Contribution to RSPG Public Consultation
The Introduction of Multimedia Services in particular in the frequency bands allocated to the broadcasting services

Cisco Systems welcomes the consultation led by RSPG and the opportunity to respond. Cisco believes the video component is a key trend which will drive migration towards next generation networks.

However mobile multimedia services should not be understood only as traditional broadcasting over mobiles. The video component will appear in many services – not only through media delivery. Furthermore, the evolution of usage shows a growing demand for interactivity and on-demand rather than pure and traditional broadcasting.

Consequently the spectrum management and the regulatory framework should be flexible enough in order not to constrain unduly a new market where players need to move along the learning curve and adapt the value chain over the time.

Strategy for the Digital Dividend

In order to facilitate the introduction of multimedia services, the RSPG considers frequency bands which could derive from the analogue switch-off.

The digital dividend is an important and unique spectrum resource for society because its propagation characteristics are much better than at higher frequencies. In the 21st century, at the dawn of the Internet era, digital television switch-over enables a more effective use of spectrum and there are now new compelling uses for this spectrum – mainly fixed or mobile convergent broadband networks. Broadband-related services – either broadcasted or not – are the broad category which corresponds to the era we have been entering into, with the adoption of Internet.

Over the last months, the European Commission assisted by the RSPG has developed a new approach for spectrum management which aims at a more effective use of spectrum. The approach is notably based on principles of technology neutrality and service neutrality.

For such a unique opportunity as the digital dividend, it appears critical to apply the new approach of spectrum management. The European Union must meet this opportunity through the most effective use of such a valuable spectrum.

However it would be contrary to this approach to pre-define that some bands of the digital dividend should be devoted to a specific category of service or to a specific technology. Broadcasted TV over mobiles is one of the options that could be envisaged by operators when the digital dividend is released, by 2012.

While it is clear that video is going to be a key driver of demand for broadband, it will be a component of many different applications, including ones that are unrelated to the delivery of media content. For example, video email, video instant messaging and video IP phone calls, ... Within the category of multimedia services over mobiles, different types of demand are emerging throughout the markets : not only mobile TV, but also mobile video communications, interactivity with home networks, and content sharing. In particular, there is a growing demand for interactivity : more and more, the broadband users – fixed or mobile - are becoming editor of contents – sharing their own contents within a community over the network (see for instance http://www.youtube.com/).

The RSPG opinion should encourage the European authorities and Member States not to jeopardize the benefits of a spectrum digital dividend by pre-reserving part of it for a specific and narrowly defined service. In particular, if the spectrum dividend were to be re-allocated to a traditional broadcasting service, it would not be adapted to the evolution of usage (customization, interactivity, on-demand), and would endanger a unique opportunity for Europe's future.

Flexible framework for licensing of mobile TV frequencies

Some Member States are currently exploring available frequency bands to enable launching of mobile TV services in the next year or even before. In the short term, they apply the current existing spectrum management scheme.

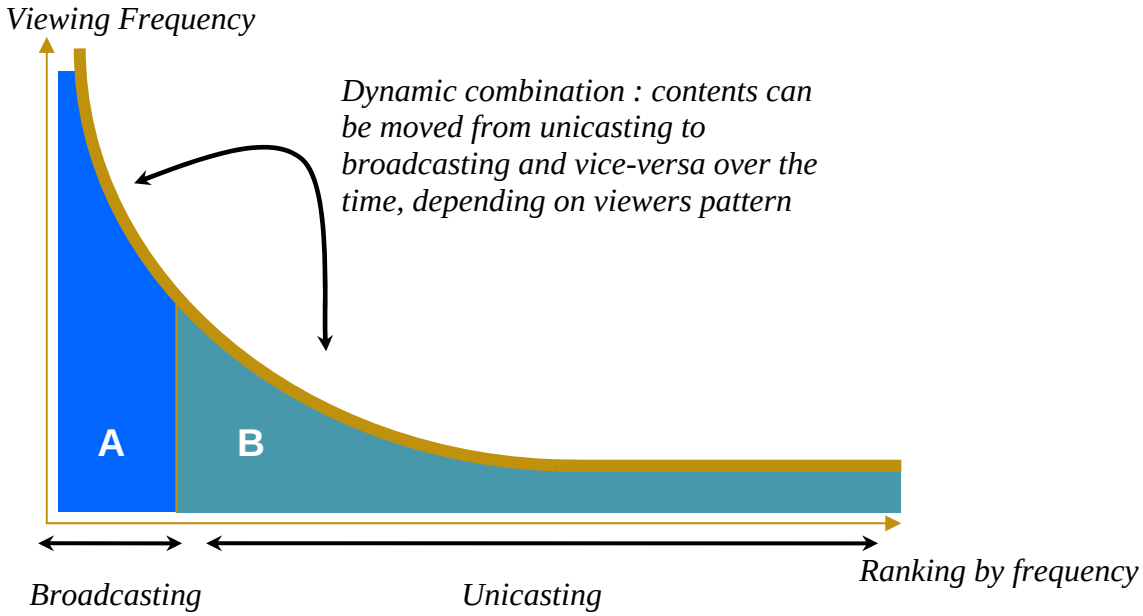
Consequently, in some Member States, the question of the licensing framework is being raised – in particular the category of licensee. When the identified frequency bands are currently allocated to broadcasting services, the policy makers and regulators may need to determine which category of players should hold the frequencies : editor of contents (e.g. TV channels) – as it is generally the case for fixed traditional broadcasting - or service providers (aggregator of contents, network operators, …).

Mobile TV should not be narrowly considered as traditional broadcasting, but as a combination of unicasted and broadcasted/multicasted services. The studies show that the optimal business model for mobile TV is a dynamic combination of unicasting and broadcasting technologies.

The broadcasting technology is more appropriate for content with a high number of viewers. It allows for a more effective use of the spectrum. Unicasting technologies (e.g. streaming through 3G network) is more effective for live contents with fewer number of viewers and for on-demand services. The combination enables the service provider to

implement interactivity and to capture the long tail distribution of revenues. The optimal business model combines a limited number of contents with a high viewing frequency with a high number of contents which is viewed by small communities.

This combination needs to be dynamic, particularly as these services are emerging. The set of broadcasted contents needs to be adjustable over the time : learning curve of the service provider to create the right set of broadcasted contents, changing patterns of viewers, … The popular contents will not necessarily be the same ones as on traditional broadcasted TV.



Flexible combinations of broadcast and unicast contents are not compatible with the licensing scheme planned in some Member States for broadcasting: these require granting of frequencies to editors of content – which basically means TV channels. If that scheme were to be applied to mobile TV, the above flexible combination would not be possible.

The capability of dynamic combination also means further differentiation – and therefore higher degree of competition – between mobile TV services.

Consequently Cisco recommends a licensing framework with minimal constraints on the category of licensees, that enables such a flexible and dynamic combination of broadcasting and unicasting. This is important for the economic success of mobile TV services across Europe, as well as for an emerging European content industry specifically targeting a mobile audience. Such a coordinated approach at the European level would be very much welcomed by the industry.