



FTTH Forecast for EUROPE

Market forecast 2021-2026

FTTH Virtual Conference 2021 – September 15-16, 2021

FTTH/B Market Panorama Revisited

Key Figures September 2020 in EU39* countries

82

million FTTH/B
Subscribers

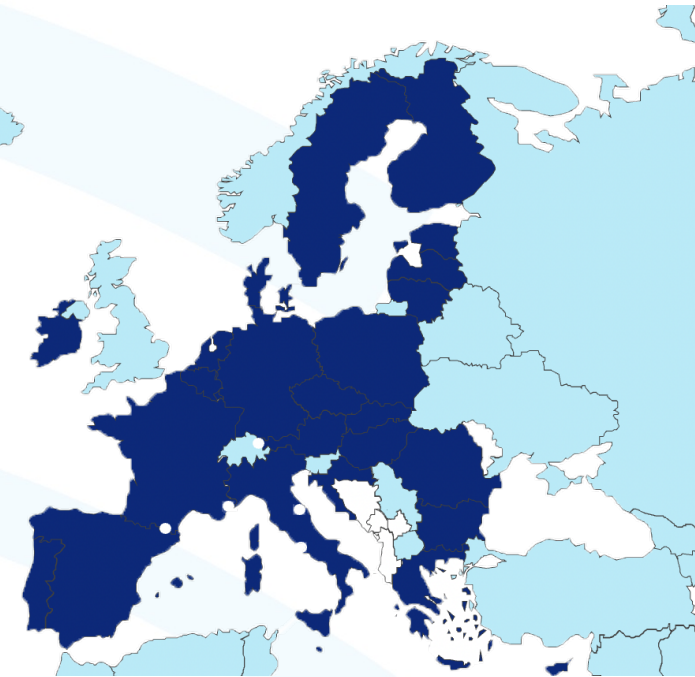
183

million FTTH/B
Homes Passed

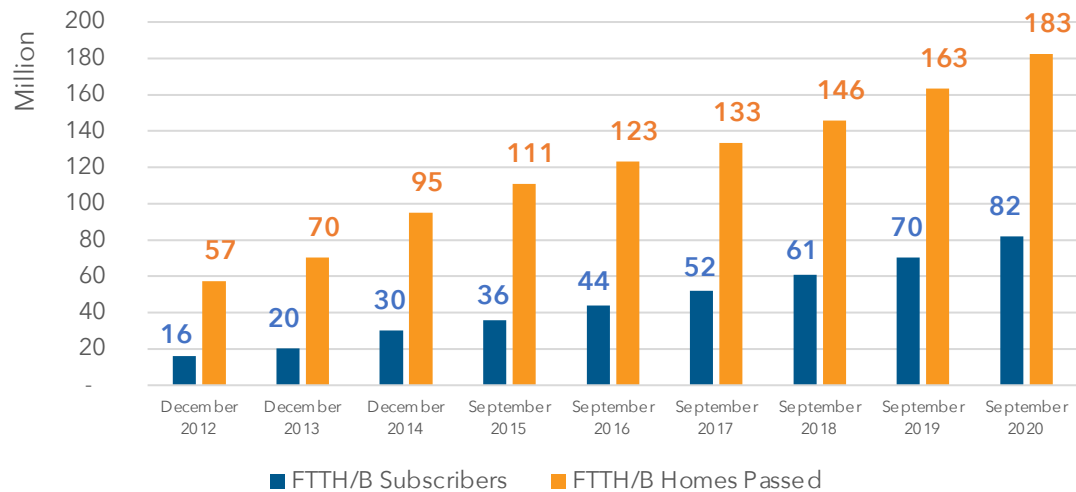
Detailed FTTH/B Market
Panorama scope

■ EU27 countries

■ Other European
countries under study



FTTH/B European market evolution (EU39)
In terms of Homes Passed and Subscribers (2012-2020)



Take-up rate

EU27+UK: 46.9%
EU39 : 44.9%

Coverage rate

EU27+UK: 43.8%
EU39 : 52.5%

* EU39 detailed composition:

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

Methodology

- Mission on behalf of the FTTH Council Europe
- Provide a forecast overview of FTTH/B European markets by 2021 and 2026

ACTIONS

* EU39 detailed composition:

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

Scope



- Individual analysis of 15 countries based on Top 15 countries by Homes passed (Market Panorama)
- Study of EU27+UK and EU39* countries
- Based on feedback from all main operators, service provider associations and regulatory contacts in each country

Bottom-up methodology



- Desk research
- Direct contacts with leading players and IDATE partners within countries
- Information exchange with FTTH Council Europe members
- Apply Forecast Model based on Supply/Demand Criteria

Results



- Both quantitative and qualitative data
- Adjusted Forecasts for years 2021 and 2026 taking into account COVID impacts
- Results compared with local intelligence sources, including regulator and other recent publications where available and appropriate

Forecast study - Factors taken into account

SUPPLY CRITERIA

- **Strategic plans** from telecom players towards high-speed broadband deployments once COVID-19 impacted in the European region.
- **Public Funds** allocated from governments to deploy fibre networks.
- New Initiatives from **Municipality/utility players to accelerate fibre development in remote areas**, where private operators don't have any incentives to deploy.
- **Copper switch off** initiatives begun or announced by many players.
- **Cable operators migrating to FTTH/B**
- **Green-field housing** and systematic deployment of FTTH in any new build housing

DEMAND CRITERIA

- **Broadband services take-up.** Average speeds continue to rise for households and new dynamics after COVID-19 impacted
- **Data consumption keeps growing** due to new confinement dynamics (teleworking and remote studying) that force the intensive use of **video content, high-definition streaming** which demand **high bandwidth capacity**.
- Demands to accomplish **EC Digital Agenda goals** by 2025 and 2030
- People in **rural areas** still not covered by high-speed connections demanding access to **NGNs. People moved to rural areas as a way to reduce virus exposure.**
- **National and Digital Agendas** pushing to accelerate fibre deployments

OTHERS

- Impact of **infrastructure costs**
- Impact of **copper-based DSL improvements** with new emerging variants, such as G.Fast.
- Impact of cable-based networks with DOCSIS 3.1 and coming DOCSIS 4.0
- Impact of **networks sharing** agreements and new deployments based on **co-investment** among players.
- **Regulatory changes at European and national level** to create a common commitment to deploy FTTH networks.
- Impact of **macroeconomic environment and economical trends:** teleworking as a new dynamic and the creation of new business models
- FTTH rollout planning may be impacted by **buildout resource availability**

Variables affecting FTTH adoption

Both positive and negative criteria should be considered

POSITIVE IMPACTS

1

Data demand and bandwidth **has intensified** (due to COVID19 and WFH situations), more operators focused on full-fibre networks to sustain ongoing traffic increase

2

National authorities are fully **involved in broadband acceleration via FTTH**, with new national programmes being defined to reach Digital Agenda goals for 2025/2030.

3

Progress in micro-trenching and cable design is less intrusive/disruptive in cities and neighborhoods while **new low profile cable designs offer better aesthetics** (indoors and outdoors)

4

Ongoing trend towards **mutualized networks and network sharing agreements** in Europe will accelerate FTTH deployments

5

Continued investment from private financing groups for new and existing network operators in more EU countries.

NEGATIVE IMPACTS

1

Gigabit Capable FWA (60Ghz) is a **potential alternative or delaying factor for FTTH in certain areas**, thus may delay FTTH deployments in some regions. **5G technology** used in high spectrum bands (26 GHz) can directly challenge FTTH in the fixed residential market

2

FTTH investments delayed in several areas due to **direct alternative technologies** such as Cable (Docsis 3.1/4.0) and G.Fast. The DOCSIS 4.0 threat is reducing due to market readiness issues.

3

Misleading fibre advertising is still impacting FTTH subscriber adoption. New demand for WFH applications in the home will help differentiate FTTH further from FTTC as 2021 progresses.

4

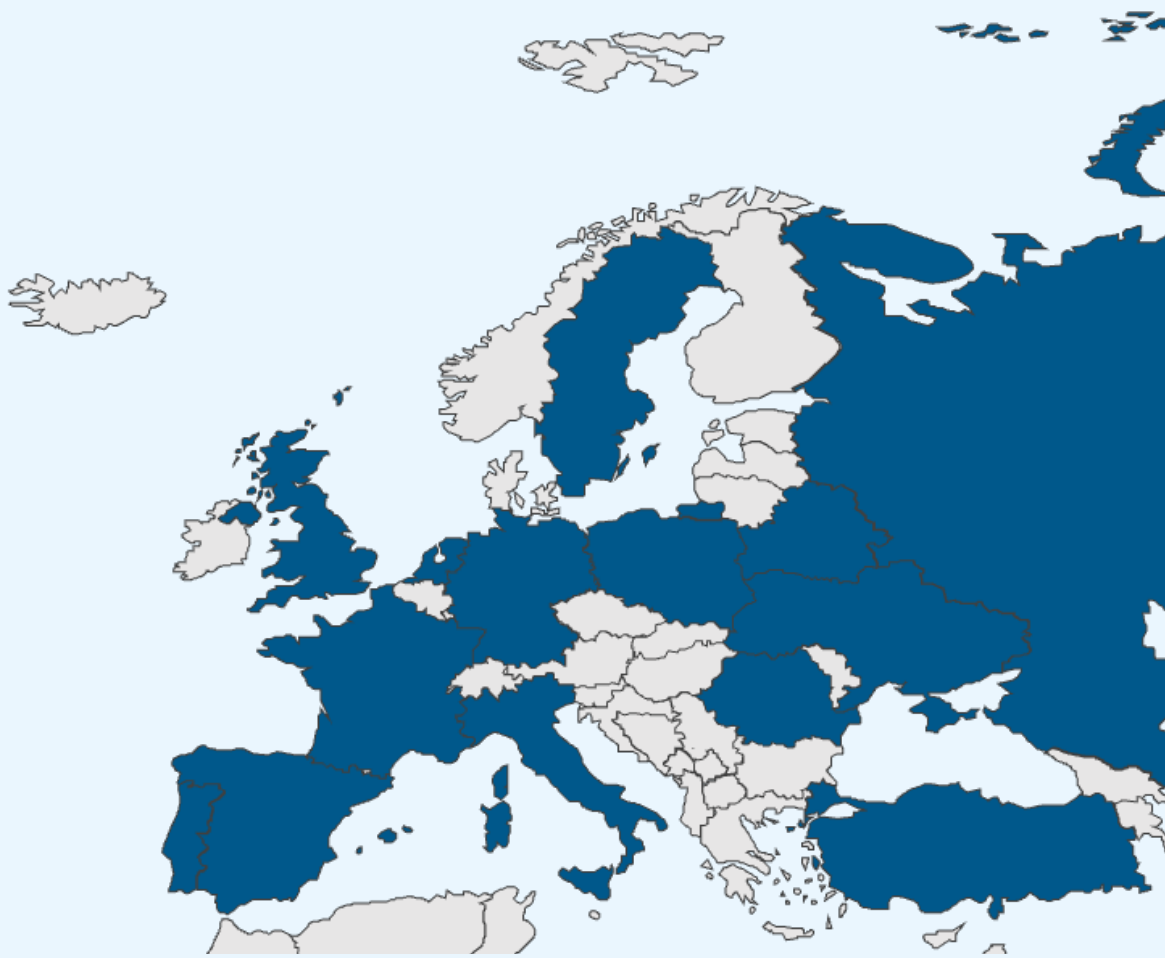
Fibre Rollout Plans being delayed across Europe - some by up to 2 years. Removal of red tape and better central coordination can tackle these delays.

5

Availability of skilled labor to build out new fibre networks is beginning to be felt in late 2020. The growth expected in 2021 and 2022 will make this more pronounced.

Forecast exercise

Individual analysis of 15 European countries

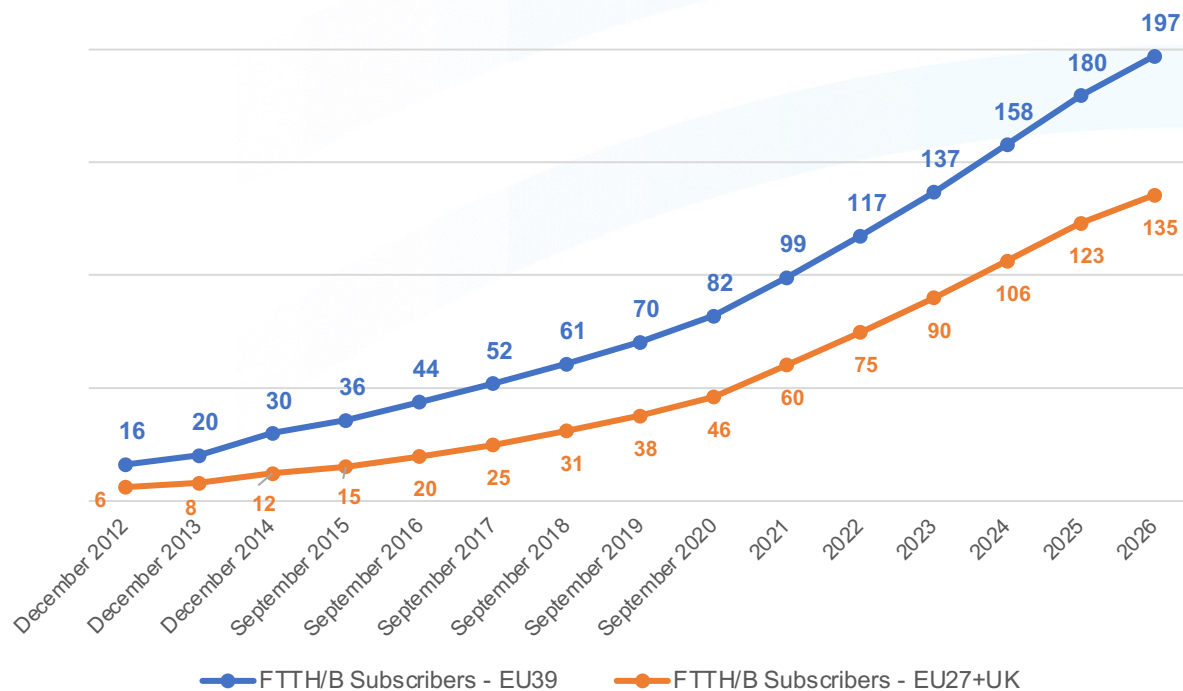


Top 15 Countries with the highest number of FTTH/B homes passed at September 2020:

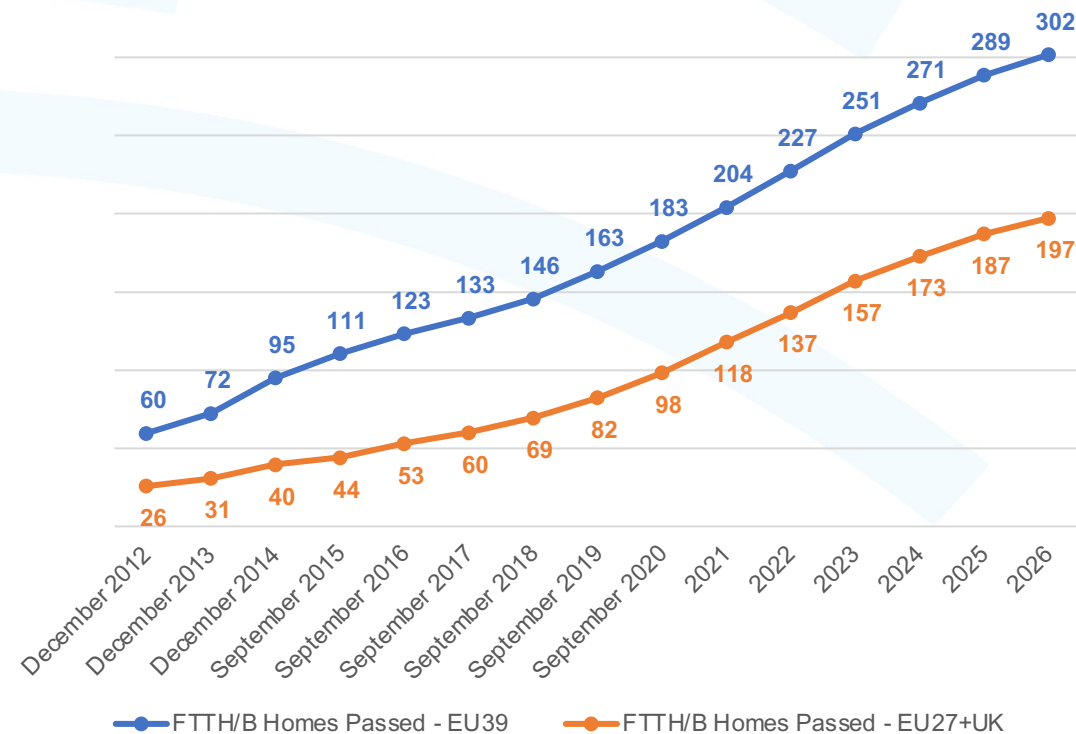
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Russia | 
France | 
Spain |
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Ukraine | 
Italy | 
Turkey |
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Romania | 
Poland |
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UK | 
Sweden | 
Kazakhstan |
| 
Belarus | 
Portugal | 
Netherlands |

European FTTH/B Historical and Forecasts (2012-2026)

FTTH/B Subscribers Forecasts (million)
Comparison EU27+UK / EU38+UK



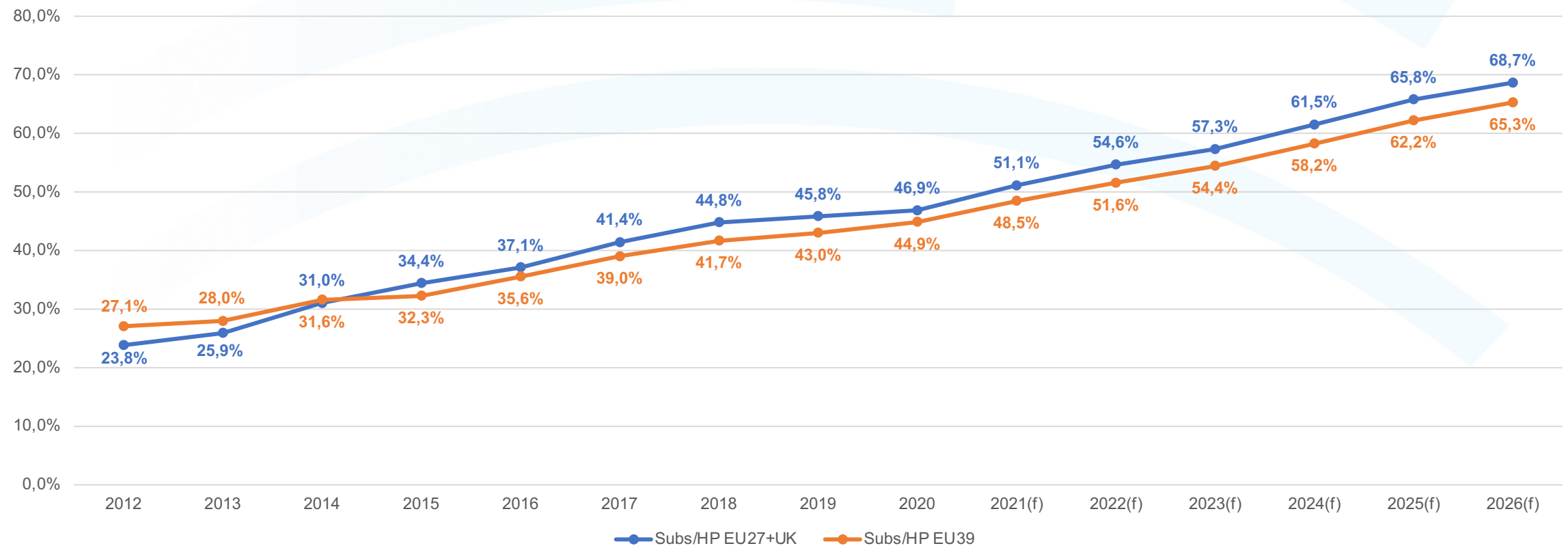
Evolution of FTTH/B Homes Passed (million)
Comparison EU27+UK / EU38+UK



Source: IDATE for FTTH Council EUROPE

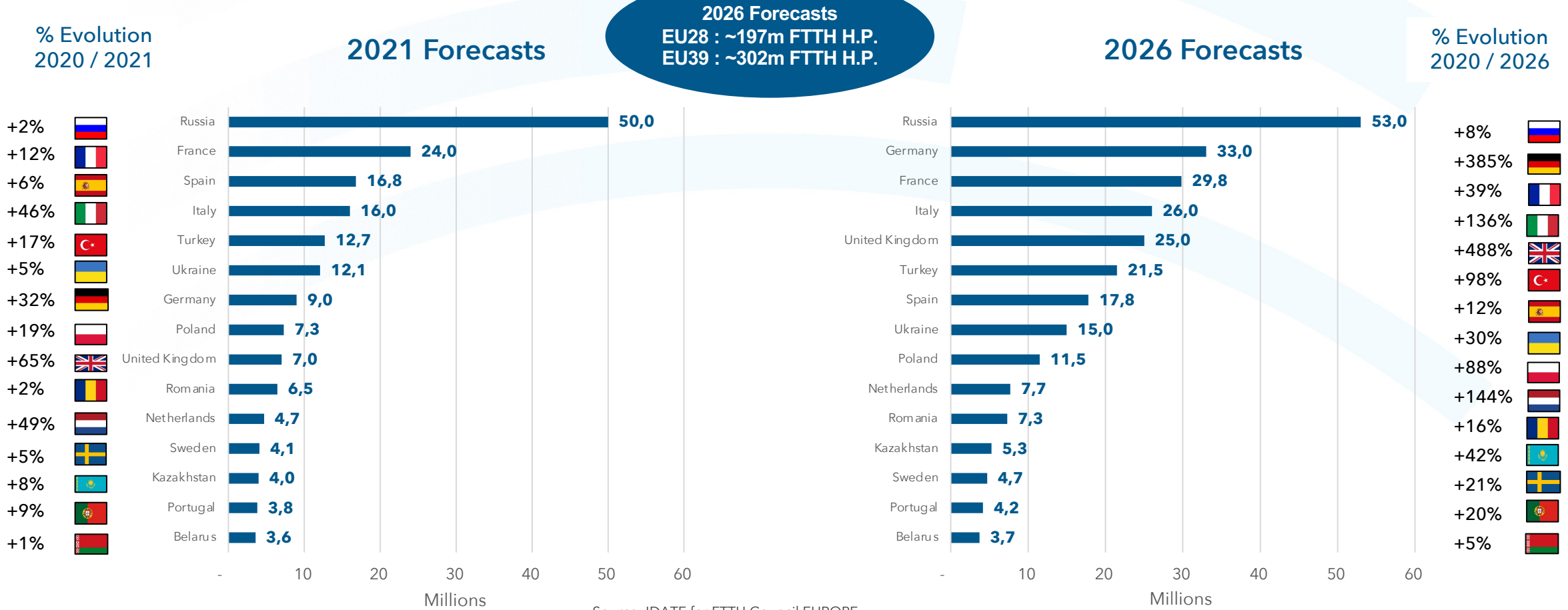
European FTTH/B Historical and Forecasts (2012-2026)

FTTH/B Take-up Rates Forecasts (Subs over Homes Passed, in %)
Comparison EU27+UK / EU38+UK



Forecast exercise (2021-2026)

European ranking in terms of FTTH/B Homes passed
(in million homes)



Forecast exercise (2021-2026)

European ranking in terms of FTTH/B Subscriptions (in million)

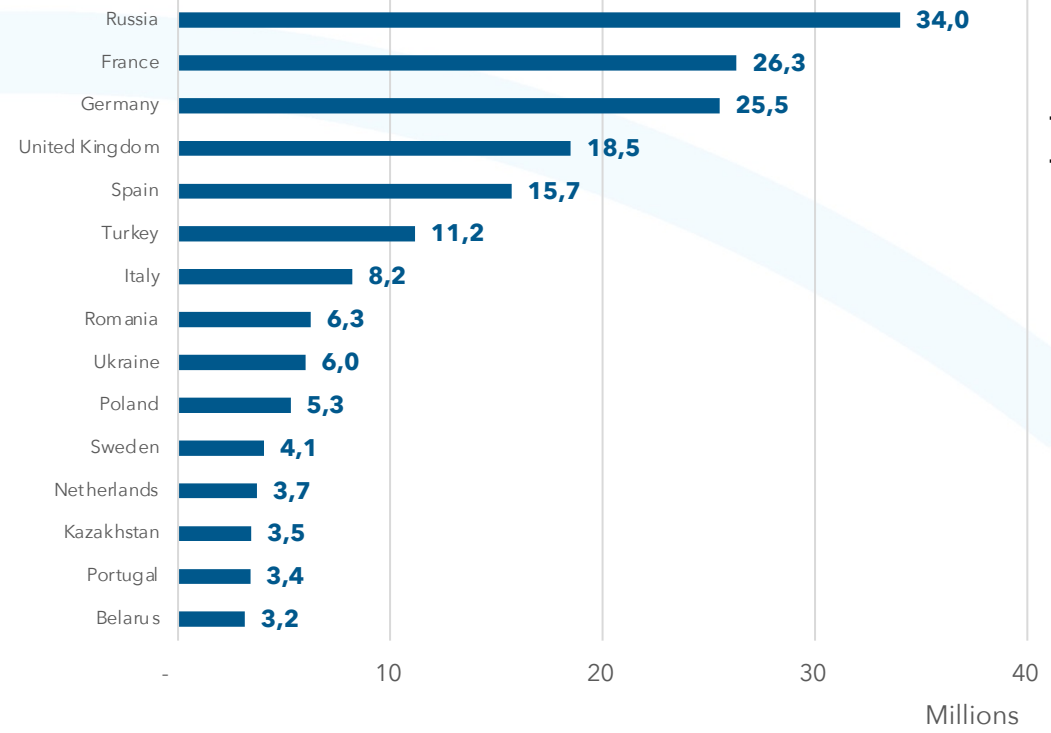
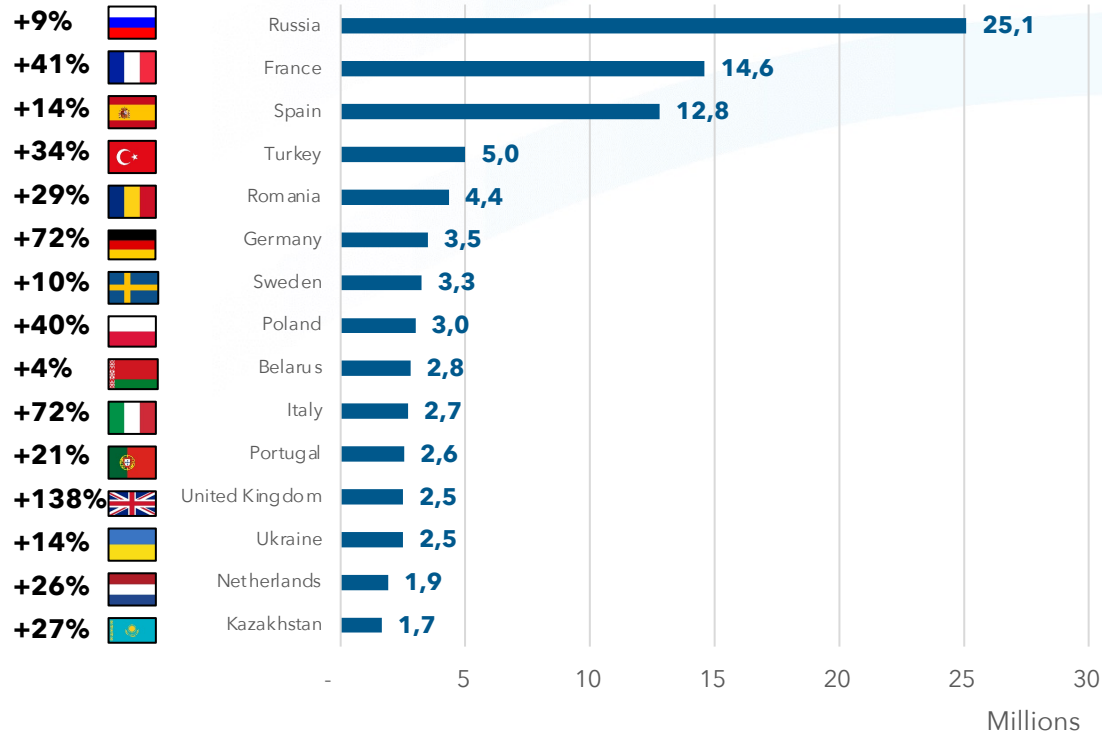
2026 Forecasts
 EU28 : ~135m FTTH Subs.
 EU39 : ~197m FTTH Subs.

% Evolution
2020 / 2021

2021 Forecasts

2026 Forecasts

% Evolution
2020 / 2026



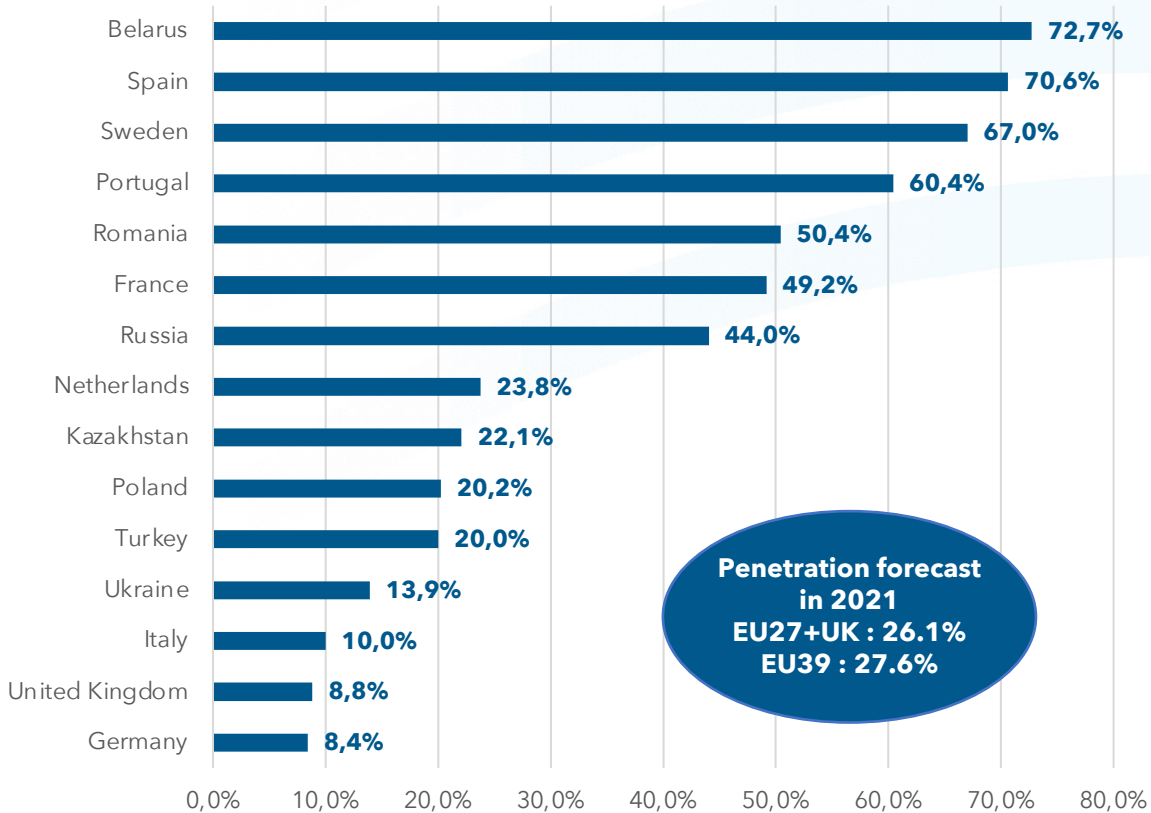
- +9%
- +41%
- +14%
- +34%
- +29%
- +72%
- +10%
- +40%
- +4%
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- +1150%
- +1662%
- +39%
- +198%
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- +85%
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- +147%
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- +61%
- +17%

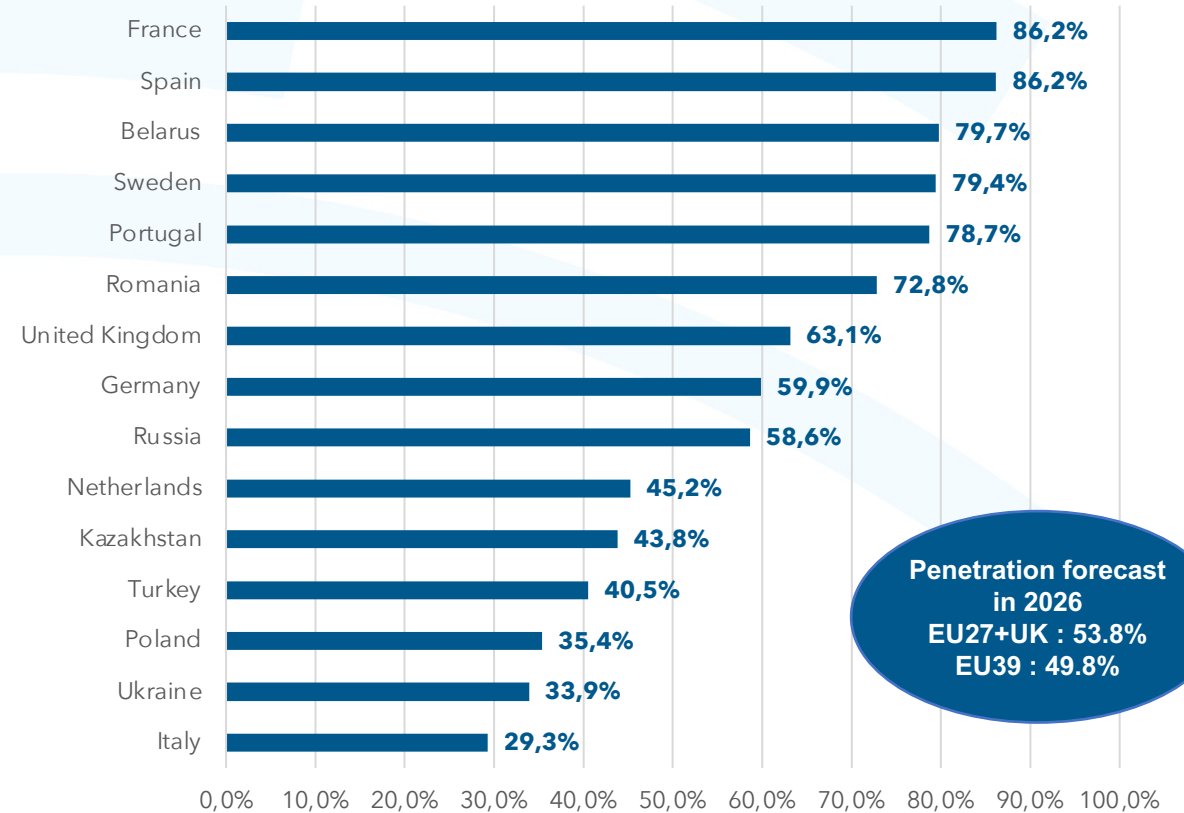
Forecast exercise (2021-2026)

European ranking in terms of FTTH/B Household penetration (%)

2021 Forecasts



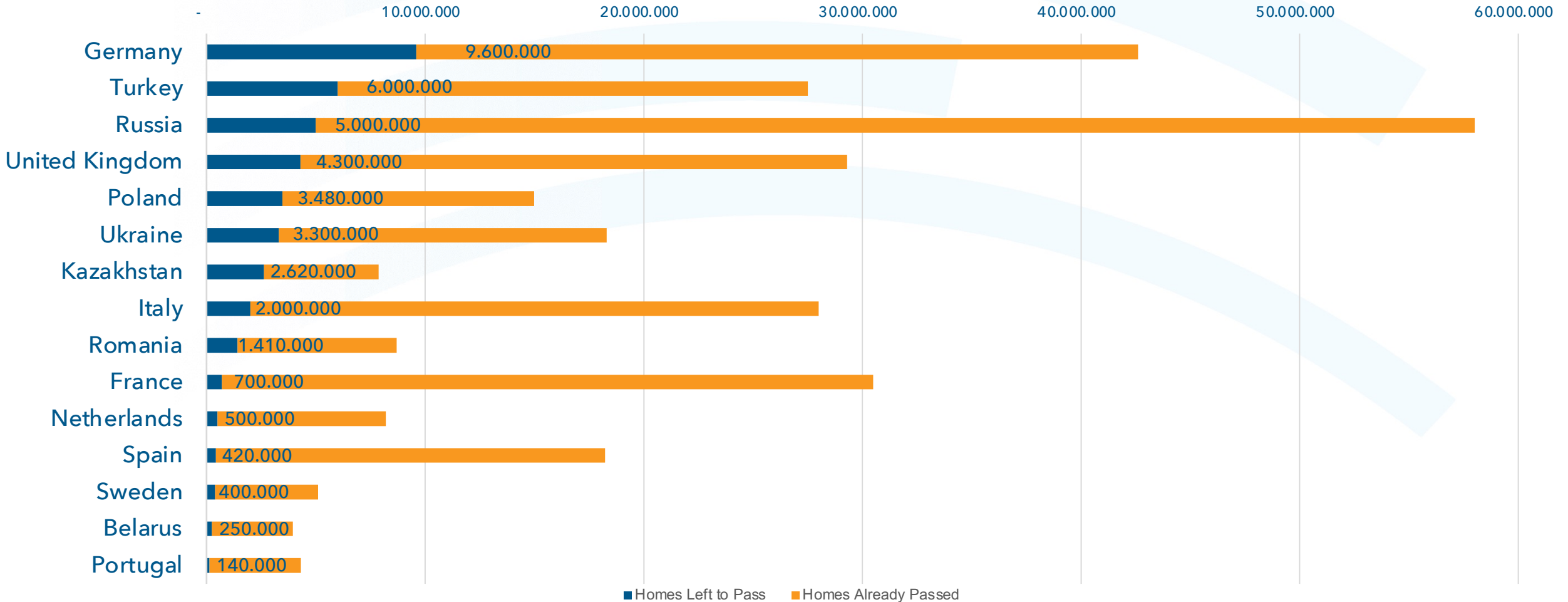
2026 Forecasts



Source: IDATE for FTTH Council EUROPE

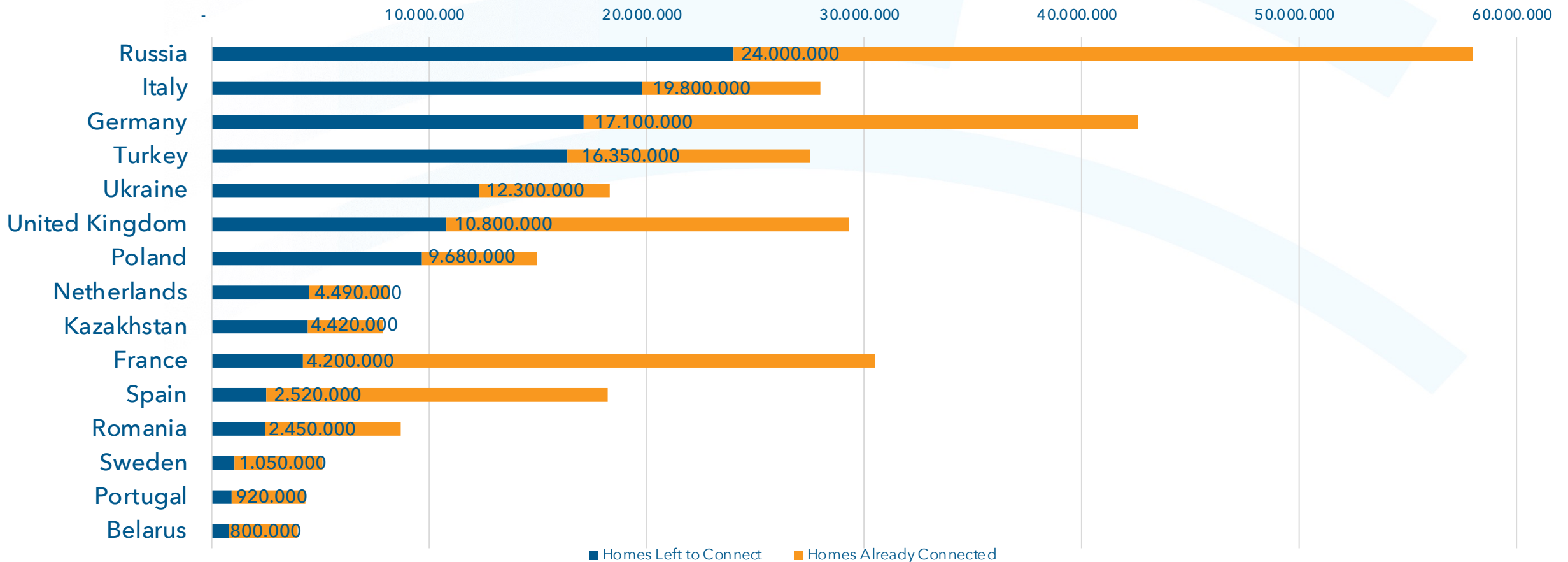
Market Forecast 15

Remaining Homes to be Passed with FTTH/B in 2026



Market Forecast 15

Remaining Homes to be Connected with FTTH/B in 2026 (Subscribers)



Key conclusions

1

FTTH WILL REACH
NEW LEVELS BY
2026

- In the post-COVID crisis era, full-fibre networks have played a key role in keeping our economies up and running. Thanks to recently launched national programmes (often as a response to COVID-19 concerns), coupled with DAE targets for 2025 & 2030, full-fibre connectivity is accelerating across all European countries.
- In 2021, EU39 will be very close to the **100 million FTTH subscriptions milestone**, with **EU27+UK accounting for 61%**. By 2026, Europe will be home for **around 197 million FTTH subscribers**, with the **EU27+UK representing 135 million**.
- **204 million homes passed** by full-fibre infrastructure in the total region in 2021, **118 million in EU27+UK**. By 2026, **FTTH/B will cover 302 million homes** in the whole region, of which **197 million for EU27+UK**.

2

MARKET
EVOLUTION: MAIN
TRENDS

- This forecast exercise highlights the ongoing transformation of European countries towards a 'Digital Society' as planned by European authorities, and FTTH/B will play a major role in this digital inclusion. The full elimination of the digital gap between rural and urban regions will also be a key focus in the coming years.
- In several historically copper and cable-based countries, the fixed broadband market is intensively evolving. In these countries, alternative ISPs are involved in FTTH deployments in areas not covered by major national players. However, recent initiatives from incumbents to migrate their core architecture towards FTTH will drive full-fibre rollouts in the next periods. (UK, Germany, Italy)
- Increasing data demand and new usage patterns will encourage players to migrate and embark into FTTH solutions, capable of delivering multi-gigabit throughputs and keep economies alive in times of crises. Multi-gigabit services are already available to residential subscribers in many of the countries in this report.

Thank you for your attention!

FTTH Council Europe asbl

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