



Brussels October 7<sup>th</sup> 2002,

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**RE: Recognised Spectrum Access (RSA) - comments on the Consultation Document ref. FOL 871 - Satellite issues**

Dear Mr.Green,

In early August, the European Satellite Operators Association (ESOA), together with the Satellite Action Plan Regulatory Group (SAP REG), submitted extensive comments on the Draft Communications Bill to the DTI/DCMS Joint Communications Bill Team.

This submission, available on the DTI Web site, contains already a number of comments on the RSA.

In this letter, we would like here to draw your attention on several of the major points of concern for satellite operators on the UK proposals for possible implementation of RSA.

In summary, our reply addresses the principle of RSA and supports the rationale that RSA should not be applied to satellite services (**Question 1**). It implicitly covers other questions posed in the consultation document and makes reference to the relevant issues where appropriate.

**The rationale for RSA**

The rationale behind the proposed introduction of RSA appears to be intended to meet a need for "protection against interference" identified by certain spectrum users. The rationale is not, however, valid in the context of spectrum used by satellite operators and is, therefore, difficult to accept for a number of reasons including those highlighted immediately below.

Satellite downlinks (as well as uplinks) in *exclusive frequency bands cannot* interfere with, and are *not* interfered with by, any other services. Accordingly, this submission assumes that exclusive bands would not be subject to RSA, although the Draft Bill does not make this explicit. Clarification of this in the Draft Bill would be desirable.

On the other hand, in *shared frequency bands*, satellite downlinks<sup>1</sup> are normally coordinated or limited to specific emission levels (which are sometimes excessively restrictive). As such, satellite services do not cause harmful interference to terrestrial links and *no* additional protection of terrestrial services is required.

Similarly, any rationale according to which RSA would encourage spectrum efficiency by satellite operators is flawed. The assumption underlying these arguments is that spectrum is inefficiently used. This assumption is generally unjustified and incorrect in relation to satellite operators. In fact, Satellite operators are *amongst the most efficient users of spectrum*. Not only is the amount of spectrum allocated limited in the first instance, but satellite operators continuously re-use the same frequencies transmit to and from different orbital locations and allow delivery of communications and broadcast services to a large number of customers in numerous jurisdictions.

Furthermore, the satellite industry has constantly developed increasingly more sophisticated technical measures for ensuring efficient use of radio spectrum, as witnessed by repeated reliance by ETSI and DVB on state-of-the-art European standards largely developed by the European satellite industry.

RSA imposes additional burdens on satellite operators which, in the light of their purpose, are unnecessary and therefore disproportionate and unjustified.

In addition, RSA would be contrary to the new Framework Directive<sup>2</sup> which states that NRA's shall use a "general authorisation" regime to assign spectrum rights when the risk of harmful interference is negligible.

### **Efficient use of spectrum**

RSA would not and could not, encourage further efficiency amongst satellite operators.

Further, no evidence has been presented that terrestrial service expansion in shared bands is being inhibited by the existence of satellite services or that opportunity cost pricing would be appropriate.

No evidence has been presented that terrestrial service expansion in other frequency bands allocated on an exclusive basis is not practicable or feasible with the adoption and use of modern spectrally efficient technologies by terrestrial operators. On the contrary, giving priority to spectrum users who purchase RSA (with no guarantee that those who pay are the most spectrally efficient) might well lead to:

- constraining efficient users which have not been granted RSA; and
- forcing FS uplinks currently sharing (or which could perfectly well share) bands with existing FSS and BSS downlinks to move to other bands, thereby increasing congestion elsewhere.

### **RSA is not voluntary**

The RSA scheme is presented as a voluntary mechanism in the Draft Bill. As a matter of fact however, it will result in the creation of a *de facto* authorization scheme. It is obvious that RSA will (and is intended to) confer a right of interference-free spectrum use only on those

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<sup>1</sup> From for example C-band or Ku-band FSS and BSS satellites

<sup>2</sup> See Article 5.1 of Directive 2002/20/EC of 7 March 2002 on a common regulatory framework for electronic communications networks and services, OJ No L108/33 of 24 April 2002.

who “purchase” spectrum under the RSA regime. Consequently, the rights of those users who decide not to purchase the protection afforded by RSA will be restricted. As a result, operators may well be *forced* to purchase RSA in order, simply, not to lose their rights to use certain frequencies.

It is possible that RSA would result in a limitation of access to and efficient deployment of satellite services in the medium term, due to opportunistic market strategies of new players. This scenario is particularly likely if RSA is introduced together with Spectrum Trading and transferability of licenses.

### **Consistency with national and European law and policy**

It appears that RSA would contradict applicable laws and policies at both national and European levels. In particular, RSA would:

- restrict the free movement of communications and broadcasting services by establishing an additional barrier to the provision of trans-border communications and broadcasting services. It would not comply with OFCOM’s duty to remove remaining obstacles to the provision of communications services at European level, as established under the new Framework Directive.<sup>3</sup> In addition, RSA runs counter to the “Television Without Frontiers” Directive,<sup>4</sup> whose aim is to establish the conditions necessary for the free movement of television broadcasts; by contrast, RSA will be a major obstacle to the retransmission of television broadcasts from other Member States.
- introduce unjustified fees for the use of spectrum where providers of satellite services and facilities are already subject to an obligation to pay high fees for up-linking signals, whether from the UK or other countries. Furthermore, they are frequently subject to fees associated with the authorisation of the satellite space station, and with ITU coordination and registration.<sup>5</sup> Additional fees relating to spectrum would further increase the burdens on an industry that is already exposed to very high operational and administrative costs.
- render some existing VSAT systems economically unviable, given the possible level of fees and possible charging structure (bandwidth) referred to in Annex F. The structure, as ESOA understands it, could quite simply lead to a cessation of use of larger earth stations (which enable and make particularly efficient use of spectrum), which give access to broad bandwidth (but which carry a limited amount of traffic at any given time).
- unlawfully extend the UK jurisdiction to operators that are not established within the UK; since there is no apparatus to be licensed and no means to compel an operator to pay the proposed fee, the scheme appears to represent an unfortunate attempt to exert *de facto* extraterritorial jurisdiction.
- violate the new EC regulatory framework which only allows for regulation that is based on the principle of *technological neutrality*<sup>6</sup> and distort competition. RSA would discriminate against Satellite operators by imposing unnecessary burdens and would

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<sup>3</sup> See Article 8 of Directive 2002/21/EC of 7 March 2002 on a common regulatory framework for electronic communications networks and services, OJ No L108/33 of 24 April 2002

<sup>4</sup> Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities, OJ No. L298/23 of 17 October 1989

<sup>5</sup> In addition, it should not be forgotten that earth stations and receivers are also licensed

<sup>6</sup> Article 8.1 of the Framework Directive 2002/21/EC

thereby unduly favour providers of communications platforms who do not need to use spectrum to provide their services. The anti-competitive effects of this distortion will be perceived particularly in the markets for innovative multimedia and broadcasting services, where platforms such as xDSL or cable will be unduly favoured.

- be likely to prioritise the use of radio frequencies in shared bands by other users over the use of frequency by satellite operators. On the basis of the assumption that RSA will apply to frequencies designated for shared use with terrestrial services, the ranges of frequencies to which RSA will apply<sup>7</sup> can be easily identified. Terrestrial operators limit the use of such frequencies to establish 'technical links'. Those links are "fungible assets" and can be replaced through other types of connections. By contrast, the same frequencies are essential to satellite operators in order to deliver their services *directly to the home of millions of people*. International law avoids prioritizing of one sector over another in view of their specific functionalities; for example functionalities of both FS and FSS are ensured on the basis of International law.
- be inconsistent with the EU policy on the harmonization of spectrum, by establishing rights and obligations which are unjustified and disproportionate. According to the new regulatory regime, NRA's shall use only general authorisations to assign spectrum rights when the risk of harmful interference is negligible. In exclusive FSS bands, there is no interference problem. In shared bands, satellite downlinks do not cause interference thanks to limitations on power flux density (pfd) agreed at ITU level. By contrast, satellite systems can be the victims of interference from terrestrial applications. Therefore, RSA would not only be disproportionate, but it would legalize interference with satellite operations.

In conclusion, ESOA members believe that the introduction of RSA would impose an unnecessary and undesirable level of complication, cost and burden on providers of satellite services and networks, resulting in an unjustifiable increasingly cumbersome mechanism to access spectrum in the UK. There would effectively be two forms of licensing, with only slightly differing rights and obligations. The satellite community has concerns about the compliance of the scheme with both the national and Community laws applicable to allocation and assignment of spectrum. ESOA is aware that several of its members will be submitting their own comments to the UK consultation. We are also aware of the submission made by the Satellite Action Plan Regulatory Group, and wish to support that submission.

Sincerely,

Fulvio Sansone  
Secretary General ESOA