

DRAFT

Introducing Recognised Spectrum Access Response by Cable & Wireless to the Radiocommunication's Consultative Document of July 2002

Introduction

This document provides the response of Cable & Wireless (C&W) to the Radiocommunication's (RA) Consultative Document of July 2002, concerning the possible introduction of Recognised Spectrum Access (RSA). C&W would like to thank the RA for the opportunity to comment on this proposed initiative.

As a general comment, however, C&W would note that RSA, although not a licence, shares many of the characteristics of a licence, and so should be implemented in a way consistent with the European Commission's authorisation directive (Directive 2002/20/EC of 7 March 2002 on the authorisation of electronic communications network and services).

Question 1: Do you agree in principle that RSA should be introduced for satellite services?

C&W understands the motivation for exploring the introduction of RSA, primarily:

- (a) to provide a basis for efficient spectrum management taking account of all recognised spectrum users; and
- (b) to provide some degree of assurance of tenure to all recognised spectrum users.

However, it is not clear that these benefits of RSA are not already substantively achieved. Under the existing UK and ITU arrangements, telecommunications operators require licences to transmit from terminals in the UK and are required to satisfy the ITU technical co-ordination procedures. Terminals are registered for both transmit and receive functions. C&W has always understood that the RA takes account, informally, of the receive requirements, including signals received from satellites. To the extent that these current arrangements result in few (if any) difficulties, C&W is sceptical of the need to introduce new arrangements that, although non-compulsory, will nevertheless involve additional cost to both the RA and the industry.

C&W has particularly strong reservations concerning immediate introduction of RSA. This is because pricing of RSA could have a material impact throughout the whole telecommunications industry. C&W, for example, would expect to face additional costs through the "pass-through" of RSA charges by Intelsat and Eutelsat in the services they provide to C&W. For others in the industry, the cost impact could be more significant.

DRAFT

Imposition of RSA charges will likely disrupt existing business plans, making payback on embedded investments more difficult. Such disruption, at this stage in the industry's life, would damage long term investment sentiment.

For this reason, C&W proposes that the introduction of RSA, if it is to occur, should under no circumstances be planned for prior to 2007, allowing five years for the full depreciation of existing embedded investments in satellite transmission and receive facilities. New business cases and plans, from 2002 onwards, could then make full provision for RSA costs from 2007 onwards.

Question 2: For which satellite services and in which bands should RSA be introduced?

No comment at this time.

Question 3: How should the recognition granted by RSA be defined and what technical and other factors should be included?

C&W believes there to be a risk that a separate RSA acknowledgement could potentially conflict with other telecommunications operator authorisations and licences. In order to avoid this possibility, C&W propose that, if RSA is introduced, it be implemented through an addendum to the operator's licence. In this way, the technical aspects can be made consistent with those stipulated in the basic licence.

Question 4: Would tradability of RSA and interchangeability with licences be advantageous and how useful would it be in practice?

In response to Question 3, C&W gave reasons why RSA (if introduced) should be incorporated as an addendum to operator licences. This would rule out the possibility of RSA trading, for which C&W sees little benefit in the specific case of RSA.

Question 5: Should RSA be perpetual or fixed term and what factors should be taken into account in deciding security of tenure?

In the event that RSA is introduced, any compulsory purchase provision should (and need) apply to only perpetual term RSA. Even in this case, it will be important that Ofcom operate to clear, unambiguous and stable guidelines describing the circumstances and terms under which RSA would be subject to compulsory purchase. Published commercial and technical guidelines, describing the circumstances required for compulsory purchase of RSA, will be essential to give some degree of 'security of tenure' to telecommunications operators, and comfort that the risk to their investments in RSA is minimised.

DRAFT

Question 6: How should spectrum pricing principles apply to RSA?

In the event that RSA is introduced, C&W would seriously caution against using auctions. Auctions will establish the true economic value of a resource only when all bidders have accurate information on the future value of the resource to themselves. This condition is unlikely to be met in the case of RSA before or within the first period of RSA tenure. Introduction of RSA auctions at this time would risk bids with wide variations, resulting from differing assumptions employed by bidders, and not necessarily reflecting the true value of the spectrum. Auctions, therefore, should only be considered as part of a second tenure of RSA assignments.

In the event that RSA is to be introduced, C&W would prefer administrative incentive pricing, based on Ofcom's assessment of the opportunity cost and the least cost alternative of the spectrum, using consistent valuation assumptions.

Question 7: How should administrative incentive pricing fees be calculated in practice?

The Consultative Document proposes two methods of administrative incentive pricing:

- fee paid by displaced terrestrial services;
- least cost alternative.

Three comments need to be made on these proposed methods. Firstly, these two methods are not alternatives. The economic value of the RSA can not be determined in isolation by either the fee paid by displaced terrestrial services, or the least cost alternative. Rather, both are constraining factors on the value of the RSA, which should be priced at the lower of the fee paid by displaced terrestrial services and the least cost alternative (analogous to demand and supply constraints).

For example, even if a VSAT displaced a terrestrial service that would otherwise pay a fee of £175 (see Annex F), the economic value of the VSAT's RSA would be less than this if there was a cheaper technological alternative to the use of VSAT.

Similarly, if the cost of the cheapest alternative to the VSAT was in fact £200, making the use of VSAT (and associated RSA) economically efficient, but the opportunity cost of the RSA was only £175, this (£175) would be the economically efficient price.

Least cost method

The second point concerns the estimation of the least cost alternative. The possible alternatives must include the possibility of using a non-UK located receiving terminal (e.g. satellite earth station), combined with inbound backhaul of the traffic into the UK.

DRAFT

For example, if RSA charges in the UK were considered excessive, telecommunication operators could be forced, in response to end-customer market pressures to remain competitive, to opt to use an earth station located in either the USA or another western European country, and backhaul the traffic back into the UK. Given the low (and declining) costs of trans-Atlantic and western European transmission capacity (especially for large volumes), the unit cost of doing this is getting progressively lower, and could become a constraining factor on the value of the RSA.

This raises an important issue of whether RSA pricing risks a long term movement of capital investment in facilities, such as satellite earth stations, away from the UK to other countries. Were this to occur, a further potential consequence could be that satellite operators cease to make provision for coverage of the UK in future spacecraft, on the basis of the diminished market base and the administrative cost burden of the RSA which they would not be able to pass on.

Opportunity cost method

C&W's third comment concerns the opportunity cost method. The opportunity cost of spectrum will be effected by whether alternative terrestrial uses of satellite spectrum are permitted by the UK Government or ITU (or may be allowed following forthcoming WRC meetings). If dual usage of particular spectrum by both satellite and terrestrial services is only a future prospect, the opportunity cost of that spectrum will be lower – even zero, reflecting the likelihood that the spectrum will be of no value to terrestrial services under existing or prospective rules.

Question 8: Are there services other than satellite for which application of RSA would be advantageous?

C&W is of the view that RSA, if introduced, should be restricted to receipt of satellite transmissions. Conceivably, other applications could exist, although there would need to be proven benefit to outweigh any cost (particularly that associated additional administrative and regulatory burden). However, it will be important to get experience in a limited area of RSA application first and, more, importantly, to avoid any possibility of over-regulating other aspects of the telecommunications industry.

Conclusion

It is not clear that the supposed benefits of RSA to the user of spectrum are not already being substantively achieved through existing “technical” license and co-ordination requirements, together with the “informal” acknowledgement of terminal receive requirements. Furthermore, C&W has particularly strong reservations concerning immediate introduction of RSA, due to disruption and possible damage to long term investment sentiment within the telecommunications industry. For this reason, C&W proposes that the introduction of RSA, if it is to occur, should be planned for post-2007,

DRAFT

thereby allowing at least five full years for the depreciation of existing embedded investments in satellite transmission and receive facilities.

In the event that RSA is introduced, any compulsory purchase provision should (and need) apply to only perpetual term RSA. Even in this case, published guidelines, describing the circumstances required for compulsory purchase of RSA, will be essential to telecommunications operators to ensure that that the risk to their existing and/or committed investments in RSA are minimised.

In the event that RSA is introduced, C&W would caution against using auctions. If used, auctions should only be considered as part of a second tenure of RSA assignments, once their value is better appreciated. C&W would recommend administrative incentive pricing, based on the lower of:

- fee paid by displaced terrestrial services;
- least cost alternative (taking account of use of overseas earth stations with inbound traffic backhaul to the UK).

The risk of long term movement of capital investment in facilities, such as satellite earth stations, away from the UK to other countries (and the further possibility of reduced coverage of the UK by satellites), should be considered before a final decision on RSA is reached.

If introduced, RSA should be restricted to receipt of satellite transmissions to avoid any possibility of over-regulating other aspects of the telecommunications industry.

END
