62nd FITCE International Congress Athens, 28 September 2023



Technology Shaping the Future

Gigabit To The Home for Smart Societies in Greece

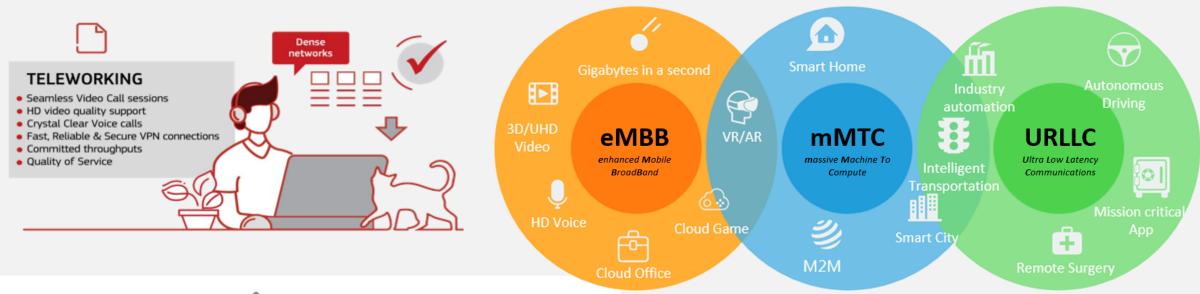


Michalis Sidiropoulos, Technology Expert



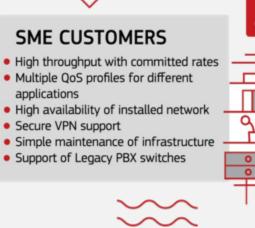
What drives Gigabit demand in the 5G era?







Source: European Commission.





EU Broadband Connectivity targets



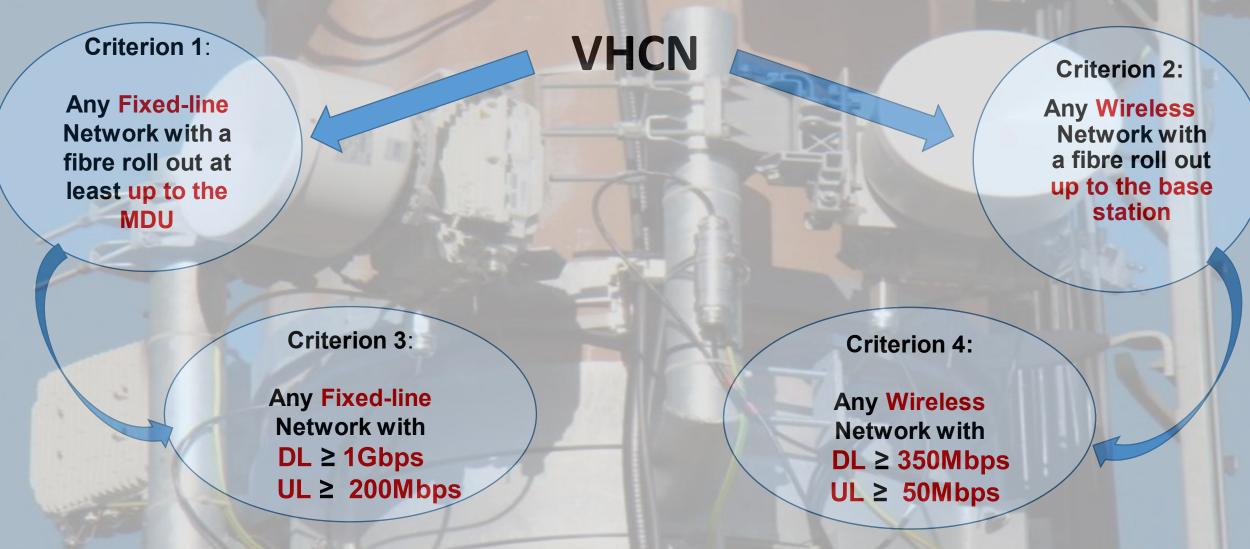
- ► Gigabit Society 2025 (Sep16)
 - 100Mbps at least DL speed for all EU Households, upgradable to 1Gbps
 - 1Gbps for all institutional entities

- ► Digital Compass 2030 (Dec22)
 - 1Gbps speed for all EU Households
 - All populated areas covered by wireless high-speed networks with performance at least equivalent to that of 5G



BEREC Guidelines on VHCN

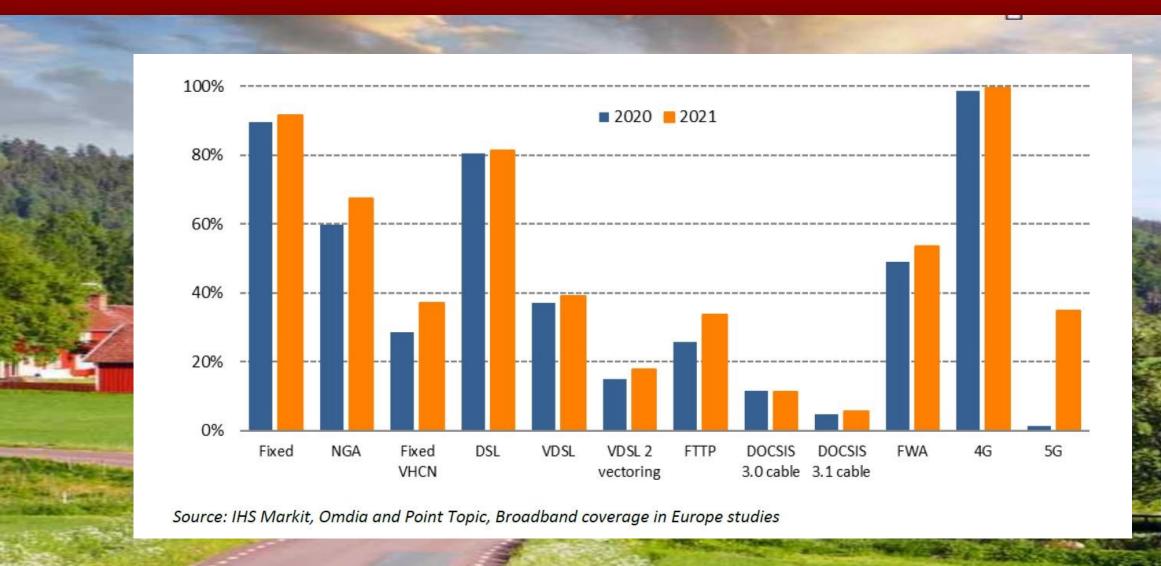




FWA Networks that meet criterion 3, may be considered equivalent to fixed VHCN

The challenge: EU Rural coverage – DESI 2022





2022 DESI ranking of Greece – Connectivity-



2 Connectivity	Greece		EU	
	rank	score	score	
DESI 2022	22	49.6	59.9	

	Greece		EU	
	DESI 2020	DESI 2021	DESI 2022	DESI 2022
2a1 Overall fixed broadband take-up	76%	77%	82%	78%
% households	2019	2020	2021	2021
2a2 At least 100 Mbps fixed broadband take-up	1%	3%	9%	41%
% households	2019	2020	2021	2021
2a3 At least 1 Gbps take-up	<0.01%	<0.01%	<0.01%	7.58%
% households	2019	2020	2021	2021
2b1 Fast broadband (NGA) coverage	81%	87%	92%	90%
% households	2019	2020	2021	2021
2b2 Fixed Very High Capacity Network (VHCN) overage	7%	10%	20%	70%
% households	2019	2020	2021	2021
2b3 Fibre to the Premises (FTTP) coverage	7%	10%	20%	50%
% households	2019	2020	202	2021
2c1 5G spectrum	0%	99%	99%	56%
Assigned spectrum as a % of total harmonised 5G spectrum	04/2020	09/2021	04/2022	047 22
2c2 5G coverage ⁴	NA	0%	66%	66%
% populated areas		2020	2021	2021
2c3 Mobile broadband take-up	67%	67%	76%	87%
% individuals	2018	2018	2021	2021
2d1 Broadband price index	49	53	58	73
Score (0-100)	2019	2020	2021	2021

Technology

→ neutrality for

VHCN in EU

No technology neutrality for VHCN in GR

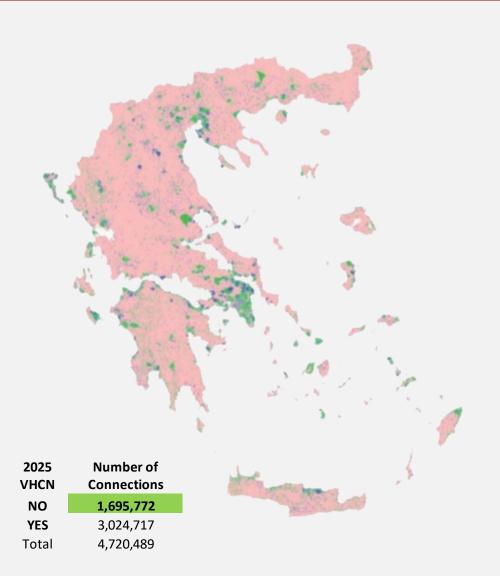
0% FTTP in rural

National Broadband Plan 2021-2027



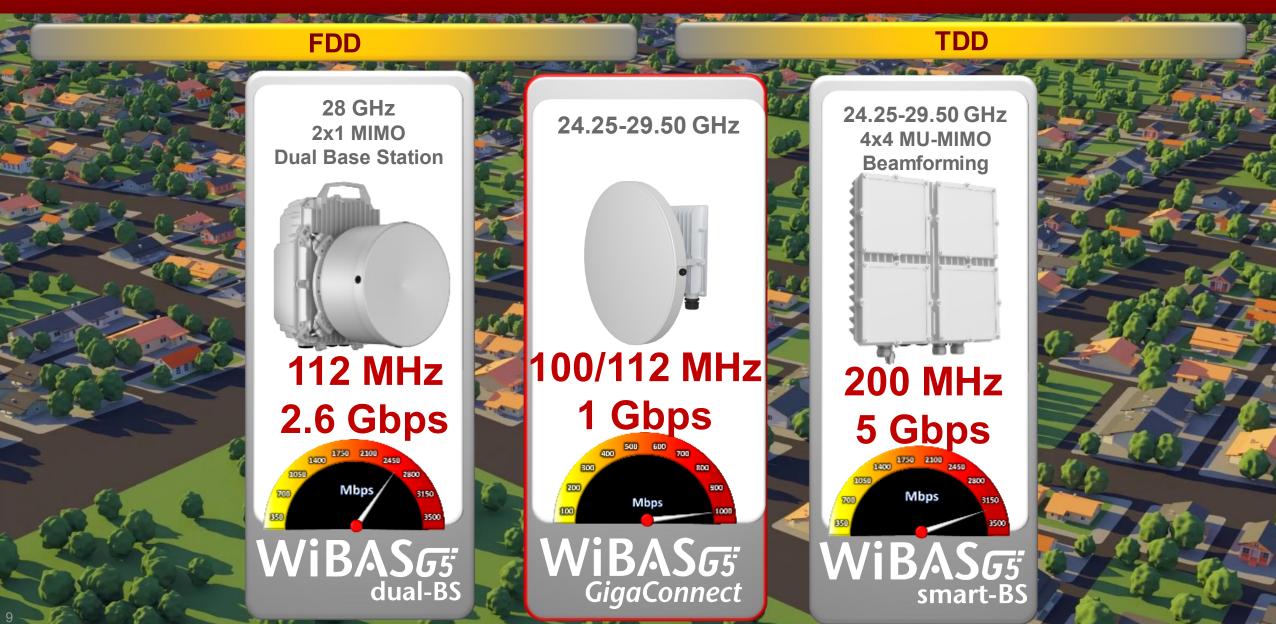
- ► UFBB (Ultra-Fast Broadband), White NGA areas
- ▶ 100Mbps DL speeds upgradable to 1Gbps (63% of areas)
 - S/W upgrade
- ▶ 100Mbps DL speed (37% of areas)
 - (within a 26-year period upgradable to **1Gbps**)
- ► UFBB II
 - In areas that won't be covered till 2025 with VHCN (10.9%)
- Fiber & Wireless, Hand in Hand Synergy needed for the

1 Gbps E2E EU Objective



FWA Gigabit Connectivity everywhere available...Now!





FWA Terminals in rural/suburban areas





FWA - MTU deployment scenario

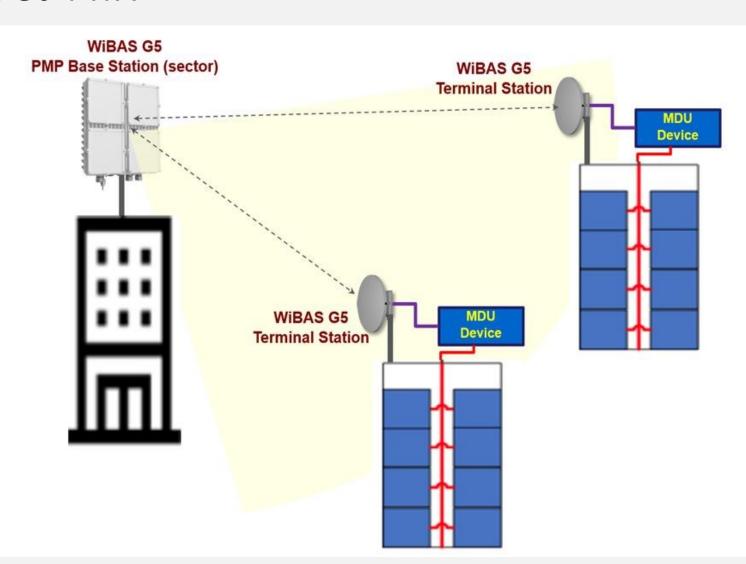


Connect MTUs with VHCN WiBAS G5 FWA

 Serve multiple End Users using existing Infrastructure (Wireline G.hn or WiFI AP)

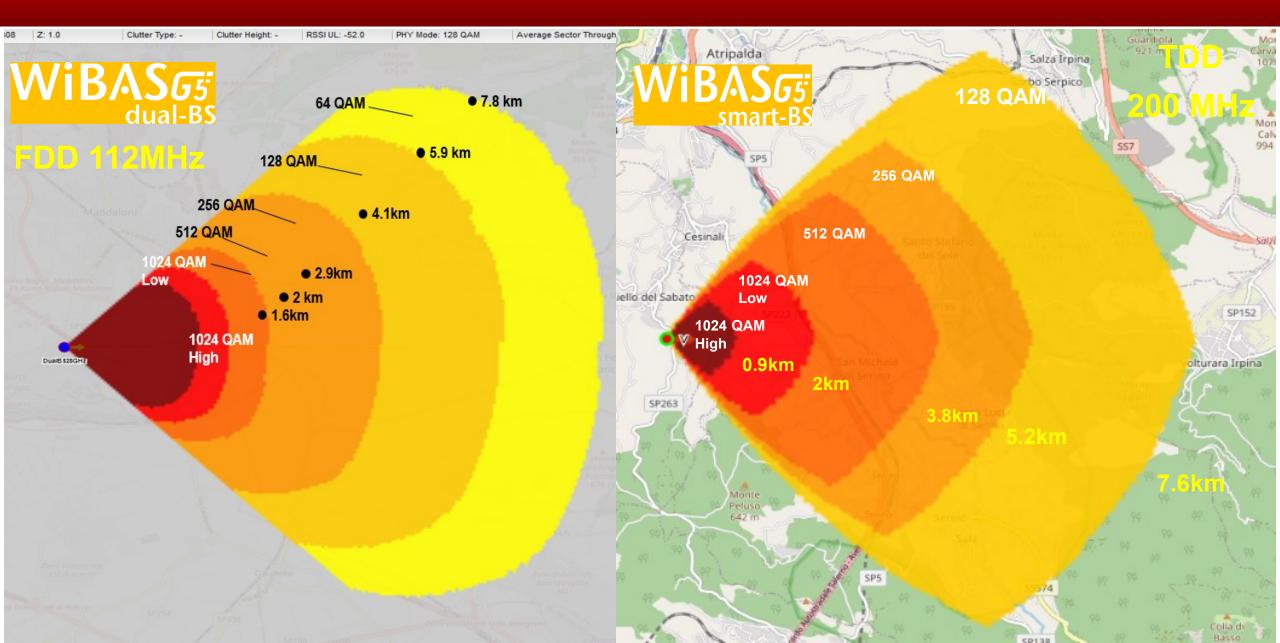
Benefits

- Maximise network efficiency
- Minimise CAPEX per End User
- Ultra High Capacity services with QoS



FWA @ 28GHz, 1Gbps Service at 7.6Km





*EOLO expands its Ultra Fast 1 Gbps FWA with WiBASG5 dual-BS





THE LARGEST MMWAVE FWA NETWORK WORLDWIDE

WiBAS₆₅



- fibre-like services, with QoS, at 28GHz
- age, addressing rural, semi-rural & sub-urban
- etwork of several 100s of terminals per Base Station
- ► 2K Terminals installed per week
- ► Massive nationwide network rollout

* 18tps://www.intracom-telecom.com/en/news/press/press2023/2023_09_14.htm

EOLO @ a glance!

2016 @ 5GHz 30 Mbps



30 MEGA . 29,90€ AL MESE PER SEMPRE E CON CHIAMATE ILLIMITATE.





2017 @ 28GHz 00 Mbps



Internet + chiamate

fino a 100 Mega

da 29,90€

al mese per sempre

EOLOrouter e installazione INCLUSI. Acquista ora!

2023 @28GHz 300 Mbps

EOLO plus All inclusive

The unlimited internet offer. Browse at top speed, watch movies, play online and work from home from multiple devices in complete safety.

- √ Ultra speed up to 300Mb/s

 (III) download (1)
- ✓ Streaming and gaming
- ✓ Work and study from home ①
- ✓ EOLOrouterEVO ①
- ✓ Unlimited national calls ①
- ✓ Public static IP (can be activated within 60 days) ①
- Antivirus and parental controls

Try EOLO for free: it will be love at first connection.

Free for i first 2 months,

then from €34.90 /month*

Check if you are

Call us tall -free to subscribe

800.966.030

Discover the offer

"The offer price will be adjusted annually based on the FOI-ISTAT Index ①

Italia 1 Giga

1 Gigabit/s download 200 Megabit/s upload

- 1 x Tender
- 8 regions across the country
- 3,881 municipalities
- 3.3mil households
- Rural & Semi-Rural areas
- 1000Mbps / 200Mbps (DL/UL) service

open fiber WiBAS65



>50 networks worldwide

Base Station Hubs

18,000

FWA Terminals

500,000

20 years expertise on FWA



WiBAS65



WiBAS™ G5 smart-BS 24.25-29.50 GHz



WiBAS™ G5 micro-BS 28 GHz



WiBAS™ G5 evo-BS 24.25-29.50 GHz



24.25-29.50 GHz



WiBAS™ G5 dual-BS 28 GHz

Enabling Gigabit to the Home







