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WRC-95: a new approach

Four weeks of intensive negotiation were required for the 1995 World Radiocommunication Conference, held in Geneva, to complete its work. The real challenge facing the Conference was to limit or control, by means of technical and legal criteria, the multiplicity of satellites notified to the International Telecommunication Union, not all of which will necessarily be placed in orbit.

The radio-frequency spectrum

The spectrum is a limited resource, widely exploited for a number of applications: telephony, television, modern satellite services, etc. There are only three ways of allocating frequencies in an already crowded spectrum: reallocate frequencies already allocated to another service, increase the amount of spectrum available by using more efficient technologies, or reach agreement on spectrum sharing between different existing services.

The problem is well illustrated by the fact that in 1995 the Radiocommunication Bureau (BR) received some 400 notifications for satellite systems to be placed in geostationary orbit. As only 120 positions are available in the geostationary-satellite orbit, there is obviously quite a rush to "corner" them.

With regard to the modern satellite services mentioned above, particular emphasis should be placed on the rapidly expanding personal communication systems which are to use constellations of low-Earth orbit satellites — the famous LEOs — to provide continuous mobile telephony and data services worldwide. The prospects for these services are very good, with substantial economic interests at stake, but they cannot be operated unless certain frequency bands are freed at the expense of some existing services.

The WRC's study of technical matters was therefore conducted in the face of commercial interests, resulting in much controversial discussion on how economic and technical considerations could be reconciled to allow the systems concerned to operate.

The Conference thus had two focal points: the issues referred to above, and the simplification of the Radio Regulations.

Mobile-satellite services (MSS)

Committee 5, chaired by Garth Jenkinson (Australia), had the task of endeavouring to resolve the complex issues related to MSS. It was also in Committee 5 that commercial interests were most forcefully voiced and that the scission between developed and developing countries was most apparent.

• MSS frequency allocations gave rise to lively discussion, with many delegations from developing and newly industrialized countries opposing frequency sharing between MSS and their fixed terrestrial services for fear that their general public, particularly the more isolated communities, would suffer as a result. Agreement was reached to introduce provisions ensuring the protection of existing terrestrial services until such time as they had been phased out and replaced by more modern technologies.

From left to right: Messrs P. Tarjanne, X. Escofet, S. S. Al-Basheer and N. Fèvre (ITU 960001)

• The date of entry into force of the new MSS allocations in the 2 GHz band also gave rise to lengthy debate. Here commercial interests came to the fore, as many operators are now ready to implement their satellite systems and reap the attendant benefits. The date, previously set at 1 January 2005, was brought forward to the year 2000 subject to transitional measures to facilitate transfer to replacement frequencies while protecting existing services (Resolution COM5–10).

• Resolution COM5-7, allocating 400 MHz in the bands 19 and 29 GHz to non-geostationary fixed-satellite service networks, was adopted subject to a large number of reservations. Although the matter was not on WRC-95's agenda, the ITU decided that it could be considered, in view of its significant repercussions on the development of new "satellite fibre" systems. The Resolution will allow the introduction of low-orbit satellite networks, of which Teledesic is one example.

Simplification of the Radio Regulations

Committee 4, chaired by Michael Goddard (United Kingdom), studied this question, using the report

General view of the Conference (ITU 960002)

of the Voluntary Group of Experts as the basis for its work.

The Radio Regulations required updating, not only in the light of recent technological progress and political changes but also to make them easier to use.

This particular agenda item presented no major problems, save with regard to Articles S8 and S9, where developing and developed countries again parted company.

Article S8 deals with the international status of frequency assignments recorded in the Master International Frequency Register, and a vote was taken on part of it in Plenary.

Article S9 relates to the procedure for effecting coordination with, or obtaining the agreement of, other administrations.

Most of the developing countries were concerned that their services might be exposed to harmful interference as a result of the amendments made to those two articles. The question is to be taken up again by the 1997 WRC.

Agenda of the next World Radiocommunication Conference

The item was dealt with by the Working Group of the Plenary, chaired by Robert Taylor (United States). The 1997 Conference already has a heavy agenda, which is to be approved at the 1996 session of the Council. It includes items which the WRC-95 was unable to complete, the question of HFBC services, matters relating to the maritime mobile and maritime mobile-satellite services, the possible deletion of all secondary allocations from the band 136-137 MHz allocated to the aeronautical mobile (R) service on a primary basis, incorporation by reference, consideration of Appendices 30 and 30A for Regions 1 and 3, and many others. One delegate said that it looked more like a shopping list than an agenda!

Conclusion

The salient features of the Conference include the number of delegates (1223) from 140 countries, the presence of 78 observers, the impressive volume of documentation dealt with, the increasingly sharp dividing line between developed and developing countries, and the injection into the debates of commercial considerations provoking both surprise and considerable suspicion on the part of participants.

This new trend nevertheless reflects the reality of today's society and, in adapting as it did during the Conference, the Union plays an important moderating role which is of benefit to its entire membership. For many, WRC-95 was a success; for others, a number of issues will have to be addressed again in 1997 if space is not to be, as it were, colonized. ■