



20<sup>th</sup> March 2007

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BY EMAIL

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**ESOA Response to a Consultation on:  
Digital Dividend Review**

Dear Mrs. Guest,

The European Satellite Operators Association<sup>1</sup>, ESOA, is pleased to have the opportunity to participate in the above-mentioned consultation by providing you with the views below.

As the leading providers of digital transmission, satellite operators are directly concerned by the digital switchover plans being prepared and implemented around Europe today. National initiatives to upgrade terrestrial networks risk jeopardising the business of our industry which has developed commercially without state support so far. We therefore hope you will take our concerns as given in our complete response below seriously and we remain at your disposal for any further information you may require.

Finally we confirm that this response may be published in whole by OFCOM.

Sincerely,

Aarti Holla-Maini  
Secretary General

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<sup>1</sup> The activities and further details about the Association can be found at ESOA's website [www.esoa.net](http://www.esoa.net). Members of ESOA are: Astrium Services, Eurasiasat, Eutelsat, HellasSat, Hispasat, Inmarsat, SES, SES Sirius, Telenor Broadcasting Holding and Telespazio. Arianespace, Astrium Satellites, Avanti, International Space Brokers and Mansat are Supporting Members of ESOA.

## ESOA RESPONSE TO CONSULTATION

The Ofcom consultation document is looking at the award of the digital dividend spectrum that amounts to a bandwidth of 368 MHz that is part of the 470–862 MHz UHF band, all still used for broadcast analog television in the UK today.

The UK government has already decided that 256 of these 368 MHz would be used for Digital Terrestrial Television as part of the plan to switchover to digital TV (DTT) between 2008 and 2012. The purpose is to enable DTT to ultimately cover 98.5 % of the UK population and expand its capacity for additional services.

The remaining 112 MHz forms the core of the 'digital dividend'. It is aimed at being auctioned for the deployment of additional / innovative wireless services such as HDTV, mobile TV, broadband services and others.

Satellite operators consider that this consultation raises three main issues that are looked at into more details in the following sections:

1. The UK's approach to guarantee and rollout TV digital switchover
2. The deployment of High-Definition TV
3. The use of 'digital dividend' for additional services

### Digital Switchover

Today's consumer is spoilt for choice with new technologies and this trend is unlikely to change. The Switchover is a necessary process, rather than a goal in itself, that will allow the host of new applications/ services that are and will continue to emerge to be technically accommodated. This objective is something that must remain at the forefront of the minds of governments and regulators involved in planning and implementing national switchover strategies. In the EU context, Digital Switchover plans fit with Europe's goal to become the most competitive knowledge-based economy in the world by 2010. Innovation and technology advancement are the keys to this and the transition from analogue to digital transmission is an important step along the way. As such the EU has in recent years given direction and guidelines for Member States to follow.

Substantial amounts are being invested in many Member States, including the UK, into upgrading the analogue terrestrial networks into digital terrestrial networks with the idea that this is the natural or obvious way to ensure continuous coverage of all citizens connected today. One of the regulator's responsibilities should be to try to achieve the objectives in the 'best' way. In the context of the switchover, the appropriate questions surrounding the switchover strategy must include:

- Will it maximise choice for consumers?
- Does it free up a maximum amount of spectrum?
- Is it the most cost-effective strategy? (i.e. is there a better and/ or cheaper alternative)
- And what is the environmental impact of the strategy?

The current strategy of upgrading existing terrestrial networks as the answer to maintaining coverage to UK citizens is not only flawed but also defiant of the principle of technology neutrality as required by EU law. 'Flawed' in that it:

- (i) Does not free up as much spectrum as could be achieved with alternative solutions. A satellite-based solution would free up substantially more spectrum in line with the government's objective;
- (ii) Will not allow for growth in the availability of HDTV channels, which is a new technology that may well become popular in the future and which will require substantial additional terrestrial spectrum (note that in the UK today, the vast majority of TV sets sold are 'HD-Ready' demonstrating an expectation from consumers that there will be substantial HDTV content available and
- (iii) Ignores the availability of other platforms, such as satellite, which have been proven and chosen by users as a viable alternative which if adopted as a solution for the UK would imply much lower cost, more freed-up spectrum and more choice for consumers, including HDTV.

The UK's strategy is not 'technologically neutral' as it favours from the outset one transmission platform over another going against the EC's 2003 Switchover Communication which states that *all transmission alternatives must be considered* in the switchover and that any public support for a particular option must be justified and proportionate. The 2005 Communication on accelerating the transition from analogue to digital broadcasting only permits favouring a particular technology as a means of increasing spectrum efficiency, which as stated above, is neither the case nor the reasoning given here. A satellite solution would in contrast, lend itself well to such reasoning as satellites make an undeniably efficient use of spectrum that the terrestrial solution cannot compete with.

Besides spectrum efficiency, satellites also offer a maximum amount of choice, which again the terrestrial solution cannot compete with. Choice not only refers to the amount of channels but also choice within other new formats such as high-definition TV. OFCOM has estimated that HDTV is unlikely to become a norm in the UK. ESOA would caution against such attempted foresight: all new technologies need time to be taken up and accepted and even consumers themselves cannot today say what they may want 5 or even 2 years from now as the pace of change and development in today's information society is so quick. It should be noted that the sale of satellite HD services saw a boom to the point of demand exceeding supply at the time of the world cup in 2006! This is evidence that when choice is given, consumers do take it, however unexpected it might seem and today, as stated the largest selling TV set is HD-Ready.

In terms of cost-effectiveness, a satellite infrastructure transmitting digital signals has been in place for over 10 years and that too, without any state support. It should also be noted that satellite technology has evolved to permit the transmission of digital TV via satellite to existing antennae.

Finally at a time when environmental concerns are dominating political agendas all over the world, the environmental impact of any and every government plan should also be evaluated. Terrestrial transmitters across the UK are consuming huge amounts of power. Once again, satellite solutions are serious competitors in this regard, as once deployed, they only use solar energy for their entire

lifetime, thus not requiring the excessive quantities of electrical power necessitated by alternative technologies.

### **High Definition TV**

The BBC's Freesat service expected to receive full approval from its Board of Trustees soon, all the Free-To-Air HD services can be carried using satellite.

Satellite bandwidth is available and signal coverage is over 99% (significantly better than DTT's 73%) throughout the country.

The digital satellite service is available now and can enable householders in all parts of the UK to switch from their analogue reception today in preparation for analogue switch off. In comparison, the timing for analogue switch off and consequently availability of spectrum for HD on DTT will be very late compared to the current full spectrum availability on satellite.

Looking at the HD market in Europe, amongst the 50 channels that are today available, most are transmitted by satellite and the only serious competitor is cable - not terrestrial. The forecasts refer to some 150 HD channels in Europe in 2010, 80% of which would be satellite - and the rest by cable, DSL or IPTV ('ScreenDigest').

Replicating the HD channels again on DTT when people should be able to simply buy a Freesat receiver with no further payments for subscriptions would be wasteful.

With a maximum availability of just 5 HD TV channels on DTT, there is no option for scalability, so for example, the free-to-air broadcasters will not be able to launch their digital only channels that even today already number around 20.

HD's importance to the consumer is growing and with the consumer electronics industry switching from CRT to plasma and LCD displays and with screen sizes growing, the need for high quality HD formatted content will only rise. Virtually every display of 26" or above is now designed to the HD Ready specification.

We're still at the very beginning of the HD product / service life cycle. Now the forecasts already show a strong increase in HDTV sets; and since there is also HD content available on the Internet, given the domestic growth of PCs, Macs and Media Centers, HD goes the road for mass usage and is to become a standard content format.

### **Digital Dividend Spectrum**

One segment of the UHF band is allocated to the Broadcasting Satellite Services - BSS -in the RR (620-790 MHz space-to-earth). This allocation is subject to WRC-07 agenda item 1.11, noting that the CPM Report proposes three methods to satisfy this agenda item (Methods A1, A2 and B). This allocation or any frequency band within the digital dividend could be considered for a satellite component in the framework of hybrid platforms (satellite + terrestrial), to deliver mobile broadcasting or multimedia services all over the UK. Such a satellite component would be complementary and compatible with existing and future terrestrial services.

Method B of the CPM Report proposes to suppress the BSS allocation, while Methods A1 and A2 assume its continuous existence, the protection of existing and future terrestrial services being ensured either by hard limits (Method A1) or seeking of agreement (Method A2). Therefore, until the potential future of this allocation is decided (end of WRC 07), we urge OFCOM not to make any decision which would potentially not be aligned with the RR.