What's Next for Terrestrial Broadcast ?

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Digital Video Broadcasting

Disclaimer

The views presented in this presentation shall not be taken as being an official and final position from the DVB as the DVB's Steering Board has not yet reviewed the on going work on this topic.

They should be considered more as reflecting some, but not necessary all, thoughts and options that are considered in the matching DVB's working groups.

Agenda

Introduction

1.A Fast Changing Context

2…. suggesting a range of enhancements and Terrestrial Broadcast

Concluding Remarks

Introduction

- Terrestrial Broadcast is the principal access to TV (and radio !) for billions of peoples
- Digital Terrestrial Broadcast : considerable increase of the terrestrial broadcast proposal (programs, quality, additional services)
- continues to do so (T2, UHD, HEVC, HbbTV, ..)
- DVB is the leading transmission standard in the world ; above 1bn receivers
- DVB established CM-T group to foster the future evolutions of DVB's terrestrial specification

Agenda

Introduction

1. A Fast Changing Context for Terrestrial Broadcast

2. Enhancing the Terrestrial Broadcast value proposal : a hint at some possible future evolutions

Concluding Remarks

A fast changing context for Terrestrial Broadcast (1)

→ End Users : 5 Key Context Factors

1. **Continuous increase in video consumption**
   more and more and more on demand but linear still resilient and leading form of media usage
2. **HD will be the basis, and quality demand will go beyond HD**
3. **Several screens, connected on a home network**
4. **Growing out of home / on the move media consumption**
5. **The need for security and privacy**

NB

A fast changing context for Terrestrial Broadcast (2)

→ Technology , Networks & Business Models

1. **Broadband for all … but ultra high speed for all much more distant**
2. **Most TVs connected to the Internet soon**
3. **Mobile networks develop very fast but unconstrained (video) mobile usage still in question**
4. **Continuous improvements expected in coding and physical layers**
5. **Big data minded models**
6. **IoT**
7. **Global Standards**

NB

A fast changing context for Terrestrial Broadcast (3)

→ **Regulation, Spectrum & Society**

1. **Less spectrum for Terrestrial Broadcast TV**
2. **Strong coupling of terrestrial broadcast and general interest objectives**
3. **Energy Efficiency Constraints**

NB

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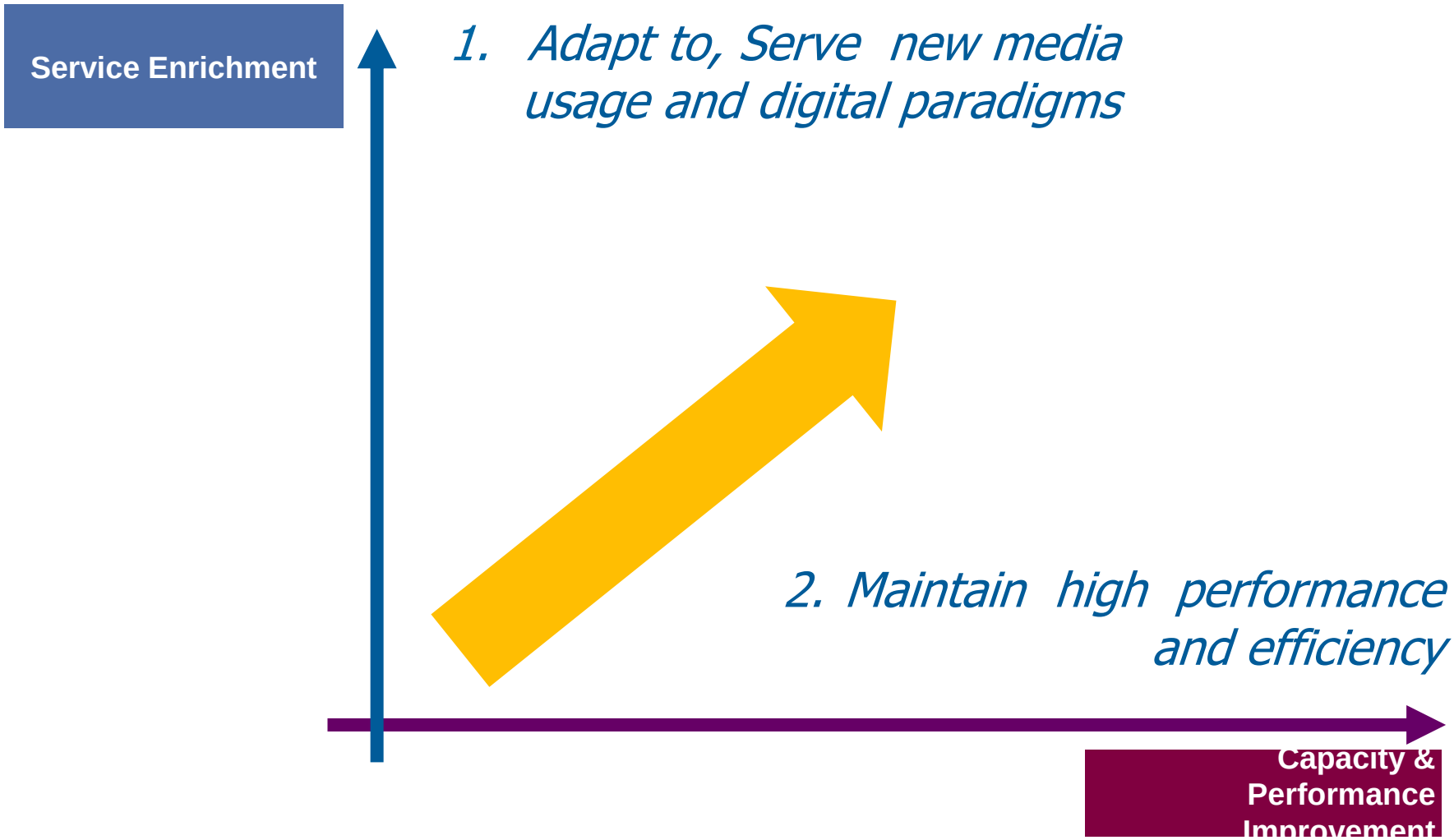
2 main directions of evolution for Terrestrial Broadcast (DVB)



Axis 1: connect TB to new media usage cases and contexts

- Optimizing TB through usage of “ground to air” information
- Local content re-assembling / Hybrid
- Better integration with in-home distribution
- “In Band” Broadcast to mobile devices
- Built-in reinforced security and trust mechanisms
- On Demand / File casting
- …….

=> A “service rich” terrestrial broadcast is key to maintain an attractive value proposal and a high reach

Axis 2 : improve the core technical performance of Terrestrial Broadcast

- In the longer term, significant possible changes & gains can be considered for Physical Layer
- And combined with adoption of next gen CODEC (after HEVC)

⇒ meet (growing) demand for services/payload with constrained supply (of spectrum)

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Closing remarks

- Terrestrial Broadcast has been and **is** a key pillar of the digital society and mass access to media
- A digital TV ecosystem without Terrestrial Broadcast is very unlikely
- DVB is committed to foster adaptations of Terrestrial Broadcast to meet major changes in the market context
  - Opening to/ integration with new use cases
  - Potential for significant performance increase
  - Global standard alignment
- With such adaptations, Terrestrial Broadcast will continue to play its vital role in the TV & Digital ecosystem
- This can be achieved only if a proper scope is maintained