Future distribution of Public Service Media

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www.ebu.ch; tech.ebu.ch

European Broadcasting Union

Professional association of public service media organisations

73 Members in 56 countries (Europe, North Africa, and Middle East)
- 780 TV services provided by EBU Members
- 1040 radio services
- broadcasting in 123 languages
- audience reach: > 1 billion people

34 Associate members in Africa, Asia, and the Americas

The EBU operates *Eurovision* and *Euroradio*.

The present

Current trends

The future

Game changers

time
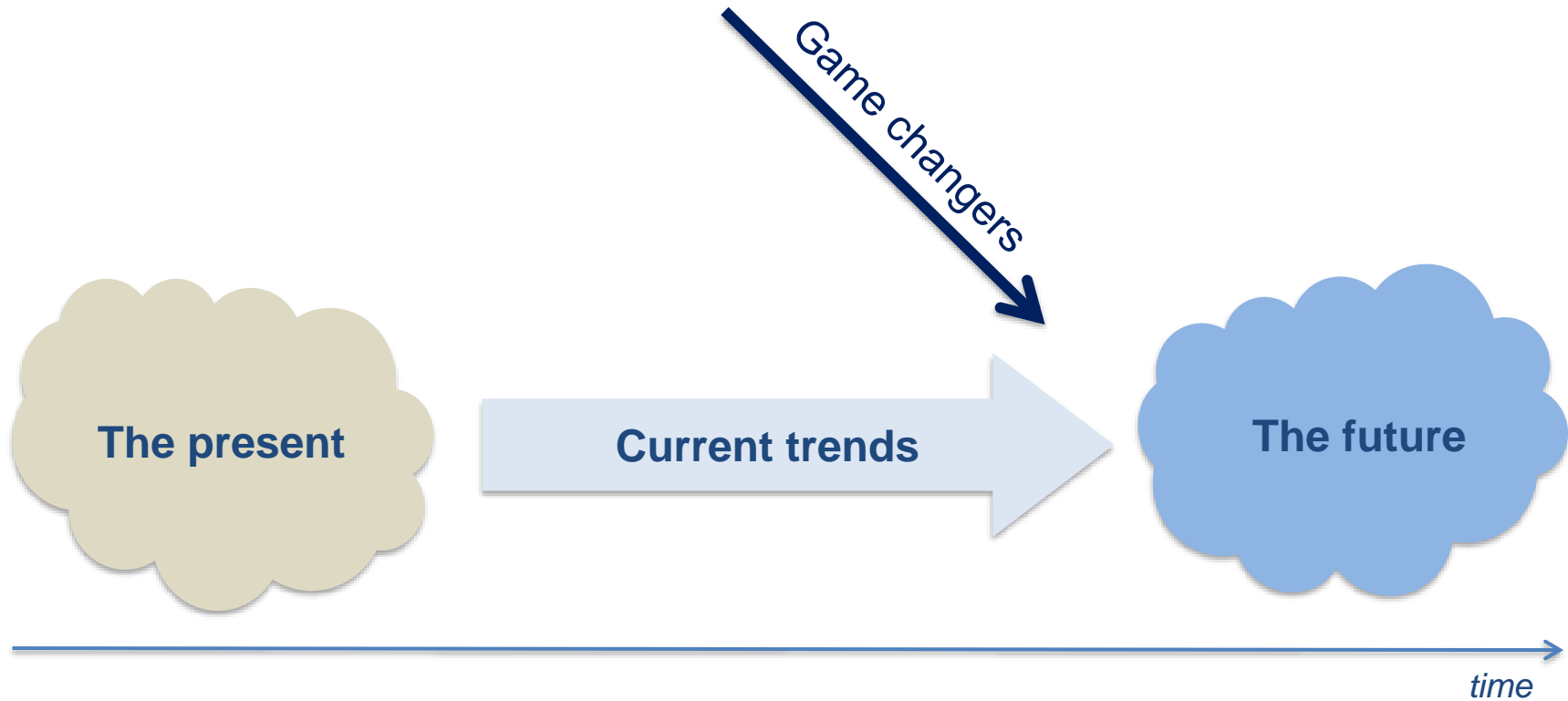
I will speak about
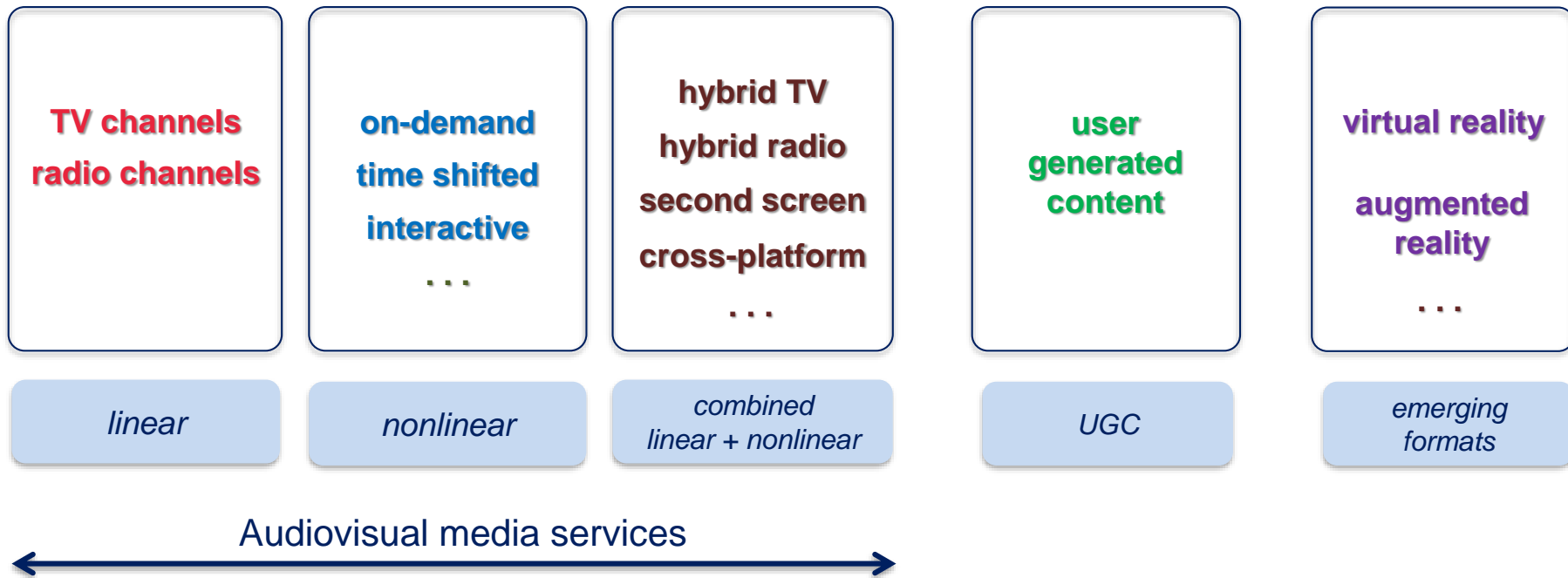
- Trends in the audiovisual sector

- Public Service Media

- Distribution of audiovisual media services

- A possible role of 5G

- Takeaways

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Trends in audiovisual media

Many kinds of audiovisual media content and services

TV channels radio channels	on-demand time shifted interactive . . .	hybrid TV hybrid radio second screen cross-platform . . .	user generated content	virtual reality augmented reality . . .
linear	nonlinear	combined linear + nonlinear	UGC	emerging formats

Audiovisual media services

Daily TV viewing time

Traditional TV viewing remains stable overall

DAILY TV VIEWING TIME PER INDIVIDUAL: 2010-2016
AVERAGE BASED ON 46 EBU MARKETS (H:MM)
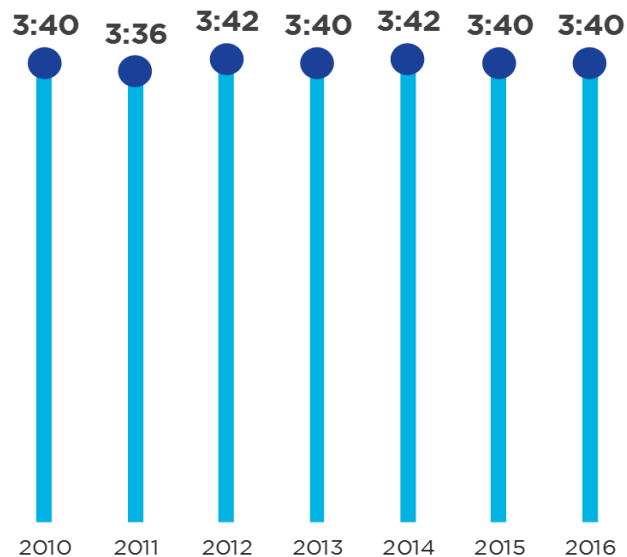
2010	2011	2012	2013	2014	2015	2016
3:40	3:36	3:42	3:40	3:42	3:40	3:40

Share of total viewing time

Online viewing is progressively eating into TV viewing time

SHARE OF TOTAL VIEWING TIME   UK, ALL INDIVIDUALS

- DVD
- OTHER ONLINE VIDEO
- ADULT XXX VIDEO
- FACEBOOK
- YOUTUBE
- PAY VOD
- BROADCASTER ON DEMAND
- RECORDED TV
- LIVE TV

2016, 2015, 2014

4%, 4%, 4%, 5%, 5%, 2%, 6%, 3%, 2%, 4%, 3%, 4%, 11%, 11%, 67%, 60%
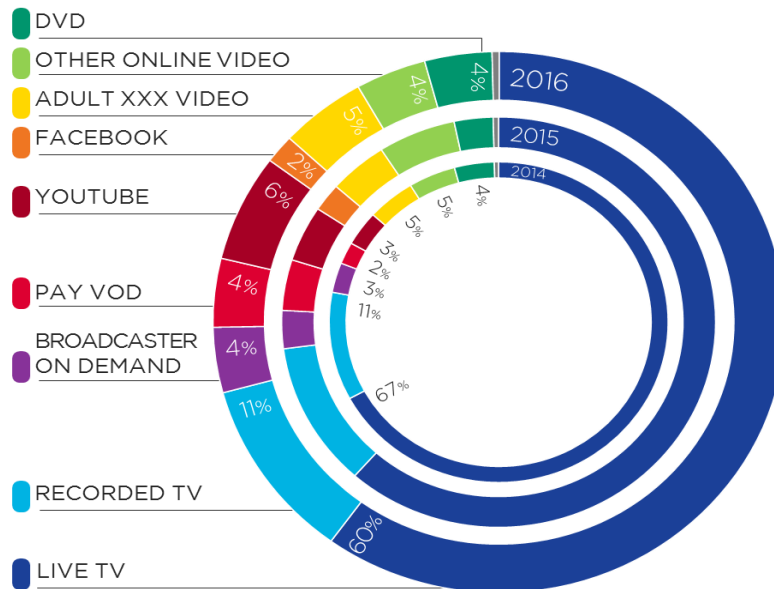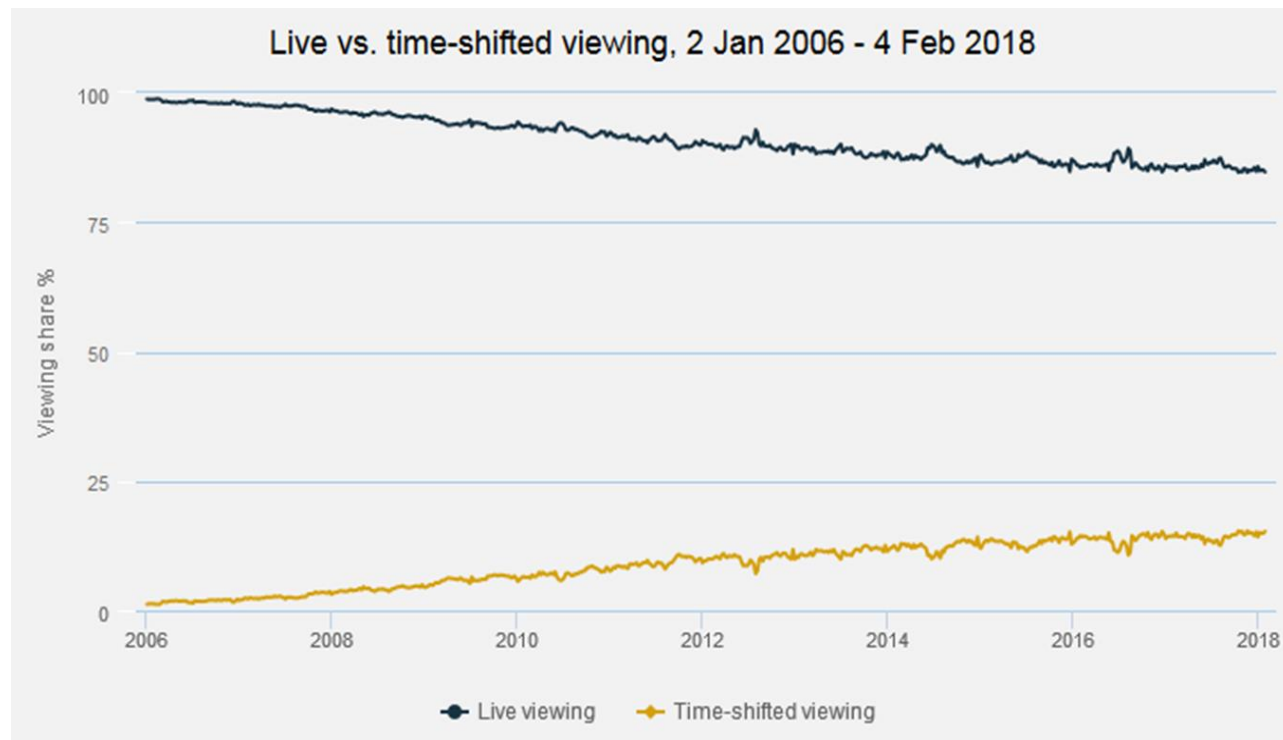
Source: Thinkbox based on BARB / comScore / broadcaster stream data / OFCOM Digital Day / IPA Touchpoints / Rentrak

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Live vs. time-shifted viewing - UK

Live vs. time-shifted viewing, 2 Jan 2006 - 4 Feb 2018

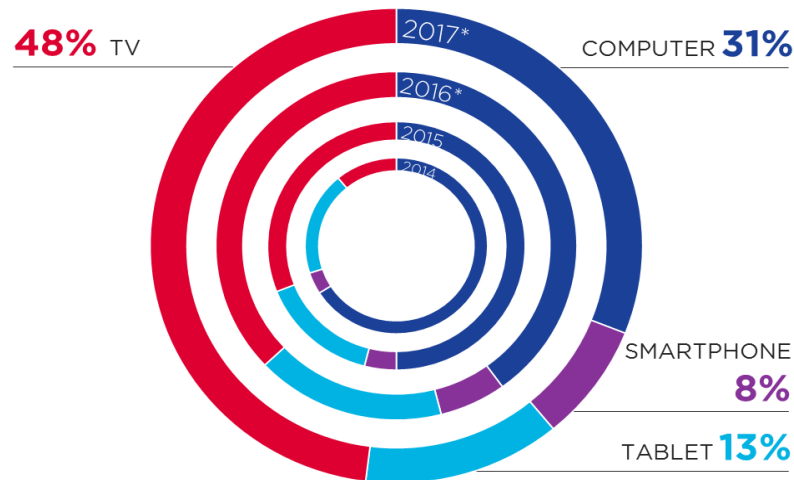*If the current trend continues the curves will intersect in 2036.*

Online TV watching – minutes by screen

The TV set is becoming the main screen for streaming

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NRK WEB TV
MINUTES DELIVERED BY SCREEN

48% TV

2017*
2016*
2015
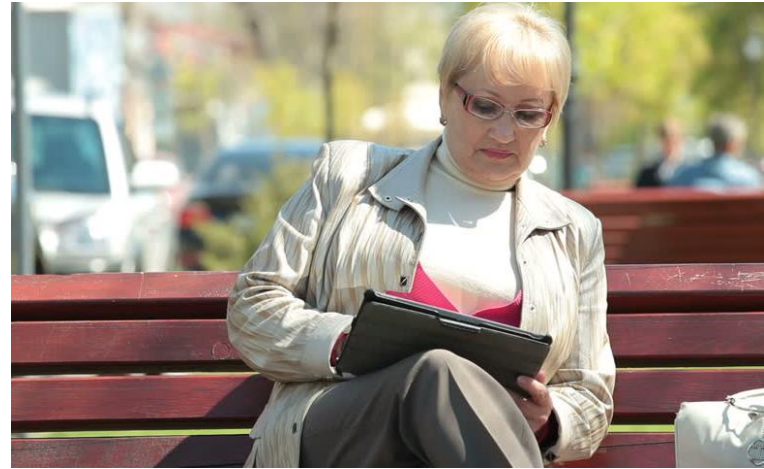2014

COMPUTER **31%**

SMARTPHONE
8%

TABLET **13%**

* 2016 based on January – June, 2017 based on January - August
Source: NRK / Kantar TNS Scores, 2016

Devices, devices…

The user context

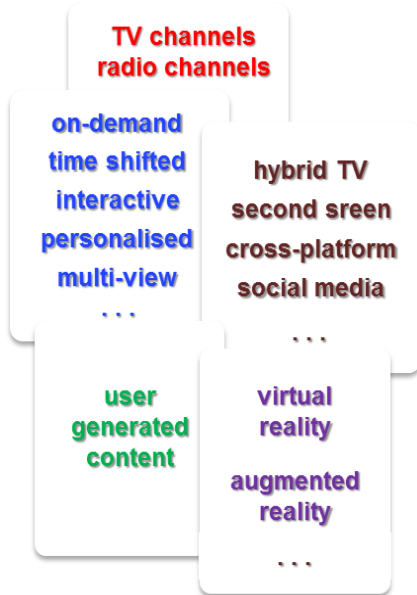# The user experience

Content choice

TV channels
radio channels

on-demand
time shifted
interactive
personalised
multi-view
. . .

hybrid TV
second sreen
cross-platform
social media
. . .

user
generated
content

virtual
reality

augmented
reality
. . .

Quality

- 'Better pixels'
  - UHD (higher resolution)
  - WCG (more colours)
  - High dynamic range
  - High frame rate
  - High quality audio

- Devices
  - Screen quality
  - Battery life

- Networks
  - Coverage
  - Capacity
  - Latency
  - Reliability
  - Security

Convenience

- Any time
- Anywhere
- On any device

- Ease of access

- User interface
  - Service discovery
  - Navigation
  - Selection

- Personalised

- Trusted services

Costs

- Cost of
  - Device
  - Service
  - Access

Takeaways on the audiovisual trends

- *There is an ever growing variety of audiovisual content and services*
  - Linear, on-demand, hybrid, UGC, immersive …

- *Linear TV viewing still dwarfs other forms of AV media consumption*
  - Average around 3-4 hours a day per person, and stable

- *On-demand and other forms of viewing are steadily growing*
  - Largely additive to linear, leading to an increase in overall consumption

- *Audience uses multiple devices and different ways of access to AV content*
  - Depending on the context, intentions, preferences, and type of service
  - No substitution of one type of device for another

- *Media is consumed everywhere but mostly indoors*

- *Quality of experience (QoE) drives user engagement*
  - QoE is determined by content choice, quality, convenience, and costs

Public Service Media

Question: What is the difference between a **TV channel** and an **online video clip**?
Answer: A TV channel is an **audiovisual media service** and online video is not.

Question: What is an **audiovisual media service**?
Answer: Provision of the **curated** audiovisual media content
- to the public
- with *editorial responsibility* of the service provider
- subject to *regulation* (content regulation, law on public service media, copyright law, telecom regulation, net neutrality, privacy and data protection, …)

Examples of AV media service: - radio and TV channels
                                 - catch-up TV (BBC iPlayer, Mediathek, …)
                                 - video on demand (VoD)
                                 - podcast

Video content but not *AV services*:   - user generated content
                                        - computer games
                                        - teleconference
                                        - surveillance video

Public Service Media (PSM) are media organisations established, financed and controlled by the public, for the public. Their main task is to *inform*, *educate* and *entertain* all audiences.

They are established on law to work for the benefit of the whole society, independent from political, commercial, religious, or other particular interests.

PSM content and services must be universally available and free to access.

Question: How is the PSM different from the commercial media?

Answer:

	Public Service Media	**Commercial media**
Funding	Publicly funded - with advertising (in some countries)	- Advertising - Subscriptions
Business objectives	Fulfilling the public service remit	Profitability
Act in the interest of	The public	The shareholders

The main product	Content for all members
	of the society
	- *'inform, educate, entertain'*
		- The audience
		  (for ad-supported media)
		- Entertainment content
		  (for subscription services)

Distribution of
audiovisual media services

The distribution challenge

The goal: *Delivery of the whole range of content and services*

- to all interested users
- at the right time
- at the right place
- on the right device
- with the desired quality
- for the right price

Balancing act between
- Optimising the user experience
- Resource management
- Business objectives
- Regulatory requirements and constraints

PSM are subject to additional regulatory requirements:

Universal availability
- On all relevant platforms
- On devices that users prefer
- Everywhere (geographically)

Free for everybody
- No recurring charges for access to services

The ability to reach audience in emergency situations

Regulated business models
- Must be compatible with the PSM remit

Distribution options

Future requirements in the audiovisual media sector

1. Enhanced user experience
- expanded choice of content and services
- convenient service discovery, selection, access
- new content formats (UHD, 360 deg., VR/AR/MR)
- variety of user devices
- personalised services
- accessibility services
- affordable prices

2. Media providers' objectives
- new production and distribution capabilities
- operational flexibility, scalability, quality
- access to the audience and brand protection
- content security
- complexity management
- cost control
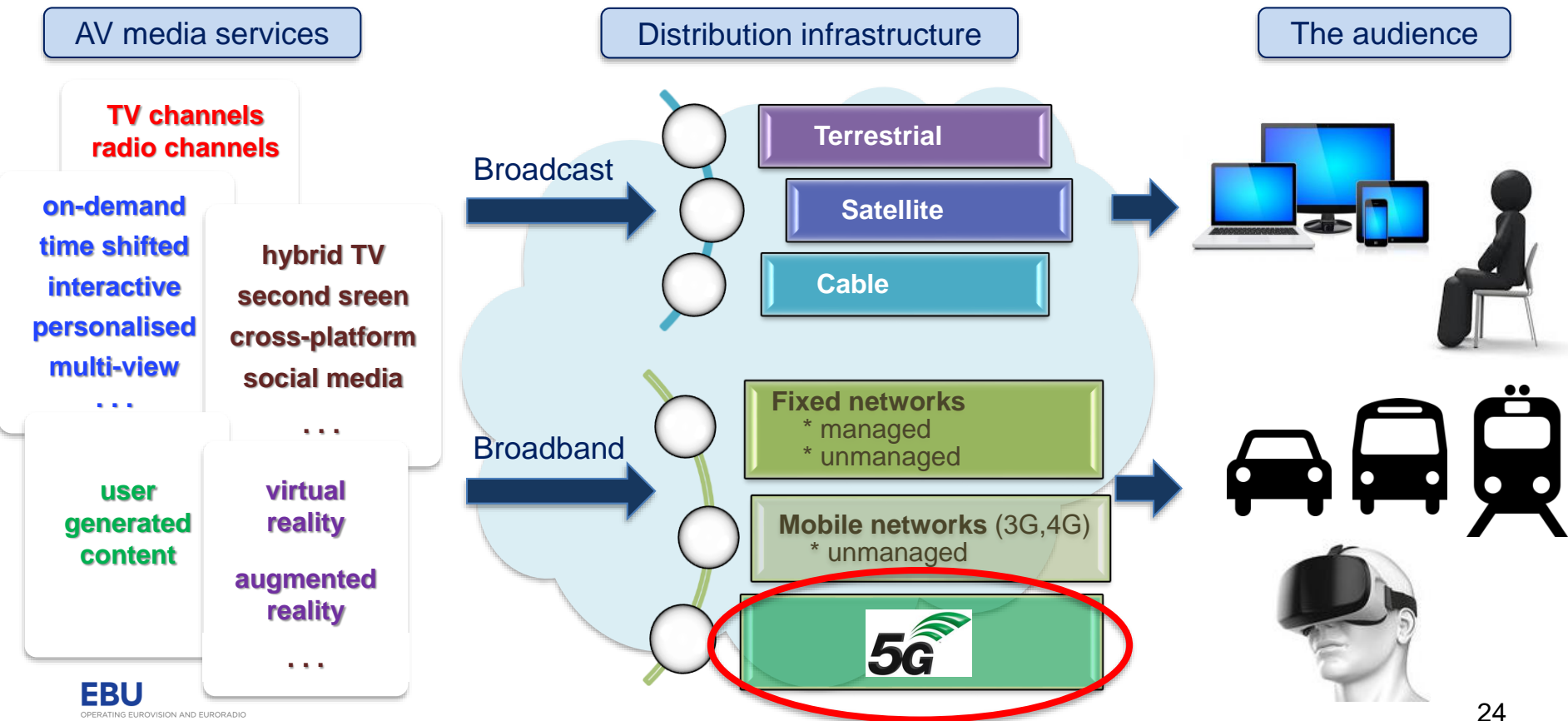
3. Audiovisual policy objectives
- safeguard media pluralism and cultural diversity
- contribute to economic growth, employment, innovation, and social cohesion.
- support production and distribution of the original content
- ensure universal availability of Public Service Media content and services

Takeaways on distribution of audiovisual media

- *Media service providers use multiple delivery means to reach their audiences*
  - Conventional broadcast networks (terrestrial, cable, satellite)
  - Broadband networks (fixed and mobile; managed and unmanaged)

- *No single distribution platform can efficiently deliver the whole range of services to all users and devices.*
  - Coexistence and collaboration between different platforms is needed

- *More than 90% of TV viewing hours are delivered over broadcast networks*
  - The vast majority of the rest travels over fixed broadband and Wi-Fi
  - This may be different for other types of media content

- *Technical and operational requirements of PSM and commercial media are similar*

- *PSM are subject to additional regulatory requirements and constraints*
  - Universality, free access, emergency communications, regulated business models

- *There are substantial differences between distribution platforms in terms of their ability to meet PSM requirements*

5G in the distribution of audiovisual content and services

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The role of 5G in media distribution – *the initial scenario*

AV media services

TV channels
radio channels

on-demand
time shifted
interactive
personalised
multi-view
. . .

hybrid TV
second sreen
cross-platform
social media
. . .

user generated content

virtual reality

augmented reality
. . .

Distribution infrastructure

Broadcast

Terrestrial

Satellite

Cable

Broadband

Fixed networks
* managed
* unmanaged

Mobile networks (3G,4G)
* unmanaged

5G

The audience

24

The role of 5G in media distribution – *a mid-term scenario*

AV media services

TV channels radio channels

on-demand time shifted interactive personalised multi-view . . .

hybrid TV second sreen cross-platform social media . . .

user generated content

virtual reality augmented reality . . .

Distribution infrastructure

Broadcast

Terrestrial

Satellite

Cable

Broadband

Fixed networks * managed * unmanaged

Mobile networks (3G,4G, NR) * managed * unmanaged

5G

The audience

The role of 5G in media distribution – *a long-term scenario?*

AV media services

**TV channels
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**augmented
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. . .

Distribution infrastructure

Broadcast

Terrestrial

Satellite

Cable

Broadband

Fixed networks
* managed
* unmanaged

Mobile networks (3G,4G, NR)
* managed
* unmanaged

The audience

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The role of 5G in media distribution – *an ultimate scenario?*

AV media services

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Distribution infrastructure

The audience

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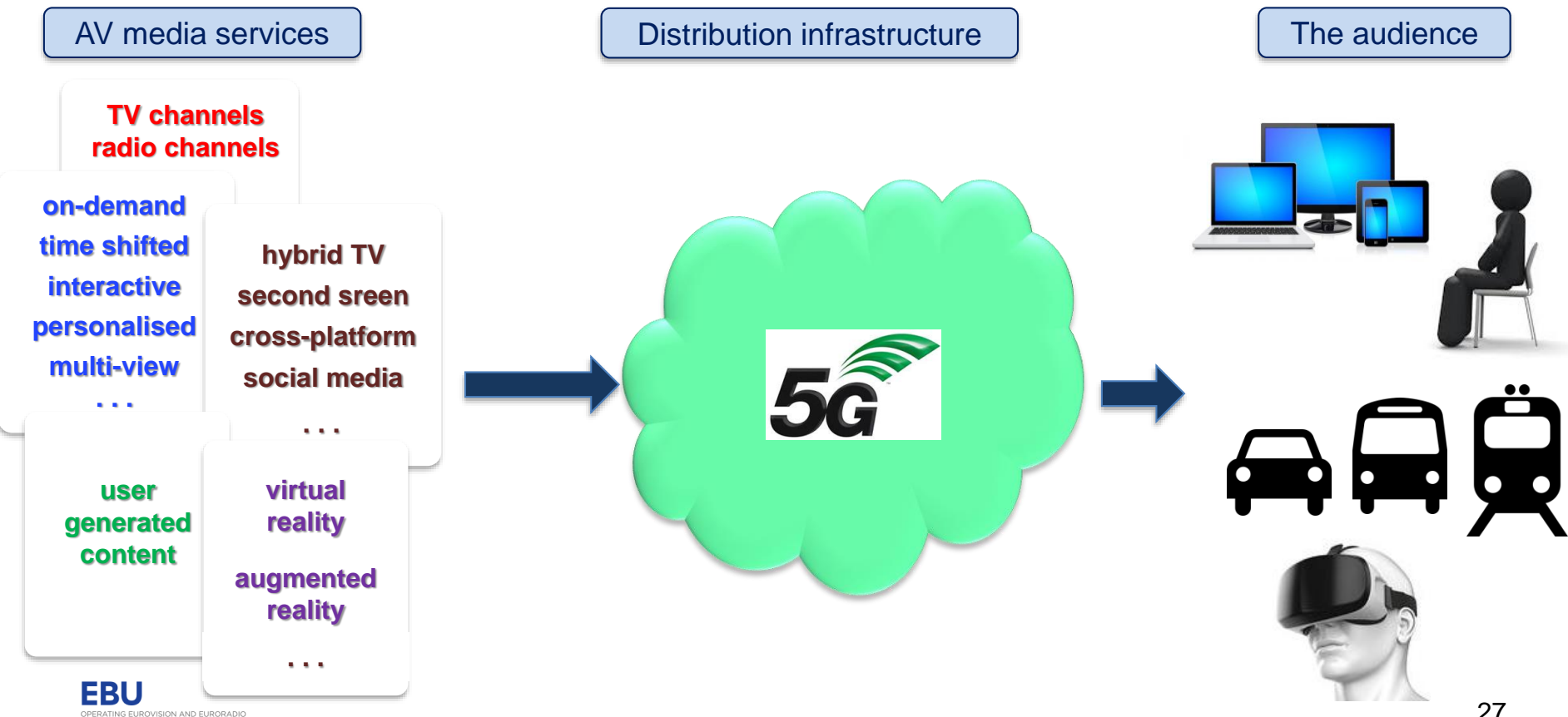
How can Public Service Media distribution benefit from 5G?

5G needs to support the PSM providers in fulfilling their remit.

- At the system level 5G will be able to meet the technical requirements.

- Operational, commercial, and regulatory requirements could in principle also be met.
    - partly addressed in 3GPP Release 14; the work continues

Check against the delivery!

- *Critical requirements for PSM distribution are, and will remain*
    - Network coverage, security, reliability, resilience
    - Business models compatible with the PSM remit
        - Compliant with specific PSM regulation
        - Operational efficiency, flexibility, scalability
        - Unconstrained access to the audience and audience data
        - Manageable (reduced) complexity
        - Sustainable; low costs for both the PSM providers and the end users

These aspects of 5G are yet to be addressed!

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The 5G opportunity
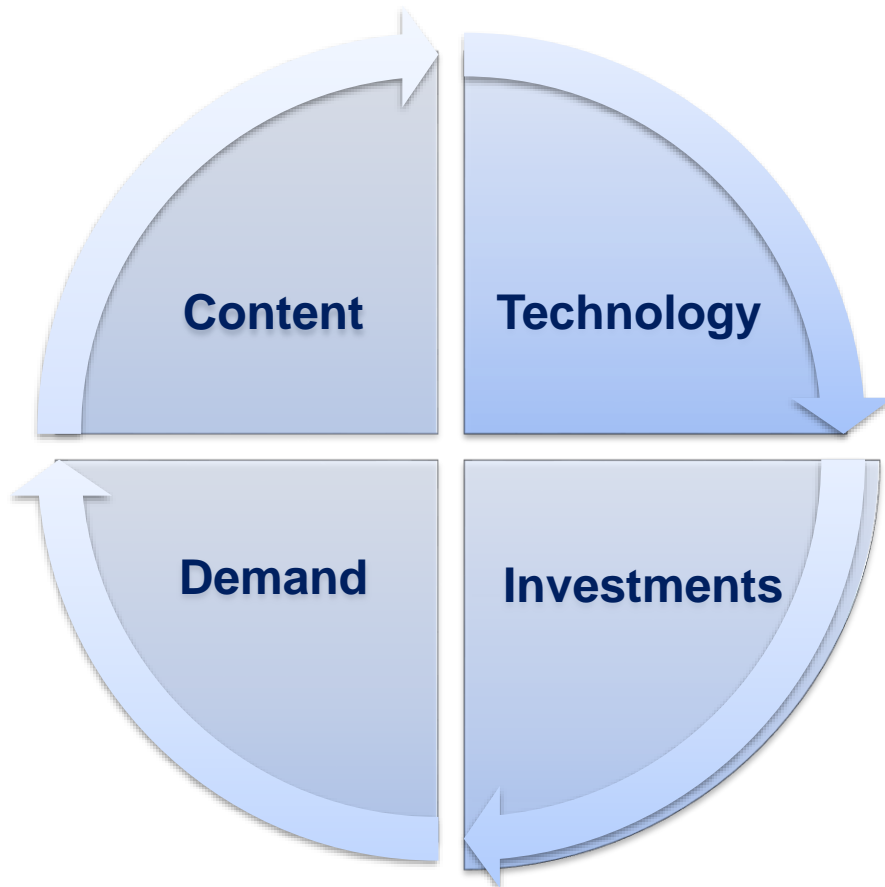
Thank you
for your attention!

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