

ITU-R SG 6 Workshop on The development of digital terrestrial television delivery systems”

1



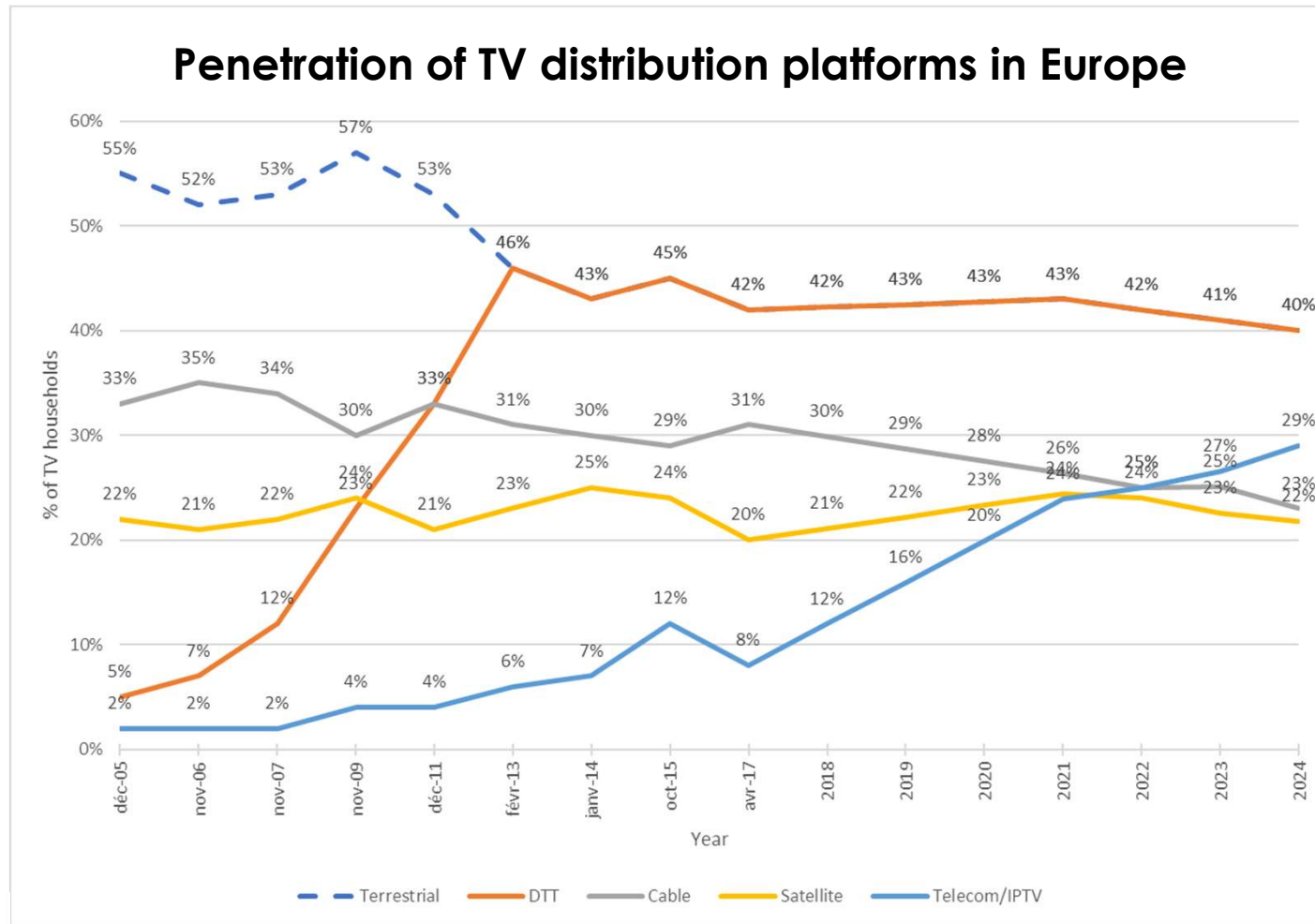
5G BROADCAST HORIZONS FOR EUROPE

**European market, use cases
and introduction scenarios**

Terrestrial networks operators serving 19 countries

 <i>United Kingdom</i>	 Belgian Tower Company <i>Belgium</i>	 <i>Austria</i>	 <i>Spain, Belgium Netherlands</i>	 <i>Czech Republic</i>	 <i>Greece</i>
 <i>Finland</i>	 <i>Italy</i>	 <i>Italy</i>	 <i>Poland</i>	 <i>Serbia</i>	
 <i>Estonia</i>	 Media Broadcast <i>Germany</i>	 Digital signals and networks <i>Croatia</i>	 <i>Ireland</i>		
 <i>Romania</i>	 <i>France, Estonia</i>	 <i>Sweden</i>	 <i>Slovakia</i>		

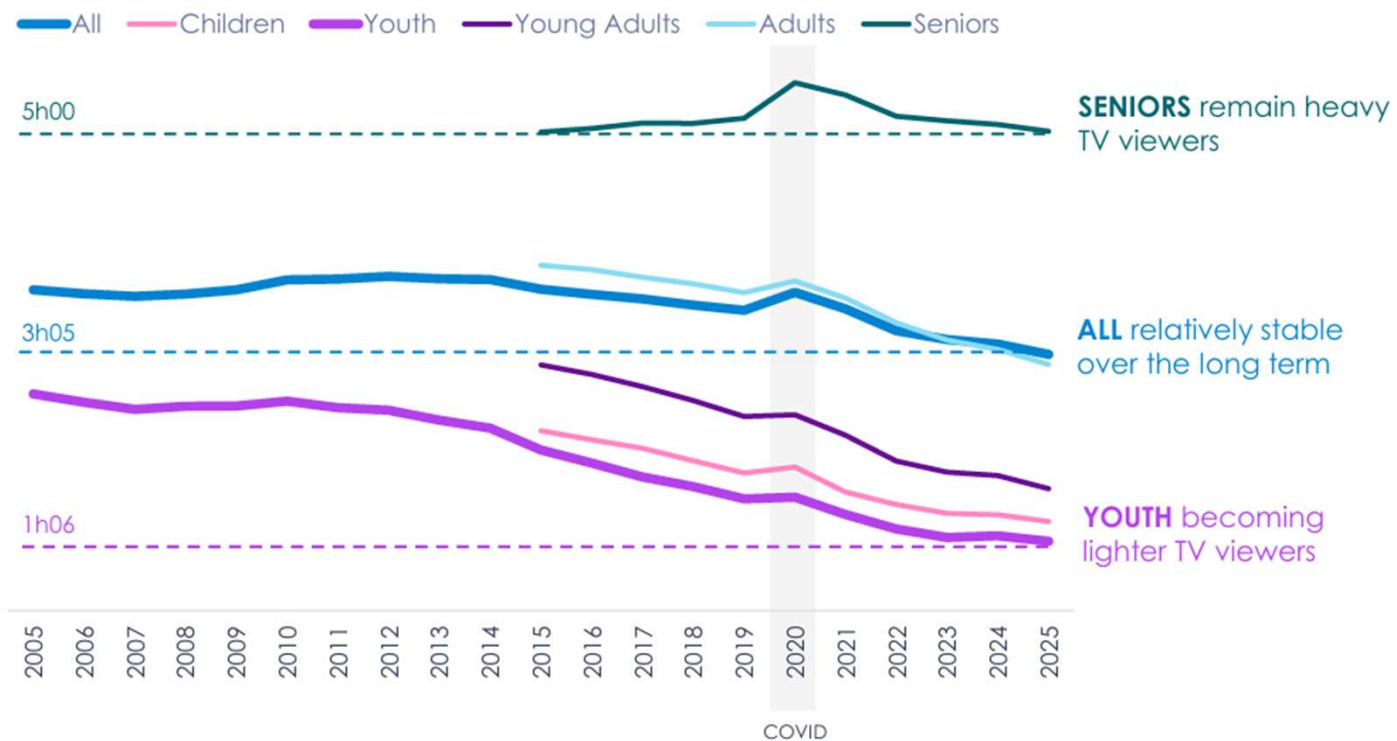
Terrestrial television is a very resilient platform



- DTT has had a very quick take up
- Strong presence among European households
- Strong competition from IP (even more if we include OTT distribution)

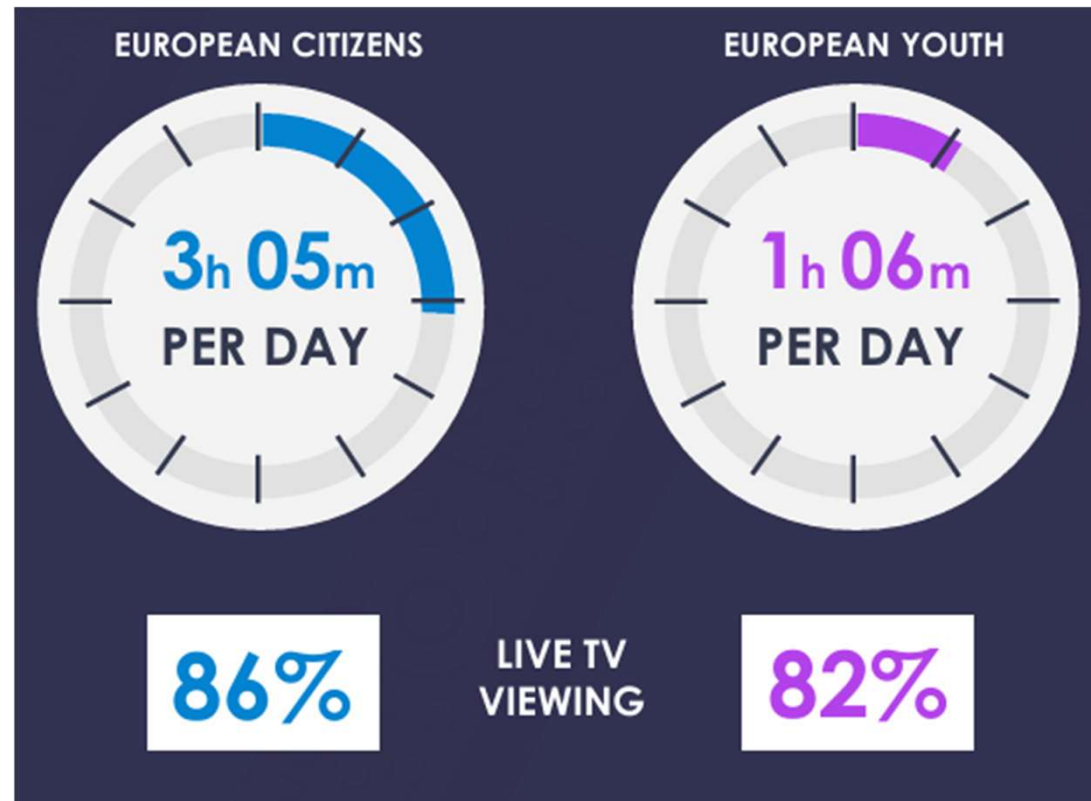
Usages are changing

EBU area daily average TV viewing time evolution by target group



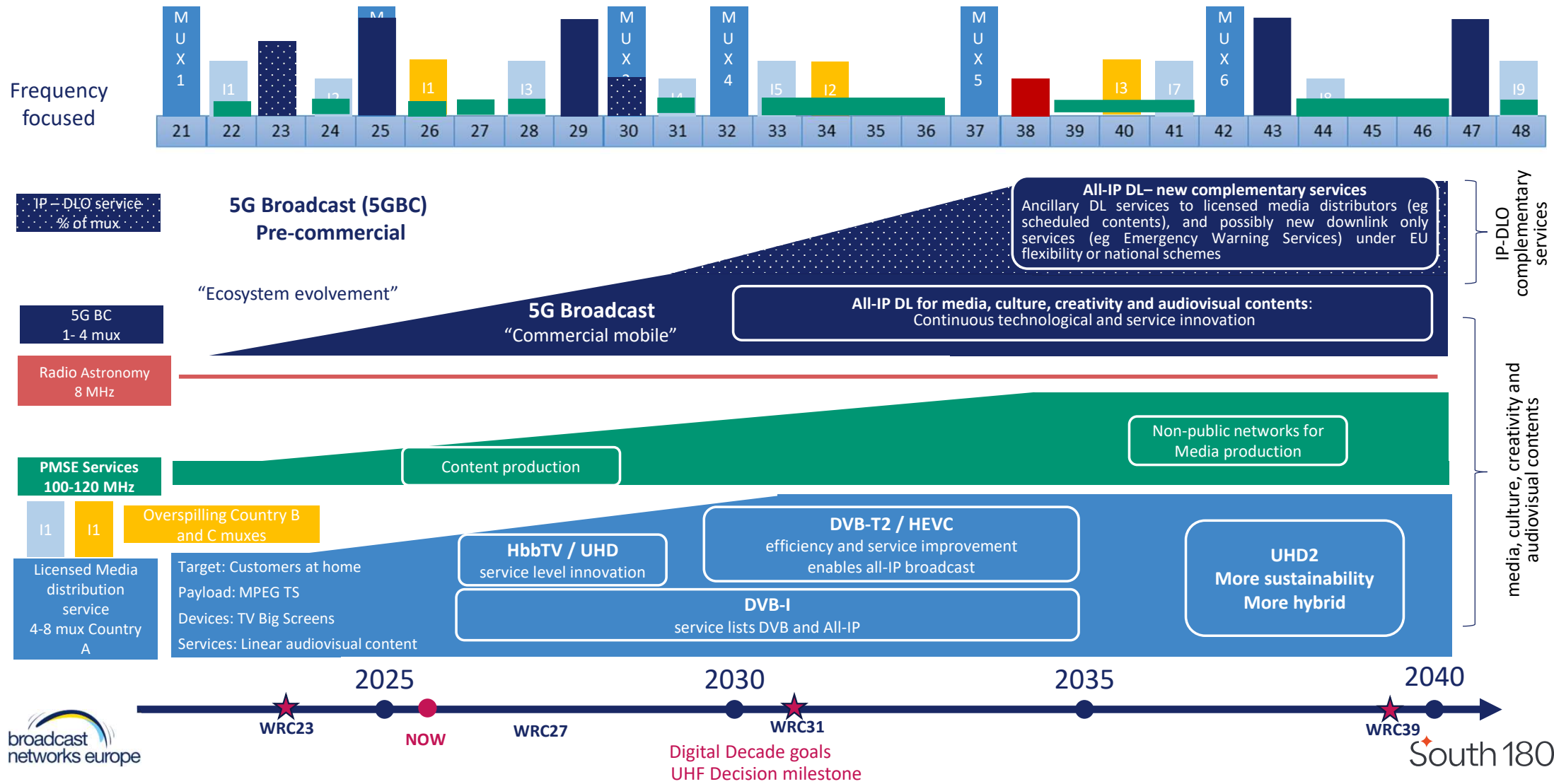
Source: EBU, 2026

Usages are changing



Source: EBU, 2026

Terrestrial broadcast innovation roadmap for more quality, hybrid interactivity and mobility in a scarce UHF spectrum



Consumption changes reveal the way to go

DTT uptake in Germany



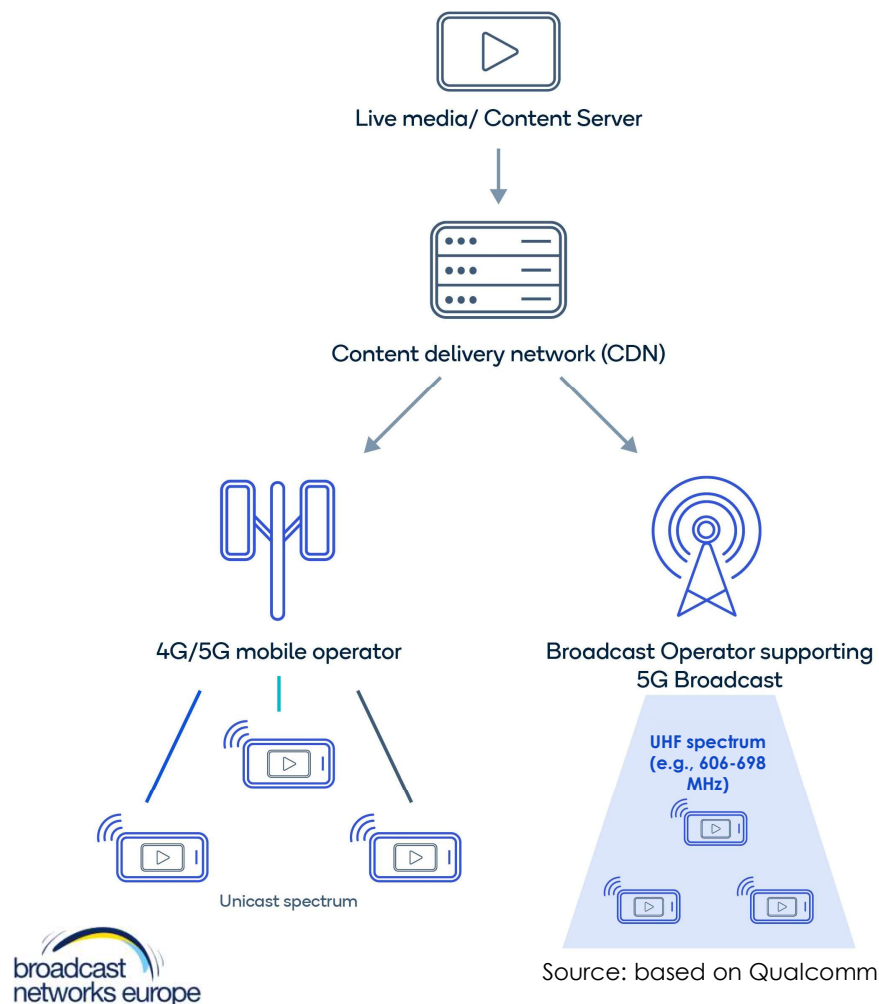
Source: Kantar for Media Broadcast

- DTT reach is growing in Germany
- Reaching 18% of households in 2025
- Sustained by the development of portable and 'mobile' usages

What is 5G Broadcast? Native convergence of AV and mobile internet

Broadcast UX + smartphone UI

- Future proof 3GPP complement to fixed delivery modes (DTT, satellite, fiber)
- Direct delivery to mobile devices
- Free-to-air, universal service
- Quality of service, no buffering
- Resilient even in extreme conditions
- Independent from SIM card
- No data consumption
- Less carbon footprint
- Seamless switching experience





1st Use Case

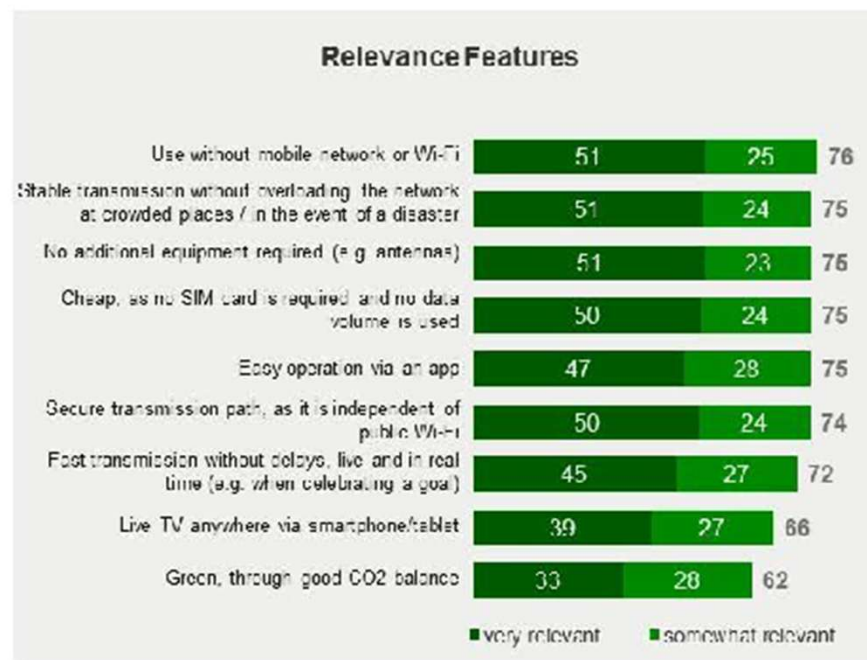
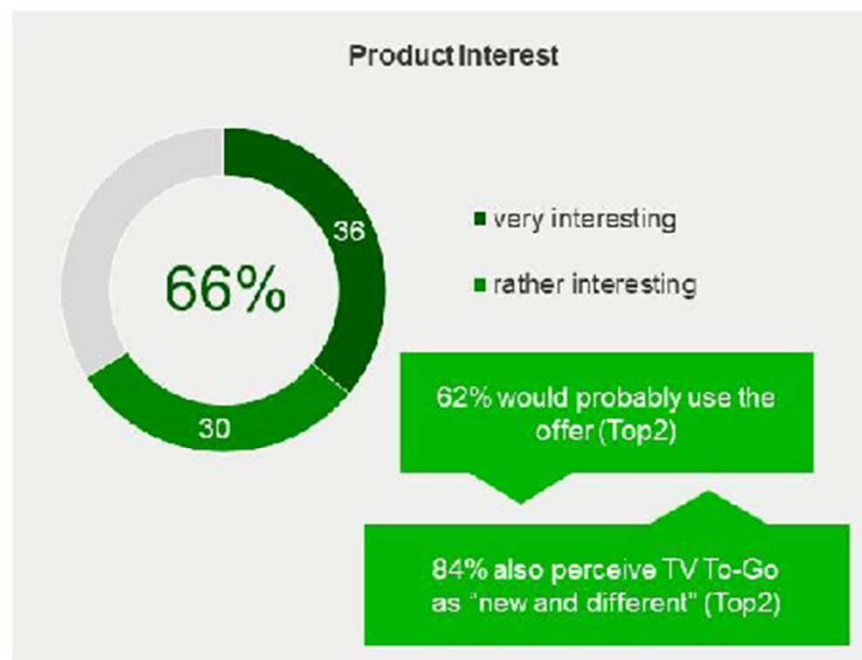
Mobile live content...

- ... no congestion
- ... no spinning wheel
- ... no SIM-card
- ... no data consumption
- ... with very low latency
- ... seamless switching possible

Consumer interest- Germany (June 2024)

TV To-Go: strong interest

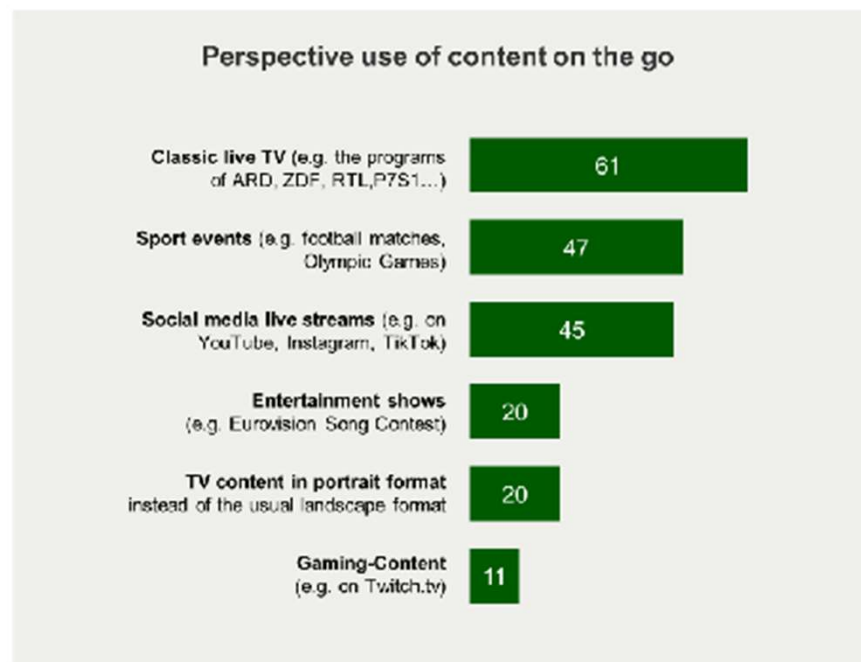
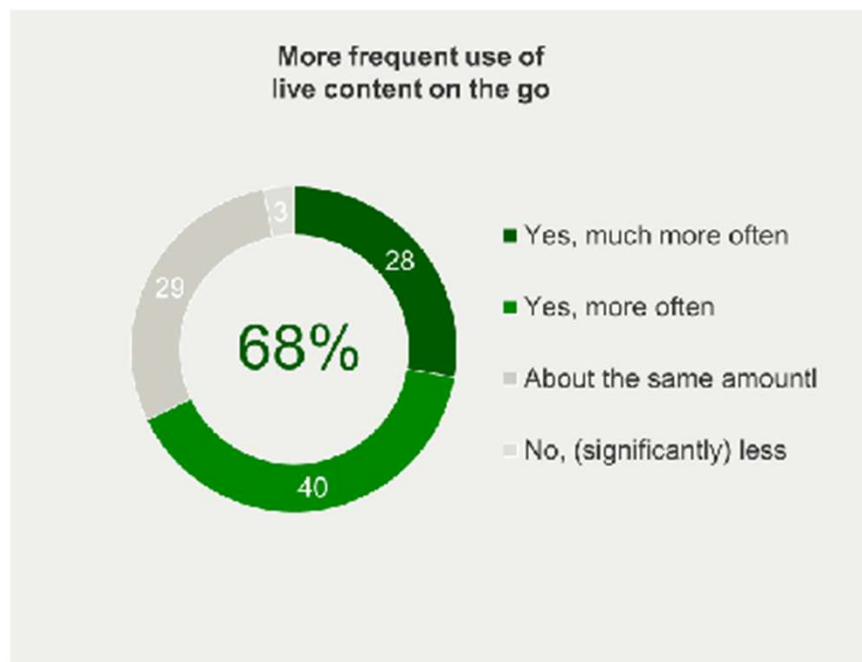
The product presentation arouses interest in two thirds of respondents, and one third even finds "TV To-Go" "very interesting."



Consumer interest- Germany (June 2024)

Perspectively used content

The majority of those interested assume that "TV To-Go" would lead to greater personal use of live content on the go.

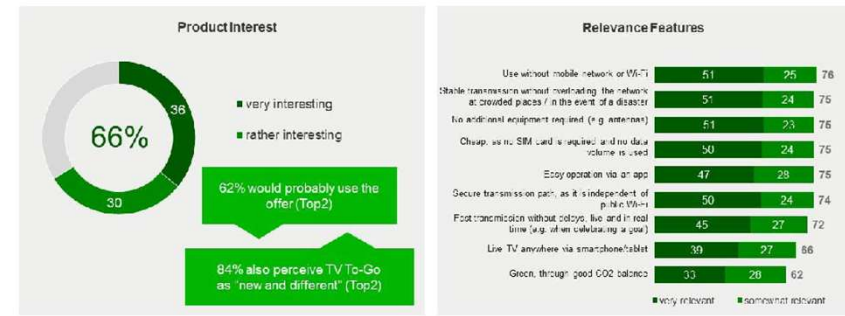


Consumer interest- Germany (June 2024)

- Two thirds of respondents find 5G Broadcast (very) interesting
- The most relevant feature is independence of the mobile network or Wi-Fi
- There is particular interest in linear television programs when using on the move

TV To-Go: strong interest

The product presentation arouses interest in two thirds of respondents, and one third even finds "TV To-Go" "very interesting."

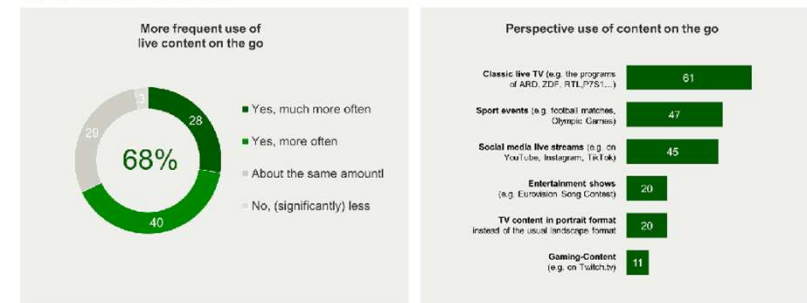


KANTAR

Question: How interesting do you find "TV To-Go" as an offer for live television reception in your smartphone or tablet in general? And how much do you think it will be used in the future? (TV To-Go: large screen, personal TV, 5G, 4K, HDR, etc.)

Perspectively used content

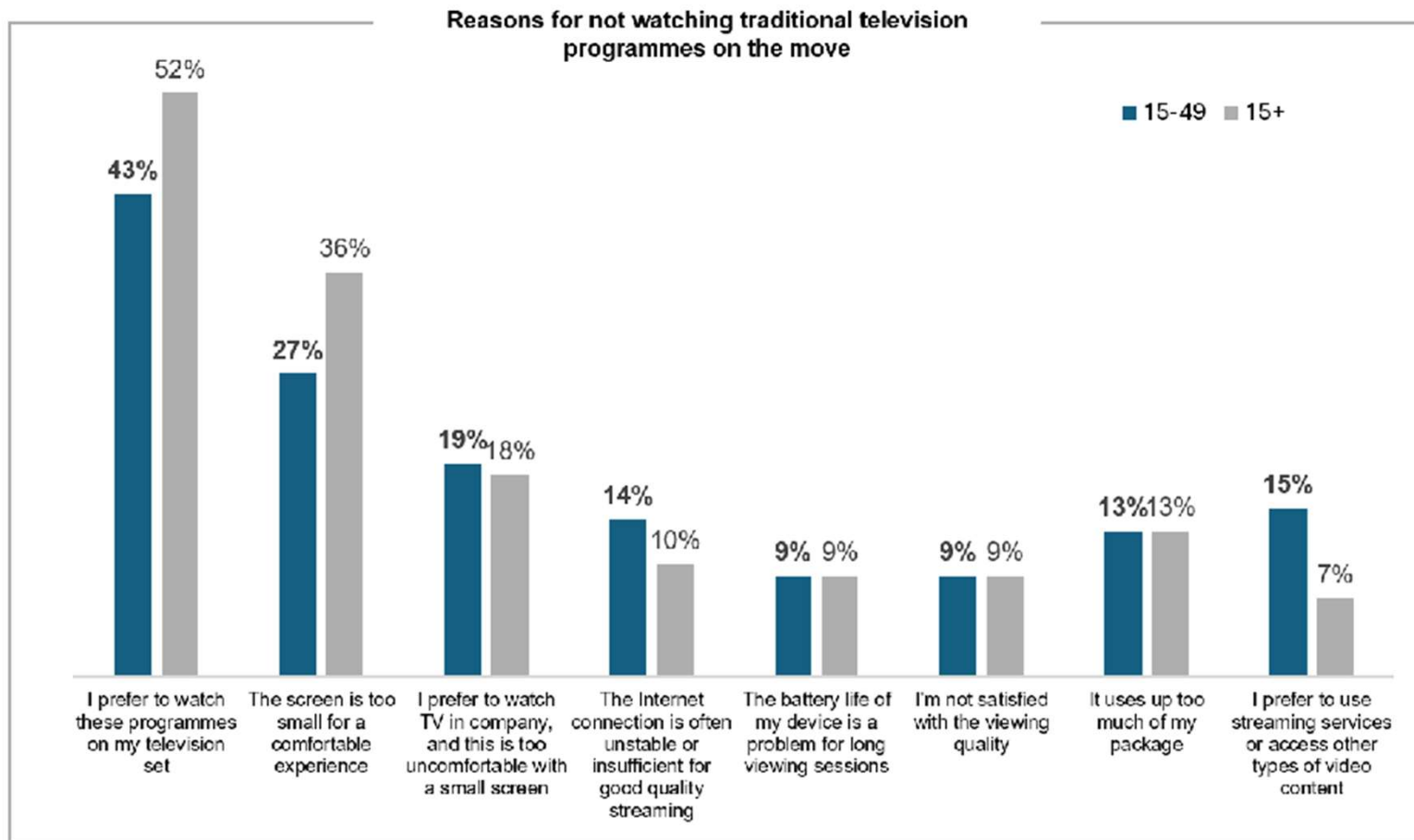
The majority of those interested assume that "TV To-Go" would lead to greater personal use of live content on the go.



KANTAR

Question: "TV To-Go" would adapt to all your use cases? What type of live TV content do you think you would use most often on your smartphone or tablet? (TV To-Go: large screen, personal TV, 5G, 4K, HDR, etc.)

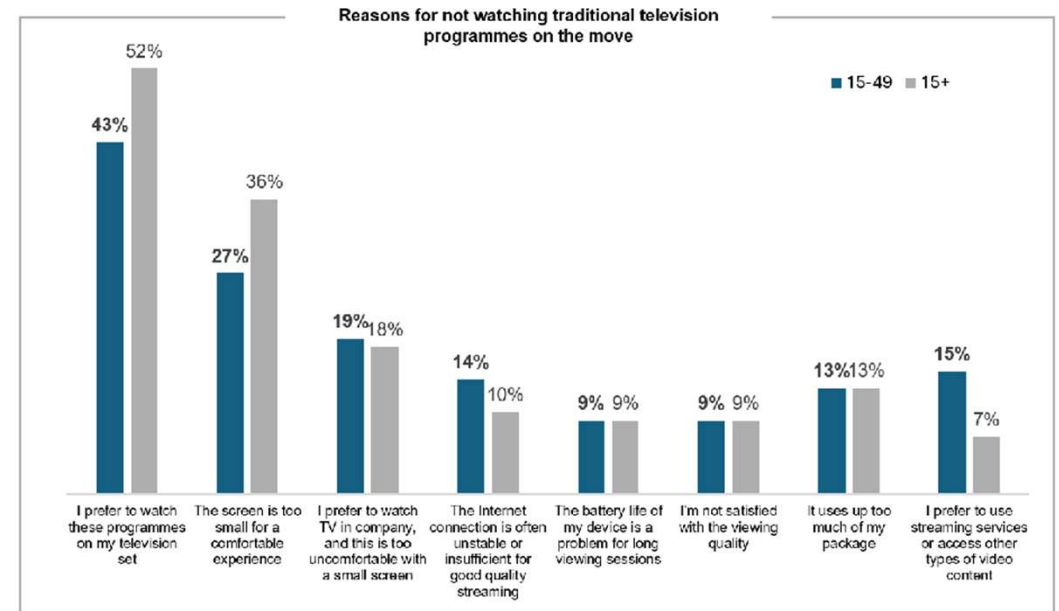
Consumer interest- France (January 2025)



Sources: Kantar field study in the form of a CAWI questionnaire conducted in January 2025 among 2,045 Kantar panelists aged 16 and over, representative of the French population in terms of age, gender, occupation and region (UDA9).

Consumer interest- France (January 2025)

- More than one in two 15–49-year-olds say they are ready to use 5G Broadcast to watch TV on the move.
- 78% of potential users of the service would consume more on the move because their mobile data would be preserved,
- 77% would increase their usage because the battery would be preserved



Sources: Kantar field study in the form of a CAWI questionnaire conducted in January 2025 among 2,045 Kantar panelists aged 16 and over, representative of the French population in terms of age, gender, occupation and region (UDA9).



2nd Use Case

Integrated warning functionality ...

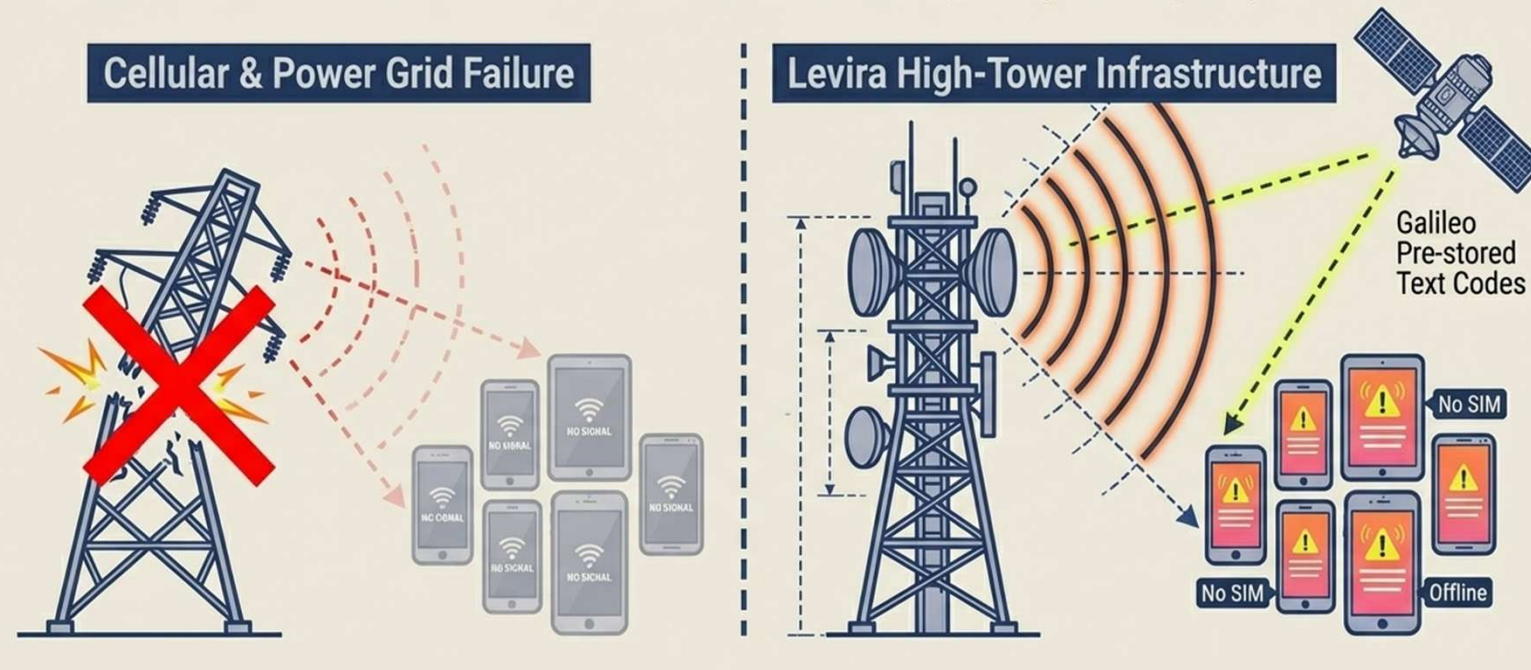
... based on the most robust broadcasting network, which has been providing guaranteed service for decades.

- One-To-Many Network can't overload
- Very resilient High tower sites
- Only 2-3 sites to cover metropole areas
- Fitting well in the multi channel alerting strategy at the heart of national resilience model

Example: Public warnings via 5G Broadcast in Estonia

The Future Edge: 5G Pocket Sirens & Satellite Alerts

Partnering with Levira and TalTech, Estonia is piloting Europe's first 5G Broadcast Pocket Siren. Designed alongside Galileo satellite technology, these systems will ensure critical alerts—including audio and video—reach citizens even if standard cellular networks, internet connections, and power grids completely fail.



levira

BIG BLUE
MARBLE

Introduction scenarios



Serving essential European priorities



Tried & tested

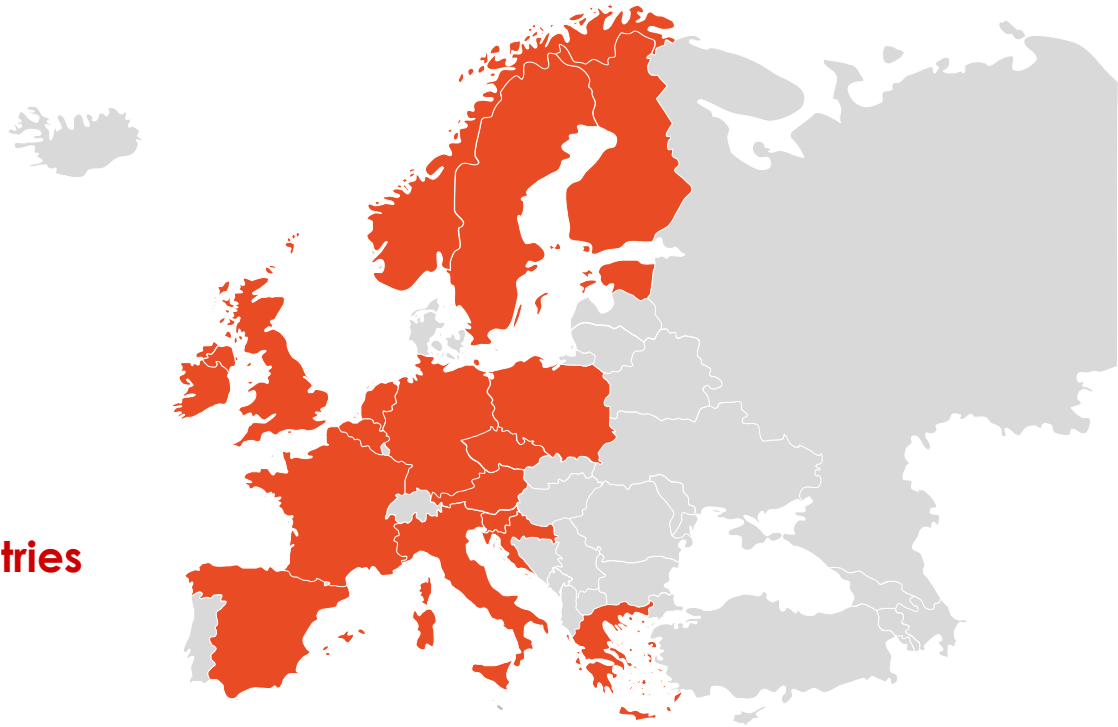
5G Broadcast **trials**

24 trials

18 countries

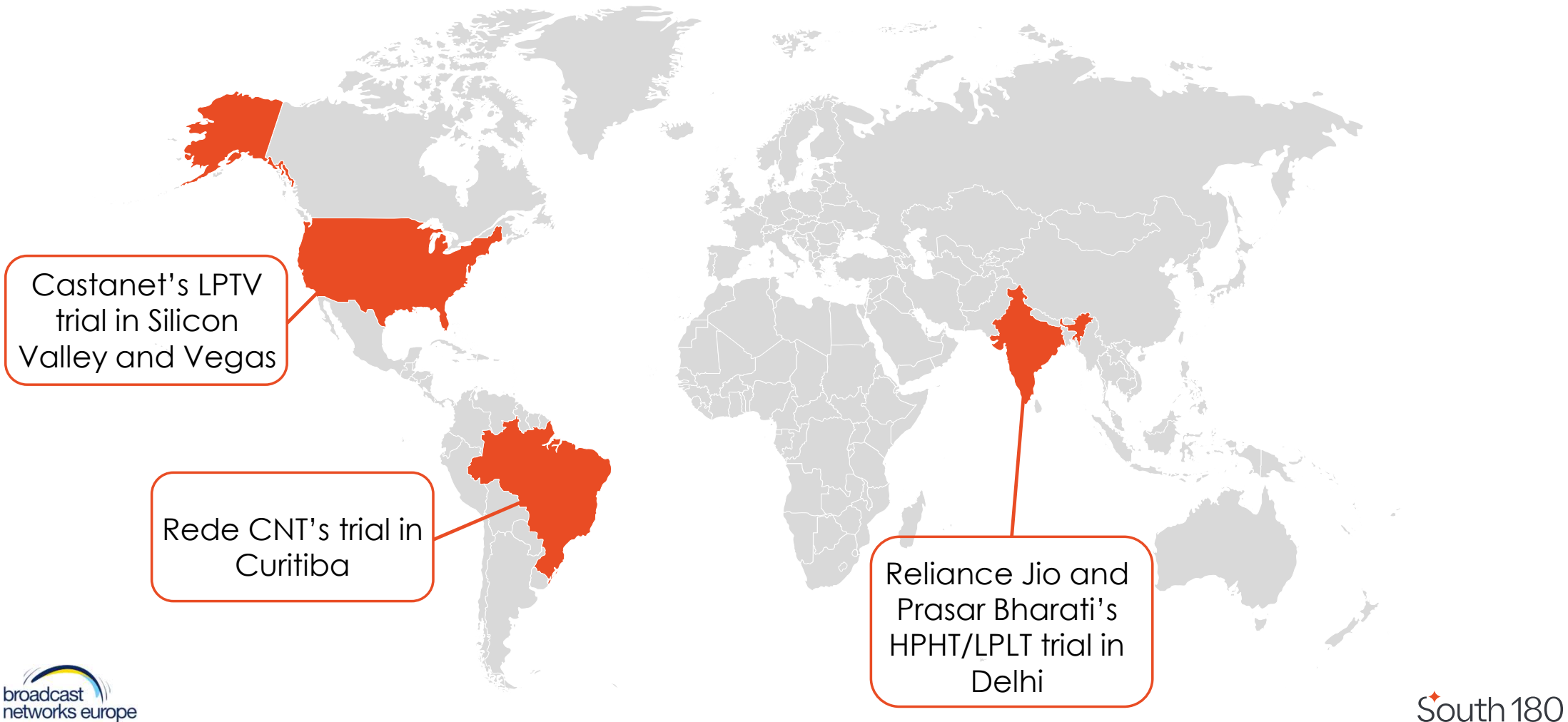
Involving

67 companies from **20** countries



Multiple trials across Europe have demonstrated that the technology is mature and ready for deployment

Interest spanning beyond Europe



Industrial actors joining forces

5G Broadcast Business Strategy Task Force

Member Companies will cover
Main Cities in 12 Countries

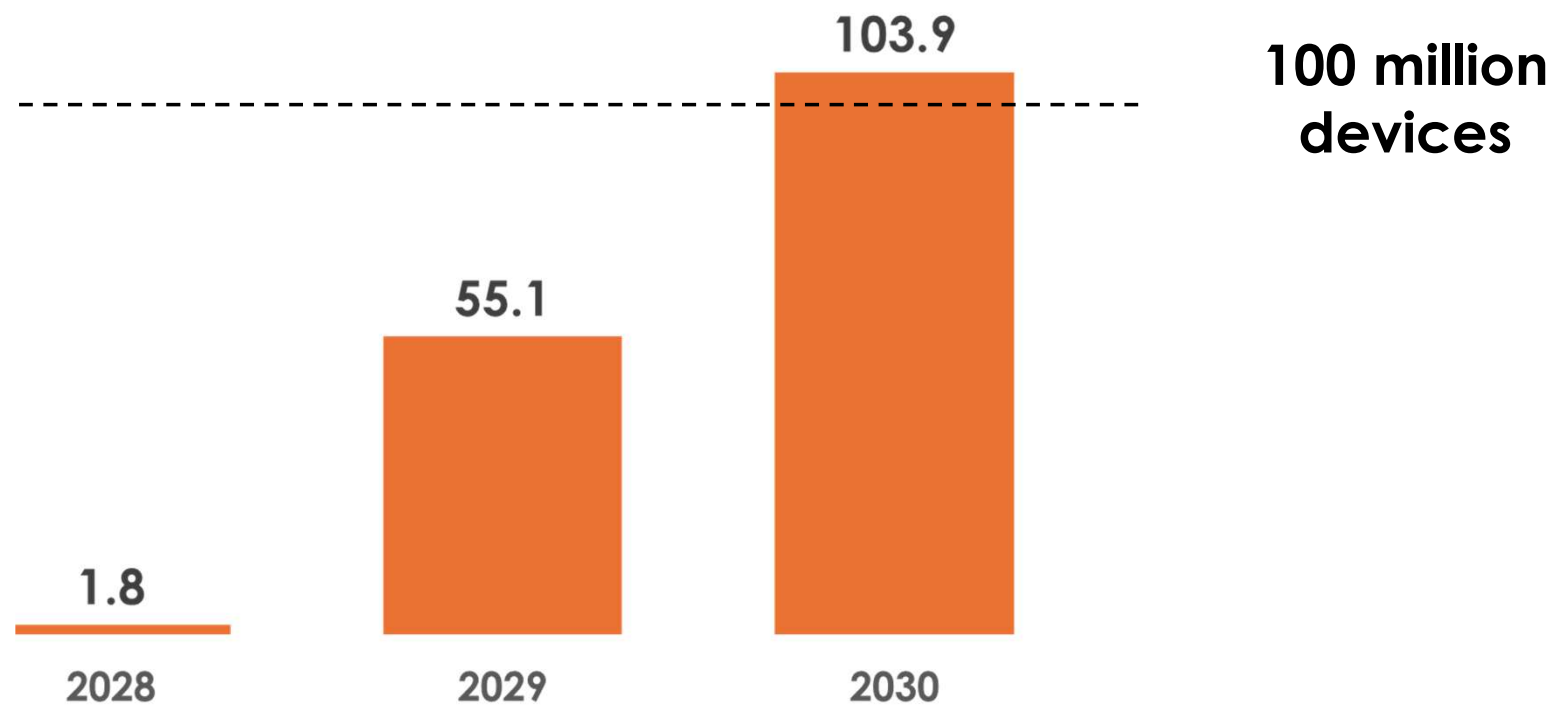


The coverage situation of the cities shown may change before deployment.

Belgium		
Croatia		
Czech Republic		
Estonia		
Finland		
France		
Germany		
Italy		
Netherlands		
Poland		
Spain		
Sweden		

The road to 100 million devices

CONTEXT



BASELINE
SCENARIO

5G Broadcast Horizons – a credible introduction scenario

2027



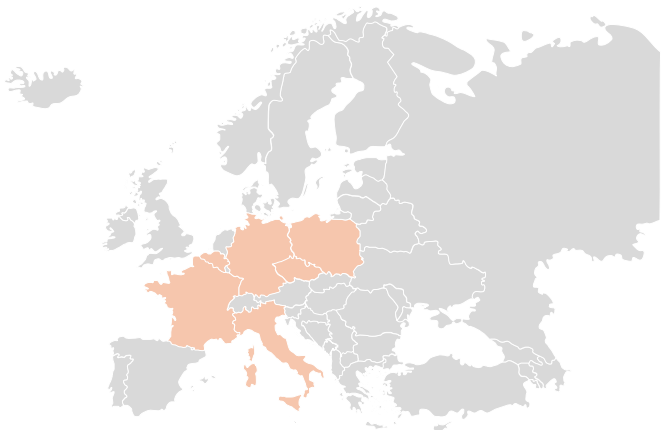
27 M



0



0



2028



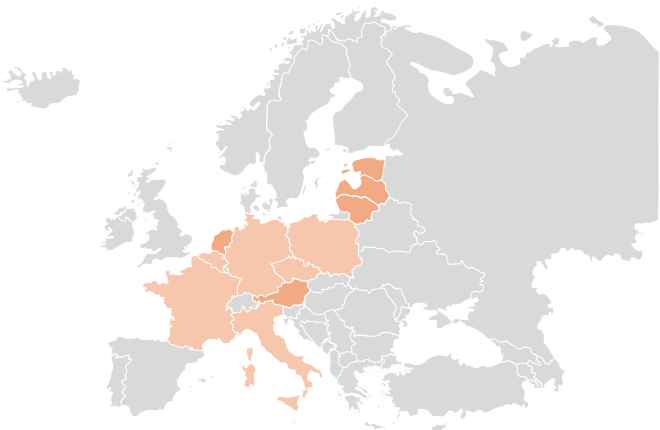
139 M



2 M



0 M



2029



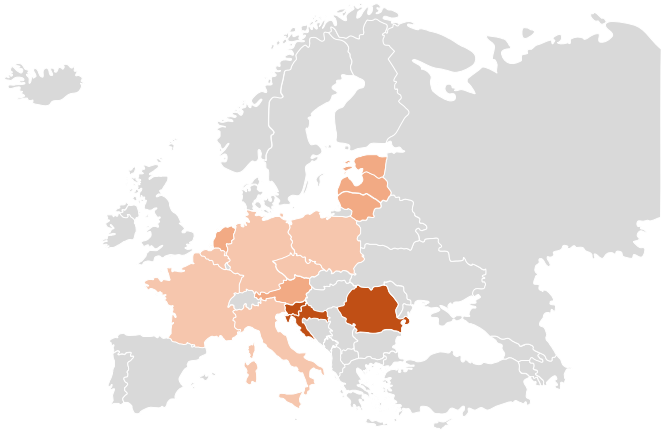
211 M



55 M



3 M



2030



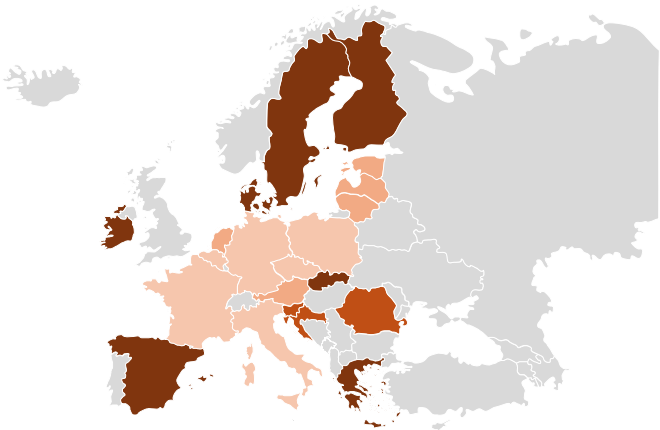
276 M



104 M

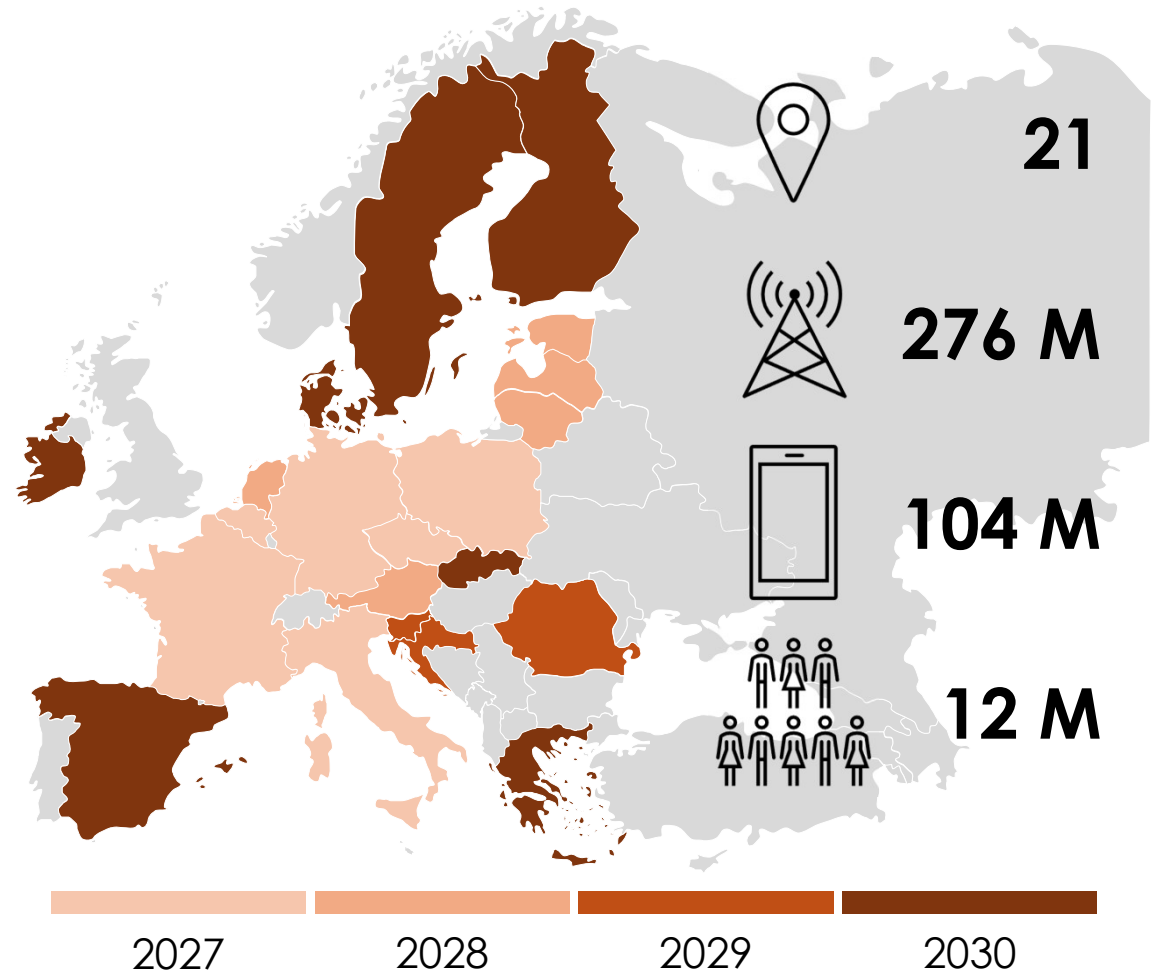


12 M



Go to market deployment for 5G Broadcast

- Full spec approved as part of the 3GPP Release 19
- **Integration into DVB T2 and ATSC 3.0**
- Large scale **network deployment plans announced for 2026-2028**
- A pillar to distribute local content and support resilience **reaching all citizens, including younger audiences**
- Cooperation with chipmakers and OEMs
- Targeting first devices in the market **from H1 2028**



Two foundational requirements

1

Ensuring all new mobile phones include **5G Broadcast enabled chipsets** in Europe from 2029.

2

Guaranteeing long term access to the UHF band for terrestrial broadcasting, noting the **key value of the 600 MHz band for 5G Broadcast** for inclusion in smartphones.

Conclusions



- For the first time, local content and public warning can reach citizens, with a regulated and resilient channel directly into their smartphones, without gatekeepers.
- The window of opportunity to turn 5G Broadcast into a success story in the digital world is now.

The window of opportunity is now

