

A man with glasses is in the foreground, holding a white HTC smartphone to take a photo of a woman in the background. The woman is smiling and looking towards the camera. They are outdoors, possibly at a social gathering or event, with other people and greenery visible in the background. The scene is brightly lit, suggesting daytime.

# WIRELESS BROADBAND AND BROADCASTING

Karl-Heinz Laudan, Deutsche Telekom AG  
Brussels, 12 May 2016



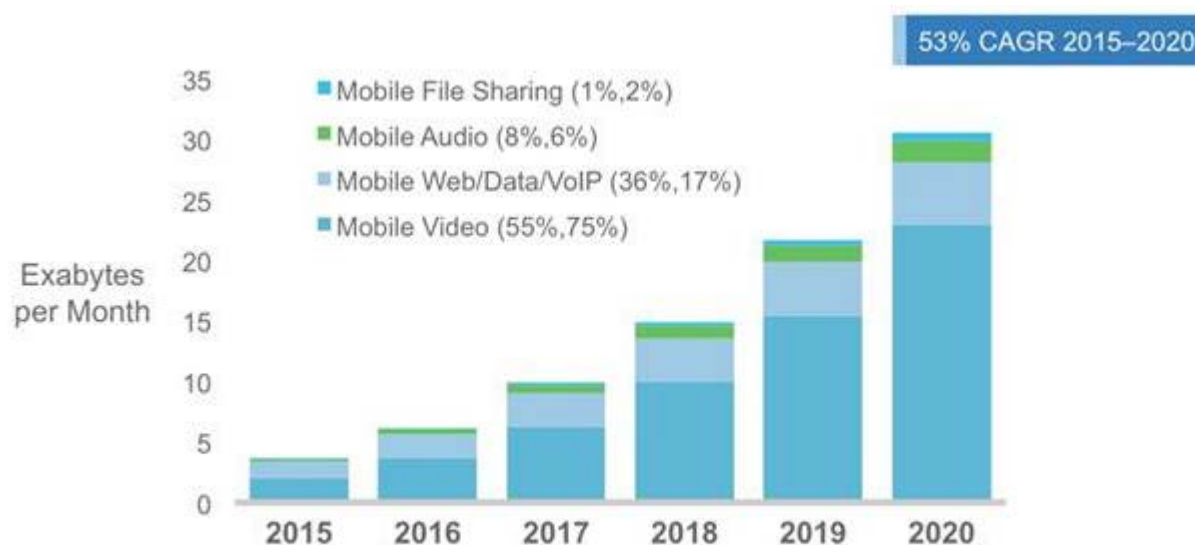
LIFE IS FOR SHARING.

# WIRELESS BROADBAND AND BROADCASTING

- This discussion started already before the release of the 800 MHz band.
- **A number of European groups have dealt with this topic.**  
CEPT, High-Level-Group of the European Commission, RSPG
- The results from that work are still of relevance since the preconditions have not changed substantially.
- Convergence of broadcasting and broadband will happen, however, the future relevance of DTT will decline.
- There is still the need for Europe to agree on a sustainable long term strategy for the UHF band.

# MOBILE VIDEO TRAFFIC

- **Mobile video traffic accounted for 55 percent of total mobile data traffic in 2015.**  
Mobile video traffic now accounts for more than half of all mobile data traffic. (Source: Cisco VNI Feb 2016)
- **Mobile video will generate three-quarters of mobile data traffic by 2020** ■ (Source: Cisco VNI Feb 2016)



Figures in parentheses refer to 2015 and 2020 traffic share.  
Source: Cisco VNI Mobile, 2016

- **But: What will be the share between linear and non-linear?**



LIFE IS FOR SHARING.

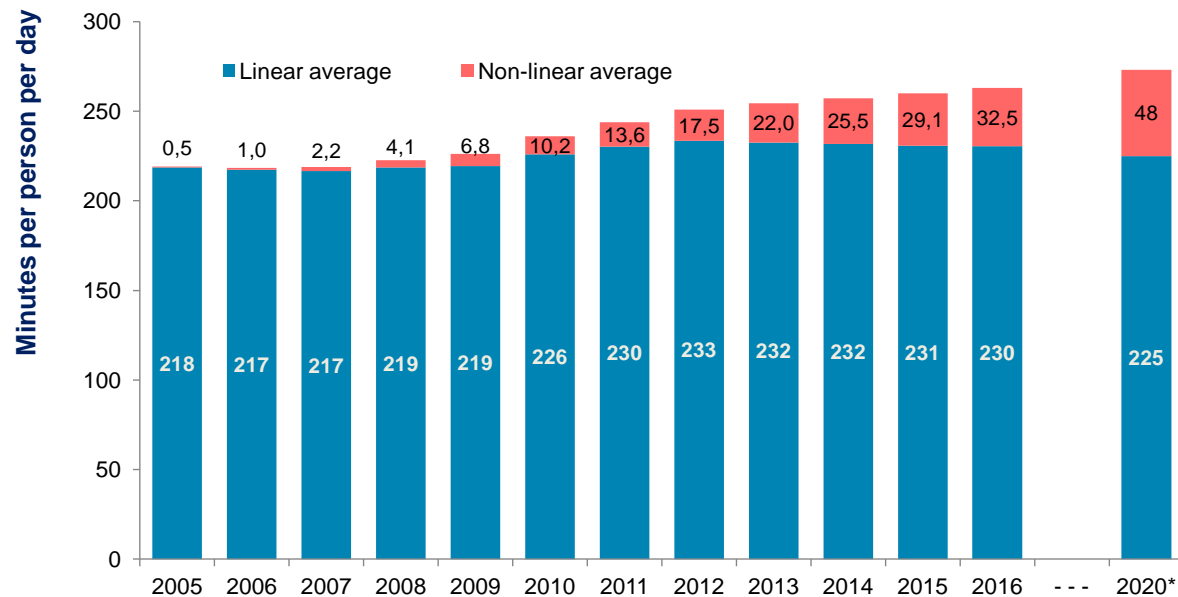
# LINEAR TV VS. NON-LINEAR

## TYPE OF TRAFFIC DETERMINES THE WAY OF DISTRIBUTION

- Linear TV content remains constantly important, however the share of non-linear content is increasing, even on big screens.

### Evolution of linear and non-linear TV viewing

Minutes per person per day – Average in the EU 'Big 5'  
Applies to "big screens"



Source: IHS – ScreenDigest: Cross-platform Television Viewing Time FY 2012  
Note: Forecast from 2012 / \* 2020 forecast by EBU

- But: What is the preferred way of content distribution ? General availability of broadband supports alternative ways to DTT. (IPTV increase DT: Q1 YoY ~9%)

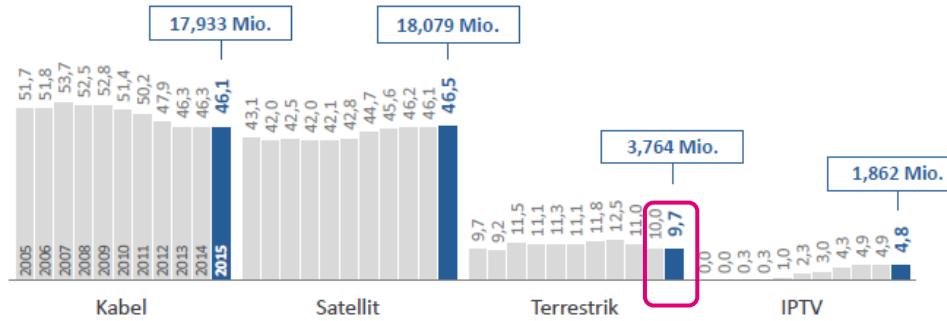


LIFE IS FOR SHARING.

# RELEVANCE OF DTT IN EU DIFFERS

- DTT share in Europe between 5 and >50%
- Reduction to relevant channels instead of 24/7 transmission of niche programs.

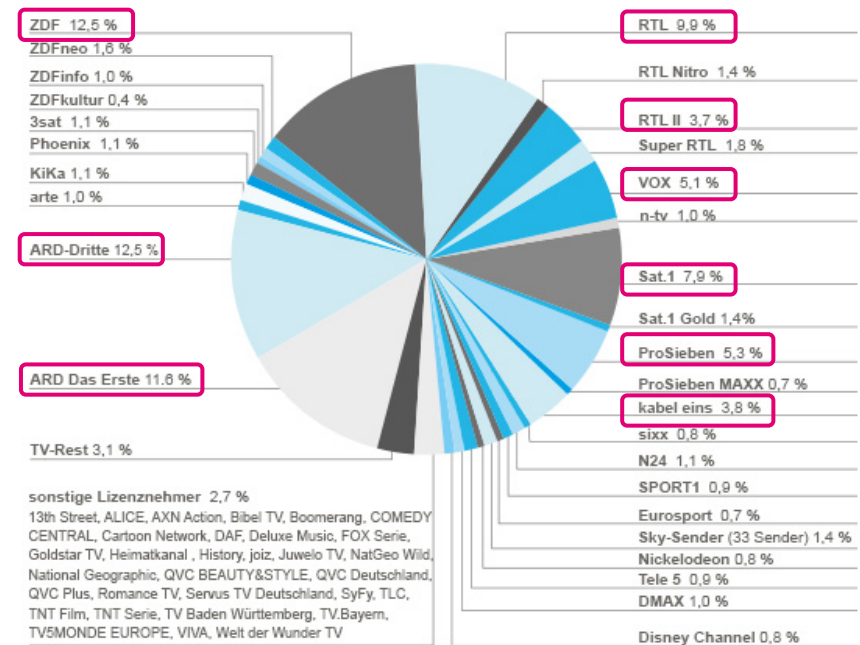
In 2015 in Germany there were just 9 channels with a daily market share >2% but more than 20 channels on DTT transmitted 24/7.



DTT share in Germany 2015: 9,7%

## MARKTANTEILE DER AGF- UND LIZENZSENDER IM TAGESDURCHSCHNITT 2015

Zuschauer Gesamt, alle Sender, Montag bis Sonntag, 03:00 – 03:00 Uhr | TV Gesamt: 223 Minuten



Quelle: AGF in Zusammenarbeit mit GfK; TV Scope, 01.01.2015 - 31.12.2015

- But: What about efficient use of spectrum? Why not using alternative distribution methods?



LIFE IS FOR SHARING.

# STRATEGY FOR THE UHF BAND

- **Support for the EC proposal to release the 700 MHz band for mobile by 2020.**

The 700 MHz will play an important role for the deployment of mobile broadband in rural areas both in terms of coverage and capacity and for indoor coverage.

- **Flexible approach for sub700**

Due to the different relevance of DTT in EU, a flexible approach on how to use the sub-700 MHz band in the near future might be reasonable. However, there should be no limitation on downlink-only services to allow for future EU-wide harmonization. CEPT has analyzed different approaches in ECC Report 224.

- **Europe should have a harmonized long-term strategy for the UHF band.**

This should be developed on the basis of real usage scenarios and customer demand. Therefore, a timely review is needed not only to be positioned for WRC-23 but also to maximize the benefit for the European society.