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**Optimisation not compromise**



*Bernard Pauchon: IBC2012 will be the perfect time for debating the issues that are key to the future of content delivery - not least in spectrum management*

Cooperation between networks will help to successfully achieve the goal of the EU's Digital Agenda, as far as wireless services are concerned.

By George Jarrett  
Digital Dividend

Bernard Pauchon is convinced that the right solution for spectrum management lies in cooperation between different networks. As chairman of Broadcast Networks Europe (BNE), Pauchon appraises what triggered the first digital dividend of a probable two.

"The first relates to the re-farming of the UHF spectrum made possible by the digitisation of TV broadcasting," he says. "It made it possible to use about six times less spectrum when compared to analogue transmission. "But to make it successful, that requires the vast majority of consumers to invest in digital receivers. The number of channels has multiplied by at least four. In addition HDTV means extra spectrum consumption. However, HD has the benefit of the better compression efficiency given by MPEG-4, and there is the better modulation given by DVB-T2.

"Even with these additional needs within broadcasting, it has been possible to make available the upper part of the UHF band (over 792MHz) to the broadband industry, and this precisely is the digital dividend," he says. "But to make it successful, that requires the vast majority of consumers to invest in digital receivers. The number of channels has multiplied by at least four. In addition HDTV means extra spectrum consumption. However, HD has the benefit of the better compression efficiency given by MPEG-4, and there is the better modulation given by DVB-T2.

"Even with these additional needs within broadcasting, it has been possible to make available the upper part of the UHF band (over 792MHz) to the broadband industry, and this precisely is the digital dividend," he says. Pauchon believes a second dividend is not realistically achievable before 2020. Asked to make a case for EBU

type broadcasters, and from his own BNE standpoint, he says: "First, DTT business is a combination of public services, commercial services, and payTV. The relative weight of these three categories varies quite significantly among different countries in the world, and even in Western Europe. So not only EBU type broadcasters have to be considered.

"BNE members are offering services for all these different categories of broadcasting services, but most of us also offer important services to telecom operators too.

"The request by some parties for a further digital dividend, typically in the 700MHz band, comes from the exponential growth of mobile broadband data traffic, and some vendors would wish to have more spectrum for LTE to cope with this fact."

But reality is different, Pauchon insists. "Most of the traffic increase is due to TV and video content, but it has to be noted that TV is subscription based. Although being an excellently designed system, LTE is far from being the right tool, in terms of spectrum optimisation, quality of service, and economical efficiency.

"The right solution is cooperation, which could include Wi-Fi in 5GHz band, as promoted by Cisco, L Band as promoted by Qualcomm, or DVB NGH, hopefully developed in cooperation with 3GPP. The most efficient tool must be used in each specific service case."

He insists that 'spectrum compromise' is not the right depiction.

"Optimisation of spectrum management, taking into account technical, economical and social aspects will be the right approach," he says. "This should be the purpose of the Radio Spectrum Policy Programme that EU institutions plan to set up. IBC2012 will be the perfect time for debating the issues that are key to the future of content delivery."