

EU Connectivity goals (2025)

Kedysi...

Main socio-economic drivers

Schools, universities, research centres, transport hubs, hospitals, PA, digital tech enterprises, etc.

- Download: > 1 Gbps
- Upload: > 1 Gbps

~fixed VHC speeds

Availability: 100%

Households

Rural and urban

Download: > 100 Mbps:

~mobile VHC speeds

Availability: 100%

Subscription rate: 50%

Download: >1 Gbps

Upload: >1 Gbps

~fixed VHC speeds

Upgradability: 100%

Urban areas & major corridors

Roads and railroads

Uninterrupted 5G coverage

2030 Digital Compass

- All European households to be covered by a Gigabit network (59% in 2020), with all populated areas covered by 5G (14% in 2021).

A dnes ...

Infrastructure and technology	Current commercial technology		Fundamental properties of last-mile physical medium		
	Top commercial technology	Top data rate (down/up)	Shared medium	Available bandwidth	Indicative transmission reach
<i>fixed</i>					
1. FTTH p2p	10GbE	10/10 Gbps	No	50 000 GHz	80 km
2. FTTH p2mp (PON)	XGPON	up to 10/2.5 Gbps	Yes	50 000 GHz	20 – 45 km (32 – 8 users)
3. Twisted pair with fibre in the backhaul	ADSL2+	24/3 Mbps	No	0.05 GHz	0.5 – 2 km (high – low speed)
4. Twisted pair with FTTC	VDSL2 + vectoring	up to 90/40 Mbps	No	0.05 GHz	0.2 – 0.5 km (high – low speed)
5. Twisted pair with FTTdb	G.fast	up to 500/500 Mbps	No	0.05 GHz	<200m (high – low speed)
6. Coaxial cable with FTTC	DOCSIS 2	up to 40/30 Mbps	Yes	1 GHz	0.5 – 3.0 km (high – low speed)
7. Coaxial cable with FTTdb	DOCSIS 3.1	up to 10/2 Gbps	Yes	1 GHz	<100m
<i>wireless</i>					
10. FWA at mm-waves	5G	up to 10/5 Gbps	Yes	1 GHz	Less than 1 km
9. FWA at mid-low waves	5G, LTE/4G	100 Mbps	Yes	0.05 GHz	Few km
8. FWA with unlicensed spectrum	Wi-Fi 5	up to 7/1.3 Gbps	Yes	0.5 GHz	Less than 1km
11. Satellite	Ka-band systems	up to 20/8 Mbps	Yes	10 GHz	--

Čo na tieto ciele hovoria najväčšie krajiny EU?

Figure 3.5: National broadband plans in the six largest European countries [Source: Analysys Mason, 2020]

Country	FTTP deployment target	Spend
France	By 2022, essentially all parts of the country will have access to FTTP with speeds of at least 30Mbit/s, and >100Mbit/s in most areas. ⁹	Public and private investments amounting to EUR20 billion. ¹⁰
Germany	Develop a gigabit network, with a preference for FTTP.	A public financing requirement of EUR10 to 12 billion. ¹¹
Italy	By 2020, develop an NGA network able to provide speeds up to 100Mbit/s to at least 85% of households, with a preference for FTTP in urban areas. ¹²	A state-aid budget of EUR4 billion has been made available.
Poland	By 2020, all households will have access to speeds of at least 30Mbit/s, with 50% coverage with speeds of 100Mbit/s. ¹³	The government has dedicated around EUR1 billion to broadband upgrades. ¹⁴
Spain	The policy (PEBA300x100 ¹⁵) aims to achieve 95% fibre coverage by 2021.	Allocated EUR525 million for the period 2018-2021. ¹⁶
UK	Deploy gigabit-capable broadband to the most remote 20% of locations by 2025 according to an "outside-in" approach.	Allocated GBP5 billion (EUR6 billion). ¹⁶

2 kvízové otázky na okraj:

1. Koľko mil. € investovalo doteraz Slovensko do cieľov Gigabit EU ... ?
2. Porovnajte koľko % z Plánu obnovy SR pôjde do digitalizácie ... a koľko z Plánu obnovy DE (alebo AT) ... ?

Figure 3.3: Estimated percentage of premises passed by FTTP, other VHCN, and by other NGA network technologies, European plus selected benchmark countries, 2019 [Source: Analysys Mason, 2020]

Výsledok

