

Next steps in radio spectrum policy

1) OBJECTIVE

To contribute to establishment of a Community framework for radio spectrum policy which is responsive to radiocommunications developments and supports Europe's competitive position on the global market. The fundamental objective is that this Community framework should be accessible and transparent and provide certainty for all for whom the radio spectrum is a vital resource.

2) ACT

Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions of 10 November 1999 on the next steps in radio spectrum policy - results of the public consultation on the Green Paper [COM(1999) 538 final - not published in the Official Journal].

3) SUMMARY

Radio appliances such as television sets, radios and mobile phones work by propagating electromagnetic waves between a transmitter and a receiver. The "radio spectrum" means all the possible frequencies which these waves could have. The "frequency" is the number of times a wave oscillates in a second, and by tuning a radio receiver to a specific frequency a specific signal can be picked up. Frequency bands define the specific location of services in the radio spectrum.

The environment for radio spectrum policy is undergoing far-reaching changes as a result of technological progress and adaptation of the market and regulations. Development of this sector has the potential to stimulate economic growth, create employment and promote general welfare. At the same time, a balance must be struck between the needs of new commercial networks and the non-economic benefits to society of non-commercial applications such as defence, public service broadcasting, emergency services and radio astronomy.

In December 1998 the Commission published a Green Paper to launch a public debate to see whether the present practice of radio spectrum policy meets the Community's strategic objectives.

These policy objectives include:

- to facilitate technological innovation and competition in radiocommunications, mobile telephony and wireless local networks;
- to pursue Community objectives with regard to the radio spectrum within a predictable and legally certain regulatory framework;
- to ensure an appropriate balancing of the interests of the individual Member States, of the European Community and of the different user communities; and
- to safeguard the Community's interests in the international negotiations on the radio spectrum.

THE PUBLIC CONSULTATION OF THE GREEN PAPER

Following the publication of the Green Paper on radio spectrum policy, the Commission sought the views of the public at large on a large number of complex issues. Contributions were received from the communications sector, broadcasters, businesses, researchers and the authorities responsible for radio spectrum management. Two hearings were held in 1999. These gave the Commission an opportunity to identify the central issues in the ongoing debate on radio spectrum policy and management.

STRATEGIC PLANNING OF THE USE OF THE RADIO SPECTRUM

General picture

Use of the radio spectrum needs to be planned strategically to allow investment and regulatory decisions to be taken. The vast majority of the communications interests and regulatory authorities supported the strategic planning process at international level under the auspices of the ITU/WRC (International Telecommunications Union and its World Radiocommunications Conference). Small firms and non-communications interests stressed how difficult it was for them to gain access to the planning process.

Often the spectrum is used for services in the general interest. Policy decisions therefore have to be taken, even if they do not fall strictly within the scope of radio spectrum management. The differing political, cultural and market situations in the Member States make it extremely difficult to achieve political agreement.

Opinions of the sectors

The **communications** sector called for reallocation of radio frequencies and suggested that part of the radio spectrum currently reserved for government or public uses should be transferred to the communications sector so that it could obtain additional radio spectrum for its activities.

The **broadcasting** sector is preparing for the changeover from analogue to digital transmission. This means more frequencies will be needed. In addition, in the longer term the sector expects that a substantial increase in frequencies will be necessary to develop new multimedia services and for special interest channels.

The **transport** sector considers strategic planning a long-term exercise since it takes lengthy preparations to introduce systems with long life cycles. Long-term planning would therefore require a process of negotiating international agreements in order to deploy internationally compatible transport networks and safeguard critical communications.

HARMONISATION OF RADIO SPECTRUM ALLOCATION

General picture

Harmonisation of radio spectrum allocation offers numerous advantages: economies of scale, lower costs, lower consumer prices, interoperability, etc.

The respondents were divided on the need for harmonisation. Some believed in complete harmonisation, while others were more hesitant. Ultimately, it seems that the need for harmonisation, particularly for cross-border services, should be decided case by case. The criteria to be used to decide in which circumstances harmonisation is required remain to be decided. The harmonisation process must be open, transparent and responsive to the interests of existing and potential users.

Again, the respondents mentioned the need for policy decisions laying the foundation for harmonisation and striking a fair balance between private and public interests for use of the same frequency bands.

Opinions of the sectors

The **communications** sector saw harmonisation of radio spectrum allocation as crucial for the provision of seamless pan-European services.

The **broadcasting** sector also considered this issue important, but less urgent than suggested by the communications sector.

The **transport** sector in turn considered harmonisation of radio spectrum allocation essential since transport networks were increasingly taking on pan-European or global dimensions.

RADIO SPECTRUM ASSIGNMENT AND LICENSING

General picture

It was generally considered that allocation of radio frequencies between users should respond to local and national needs and was therefore best carried out at national level. The fact that the amount of radio spectrum available for certain services varies from one country to another could therefore be accepted. However, the differing licensing conditions and lack of single licences to provide services throughout the Community were criticised as particularly burdensome. It was agreed that assignment and licensing procedures and conditions in the Community must take due account of international commitments, particularly in the area of trade.

The national regulatory authorities were generally in favour of charging for access to the radio spectrum, which could make assignment decisions easier whenever there was a shortage of radio spectrum and encourage efficient usage thereof. However, views diverged on which assignment and licensing mechanism is best in which circumstances.

Opinions of the sectors

The **communications** sector acknowledged that radio spectrum assignment and licensing should be decided as close to the market as possible. Such harmonisation would favour development and internationalisation of the market. The sector was in favour of charging for access provided a level playing field was established to make sure that users in the same sector were subject to the same requirements.

The **broadcasting** sector was opposed to the introduction of charges for access. The **transport** sector also felt that charging was inappropriate in the case of services in the public interest.

THE INSTITUTIONAL FRAMEWORK FOR RADIO SPECTRUM COORDINATION

General picture

According to the Member States and the communications sector it was simply necessary to improve the institutional framework for radio spectrum coordination. However, some respondents said that the ITU/WRC (for spectrum management at world level), the CEPT (European Conference of Postal and Telecommunications Administrations for spectrum management at regional level) and the national regulatory authorities put the interests of the communications sector first.

Opinions of the sectors

The **communications** sector suggested improving rather than replacing the current arrangements for radio spectrum management.

The **broadcasting** and **transport** sectors considered that commercial and non-commercial uses were so incompatible that a political decision was needed.

RADIO EQUIPMENT AND STANDARDS

Most respondents felt that use of the radio spectrum should be technology-neutral but that standardisation was necessary in order to provide European consumers with seamless services and uniform, interoperable equipment.

According to the manufacturers, radio spectrum harmonisation would further benefit from the liberalised regime for placing on the market and use of radio and telecommunications terminal equipment put in place by the Directive.

NEXT STEPS IN RADIO SPECTRUM POLICY

On analysis of the responses received to the questions posed in the Green Paper, the European Commission has identified the following areas where Community action is required:

- addressing radio spectrum policy issues at Community level, by setting up an expert group to help the Commission to decide Community priorities on harmonisation of radio spectrum use;
- establishment of a regulatory framework for Community radio spectrum policy by adopting a European Parliament and Council decision providing for the CEPT to draft technical harmonisation measures in response to Community requirements and ensuring proper implementation of these measures by the Member States;
- ensuring the availability of information;
- safeguarding Community interests in the ITU/WRC by building on the coordination between the Member States within the CEPT;
- safeguarding the Community's interests in the context of international trade;
- improving radio spectrum management by the CEPT and the way the CEPT works.

4) IMPLEMENTING MEASURES 5) FOLLOW-UP WORK

Decision [676/2002/EC](#) of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) [Official Journal L 108, 24.04.2002].

The purpose of the Decision is to set up a policy framework for radio spectrum use, taking into account the economic, cultural, scientific and social aspects of Community policies, as well as considerations of security, public interest and freedom of expression. The objective is also to establish a legal framework to ensure harmonised conditions with respect to the availability and efficient use of radio spectrum.
