



JRC Response to the Independent Review of Radio Spectrum Management By Professor Martin Cave

Key Points

- The report is a welcome contribution to continuing to develop radio spectrum management in the UK to extract the maximum national benefit from a valuable non-depletable natural resource.
- The report correctly recognises that “the Radiocommunications Agency is among the foremost spectrum management organisations in the world”. In making changes, the UK must be cautious to ensure it does not detract from that position.
- Notwithstanding the pre-eminence of the Radiocommunications Agency, the report correctly recognises that private spectrum management organisations can provide greater flexibility and efficiency than a national regulatory organisation.
- The report correctly identifies the need to extend spectrum pricing disciplines to all users of the radio spectrum, in particular satellite services which currently escape any spectrum charge – or incentive to use spectrum efficiently - by virtue of placing their infrastructure beyond national jurisdiction. (para 108)
- The report’s recognition of the public safety role of organisations beyond the traditional ‘blue light’ emergency services is welcome (para 13.18), and the need to continue to ensure that they have access to the spectrum needed to maintain systems devoted to public safety. This is being increasingly recognised with other countries identifying spectrum for “public safety services”, and international initiatives to harmonise spectrum for public safety services to facilitate mutual aid across international borders. Recommendation 13.3 is therefore fully supported.
- The importance of international harmonisation of spectrum allocations is perhaps under valued in the report. For a market the size of the UK, the availability of products internationally has a substantial influence over the value of a given block of spectrum. For example, 100 MHz of spectrum between 470-570 MHz with the rights to use for television broadcasting is of inestimably greater value than 1000-1100 MHz for the same purpose because consumers could never get TV receivers at a comparable price – if at all in 1000-1100 MHz.

Detail points

- Although the 3G auction is held up as an example of how undervalued much of the spectrum is, it is arguable that the price simply reflected its scarcity value, ie the decision to only allocate a certain amount of spectrum and few licences.

- By contrast, we must avoid the 28 GHz pitfall where spectrum is laying unused because the reserve price was set too high. The administrative cost of licensing the currently unused 28GHz spectrum is minimal, but the spectrum is unused even though there are applications which could make economic use of it. Thus the nation is being denied economic benefit from a resource which is not recoverable at a later date.
- The report sensibly identifies that spectrum trading can be introduced most rapidly by permitting current licensees to trade their existing spectrum at the margins.
- In permitting private sector organisations to bid for the rights to manage blocks of spectrum, adequate provisions will need to be incorporated into legislation to prevent any particular organisations obtaining dominant market power, and to prevent equipment manufacturers obtaining blocks of spectrum, and then using technical specifications to prevent access to the market by their competitors by restricting access to spectrum.

Background

1. JRC manages 4 MHz of spectrum, of which 2.8 MHz is for PMR applications and 1.2 MHz for telemetry and telecontrol services. JRC created and manages a national cellular plan for co-ordinating frequency assignments for some of the largest PMR networks in the UK. JRC also represents gas and electricity interests on government committees addressing radio issues.

2. JRC manages VHF and UHF allocations. These networks keep the electricity and gas industries in touch with their field engineers throughout the country. The networks provide comprehensive geographical coverage to support the installation, maintenance and repair of plant in all weather conditions.

3. The Scanning Telemetry Band is used by radio based System Control and Data Acquisition (SCADA) networks which control and monitor safety critical gas and electricity industry plant and equipment throughout the country. These networks provide reliable communications to unmanned sites and plant in remote locations.

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10 May 2002