

Information Notice

The World Radiocommunication Conference

Geneva, Switzerland.

9 June to 4 July 2003.

1 Introduction

This information document provides a brief overview of the World Radiocommunication Conference scheduled to take place in Geneva from 9th June to 4th July 2003. The document provides an introduction to the WRC, a flavour of the range of issues under discussion at the conference, and the aspects of radiocommunications on which they impact.

A further information notice will be published following the completion of the Conference in July.

2 Background

The last decades have witnessed an unprecedented technological development in the field of radiocommunications, resulting in the expansion of a growing range of services and applications, from aircraft and maritime navigation to wireless telephony, terrestrial and satellite broadcasting, scientific research, mobile telephony and satellite news gathering, to name just a few. Such services and applications increase the demand for radio frequencies and geostationary satellite¹ orbital positions, which are limited natural resources, and for international coordination to avoid harmful interference.

The primary process to accomplish these requirements is for all nations of the world to meet and agree on how the radio frequency spectrum and the geostationary satellite orbit is used. The meeting is known as the World Radiocommunication Conference and it is held under the auspices of the International Telecommunications Union, an organ of the United Nations. The World Radiocommunication Conference (WRC) is held every two to three years and its function is to review and, if necessary, revise the Radio Regulations which is the international treaty governing the use of the radio-frequency spectrum and the geostationary-satellite and non-geostationary-satellite orbits.

This year the conference is being held in Geneva, Switzerland over the period 9 June to 4 July and the total number of delegates is almost 2600. This includes 189 Administrations, Intergovernmental Organizations Operating Satellite Systems, Recognized Operating Agencies, Regional and Other International Organizations, Scientific or Industrial Organizations. This unprecedented level of participation shows the growing importance that radiocommunications plays in the worldwide economy and how critical it is that we harmonise spectrum usage not only to prevent interference problems but also to achieve economies of scale in the manufacturing sector and to facilitate global use of radiocommunications applications. Negotiations are based on technical and regulatory proposals to the WRC. Ireland's interests are represented by a small team headed by the Department of Communications, Marine and Natural Resources and including ComReg staff.

¹ geostationary satellite: a satellite in orbit around the Earth at such a speed and altitude that it takes exactly one day to rotate around the Earth, so that, viewed from the surface of the earth, it appears to be in a stationary position above the Earth's surface. Such satellites are commonly used for telecommunications and broadcasting services.

3 The World Radiocommunication Conference 2003

The general scope of the agenda of World Radiocommunication Conferences is established four to six years in advance, with the final agenda finalised two years before the conference. In 2003 the key issues under discussion include:

- ensuring that spectrum and regulatory issues around Galileo (the European 'GPS'² satellite system) are concluded. This will lead towards a European navigation satellite system providing enhanced navigational and positioning capabilities;
- (ii) Further development of IMT-2000, the third generation (3G) mobile communications system, including protecting IMT-2000 networks from interference by other systems and regulatory procedures to facilitate use of high-altitude platform stations (HAPS) as IMT-2000 base stations;
- (iii) Achieving global frequency allocations for Radio Local Area Network (RLAN) systems in frequency bands around 5 GHz that are becoming popular in Europe and which are already being used to provide broadband access in Ireland;
- (iv) Resolving a number of issues concerning the regulation of maritime distress and safety issues, important for the Irish shipping and fishing industry;
- (v) Finally, resolving a myriad of satellite network regulatory issues which will permit further sharing between terrestrial (e.g., fixed links) and satellite services that share bands.

Ireland is part of a grouping of 45 European countries (CEPT) that have formulated Common Positions in order to negotiate from a strong position. The primary goal is to reach global agreement were possible and Ireland has signed up to the majority of these European Common Positions where they best serve the interests of Irish users of radiocommunications services. Full details of the WRC agenda and European Common Positions can be found on the ERO web site at <u>www.ero.dk</u> under Conference Preparatory Group.

For the next conference in 2007, five of the possible agenda items at this stage include:

• Improving allocations of spectrum for Earth-Exploration Satellite Services, important satellite services that monitor the earth's environment and resources and also additional spectrum for meteorological-satellite services which provide weather updates and weather warnings worldwide. There are a number of users of these services in Ireland.

² GPS: Global Positioning System, a US military radiolocation system available for civilian use, which allows users to pinpoint their location anywhere in the world to within 10m

- Looking for additional allocations for the aeronautical mobile service (aircraft) between 100 MHz and 6 GHz to resolve the current congestion problems and to ensure the continuing integrity of aeronautical related radiocommunication services. This is a key requirement in facilitating the growth of the aviation industry in Ireland.
- To examine the results of studies on frequency related matters concerning the development of IMT-2000 and future generations of enhanced mobile communication services.
- To consider results of studies to identify frequency tuning ranges which could be used on a global basis to fulfil the communication needs of public protection and disaster relief agencies.
- To review the operational procedures and requirements of the Global Maritime Distress and Safety System (GMDSS) the system that provides safety and distress communications for shipping.

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