

EBU TECHNICAL



Mobile Broadband Technologies Workshop

Welcome and Introduction

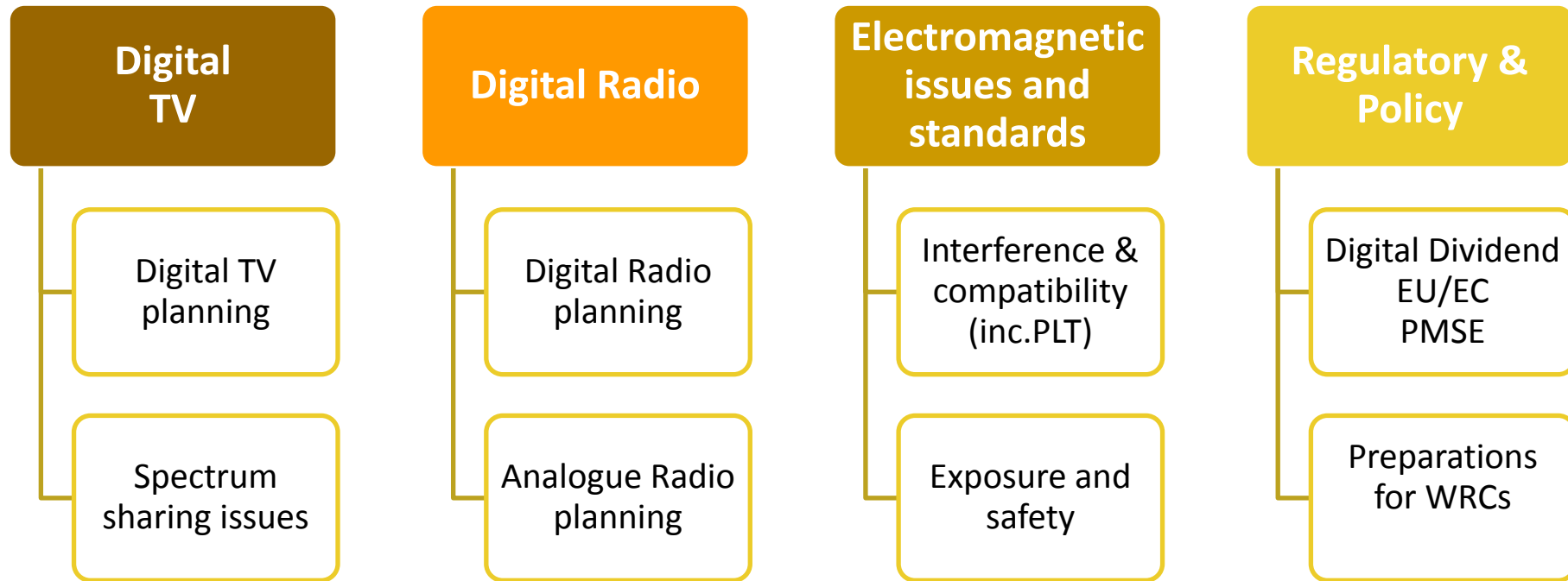
12 May 2011

Nigel Laflin

Chairman, Expert Community on Spectrum



EBU Experts Community on Spectrum - ECS





New area of activity for ECS



To investigate the potential and opportunities for the delivery of broadcast content using wireless distribution technologies

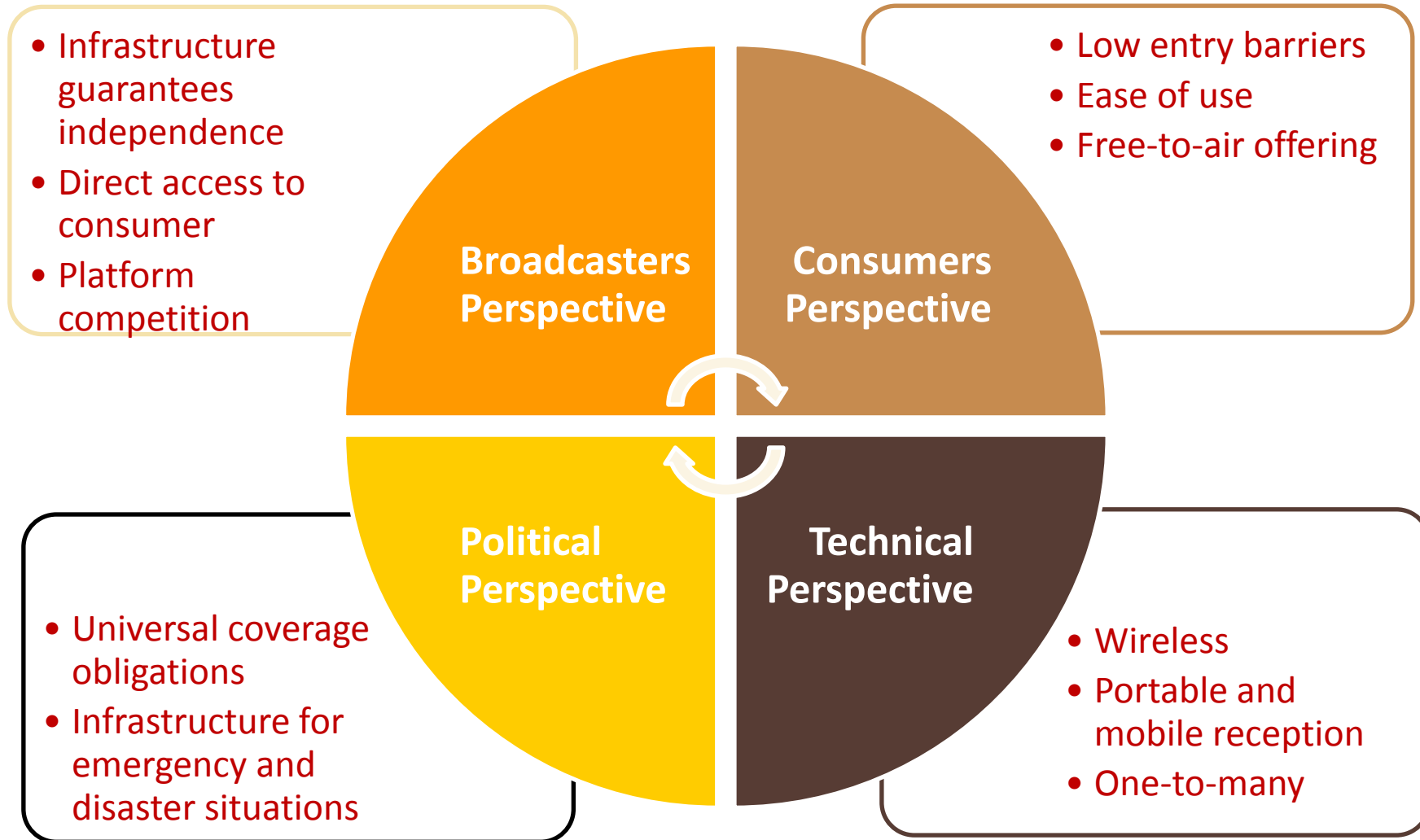


To monitor market developments on possible new technologies (e.g. LTE) to deliver broadcasting services



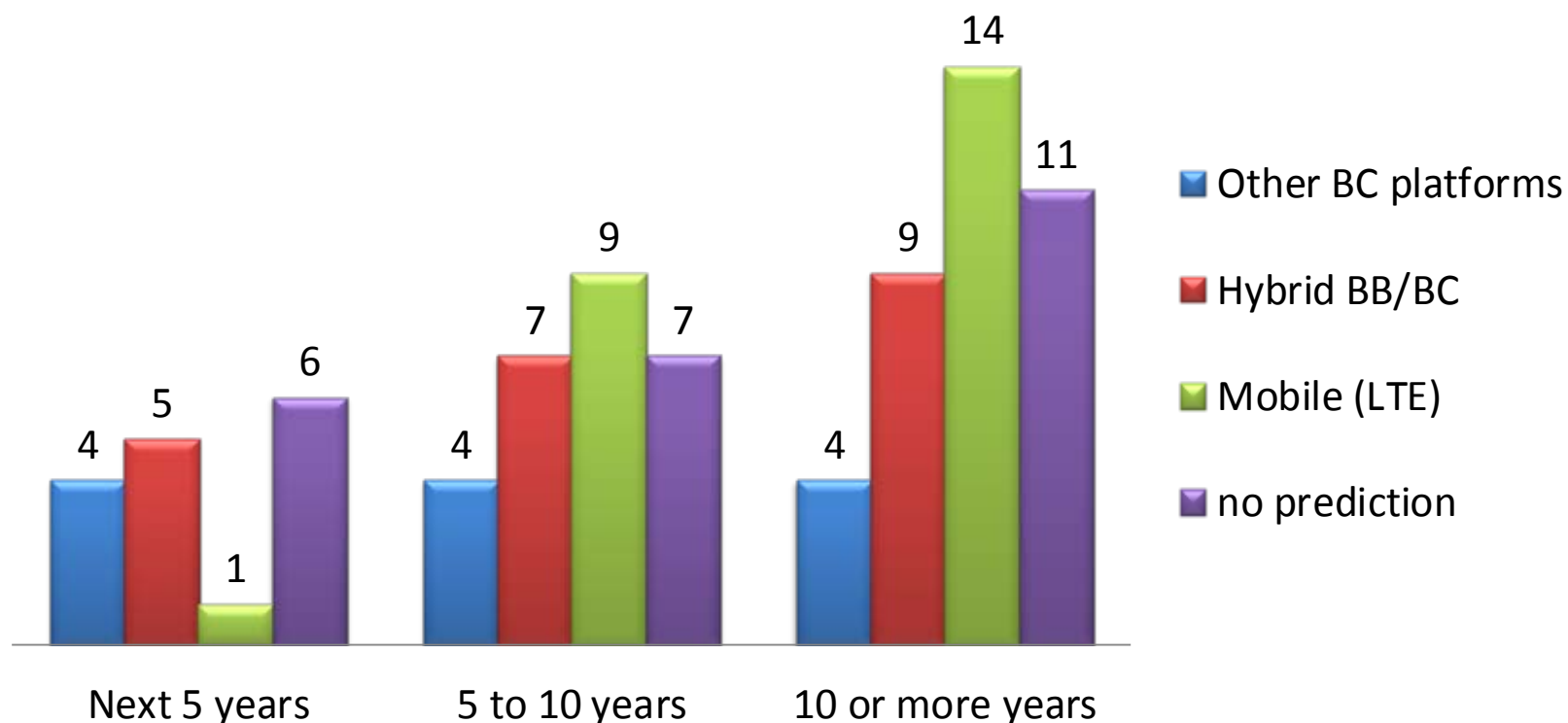
Establish liaison with the mobile telecommunications industry to enable an exchange of views, promoting broadcaster's needs and understanding the position of mobile industry

Why broadcasters need terrestrial delivery



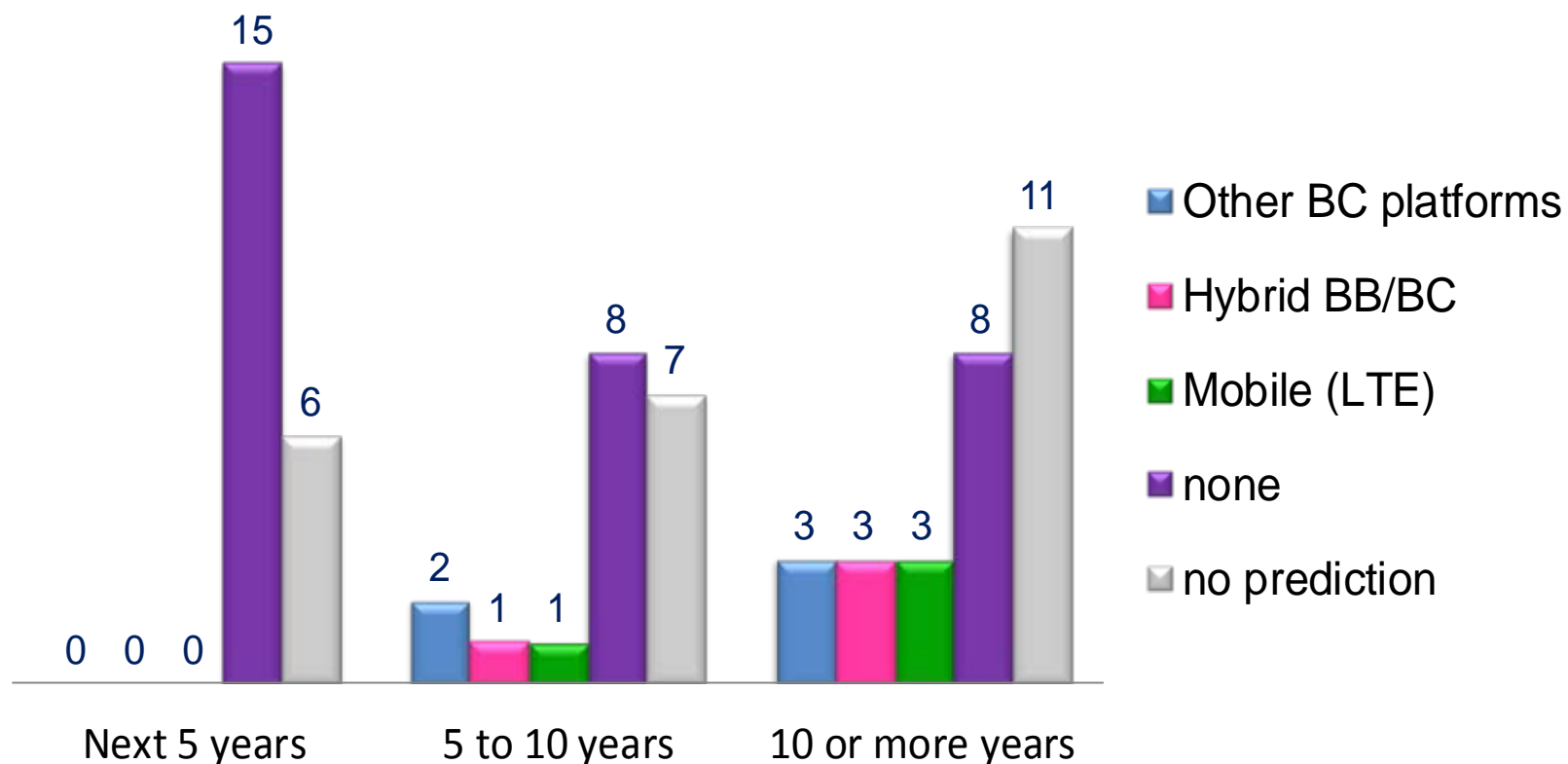
EBU Survey 2010: Future technological possibilities

COMPLEMENTARY to terrestrial broadcasting



EBU Survey 2010: Future technological possibilities

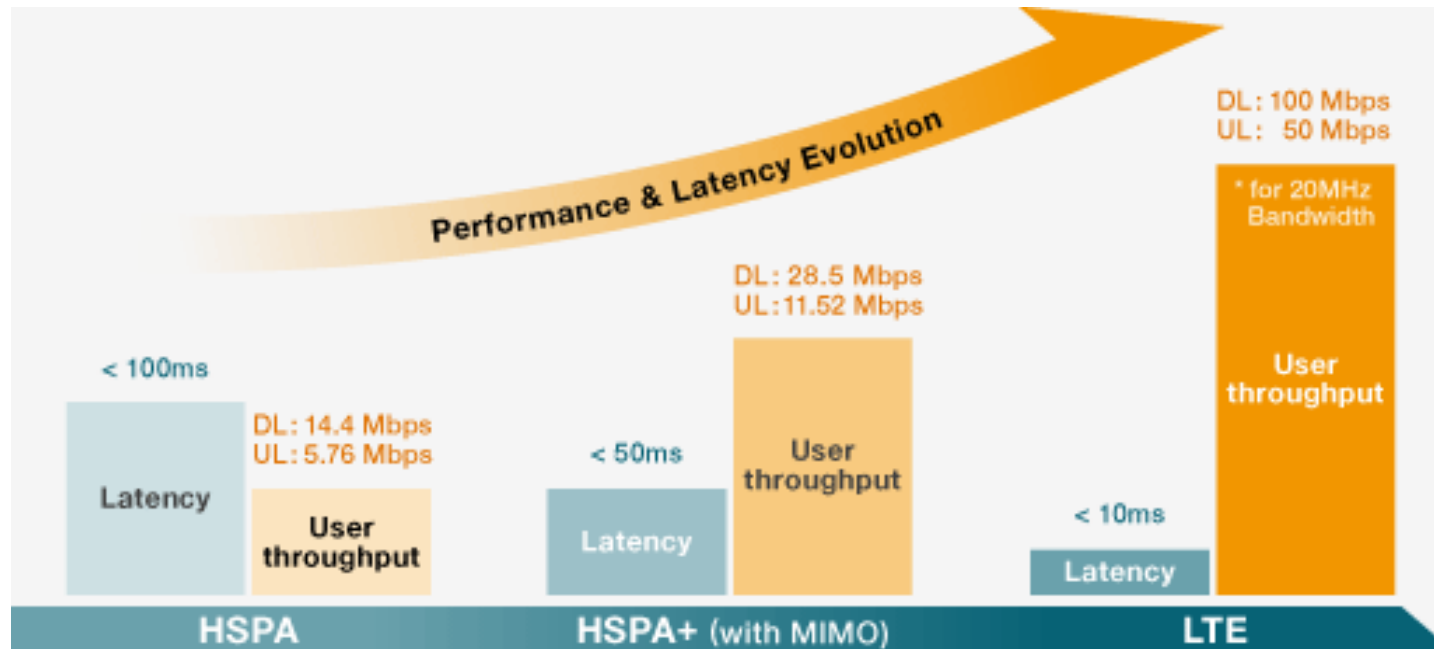
ALTERNATIVES to terrestrial broadcasting





New Opportunities?

- Mobile broadband technologies such as HSPA and LTE enable high-speed Internet access from portable and mobile devices
- These technologies are increasingly capable of delivering media services which potentially creates new opportunities for broadcasters



www.nec.com/global/solutions/nsp/3g/products_and_solutions/solu_hspa.html



Application bandwidth requirements

Application	Recommended Bandwidth
Mobile voice call	6 to 12 kbps
Text based E-mail	10 to 20 kbps
Music Streaming	28 to 300 kbps
Video Conferencing	384 kbps to 3 Mbps
Responsive Web Browsing	1 or higher Mbps
Internet streaming video	1 to 2 Mbps
Telecommuting	1 to 5 Mbps
Standard Definition TV	2 Mbps
Gaming or Enterprise Applications	1 to 10 Mbps
Basic High Speed Internet	5 Mbps
HDTV	7.5 to 9 Mbps
Multimedia Web Interaction	10 Mbps
Enhanced , high-speed Internet	10 to 100 Mbps (emerging)

The actual bandwidth requirement is dependent on how a service is implemented, the specific technology, delay, and quality of service

Source: Wireless Technology Briefing, Rysavy Research Asociacion





Objectives of the Workshop

Explore

- potential of mobile broadband technologies to deliver broadcasting services

Discuss

- broadcasters' requirements

Identify

- issues where further involvement of the EBU technical community is required



Workshop Programme

Session 1

Welcome and introduction

Broadcasters' requirements

Overview on mobile
broadband technologies



Session 2

Mobile broadband network
configuration

Media services on mobile
broadband

Discussion



Session 3

Broadband Wireless Access
and possibilities for NPO

Discussion

Roundup, conclusions and
recommendations





Interactive Sessions and outcome of Workshop

Questions

1. How could broadcasting and mobile broadband be combined to enable hybrid distribution?
2. Is there a common interest between mobile and broadcasting industries?
3. In which areas is co-operation possible and necessary?

Recommendations to the EBU Technical Committee on work to be addressed in the future





Workshop on Mobile Broadband Technologies

Thank you

We look forward to your interest
and participation in the Workshop

