

Specific Satellite Spectrum issues

The FEI notes that satellite communications has only a small treatment in the review documentation. This is not particularly surprising to the FEI given that previous studies have found that the diverse nature of satellite communications and its implicit international nature make it a difficult subject for national spectrum management.

Satellites carry a wide range of services, including international telephony, TV distribution & broadcasting and data networks. Satellite delivered services offer some benefits not readily available by other means, including wide area coverage (including low population density areas), inherent broadcast capabilities, and the ability for rapid setting up of individual links. Their international nature gives rise to many opportunities, but it should also be recognised that they operate under various constraints. The satellites themselves are often designed for an operational lifetime of some 15 years, and take several years (3-10) to specify and build. Satellites incur a large upfront investment cost (running into hundreds of million if not billion dollars of early investment) and once they have been launched it is impossible to modify them. Thus it is very important that they operate in an environment of stable and certain usage of the spectrum over a long period of time to ensure efficient use, and to secure the investment.

One of the strengths of satellite communications is its global reach. Many systems provide for or are planned to meet global coverage to both developed and less developed communications markets. FEI considers it would clearly be detrimental to the provision of such facilities if spectrum had to be managed under different regimes in the different countries and any costs of management could soar putting the only viable communications mechanism out of reach for many potential users.

Satellites still provide many countries with their primary contact with each other. Communications links between the UK and some 50 countries are provided only by satellite, as there are no realistic alternatives. It is important that these "lifeline" services are not prohibitively priced.

The FEI is cognisant that satellite communications is probably more tied to international obligations than any other radio service. Satellite systems work across national boundaries and the international elements of the Radio Regulations and recommendations are essential in ensuring satisfactory and efficient usage and sharing of the spectrum. It is important for the UK to work with the appropriate international bodies and influence them as appropriate rather than to try to take an independent path. Also some international satellite operators mandate the technical specifications that must be adhered to for their services.

Furthermore, operating in an international field FEI members wish to have the benefit of a level playing field in so far as competition is concerned. In this regard the FEI would

wish to be assured that any UK spectrum management regime would not expose its members to any potential violation of the Treaty of Rome or its intentions.

Such attributes need to be taken into account when managing spectrum for satellite communications.

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