



Office of the Director of  
**Telecommunications  
Regulation**

## **MEDIA RELEASE**

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# **ODTR Radio Spectrum Management Planning for the Future**

Etain Doyle, Telecoms Regulator today (8th February 2001) issued a paper on the future Management of Radio Spectrum by the ODTR in Ireland. The paper presents the findings of a high level review which has examined the current spectrum management framework in Ireland and has outlined key issues for spectrum management going forward.

For almost a century, radio spectrum has made a major contribution to Ireland's society and economy. From its earliest years as a specialist tool providing essential communications for the maritime, aeronautical, transport and public safety communities it has evolved into a mass market delivering broadcast information and entertainment across the country.

According to the Regulator "the ODTR seeks to ensure that Ireland has the necessary operational framework in place to maximise economic benefit from radio spectrum while protecting the needs of the wider community. Over the last decade mobile communications, which depends substantially on radio spectrum has become one of the fastest growing industries and this remarkable growth rate is set to continue. Developments in other spectrum using services and technology such as digital broadcasting and broadband fixed wireless access also have the potential to provide significant benefits to industry and consumers. Key market and technology developments are placing very different demands on the spectrum. Long established users of spectrum such as emergency services, utilities and transport operators continue to rely on radio spectrum to support their core operations."

Consumers are becoming more sophisticated in terms of range of content and services they demand. Multi channel television is the norm for many years in Ireland, over half the population now have a mobile phone and around a third currently have access to the internet. Meanwhile technology is developing at a rapid pace enabling greater quantities of data to be carried over both wire line and wireless platforms. DTT, which is currently in preparation for Ireland, allows up to five channels to be accommodated in the radio spectrum previously occupied by a single analogue channel.

She continued “ Planning for future spectrum requirements is complicated by the sheer unpredictability of the electronic communications market. Therefore it is important that the spectrum management regime has sufficient flexibility to respond to and where possible anticipate market and technology evolution. The future is by definition uncertain, however we can attempt to identify where demand for spectrum can be expected to increase and hence where regulatory changes may assist the ODTR maximise the choice and quality of communications service available to consumers throughout Ireland.”

Innovative technologies that are already on the horizon, or that may reasonably be anticipated include:

- domestic television hard-drive storage devices, allowing viewers effectively to develop their own viewing schedules;
- equipment convergence, for example integration of a Digital Terrestrial TV (DTT) or Digital Audio Broadcast (DAB) receiver with a 3G mobile handset permitting mobile interactive multimedia applications;
- digital camera integration with a mobile handset (already available in Japan) allowing still shots, and in the future mobile clips, to be sent as a “video postcard” for example;

- wireless home and wireless office; use of radio local area networks (RLANs) of low-cost, low-power technologies like Bluetooth<sup>1</sup> to avoid the need for data cables from the majority of applications;
- home automation whereby one or more intelligent processors operate and monitor a series of comparatively ‘dumb’ devices around the house, including the television and local PCs;
- high altitude platforms (HAPs) including stratospheric balloons and aeroplanes, as a cost-effective alternative to satellite for the provision of fixed or mobile communications.

Decisions about spectrum use can have long term economic implications for the spectrum user and for the consumer. It can take many years to change the designated use of particular frequency bands. It is therefore important to get the allocations right.

Ireland requires a strategy for the future use of different frequency bands that:

- Is informed by and informs spectrum management decisions at a European and International level
- Takes due account of likely future developments in communication technology and markets
- Takes account of the requirements of Irish users and broader Irish policy objectives
- Provides users with information to make appropriate investment decisions.

**ENDS**

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<sup>1</sup> Bluetooth is a wireless connectivity standard intended to replace proprietary cable links that currently connect IT and telecom devices to one another and replace them with a single universal short range radio link.

### **Note to Editors**

The electromagnetic spectrum, of which radio waves are a part, also encompasses infra-red rays, visible light, ultraviolet rays, x-rays, gamma rays and cosmic rays. The characteristics (or behaviour) of each part of the electromagnetic spectrum is defined by the wavelength or frequency (the shorter the length of an electromagnetic wave, the higher the frequency).

Radio waves fall within the part of the electromagnetic spectrum sometimes known as the radio spectrum or frequency spectrum which goes from very low frequencies (long wave lengths - kilometres) up to extra high frequencies (where the length of a wave is measured in millimetres). Examples from either end of the radio spectrum would include broadcasting in the Long Wave band and satellite TV broadcasts respectively.