

# Innovation and Development Scenarios for Terrestrial Broadcasting

Lars Backlund  
Secretary General  
Broadcast Networks Europe (BNE)

# Terrestrial Network Operators serving 19 Countries

 UK	 Spain, Belgium Netherlands	 Czech Republic	 Greece	
 Finland	 Poland	 Serbia	 Italy	
 Italy	 Germany	 Croatia	 Austria	
 Ireland	 Romania	 France, Estonia	 Sweden	

# BNE Mission

## Regulatory Context

- Representing the commercial interests of Terrestrial Broadcast Network Operators with regard to policy developments and regulatory intervention being undertaken by European Institutions and other organisations and stakeholders.
- To take necessary actions to ensure, in each country where the Association has Members, long term availability of adequate spectrum for current and future developments of the Terrestrial Broadcast platforms.

## Long Term Value

- Providing a forum for information exchange and cooperation on topics of common interest between Members to ensure that the Broadcast Network Operator sector remains attractive to the market over time.
- Sustaining and nurturing the long-term market opportunity for the distribution of content and data via Terrestrial Broadcast Networks.

# Our position

>100 million DTT households  
>250 million viewers

DTT is a primary source of trusted information and quality content, today and for the foreseeable future

Under national control

5G Broadcast will become a new distribution platform to reach mobiles tablets and cars

Emergency alerts

Continued availability of sub 700 MHz for the Broadcasting Service well beyond 2030

Instrumental for the cultural, content production and media sectors and a trusted source

Environmentally friendly

No change of current allocation of the 470-694 MHz band

Technical:  
• Resilience  
• Reliability

Trusted source for:  
• Content Quality  
• Content Reliability

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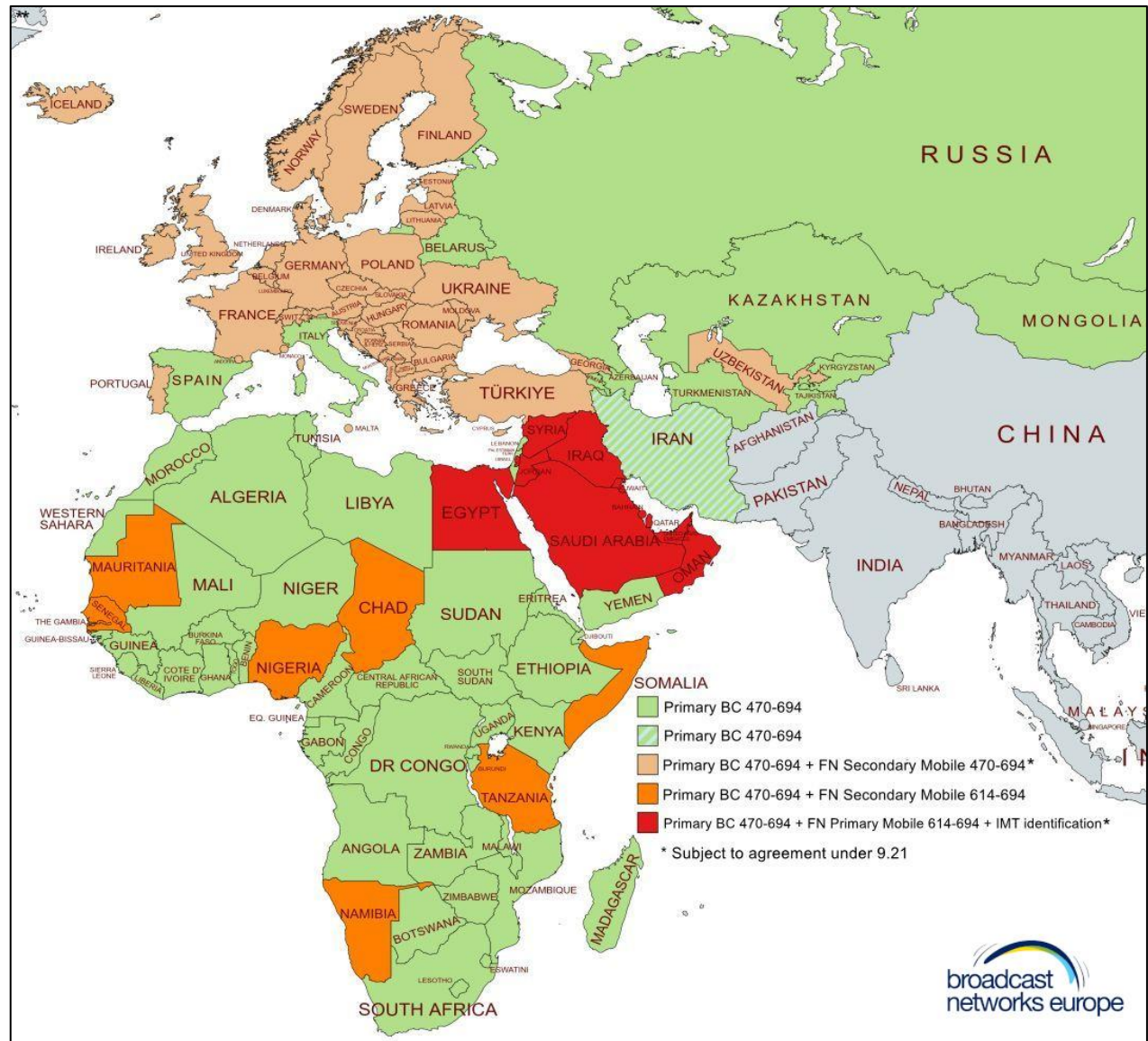
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# Regulatory standpoint

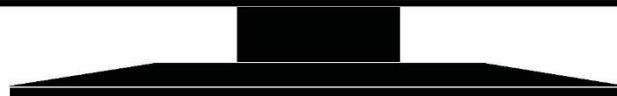
# Outcome of WRC-23 – Region 1

- Broadcasting remains the only primary service in the frequency table for the sub 700 MHz band.
- Footnotes for secondary mobile in European and African as shown on map.
- Footnotes for primary mobile in the 600 MHz band in MENA as shown on map



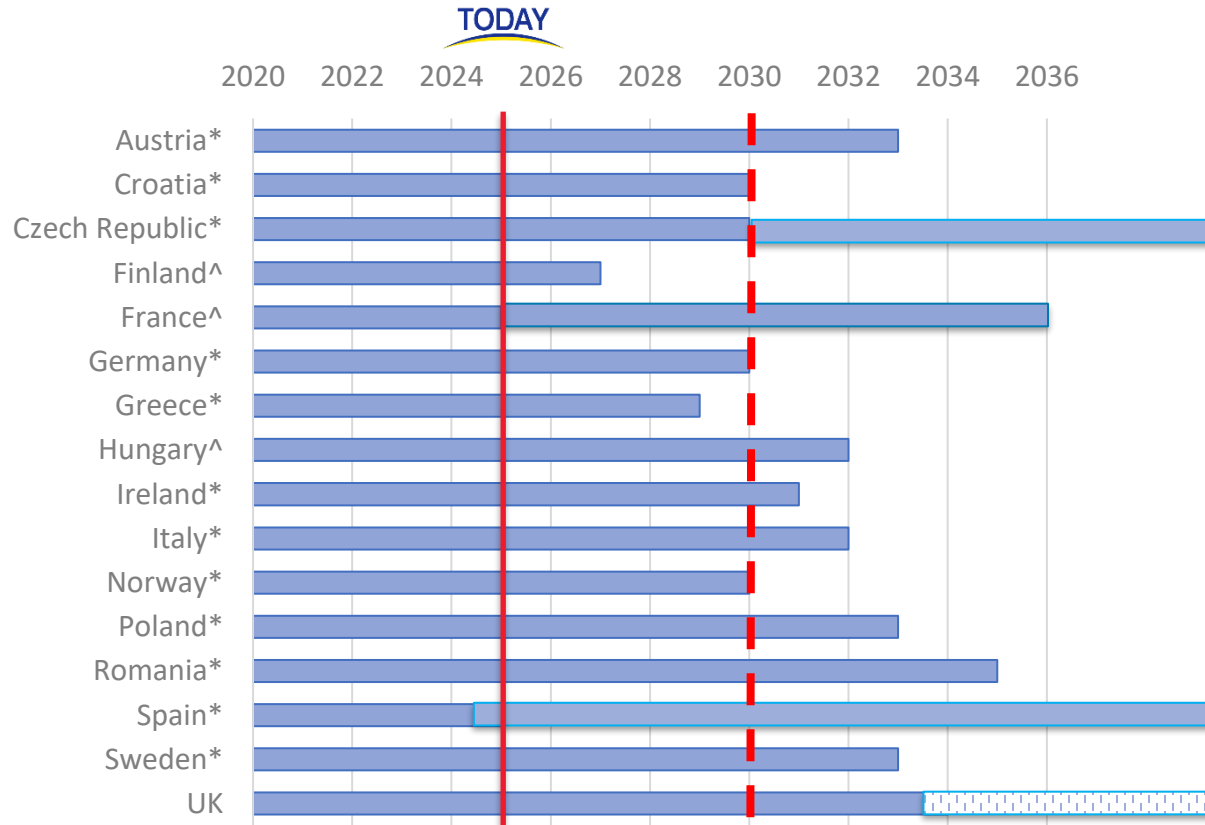
# However, We cannot rest – EU, WRC-27, WRC-31

- Current EU legislation guarantees access to the 470-694 MHz band for the Broadcasting Service until at least 2030
- The EU Radio Spectrum Policy Group will issue a report on the future of the UHF band in June 2025
- The WRC-27 will mainly be a “Satellite Conference” but “attempts” may emerge around the UHF band
- The current primary allocation of the sub-700 MHz band to the Broadcasting Service will be discussed at the WRC-31
- Mobile IMT Services cannot co-exist with Broadcast Services in the sub-700 MHz band
- Without the sub-700 MHz band beyond 2030 the European terrestrial broadcasting industry can no longer operate, innovate and compete

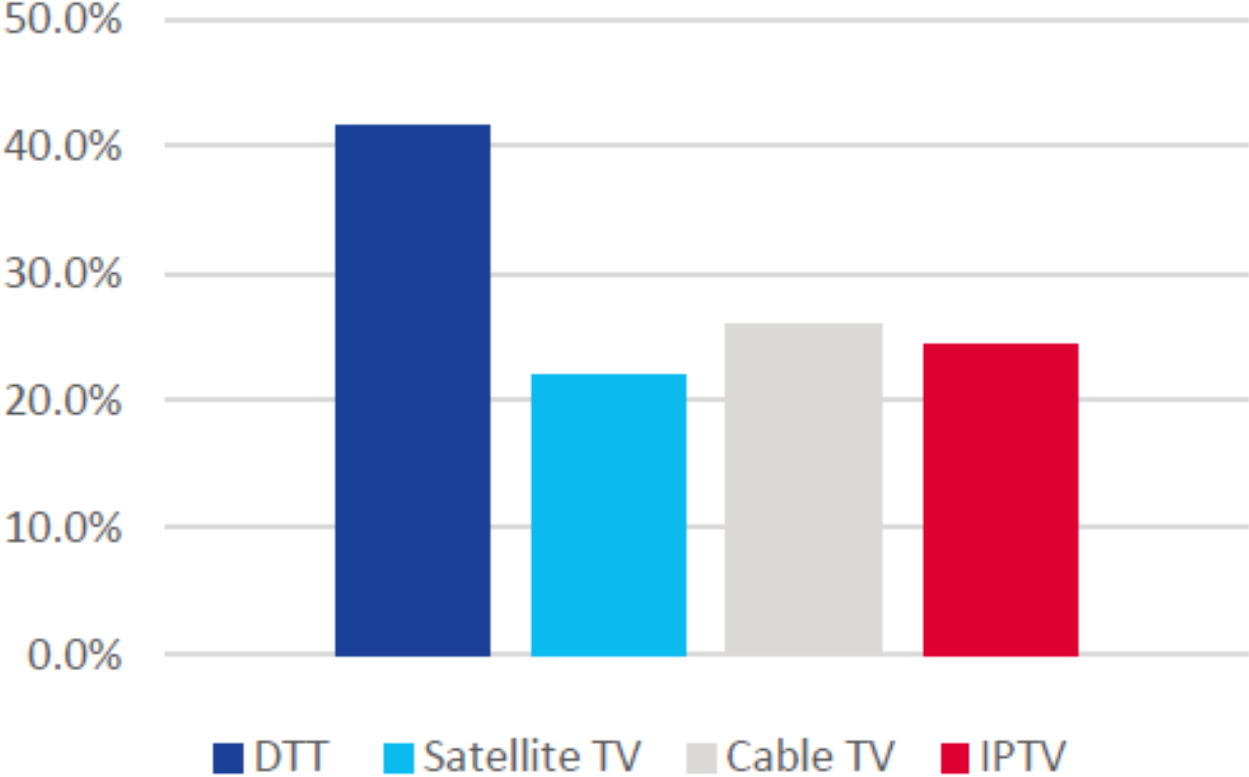


# DTT licences generally extend beyond 2030

## Scheduled renewal in coming years



# Platform penetration EU27 in % of TV households



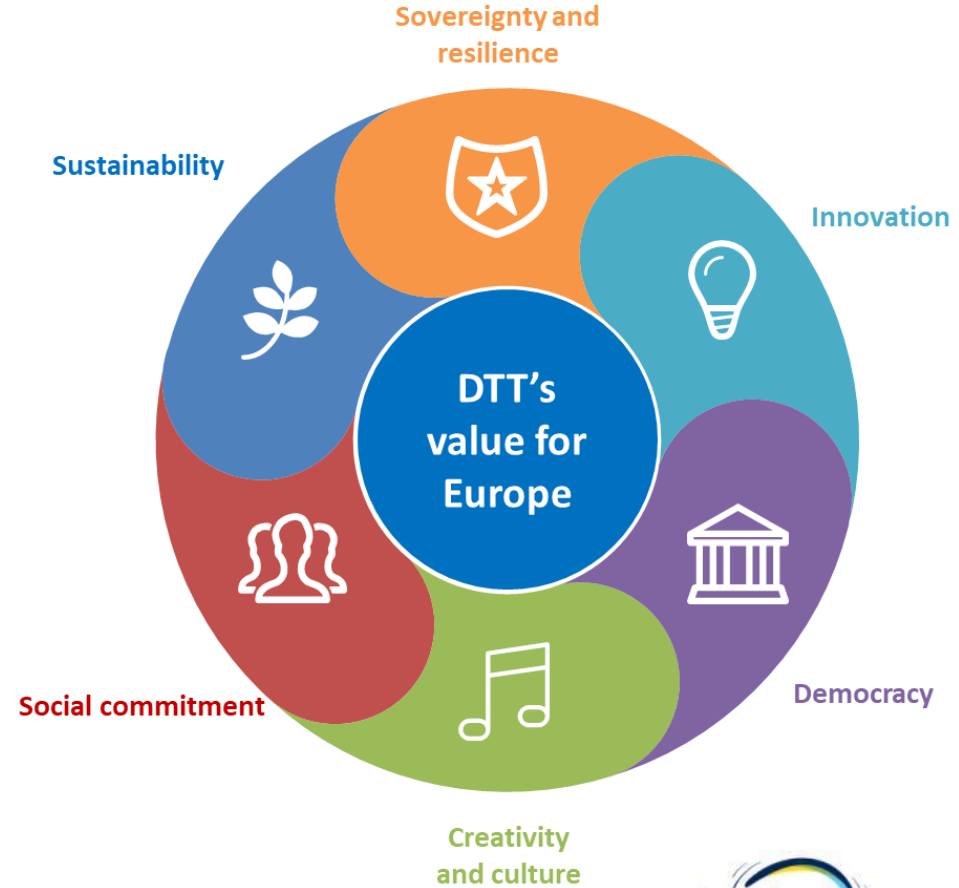
Source: BNE-EBU DPM data base 2024 and EBU 2024

# Innovation and DTT's value for Europe

# A vision for Europe beyond 2030

## Digital Terrestrial Television Value Model

- Key platform delivering value and positive impact on society and the industry
- From infrastructure safety and independence to technical innovation and many other types of economic, social, cultural and democratic values,
- **Benefits delivered by DTT is a great asset for Europe**

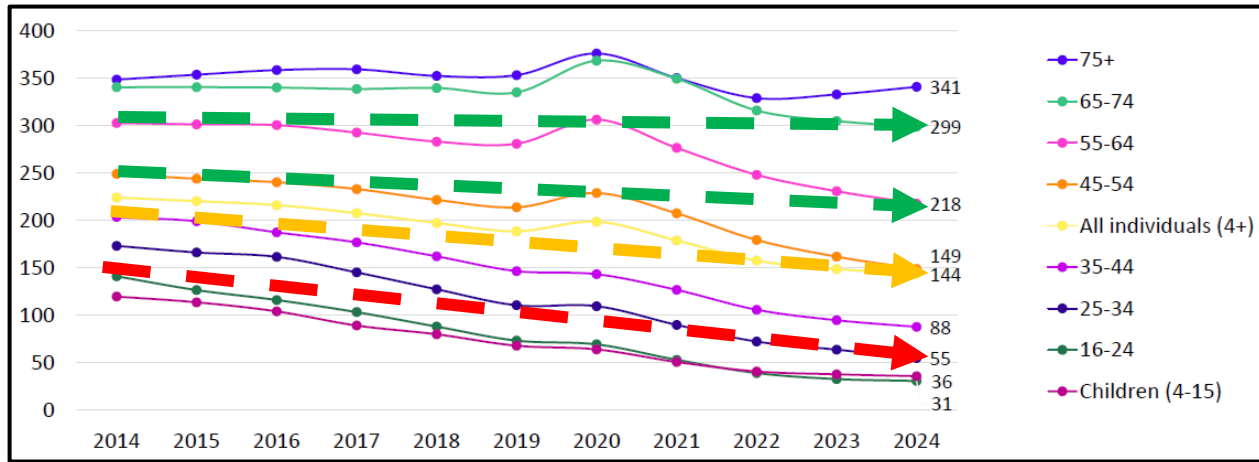


# TV Viewing remains a massive usage in Europe



- TV viewing is 3h33 min /day/pop in 2023 (2 minutes less than 10 years before)
- 88% is live viewing
- SVOD (film and series streaming platforms) – usage is 0.5 to 1h/day/pop

# TV viewing remains very resilient for some age groups, strategic actions are needed for others



Average daily minutes broadcast TV viewing

UK example: data presented by OFCOM from Barb research. Analysis with the arrows is from BNE

- With 10-year history, we can follow the evolution for some individuals who went from one age group to the next.
- For people above 45-year-old in 2014 (55 in 2024), the erosion in TV viewing is very slow or non-existent
- Those individuals still have more than 2 decades of usage ahead
- 
- The drop for younger generations (<35-year-old in 2014) is a concern for broadcasters. 5G Broadcast is a strategic option to serve them, in complement to OTT strategies.

# Innovation objectives and key characteristics



**Prominence**



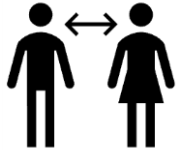
**Universal Accessibility**



**Distribution Costs**

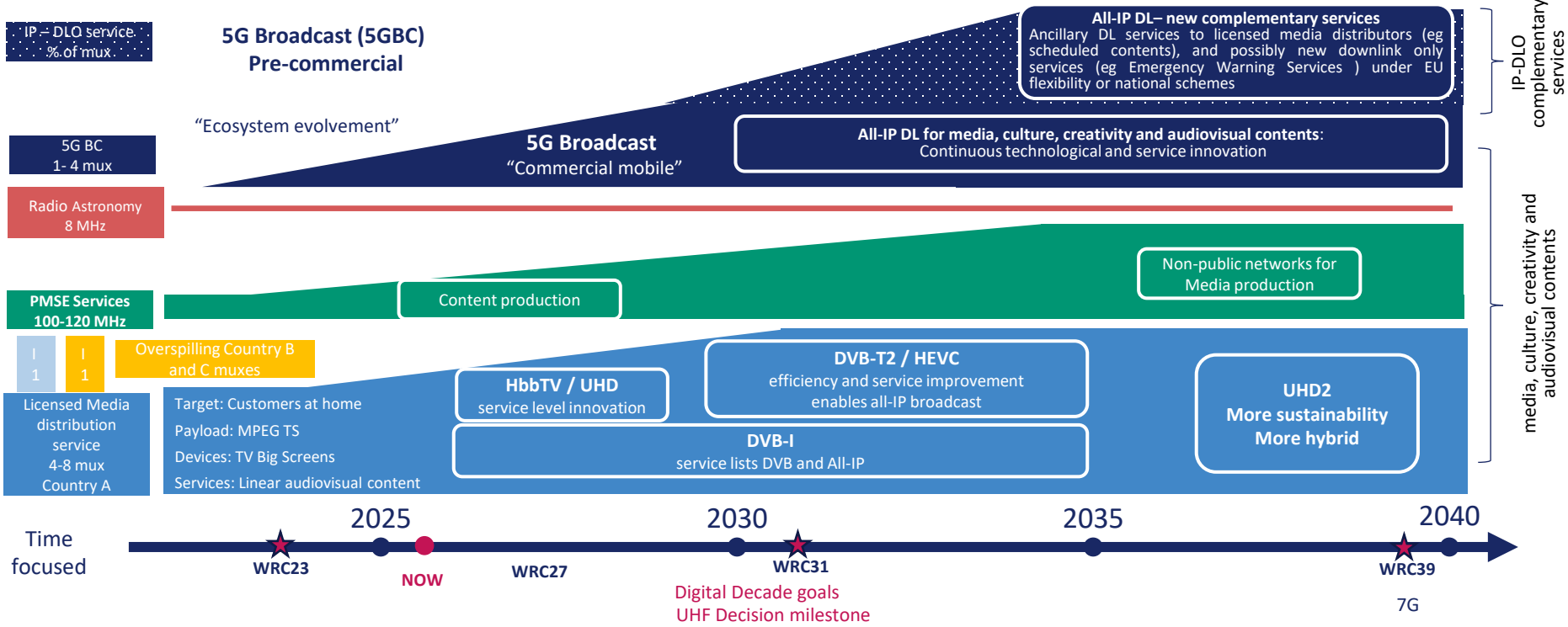
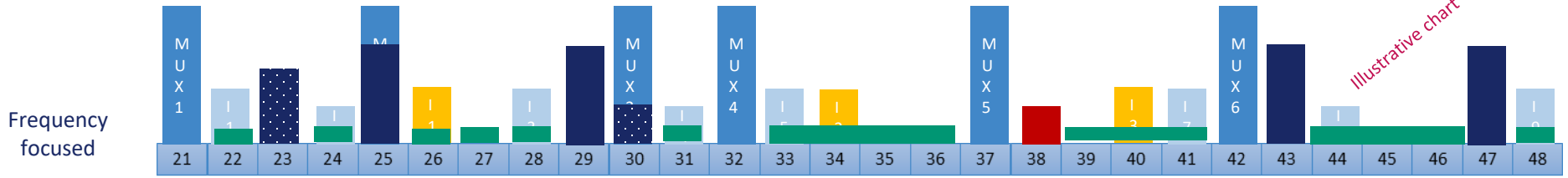


**Public Warning**



**Direct access to viewers and listeners**

# The UHF Band – Innovation Roadmap



# Services in the UHF band

- Terrestrial broadcasting and DTT remains relevant, resilient and evolving. Innovation lies in integration, personalization and sustainability. Migration to DVB-T2 and enhanced compression technologies already allows introduction of Ultra High-Definition services to large screens and integrated Hbb-TV services
- 5G Broadcast will offer SIM-free All-IP-Downlink-Services for media, culture, creativity and audiovisual services to handheld devices
- 5G Broadcast or IP-Broadcast will offer Emergency Warning services and All-IP-Ancillary–Downlink-Services for a broad variety of applications
- PMSE (e.g. wireless microphones and other content production equipment) can continue shared use of the band
- Existing Radio Astronomy services can continue using the band

# Terrestrial TV on track on the innovation roadmap

UHD



HbbTV



5GBC trials



Higher quality/HD/UHD

Interactivity

Mobility

# Talking about Broadcasting – Don't forget Radio

The recent power outage in Spain and Portugal reminded us of the resilience of the broadcast networks compared to mobile networks, most of which went down within an hour or two of the incident.

For a few hours, the most reliable — and only one available — source of information was broadcast radio. It provided continuous updates to millions of citizens through special live programs.

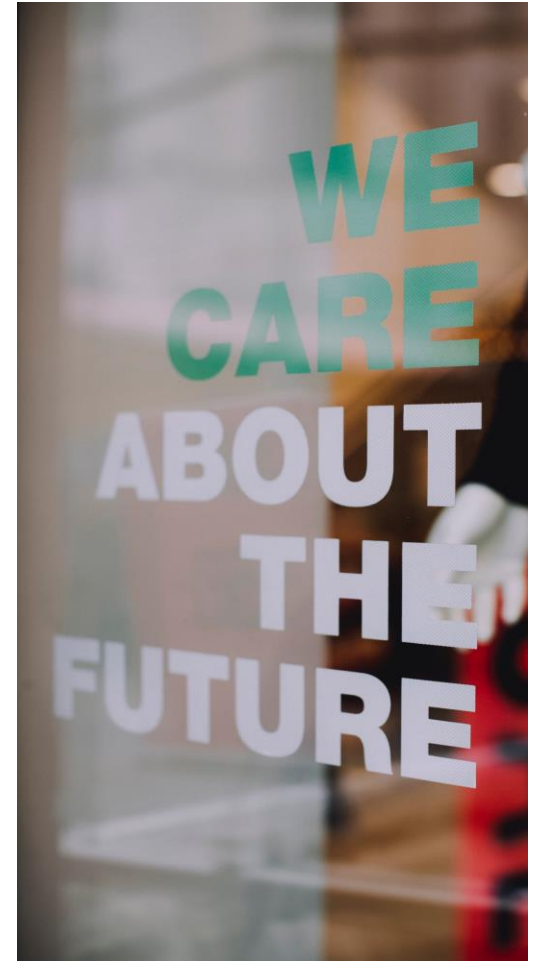
“While radio may not be the newest or shiniest technology in town, it again remained the most consistent and reliable in an emergency”.

<https://www.redtech.pro/radio-shines-in-the-blackout/>



# Keep the UHF band for Broadcasting - Benefits

- **Citizen centric**
- **Fair competition**
- **For European businesses**
- **Platform for European culture**
- **Accountability for healthy democracy**
- **Public service for all Europeans**
- **Supporting European content**
- **European sovereignty**
- **Spectral efficiency**
- **Green future for Europe**



**Our sector plays a key role in Europe**

**The future of terrestrial broadcasting is exciting,  
with challenges but also opportunities for the  
longer term**

**Innovation is key**

**Future developments depend both on  
Technical and Political decisions**

**If we are not at the table**

**We may be on the menu**