GSME response to the RSPG public consultation related to the draft Opinion on 'EU Spectrum Policy Implications of the Digital Dividend'

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GSME welcomes the draft RSPG Opinion on 'EU Spectrum Policy Implications of the Digital Dividend' and supports the RSPG's progress towards, we hope, a satisfactory resolution of the issues surrounding the digital dividend.

The beneficial propagation characteristics of low frequency spectrum, including the ability for signals to travel further and be less sensitive to obstacles, are well documented. To this end, the spectrum between 300MHz and 1 GHz, some of which is to be released as a result of digital switchover, is particularly suited to terrestrial mobile use, including mobile TV which *de facto* demands wide area coverage. As identified by Commissioner Reding[1], wireless services offer "the best hope we have to bridge the digital divide".

This low frequency spectrum was the first to be used for public or commercial services, including radio broadcasting and later TV broadcasting. As technology developed, due to lower band congestion, higher parts of the band started to be used and mobile cellular services (initially analogue) were allocated to the 900 MHz band. In most countries in Europe, we are now in a situation where traditional TV broadcasting uses up to 450 MHz of this valuable lower band spectrum (VHF and UHF bands) compared to only a maximum of 70 MHz used by cellular services in most of Europe. Mobile operators use spectrum far more efficiently than any other type of spectrum user. Current mobile allocations at 900 and 1800MHz are extensively used and additional and proportionate spectrum is required for enhancing rural and indoor coverage in urban environments.

<u>Ensuring efficient use of spectrum</u>

It is clear that the slow technology evolution of the wireless broadcasting sector has left the situation unchanged, with inefficient spectrum use in the UHF band in particular. Additionally, it should be acknowledged that traditional wireless broadcasting is now being complemented with new forms of television content distribution, such as cable TV, IPTV via ADSL and satellite TV. The potential release of spectrum for terrestrial mobile use brings the very real opportunity to use this spectrum in a more efficient manner, in line with Commission objectives. The 2005 Communication from the Commission[2] stated that:

> *'Even taking into account ancillary factors influencing spectrum use such as the need for simultaneous transmission of analogue and digital channels, possible*

[1] Commissioner Reding speech at ITU "Telecom World 2006", 4 December 2006

[2] EU spectrum policy priorities for the digital switchover in the context of the upcoming ITU Regional Radiocommunication Conference 2006 (RRC-06) COM(2005) 461

changes in coverage obligations, the final selection of transmission standards, and the substitution of terrestrial transmission by other platforms (e.g. cable and satellite), it is expected that there will be a substantial amount of "unused" spectrum available at the end of the switchover process'.

Consumer benefits

Consumer demand for mobile services is increasing as the services become more reliable and readily available. Content provision is increasing and mobile TV is beginning to take off in many European countries. Consumers will expect to have access to their services at any time and in any place. Mobile operators will however only be able to satisfy this consumer demand if they are able to access appropriate spectrum.

The availability of a portion of the UHF band for non-broadcasting services could be the key to the provision of innovative and relevant services and applications such as wireless broadband to rural areas. The propagation characteristics of the band could facilitate the deployment of a mobile communications network reaching sparsely populated areas uneconomical to cover with systems operating at higher bands to the benefit of consumers inhabiting such areas and ensuring that the digital dividend prevents any digital divide.

RSPG proposals

The RSPG consultation document foresees three options for the use of the digital dividend that, in some countries, could be mutually exclusive:

1. Use all the channels released by the digital switchover to create one or two layers for high field strength downlink services (i.e. mainly broadcasting such as mobile TV, HDTV etc) using traditional broadcasting spectrum planning
2. Define a harmonised sub-band in the UHF band to be used for fixed/mobile applications (including up-links)
3. Define a harmonised sub-band to be used for high field strength downlink service broadcasting

GSME favours the second option as it is the only one that guarantees maximum flexibility in the use of the spectrum although we note that other spectrum is more suited to fixed service provision. As already discussed, the propagation characteristics of this spectrum are of significant technical value to the mobile operators for both mobile communications, such as IMT, and broadcasting to mobile devices. In addition to enabling other technologies, option 2 has the advantage that it does not exclude any possible use of the band, whilst the first and third options restrict use to broadcasting. This is important because the released UHF spectrum will not be available before 2012 in most European countries and it is currently too early to have a definitive decision at this stage in favor of a specific service proposition.

Option 2 includes *a priori* the possibility of providing (mobile) broadcasting services on part of the sub-band. This could be done using single channel broadcasting networks (if compatibility studies provide positive results) or by using MBMS/ streaming technologies on the underlying mobile networks. These technologies offer the opportunity of the provision of many types of services for European consumers including *inter alia* wireless broadband, mobile internet access and video telephony.

If, instead, one of the broadcasting options is selected, then there will be no possibility to reverse the decision later on in the process and a reduced range of services for the consumer will be offered. GSME also considers that option 2 meets the European Commission's stated aim of ensuring service neutrality in spectrum allocations.

The wider European context

GSME supports the allocation of the frequency band 470-862MHz for mobile service at WRC-07 together with a WRC-07 Resolution asking for studies on the nature of the digital dividend. If IMT is to be part of this digital dividend, the identification of the relevant harmonised sub-band for IMT could be undertaken at WRC-11.

Demand for additional broadcasting services using terrestrial networks is unclear, especially since there are new means for multimedia content distribution (ie mobile TV, satellite, cable, IPTV) that can cater for a progressively more sophisticated demand profile. GSME has not yet seen an objective justification for reserving spectrum for HDTV in the UHF band, which we consider more suited to some of the newer forms of distribution. We support the efficient use of the digital dividend and are pleased to see that the Commission is seeking to adopt a new Mandate to CEPT on the implications of the digital dividend. GSME members will be active in supporting the work of the newly established CEPT Task Group to ensure an optimal and flexible outcome.

As highlighted in the RSPG consultation, GSME recognises that the most efficient spectrum result will require a certain amount of re-planning by broadcasters to allow an additional allocation in the UHF band to mobile applications. However, GSME does not believe that this prevent the provision of exciting new services for the consumer for many years into the future and that the benefits of any re-planning exercise will easily outweigh the costs.

Conclusion

GSME supports and encourages the further study and impact assessment in order to achieve Option 2, definition of a harmonised sub-band in the UHF band to be used for the provision of mobile applications (including up-links), as outlined above for the provision of mobile services, such as IMT.