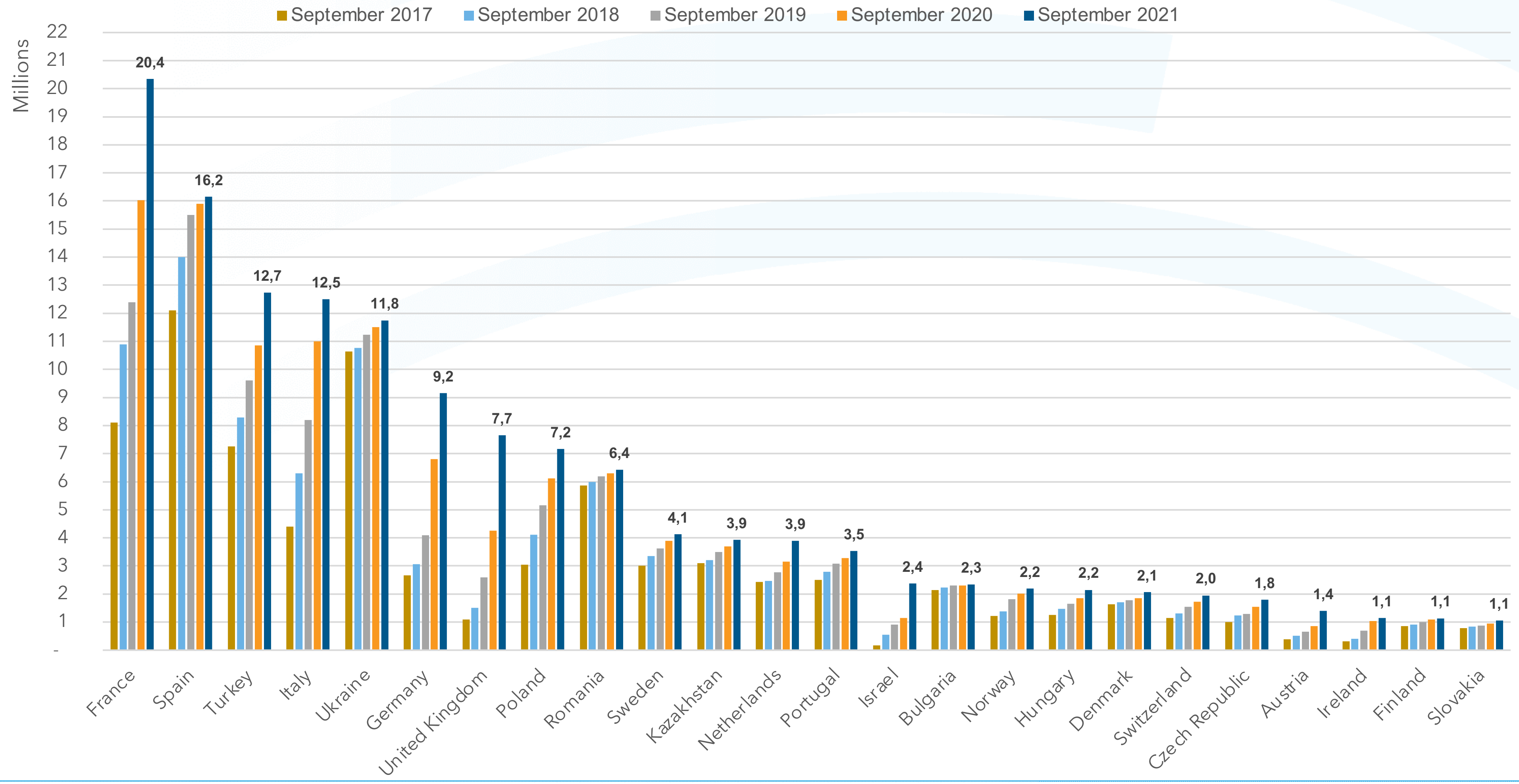
Data from Sept. 2020 to Sept. 2021 (in terms of FTTH/B Homes Passed)

| | | |
|---|---|---|
| France **+4.3 M** | 1 | Belgium **+ 109%** |
| UK **+3.4M** | 2 | Greece **+ 90%** |
| Germany **+2.4M** | 3 | Cyprus **+83%** |
| Italy **+ +1.5M** | 4 | UK **+ 80%** |
| Poland **+1M** | 5 | Austria **+ 62%** |

# FTTH/B Homes Passed - EU39 Ranking

**EU27+UK ranking in terms of FTTH/B Homes passed over time** (in million homes)

Data comparison between Sept. 2017 and Sept. 2021




**5 fastest growing markets (in both volume and %)**

Data from Sept. 2020 to Sept. 2021 (in terms of FTTH/B Homes Passed)

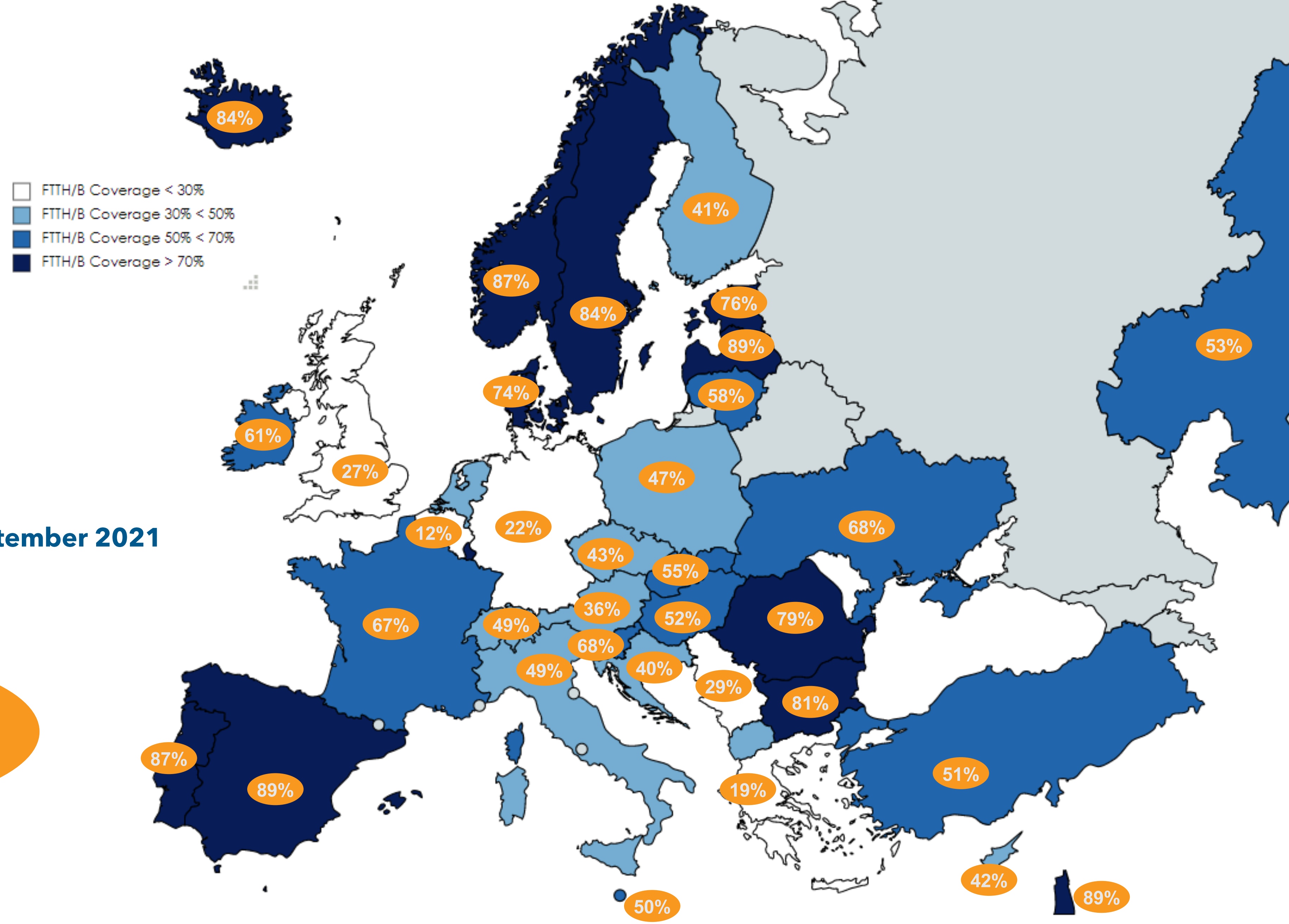
| | | |
|---|---|---|
| France **+4.3 M** | 1 | Belgium **+ 109%** |
| UK **+3.4M** | 2 | Israel **+ 107%** |
| Germany **+2.4M** | 3 | Greece **+ 90%** |
| Turkey **+1,8M** | 4 | Cyprus **+83%** |
| Italy **+ 1.5M** | 5 | UK **+ 80%** |

With thanks to IDATE DIGIWORLD

Source: IDATE for FTTH Council EUROPE

Full fibre for a digital and sustainable Europe

# FTTH/B Coverage
## Summary map




**FTTH/Bcoverage* map - September 2021**
(* Homes passed / Households)

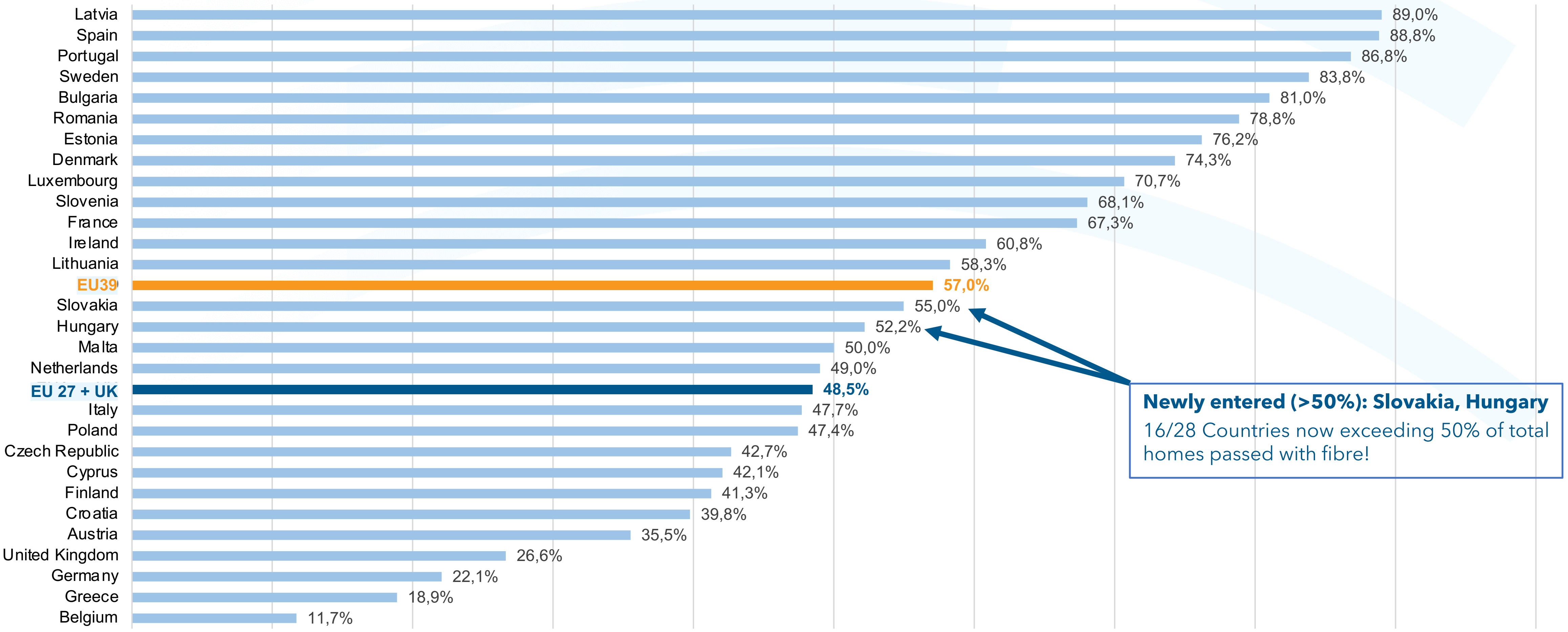
**Coverage rate**

EU27+UK: **48.5% ( Up 4.6% )**
EU39 : **57% ( Up 4.5% )**

# European leaderboards - EU27+UK

**2 new countries have passed the 50% mark of total homes passed with fibre! : Who is next?**

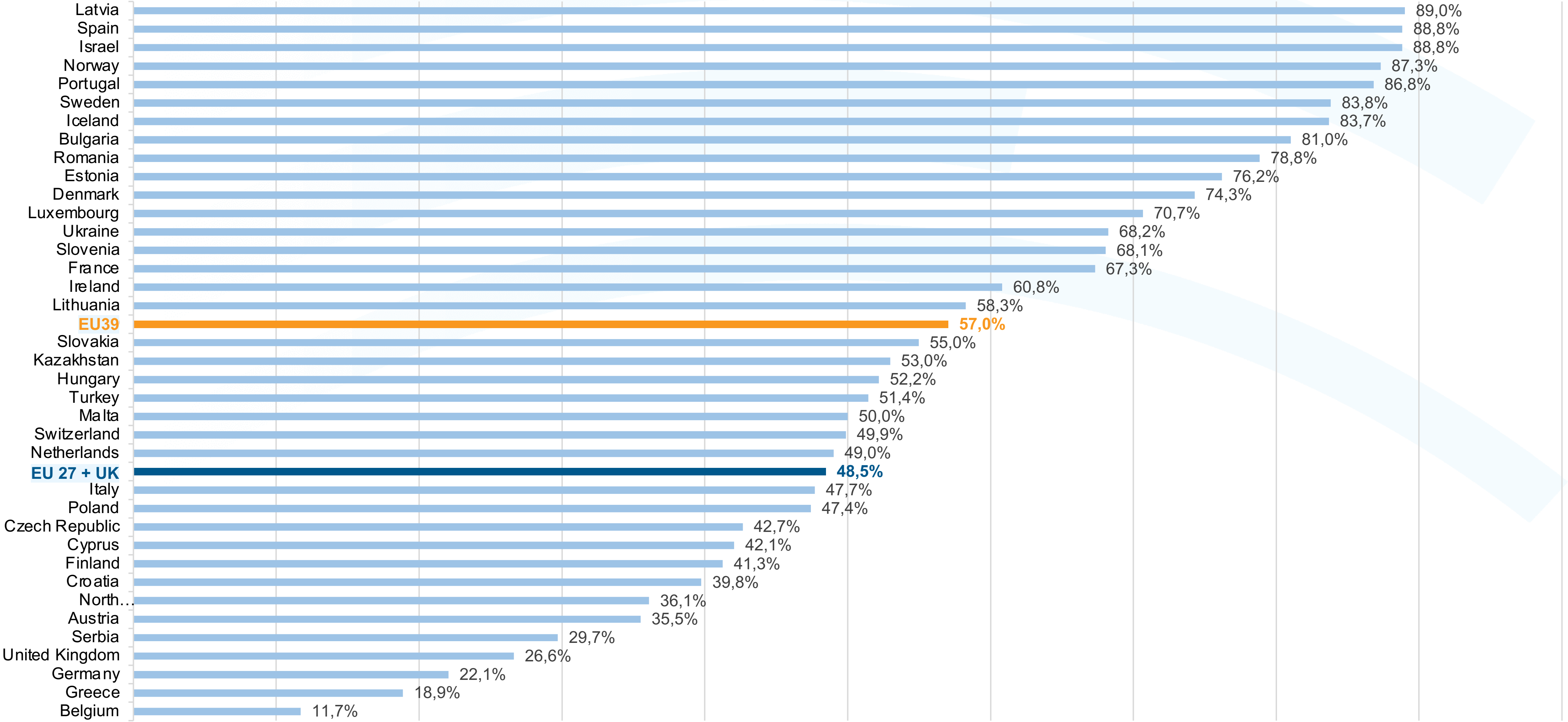
FTTH/B coverage* in EU27+UK as of September 2021 (* Homes passed / Households)



# European leaderboards – EU39

**EU39 : 3 out of 5 countries now have more than 50% of total homes with fibre!**

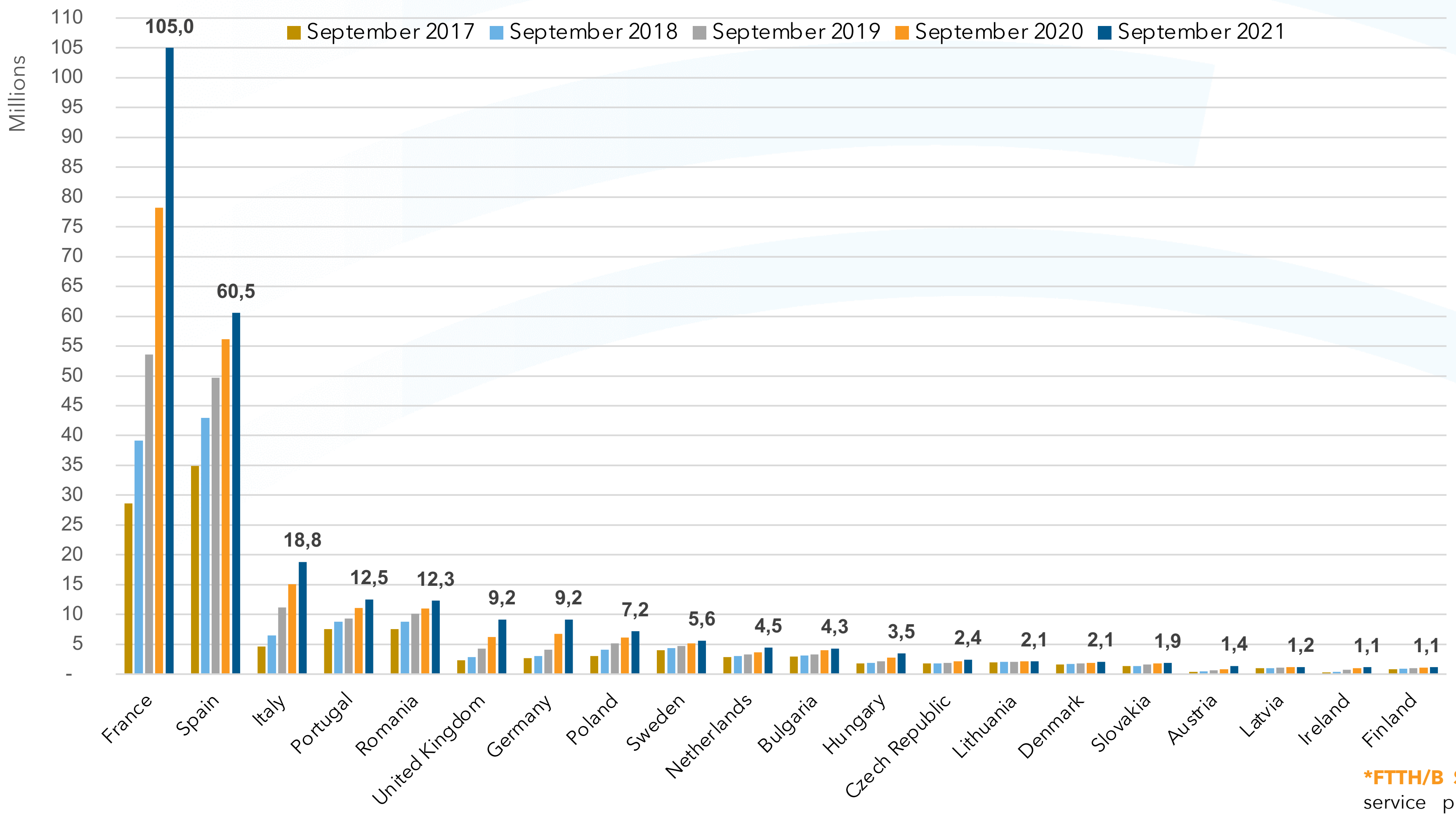
FTTH/B coverage* as of September 2021 (* Homes passed / Households)



# FTTH/B Sockets Deployed* - EU27+UK Ranking

**EU27+UK ranking in terms of FTTH/B Sockets Deployed, countries with > 1 million sockets deployed**

Data comparison between Sept. 2017 and Sept. 2021 (in million homes)




**5 fastest growing markets (in both volume and %)**

Data from Sept. 2020 to Sept. 2021 (in terms of FTTH/B Sockets Deployed)

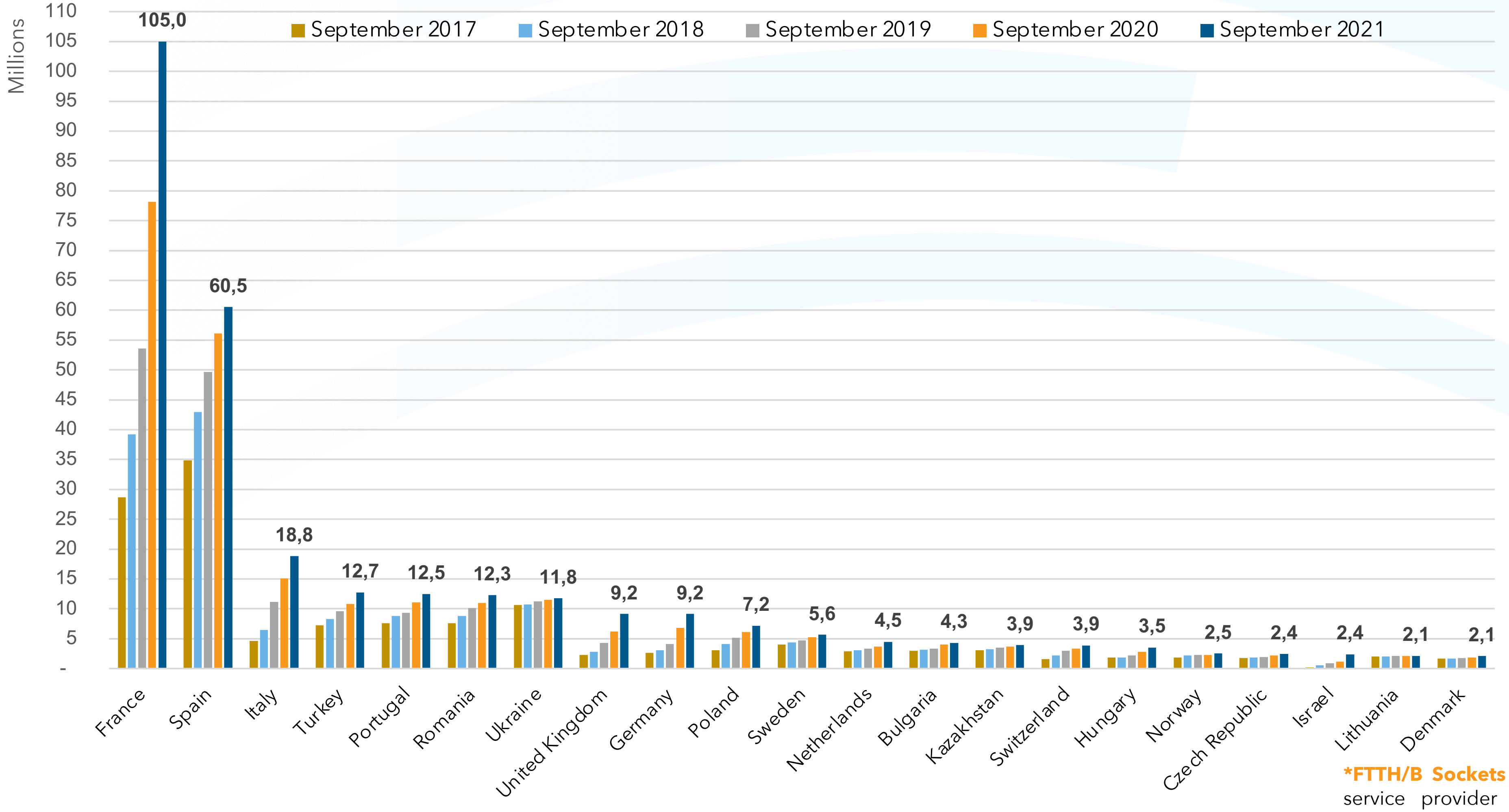
| | | |
| --- | --- | --- |
| France **+26.8 M** | 1 | Belgium **+ 109%** |
| Spain **+4.4M** | 2 | Greece **+ 90%** |
| Italy **+3.8M** | 3 | Cyprus **+83%** |
| UK **+2.9M** | 4 | Austria **+ 62%** |
| Germany **+2.4M** | 5 | UK **+ 48%** |

***FTTH/B Sockets Deployed:** The connection point of a single fibre service provider inside/outside a premises. Multiple sockets are counted if the location is serviced by multiple FTTH network operators.

# FTTH/B Sockets Deployed* - EU39

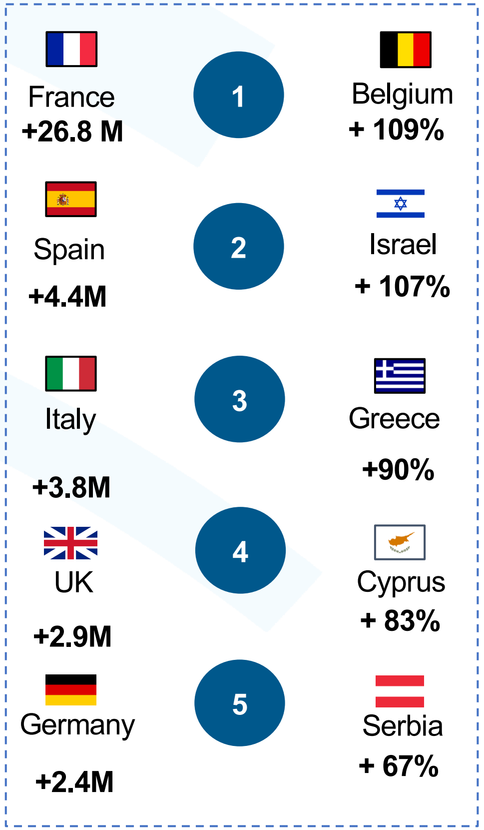
**EU39 ranking in terms of FTTH/B Sockets Deployed, countries with > 2 million sockets deployed**

Data comparison between Sept. 2017 and Sept. 2021 (in million homes)




**5 fastest growing markets (in both volume and %)**

Data from Sept. 2020 to Sept. 2021 (in terms of FTTH/B Sockets Deployed)

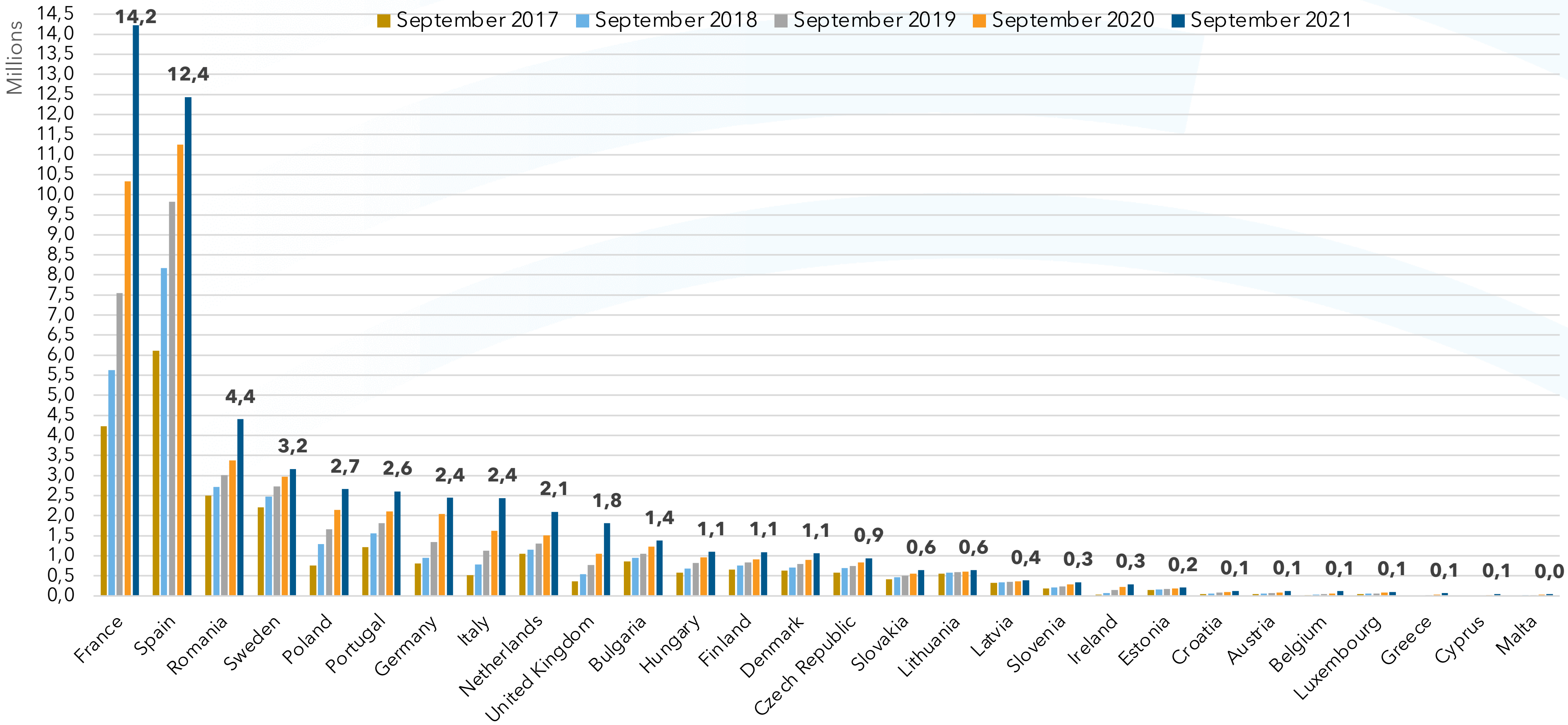



***FTTH/B Sockets Deployed:** The connection point of a single fibre service provider inside/outside a premises. Multiple sockets are counted if the location is serviced by multiple FTTH network operators.

# FTTH/B Subscribers – EU27 + UK

## EU27+UK ranking in terms of FTTH/B Subscriptions over time (in thousands homes)

Data comparison between Sept. 2017 and Sept. 2021 (in million homes)




### 5 fastest growing markets (in both volume and %)

Data from Sept. 2020 to Sept. 2021 (in terms of FTTH/B Subscribers)

| | | |
|---|---|---|
| France +3.8 M | 1 | Greece + 121% |
| Spain +1.2M | 2 | Cyprus + 114% |
| Romania +1.0M | 3 | Belgium +92% |
| Italy +820k | 4 | UK + 73% |
| UK +765k | 5 | Austria + 53% |

With thanks to IDATE DIGIWORLD

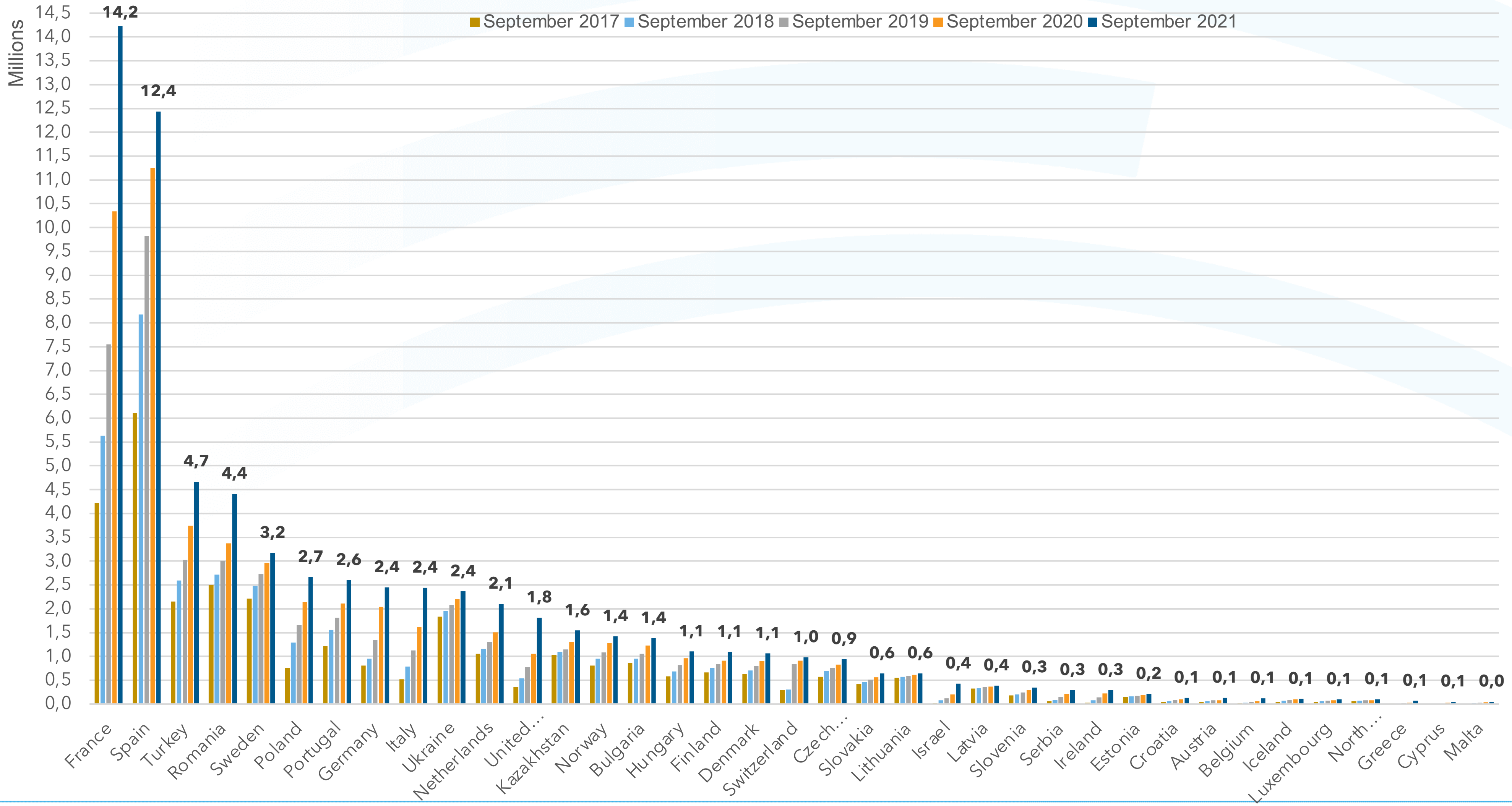
Source: IDATE for FTTH Council EUROPE

Full fibre for a digital and sustainable Europe

# FTTH/B Subscribers – EU39

## EU39 ranking in terms of FTTH/B Subscriptions over time (in thousands homes)

Data comparison between Sept. 2017 and Sept. 2021 (in million homes)



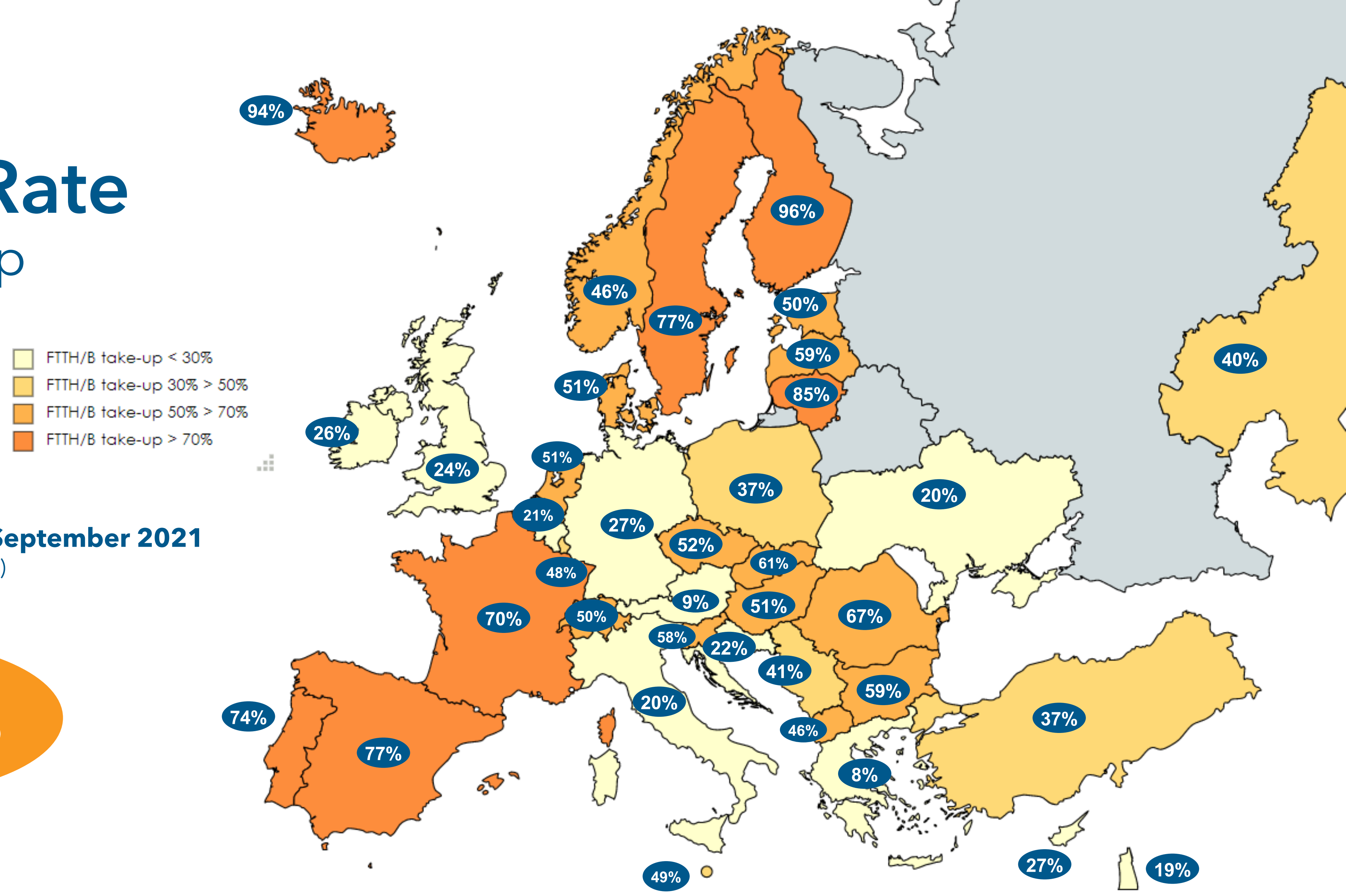

### 5 fastest growing markets (in both volume and %)

Data from Sept. 2020 to Sept. 2021 (in terms of FTTH/B Subscribers)

| Volume | Rank | % |
|---|---|---|
| France +3.8 M | 1 | Greece + 121% |
| Spain +1.2M | 2 | Cyprus + 114% |
| Romania +1.0M | 3 | Israel + 107% |
| Italy +820k | 4 | Germany + 92% |
| UK +765k | 5 | UK + 73% |

# FTTH/B Take-up Rate

Summary map




**FTTH/B take-up* map - September 2021**

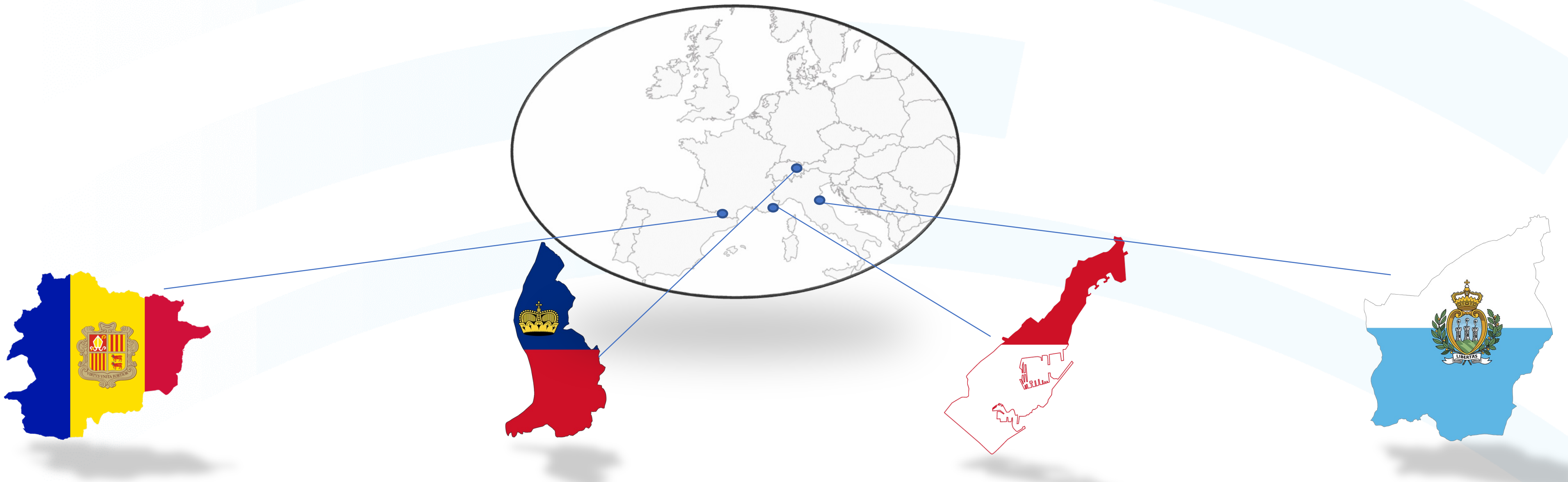
*(Subscribers / Homes Passed)

Take-up rate

EU27+UK: **52.4% (Up 5.6%)**
EU39 : **48.5% (Up 3.6%)**

# Focus on microstates progress

## Good progress being made across all 4 regions



**Andorra - 45,100 Households**

45,100 Homes Passed by Fibre — 100%*

38,168 Fibre Subscribers — 85%*

* of total homes

**Liechtenstein - 23,400 Households**

18,684 Homes Passed by Fibre — 80%*

12,321 Fibre Subscribers — 53%*

* of total homes

**Monaco - 18 400 Households**

12,500 Homes Passed by Fibre — 68%*

2,000 Fibre Subscribers — 11%*

* of total homes

**San Marino - 11,500 Households**

7,000 Homes Passed by Fibre — 61%*

6,500 Fibre Subscribers — 57%*

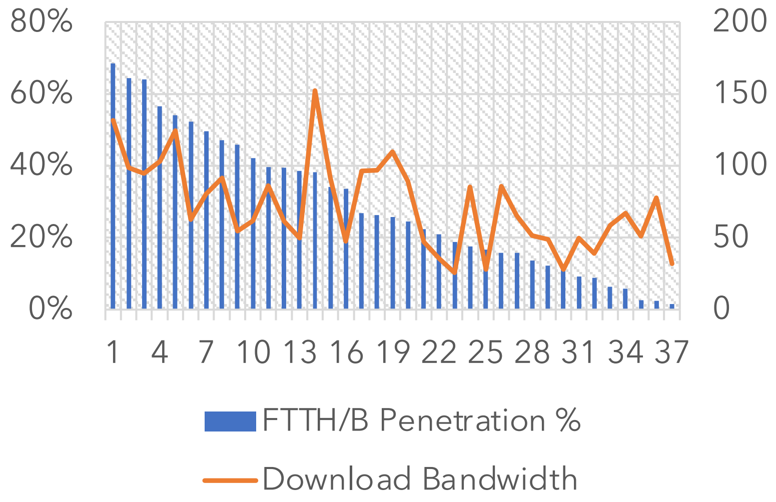
* of total homes

# Fibre improves the customer experience

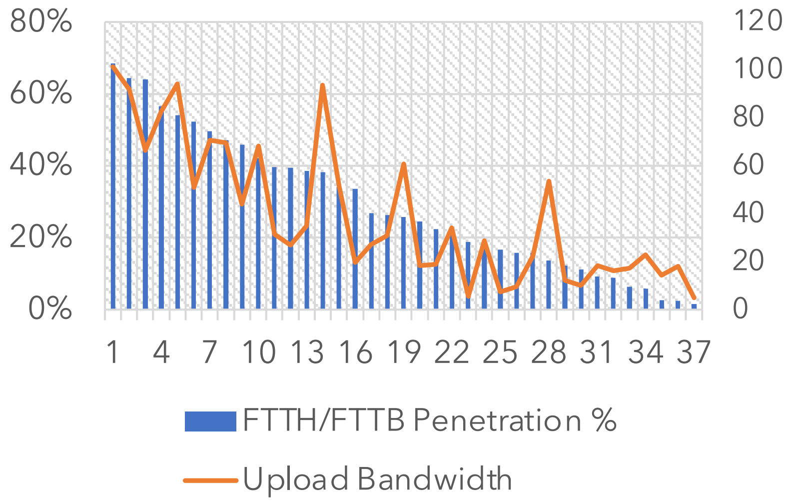
## Based on Ookla Global Index November 2021

- Full-fibre connectivity supports higher download speeds, higher upload speeds and lower latency.
- Fibre facilitates Working From Home (WFH), allowing true business critical functions outside the office.
- This supports video-conferencing, cloud-based services and other real-time or bandwidth hungry applications now in demand

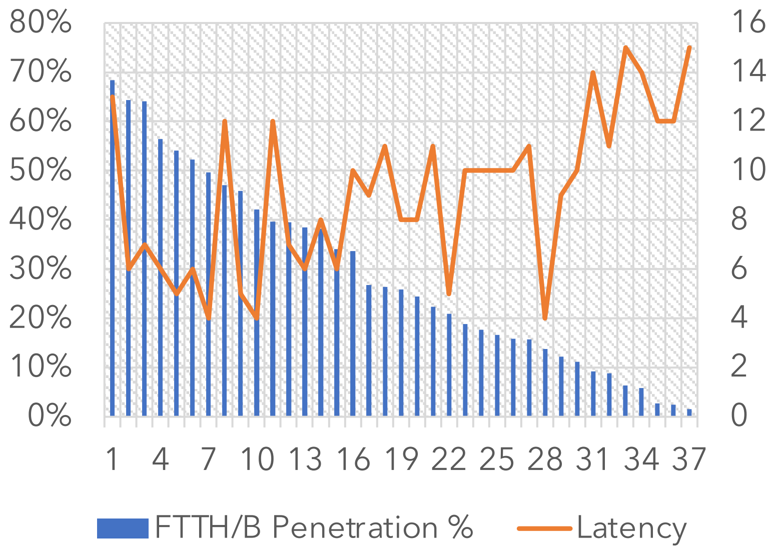
**FTTH/B Penetration alongside Ookla Global Index - Fixed Download Bandwidth**




**FTTH/B Penetration alongside Ookla Global Index - Fixed Upload Bandwidth**




**FTTH/B Penetration alongside Ookla Global Index - Latency**



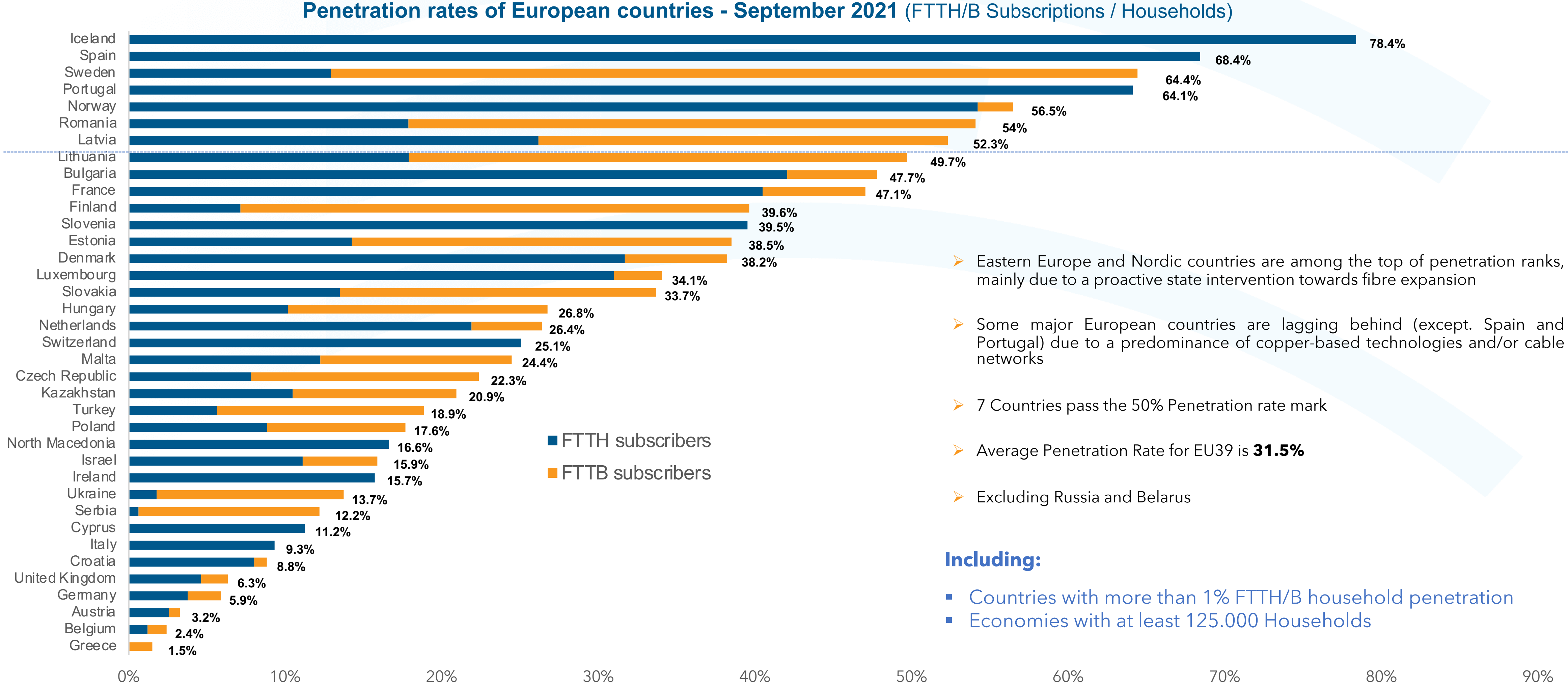
# 4. FTTH/B Market Panorama

European Ranking September 2021

With thanks to IDATE DIGIWORLD

# European Ranking

## FTTH/B Markets – September 2021



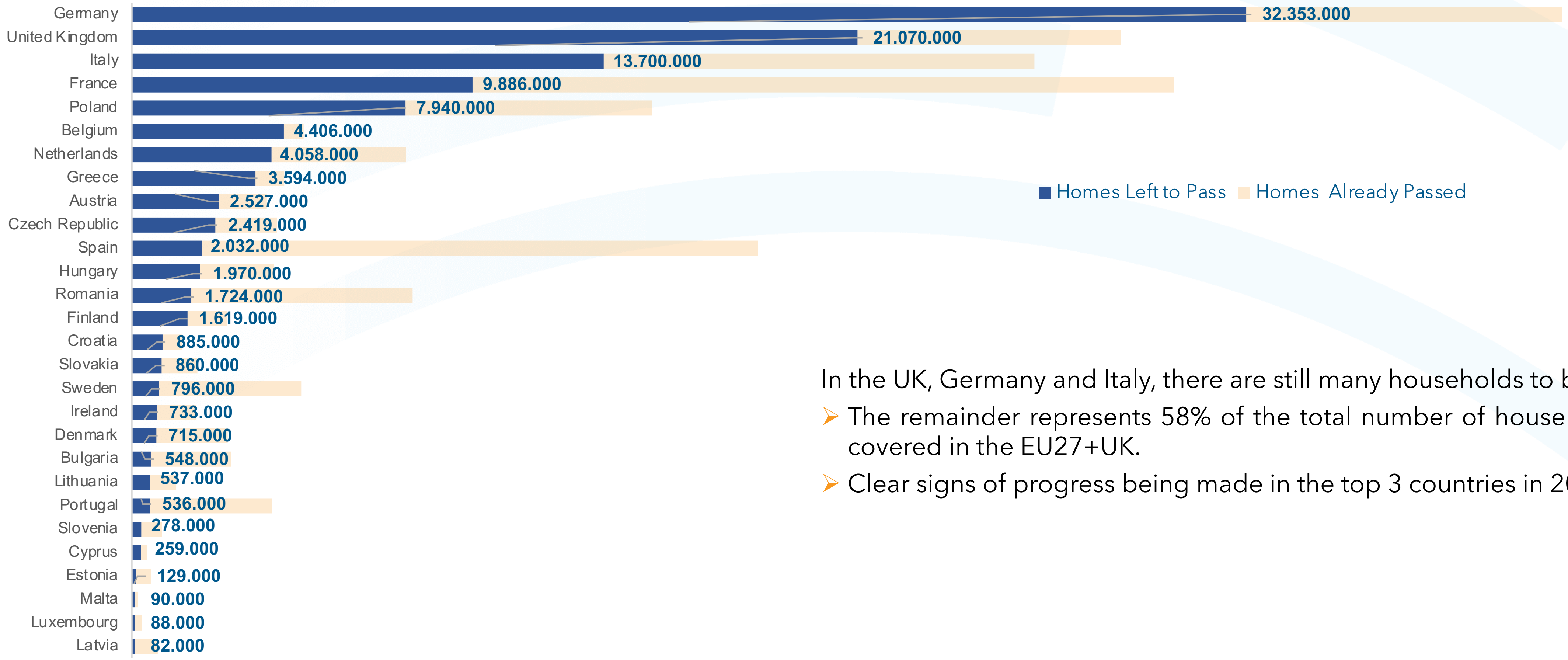

- Eastern Europe and Nordic countries are among the top of penetration ranks, mainly due to a proactive state intervention towards fibre expansion
- Some major European countries are lagging behind (except. Spain and Portugal) due to a predominance of copper-based technologies and/or cable networks
- 7 Countries pass the 50% Penetration rate mark
- Average Penetration Rate for EU39 is **31.5%**
- Excluding Russia and Belarus

**Including:**

- Countries with more than 1% FTTH/B household penetration
- Economies with at least 125.000 Households

# The Road to Full Fibre – Who has the most work left to do?

## EU27+UK – September 2021




In the UK, Germany and Italy, there are still many households to be covered.

- The remainder represents 58% of the total number of households to be covered in the EU27+UK.
- Clear signs of progress being made in the top 3 countries in 2022

# 5. FTTH/B Market Panorama

Key Conclusions

FTTH COUNCIL EUROPE

With thanks to IDATE DIGIWORLD

# Key conclusions

**Top 3 – Progress made in FTTH/B Penetration – EU27+UK**

| 1 Iceland | 2 Spain | 3 Sweden |
|---|---|---|
| 78.4% | 68.4% | 64.4% |

**Top 3 - Main movers in terms of Homes Passed in absolute numbers – EU27+UK**

Data comparison between Sept. 2020 and Sept. 2021

| 1 France | 2 UK | 3 Germany |
|---|---|---|
| + 4.3m HP | + 3.4m HP | + 2.4m HP |

3 out of 5 countries now have more than 50% of total homes with Full-fibre : a figure showing the willingness of each country to support the expansion of FTTH

EU39 reaching 96 million FTTH subscriptions, with EU27+UK accounting for 60%.

198 million homes passed by full-fibre infrastructure in the total region, 109 million in EU27+UK.

Almost halfway there : EU 27+UK - 49% of European homes are covered by Full-fibre.

Fibre Rollout delays seen in 2020-2021 lockdown period, this resulted in less progress versus previous forecasted figures

Gigabit capable technologies such as 5G FWA, G.fast and Docsis 3.1/4.0 are still being deployed to meet the current Home bandwidth demands, delaying FTTH in some areas

Availability of skilled labor to build out and manage new fibre networks is now being felt. Industry is responding but staff training and retention is top of mind for service providers and network builders.

Germany, UK and Italy have the most work to do in connecting their remaining homes – with over 60million homes left to pass between them.

# Thank you for your attention!

**FTTH Council Europe asbl**
Rue de la Presse 4
B-1000 Brussels
Belgium
Tel: +32(0)460 97 46 97
e-mail: info@ftthcouncil.eu

www.ftthcouncil.eu

**Roland Montagne**
Principal Analyst
+33 (0)6 80 85 04 80
r.montagne@idate.org

**Eric Joyce**
Chair, Market Intelligence Committee
FTTH Council Europe
eric.joyce@ftthcouncil.eu