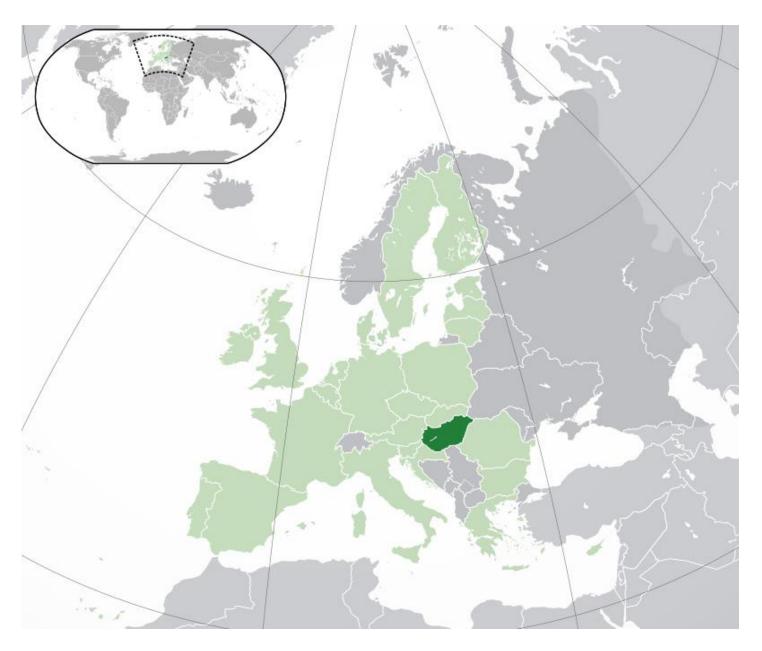


# Present Status, Trends, New Technologies in Broadcasting Sector in Hungary

Péter Vári PhD.

New Delhi, 9. October 2019.

# Hungary



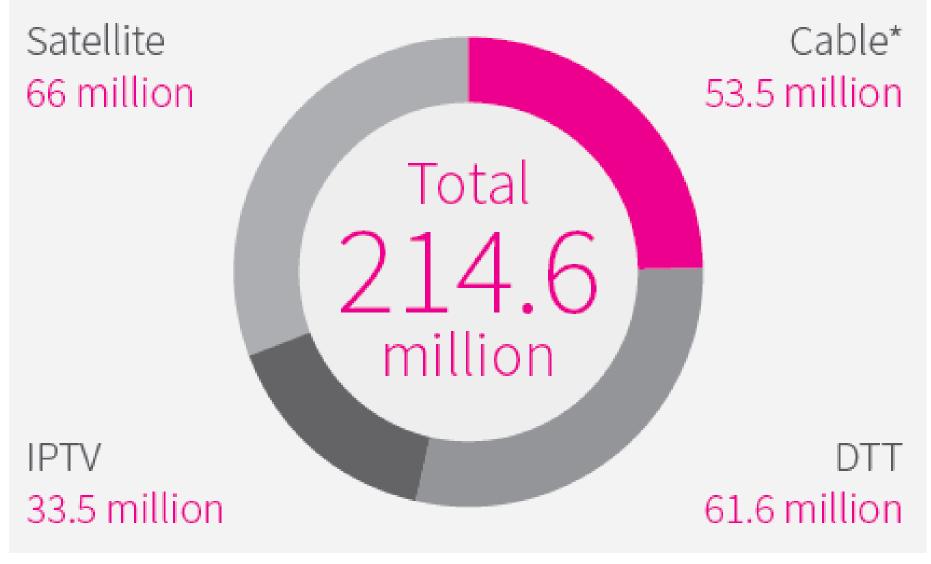
Area • 93 030 km2

Population

- 9 772 756
- Density105.1/km2

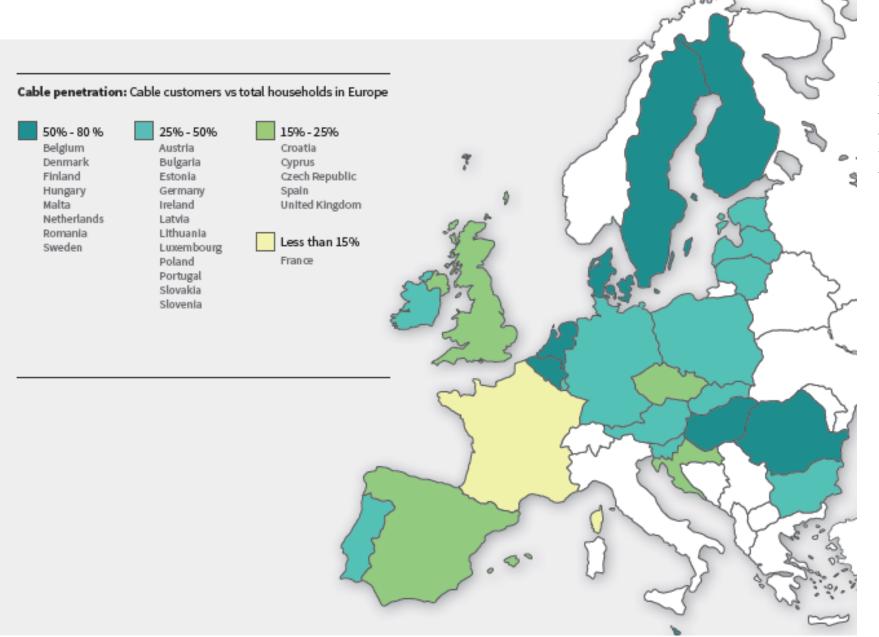
## **Status & Trends**







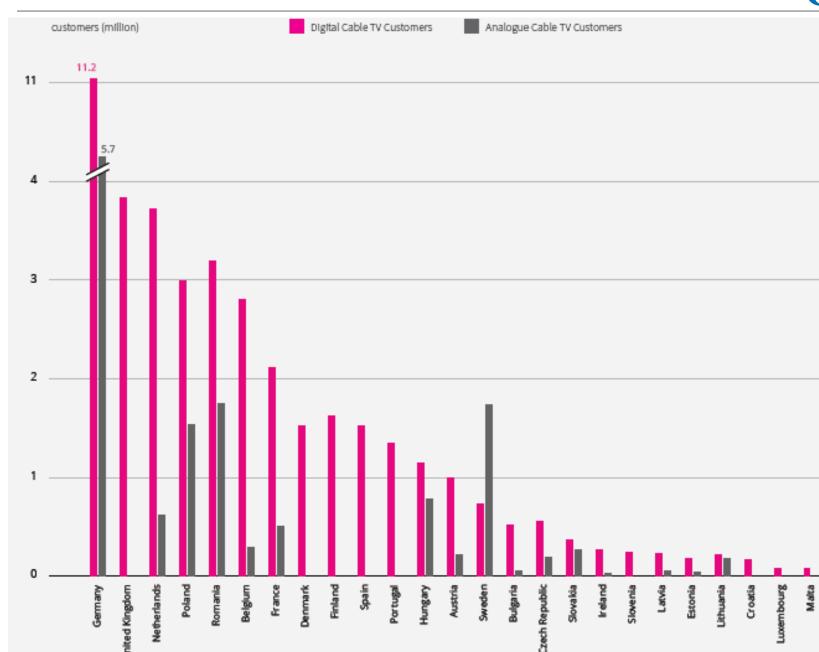
### **European overview TV Broadcasting**



о<mark>о</mark> NMHH

> Cable networks: 65.8 million households in the European Union, providing Digital TV.





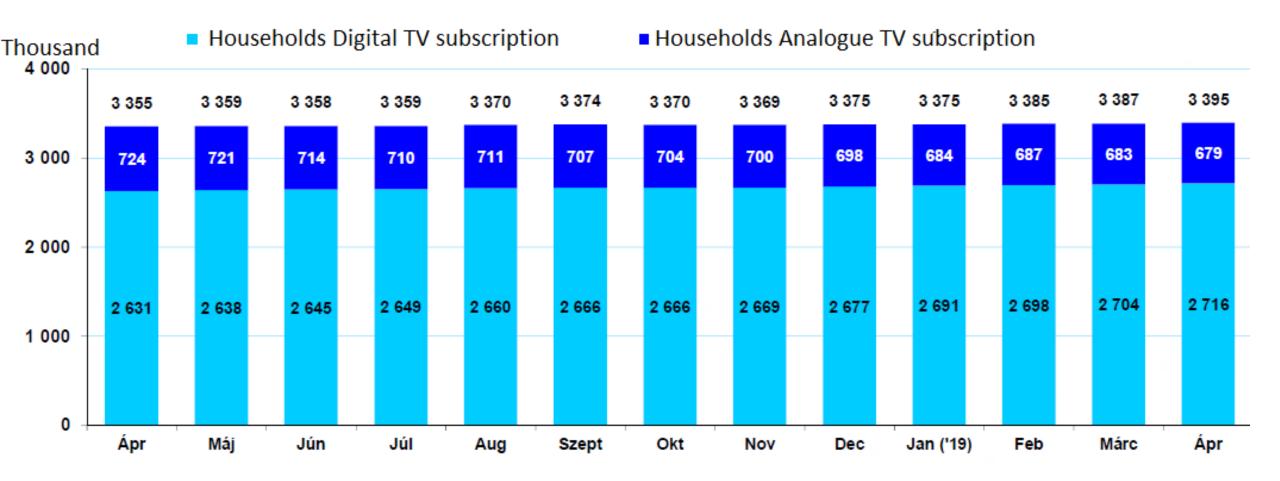
## **Cable TV Households**

Where the number of CATV households is higher, the DTT value is lower and vice versa. What could be the reason for this big difference?

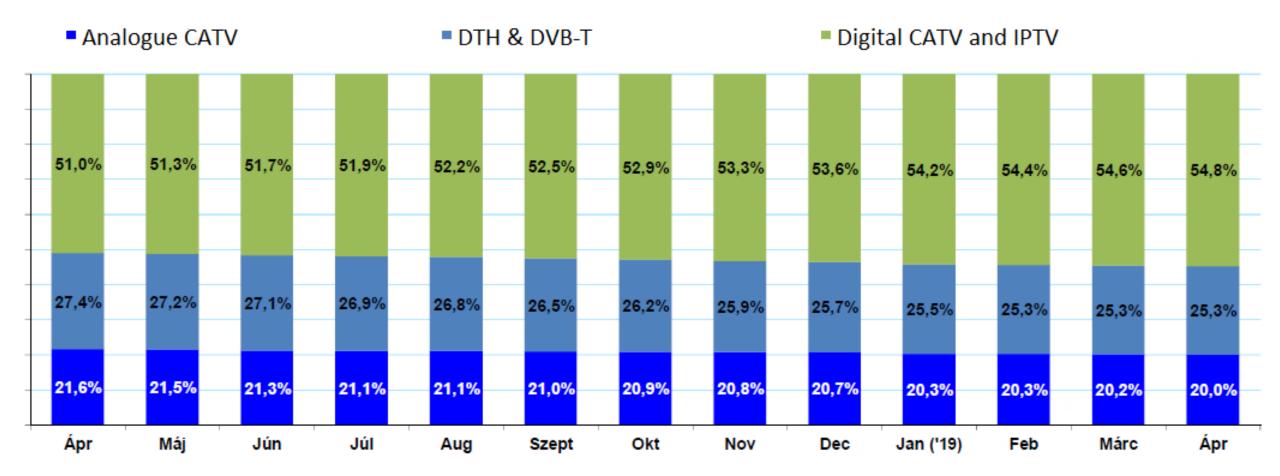
()prus



### **Hungarian overview TV Households**

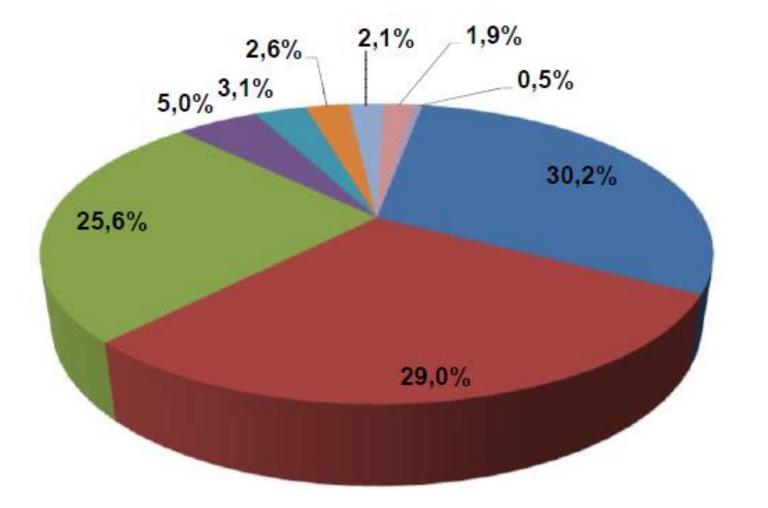








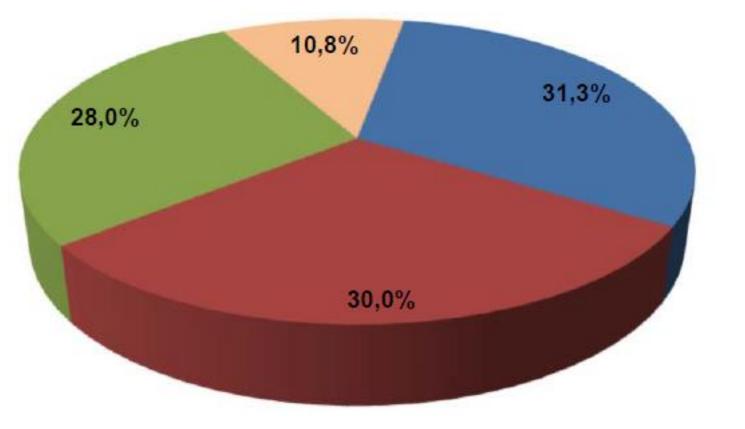
### **Distribution by operators**



DIGI group Telekom UPC Others Tarr MinDig TV Extra ViDaNet PR-TELECOM PARISAT

#### o<sup>0</sup> NMHI

### **Distribution by operators (wireless only)**





Competition among national and international companies. (triple play, four play)

# Technologies

o<mark>0</mark> NMHH

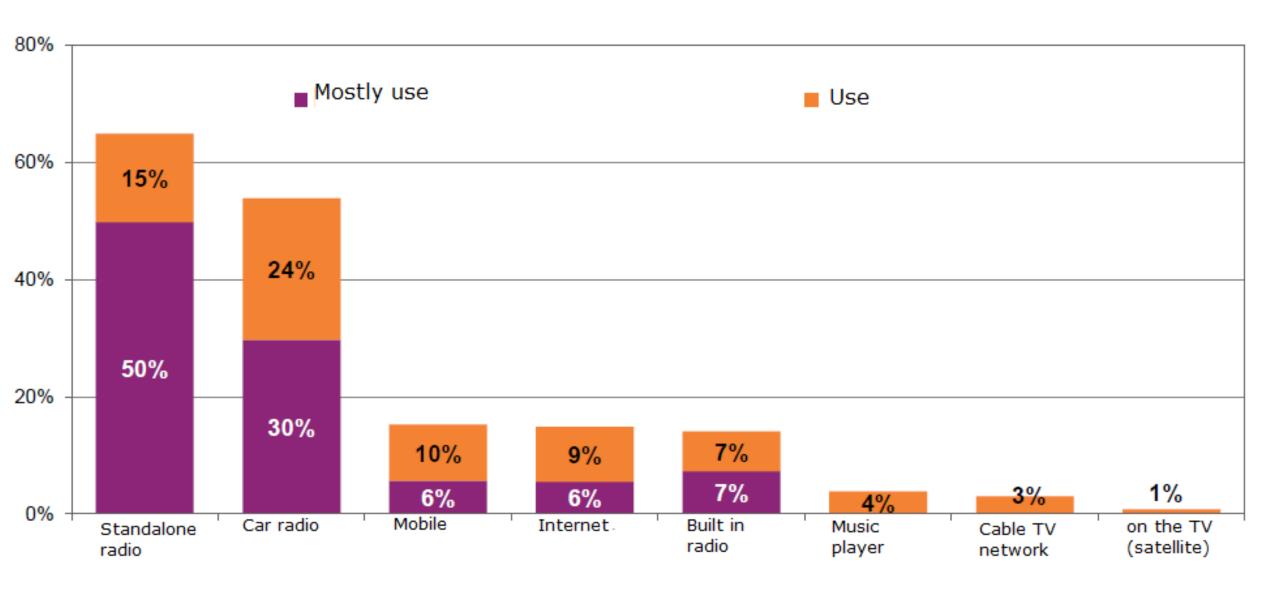
# **Technologies (TV)**

Platform	Medium		Analogue/digital
Terrestrial		c.23	Analogue switch off in 2013,
		WRU	DVB-T2 commercial launch 2020
Satellite		•	Analogue switch of by market, DVB-S, DVB-S2
Mobile			DVB <b>(F)</b> switch off, 3G, 4G, 5G
Cable	Medium Analogue/digital   Analogue/digital Analogue/digital   Analogue switch off in 2013, DVB-T DVB-T   DVB-T2 commercial launch 2020 Analogue switch off Market, DVB-S, DVB-S2   Analogue switch off Market, DVB-S, DVB-S2 DVB-DVB-T2   DVB-T2 commercial launch 2020 Analogue switch off, 3G, 4G, 5G   DVB-T2 DVB-T2   DVB-T3 DVB-T4   DVB-T4 Analogue, DVB-C, IPTV   Copper Analogue, DVB-C, IPTV   Pibre GOVer Analogue RFoG, DVB-C, IPTV   Over all medium Digital		
	Copper	cental bis	Analogue, DVB-C, IPTV
	over	Aybrid Fibre Coax	Analogue, DVB-C, IPTV
	Fibre		Analogue RFoG, DVB-C, IPTV
OTT	Over all medium		Digital

# **Radio broadcasting**

### Listening to the radio

The primary listening remains the standalone radio. 54% of listeners while driving.





Platform	Analogue/digital
Terrestrial	AM in MF, <mark>FM in VHF</mark> DAB+ in VHF (pilot)
Satellite	Supplementary service
Mobile	FM in VHF or supplementary service
Cable	Supplementary service
OTT	Supplementary service



Which country has the most DRM receivers?

**India - correct** 







Which country has the highest outgoing power DRM transmitter?

### Hungary - correct



