

**Response of Liberty Global to the consultation on the Radio Spectrum Policy
Group's draft Opinion on the Digital Dividend (RSPG09-272)**

Introduction

This response is submitted by Liberty Global Europe Ltd on behalf of itself, its parent Liberty Global, Inc and other members of its group (together "LGI").

LGI is the leading international cable operator offering advanced video, telephone, and broadband internet services. In Europe LGI provides video, broadband internet, and voice services in 11 European countries under the brands UPC, Cablecom (Switzerland) and Telenet (Belgium), and digital programming & services through Chellomedia, a world class multimedia content provider.

Further information on LGI's views on this matter are available from: publicpolicy@lgi.com

Key issue

Although changes in relation to the band of spectrum between 790-862 MHz, covered by this consultation, are likely to be beneficial LGI is concerned that many millions of customers/viewers could be negatively impacted unless a full assessment of potential interference problems is carried out.

HFC cable networks, such as those operated by LGI, use frequencies up to 860MHz. We are aware of tests in Germany and Austria over the recent months that indicate that some new services are likely to cause interference with the services currently provided to both TV viewers and high-speed data users on cable networks.

The results from those initial tests align with conclusions in a report by the UK regulator, OFCOM,¹ which was submitted to CEPT SE42. Section 1.3 of that document concludes that a separation distance of between 22 and 40 meters radius is required to prevent interference to viewers, although this does not appear to allow for higher power base station transmitters. As a result, cable operators are not able to filter out interference as the full band up to 862MHz is in use.

HFC cable networks are a key driver of broadband deployment across Europe both directly and as a spur to investment in other network infrastructures. In that regard we note that, in section 1 of the document a key objective of the RSPG is stated to be "promoting competition and innovation in the provision of wireless services to citizens and consumers". We would observe that if this is done and the expense of innovation in wired networks, for example due to interference issues, the interests of European citizens will not be served.

Thus primary concern is that the impact on users and operators of cable networks could be significant unless solutions are found to the potential interference problems. We strongly believe that, since this is a technology issue that could have a direct effect on the general public and consumer, it needs to be resolved at the policy level before final decisions on spectrum award and reallocation.

¹ *Impact of interference from ECN terminal stations operating in the band 790 – 862 MHz on digital TV receivers operating below 790 MHz*

Other Comments

Referring to Section 1 of the reference document '*Introduction*':

- The definition of Digital Dividend suggests that the Digital Dividend spectrum will be "virgin" spectrum with no compatibility issues. Work within CEPT states that the major stakeholder, "the viewer", will suffer interference and considerable costs in changing out or modifying existing and legacy equipment.
- Unfortunately, the mandate to ECC and the resulting work within CEPT has not addressed fully the problems of the viewer. Some administrations within ECC have stated that this problem is outside the mandate although there has been no consensus.
- Before binding decisions are made, the problems of the viewer need to be fully addressed and answers be found, including the vexed question of who will pay for the remedial work.

Referring to Section 3 of the reference document '*Optimising the Digital Dividend in Europe for Citizens and Consumers*':

- Whilst agreeing that there are significant societal and economic benefits to be gained from the unique opportunity of making available a Digital Dividend in the UHF, no impact assessment has been carried out comparing the existing services enjoyed by citizens and consumers with the perceived benefits of a new mobile service. We suggest that an in depth impact assessment is vital before any final decisions and time scales are made. In particular, the economic advantages/disadvantages need full disclosure.

Referring to Section 3.1 of the reference document '*Development of the Technical Elements*':

- The work of CEPT on the second mandate of the EC has not fully addressed the compatibility issues of existing and legacy equipment. If new work is instigated, the present proposals of common and minimal (least restrictive) technical conditions may need reconsideration.

Referring to Section 3.2 of the reference document '*Benefits of a Coordinated Availability of the 800 MHz Band throughout Europe*':

- Consideration must also be given to the research and development of new consumer equipment and the logistics of getting the new equipment into domestic premises. This could be in the form of an EC Framework project.

Referring to Section 4 of the reference document '*Understanding the significant issues*':

- The time scales in Annex B are extremely short. Previous changes in spectrum use, such as the Detailed Spectrum Investigations carried out by CEPT in the early 1990s, used a changeover period of some 10 years. No account has been taken of the logistics of developing and changing out affected consumer equipment.

Referring to Section 4.1 of the reference document '*Range of Services*':

- Consideration should be given to the financial viability of mobile services in these circumstances and if the proposed wide range of services could not be better provided by fixed networks, which would also provide expansion for the future.

- Given that the digital multimedia era will need more programmes, PMSE must have sufficient spectrum to service the entertainment industries' requirements.

Referring to Section 4.3 of the reference document '*Timeframes for Making Available the Digital Dividend in the 800 MHz Band*':

- As previously stated, the consumer industry must be given sufficient time to develop, modify and install equipment affected by the new services.

Referring to Section 4.4 of the reference document '*International Frequency Coordination*':

- Interference to viewers must be brought into this planning process.

Referring to Section 4.5 of the reference document '*Cost of Clearing out the 800 MHz Band*':

- This point requires urgent clarification, as consumers' equipment conforming to the present CE requirements will, in many cases, need modification or replacement. Additional costs to individual citizens, particularly in a period of economic downturn, will not be welcome.

Referring to Section 5 of the reference document '*Assessing the Merits of a Coordinated EU Approach, Including Harmonisation as Appropriate, to Making Available the 800 MHz Band for ECN and ECS, Other Than Broadcast Transmission Networks and Services*':

- Any assessment must allow representation of all affected parties including consumers and industry.