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Mr Laurence Green,  
Radiocommunications agency  
11B/20C  
Wyndham House  
189 Marsh Wall  
London  
E14 9SX

Re: Consultative Document on Recognised Spectrum Access

Dear Laurence,

I am pleased to be able to provide you with the Water Industry response to your Consultation Document on Recognised Spectrum Access.

## INTRODUCING RECOGNISED SPECTRUM ACCESS

### INTRODUCTION

This response is provided by CSS Spectrum Management Services Ltd., on behalf of the Telecommunications Advisory Committee (TAC).

TAC is Chaired by Mr Mike Halliwell, of the Environment Agency.

TAC has been established for over 10 years and represents the interests of the United Kingdom Water Industry on a range of matters related to Mobile and Fixed Communications and Radio Scanning Telemetry.

The membership is drawn from representatives from the following Industry Groups:

10 Water Service Companies

15 Water Supply Companies

Scottish Water

Environment Agency

Dept of Regional Development Water Service Northern Ireland

The Water Industry (WI) has been a major user of Private Business Radio systems. They operate a limited number of analogue trunked radio systems. In addition, increasing use is being made of Public Cellular, provided by the UK Service Providers on the GSM 900 and GSM 1800 systems.

The Water Industry is also a major user of licensed Radio Scanning Telemetry systems which are designed and assigned to the IR 2037, VNS 2111, RA375 (previously the MPT 1411 specification). Both the PBR and Scanning Telemetry spectrum is self managed under a National Channel arrangement.

The Committee has provided input into the various stages of the Spectrum Review and the resulting Consultative Documents leading to the 1998 WT Act and the various Consultations which have followed.

Management and support for matters related to Water Industry mobile communications and Scanning Telemetry are provided by CSS Spectrum Management Services. This relationship provides the RF engineering and planning necessary to ensure that the most effective, efficient and equitable use is made of the radio spectrum. It also acts as a focus for the Industry and deals with financial matters related to RA, DTI and Oftel. CSS also act as the common point of contact for the equipment manufacturers and Service Providers.

In liaison with the TAC membership, CSS has developed a Water Industry Mobile Communications Strategy for the medium and long term.

The day to day spectrum management of the PBR and ST bands is carried out by CSS Spectrum Management Services who also collect the license fees and deal with all licence issues.

## SCOPE OF THE CONSULTATION

The members of TAC have recognised the need for effective use of the radio spectrum. This has already been demonstrated by the sharing of spectrum and radio systems over the past twelve years. The members have recognised the benefits offered by the introduction of Spectrum Pricing and have supported the Radiocommunications Agency with their development of the detailed pricing options in a number of areas.

The members of TAC have recently responded to the RA consultation document on Implementing Spectrum Trading and can recognise the interrelationships between the two documents.

The topic of Recognised Spectrum Access introduces a new concept in the management of the radio spectrum and as such should be handled with a degree of caution.

## GENERAL RESPONSES

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

**Response to Question 1.**

It is accepted that in principle that RSA could be of benefit to certain groups of users or operators. At this point in time the satellite services could benefit from such an approach subject to the arrangement providing a real benefit to the license holder.

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

**Response to Question 2.**

On the basis that this new license will be of benefit to the users and operators the choice of which satellite service should initially be considered, could be based on the services currently have a problem in this area.

We are aware that other Utilities do have a problem from certain satellite services.

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

**Response to Question 3.**

In practice the value of RSA can only be provided by the RA (Ofcom) and the results that they achieve.

The actions that the RA will undertake to deliver the RSA safeguard services should be detailed from both from the administrative and technical standpoints.

Administrative examples:

- Have a policy in place to avoid adding additional users which will interfere with existing users of the spectrum.

- Have a process for routine monitoring of the spectrum by the RA (Ofcom) Monitoring Station Baldock.

- Make representation to the International bodies to ensure controlled access to the spectrum in use by UK systems.

We are not in position to comment on the technical criteria at this time.

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

**Response to Question 4.**

The concept of secondary trading has been discussed in the Radiocommunications Agency Consultative document Implementing Spectrum Trading.

At this time there is no UK based practical experience of the benefits or problems associated with spectrum trading.

Until the value of RSA is proven it is difficult to identify if tradability will be a requirement of this market sector.

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

**Response to Question 5.**

Due to the rapidly changing communications market the requirement for spectrum are likely to change. In this situation it is suggested that a minimum fixed period of 3 years be provided with a rolling annual review after this period. This provides both parties with a guaranteed period of tenure but also the option to carry on with the process subject to a 3<sup>rd</sup> party requiring access to the spectrum or the need to change the designated use of the spectrum.

As RSA is such a new concept a flexible approach must be taken to the RSA licence period of tenure.

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

**Response to Question 6.**

The principles of spectrum pricing could be applied but it is clear that the actual deliverable is far less quantifiable at this stage. In situations where satellites are targeting the UK there may not be much that the RA can do to stop this, certainly in the short term to medium term.

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

**Response to Question 7.**

This figure must represent a degree of the value for money that the RSA license will provide. Organisations are now much more aware of value for money and the service for which they are being charged.

It is suggested that a matrix be generated of items such as the:

- Size of organisation
- Number of users
- Tangible benefits
- Short term deliverable benefits
- Future benefits
- Ability of RIS to rectify problems
- etc.

This information would then be used to generate a fee multiplier.

The detail of such an approach should be developed by discussions with Users and Operators.

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

**Response to Question 8.**

At this time virtually all spectrum that is used in the UK is licensed or clearly identified as being license free. Those licensed users obviously expect protection under their existing licences.

The passive use of spectrum, such as radio astronomy, would benefit from the protection of RAS but it is questionable if the RA would be in a position to clear spectrum or remove the offending organisation , assuming that they were licensed.

The RA would have to balance the needs of RSA license holders against the requirement to make the most effective use of the radio spectrum.

## **SUMMARY**

It is clear that there are sectors of the market that already have problems and would benefit from Recognised Spectrum Access and for these sectors such a proposal would be of considerable value. For these sectors the Water Industry support the approach.

In view of the current financial climate it is suggested that RSA should be available as an option to be used as and when required.

As indicated in our response there are certain sector that would benefit from further discussion. The Water industry would be pleased to provide input into such a process.

David Tripp C.Eng. MIEE.  
Managing Director  
Chairman of Spectrum Management Group  
8-10-2002