COMMISSION OF THE EUROPEAN COMMUNITIES

COMMUNICATION FROM THE COMMISSION

TO THE COUNCIL, THE EUROPEAN PARLIAMENT,
THE ECONOMIC AND SOCIAL COMMITTEE
AND THE COMMITTEE OF THE REGIONS

Next Steps in Radio Spectrum Policy

Results of the Public Consultation on the Green Paper

SUMMARY

1. OBJECTIVE

The objective of this Communication is to contribute to the **establishment of a Community framework for radio spectrum policy** which is responsive to radiocommunications developments and which supports Europe's competitive position in the global market.

2. CONTEXT

Radio spectrum[1] is a vital resource for implementing Community policies in the areas of telecommunications, broadcasting, transport, and R&D. **The Community mainly pursues its policy objectives with regard to radio spectrum in the spectrum management organisations of the CEPT** (European Conference of Postal and Telecommunications administrations, an inter-governmental organisation where 43 European countries are represented) **and the ITU** (International Telecommunication Union, a UN body).

The environment for radio spectrum policy is presently undergoing significant evolution, as a result of technological, market and regulatory developments. New commercial networks based on radio technology are being rapidly introduced. Such networks include mobile and satellite broadband networks which may combine telephony, data transmission, internet applications and positioning functions to provide new value-added services. These new services have the potential to **stimulate economic growth, create employment and promote general welfare.** At the same time, **the rapid expansion of such radio-based services makes the management of the radio spectrum increasingly complicated[2], as it requires a balance 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.

3. COMMUNITY POLICY OBJECTIVES WITH REGARD TO RADIO SPECTRUM

In view of the changing environment for radio spectrum policy, the Commission published a Green Paper[3] to launch a public debate on the question **whether, in the new environment, the present practice of radio spectrum policy meets Community policy objectives.**

---

1   Radio appliances such as TV's, radios, and mobile phones work by means of electromagnetic waves which propagate between a transmitting and a receiving antenna. Radio spectrum is defined as all the possible frequencies which such waves may have. The number of times a wave oscillates in a second is called its frequency, and by tuning a radio receiver to a specific frequency one can pick up a specific signal. Frequency bands define the specific location of services in the radio spectrum.

2   Regulatory authorities decide which part of the radio spectrum should be used for which services as a function of its technical characteristics (allocation decisions), in which time frame (strategic planning of radio spectrum use), who is able to use what frequency band for what purpose (assignment decisions) and under which conditions (licensing decisions). In order to ensure cross-border availability of services, harmonisation of radio spectrum allocation, and thus of the use of radio spectrum, is required. In order to introduce new services, existing assignees need to be relocated (re-farming). For the purpose of this Communication, radio spectrum policy refers to the longer-term and comprehensive process of agreeing on the need for radio spectrum availability for all possible uses. Radio spectrum management refers to the operational process of agreeing on the technical conditions for accommodating the various uses within the radio spectrum.

3   Green Paper on radio spectrum policy in the context of European Community policies such as telecommunications, broadcasting, transport and R&D (COM(1998)596), 9 December 1998.

1α

regulatory authorities and representatives from radio spectrum user communities, would advise the Commission on market, technical and other relevant developments with regard to radio spectrum. On this basis, the Commission could initiate action, where required, in order to ensure that Community policy objectives with regard to radio spectrum are met. The principal task of the SPEG would be to ensure that all views are expressed and can be taken into account when a decision is taken to harmonise the use of radio spectrum.

(2) **A regulatory framework for radio spectrum policy should be established in order to ensure that the use of radio spectrum is harmonised where necessary to implement Community policies in the areas of telecommunications, broadcasting, transport, and R&D.** To this end, a proposal for a European Parliament and Council Decision will be drafted. At present, radio spectrum use for Community policies is harmonised on a sector- or technology-specific basis, as has been the case with the European Parliament and Council Decisions on satellite personal communications services (S-PCS) and on the universal mobile telecommunications system (UMTS). The proposed decision would establish a general framework for ensuring that the use of radio spectrum is harmonised where necessary. The decision would simplify Community legislation and replace the S-PCS and UMTS Decisions when these expire. It would strengthen co-operation with the CEPT and would include safeguards to allow for action to be taken where the work of the CEPT or the implementation of its measures by the Member States did not meet the agreed Community objectives.

(3) **In order to increase the effectiveness of the Community in the WRC negotiations, communications will be produced on the Community's policy objectives on the various WRC agenda items.** All relevant players will be called upon to participate in the preparatory process leading to WRC. Where the agenda of WRC includes items of particular importance in the context of Community policies, **the Commission will invite the Council to endorse the European positions.** The Commission will consider further how the principles of objectivity, timeliness, transparency and non-discrimination, which were agreed in the context of the World Trade Organisation (WTO), are to be practically applied in the area of radio spectrum and how the various national approaches can be assessed in market access negotiations.

6. OUTLOOK

The public consultation on the Green Paper showed that **the role of the Community in radio spectrum policy needs to be enhanced at a European and international level.** This aim can be achieved without making major changes to the current institutional responsibilities. Rather, a number of mechanisms are put forward which will **allow better account to be taken within the institutional arrangements, both of the Community interests and of the needs of EU business and users.**

The Commission invites the European Parliament and the Council to endorse the policy objectives identified in this Communication and of the proposals set forth in order to meet these objectives. The Commission intends to draft policy and legislative measures in the course of the year 2000.

* * *

1. INTRODUCTION

The public consultation on the Green Paper, which ran from 15 December 1998 until 15 April 1999, attracted considerable attention from major players and regulatory authorities concerned with radio spectrum. Over 140 written contributions were received from interested parties[4], most of whom also attended the three public meetings organised as part of the public debate.

This Communication reports on the comments received in response to the Green Paper and suggests further steps to be taken in order to meet the Community's policy objectives with regard to radio spectrum. It summarises, firstly, the contributions received in response to the Commission's Green Paper on radio spectrum policy in the context of European Community policies such as telecommunications, broadcasting, transport and R&D . Secondly, it assesses the results of the public consultation on the Green Paper in the context of Community objectives with regard to radio spectrum and identifies areas for action. Thirdly, it presents a number of areas where Community initiatives should be developed in view of securing the Community's interests at the socio-economic, political, international and technical levels of radio spectrum policy and management.

This Communication is addressed to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions. The Communication takes into account the opinions on the Green Paper of the Economic and Social Committee of 29 April[5] and of the European Parliament of 4 May 1999[6].

The aim of this Communication is to contribute further to the elaboration of a Community framework for radio spectrum policy, which is accessible and transparent and provides for certainty for all those for whom the radio spectrum is a vital resource. To this end, the Commission suggests steps to be taken in order to ensure that the importance of radio spectrum policy is fully acknowledged in the Community context so as to derive the maximum benefit of the resource in economic, cultural, social and political terms.

Many commentators offered views on matters which, while relevant to radio spectrum policy and spectrum management, were outside the scope of the Green Paper itself. Such matters, which are briefly outlined in this Communication, will be further considered by the relevant Commission services.

This Communication should be seen in relation to policy and legislative initiatives in related fields. The Communication on the review of the telecommunications sector[7] will address certain radio spectrum policy matters, which are relevant in the context of the legislative regime for electronic communications. One of the issues addressed in the latter document is whether the provisions of the Licensing Directive on scarce resources such as radio

---

4   In order to increase the transparency of the public debate, all contributions have been posted on the Commission's website (http://www.ispo.cec.be/spectrumgp).

5   Opinion of the Section for Transport, Energy, Infrastructure and the Information Society on the Green Paper on Radio Spectrum Policy in the context of European Community policies such as telecommunications, broadcasting, transport and R&D (COM(1998)596), CES 445/99, Brussels, 28-29 April 1999.

6   Report on the Green Paper on Radio Spectrum Policy in the context of European Community policies such as telecommunications, broadcasting, transport, and R&D (COM(1998)596 – C4-0066/99), A4-0202/99, European Parliament, 4 May 1999.

7   Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, Towards a New Framework for Electronic Communications Infrastructure and Associated Services -- The 1999 Communications Review, COM(1999)539, 10.11.1999.

2.   THE PUBLIC CONSULTATION ON THE GREEN PAPER

The aim of Chapter 2 is to summarise the main messages expressed during the public consultation so as to provide the basic elements for assessing whether the current practice with regard to radio spectrum meets Community policy objectives.

Section 2.1 reports on the public consultation. Section 2.2 summarises the comments received according to the issues presented in the Green Paper. Section 2.3 lists a number of sector-specific issues raised by the various radio spectrum user communities.

2.1   The consultation process

Following the publication of the radio spectrum Green Paper in December 1998, the Commission sought views from the public at large on a large number of complicated and often inter-related issues.

The Green Paper attracted considerable attention. Most contributions (52) were received from the communications sector, 24 from the broadcasting community, 13 from the transport sector, 4 from the R&D community, 12 from players active in radio equipment manufacturing, 19 from Member States' administrations and/or authorities responsible for radio spectrum management, 6 from other European administrations which are members of CEPT (European Conference of Postal and Telecommunications administrations), one non-European administration, and two contributions were received from Community institutions. (see ANNEX I for details).

Orientation debates took place on the occasion of the Telecommunications Council and in meetings between the High Level Regulators and the Commission, and formal opinions were given by the European Parliament and the Economic and Social Committee on 4 May and 29 April 1999 respectively. An exchange with CEPT on the Green Paper was held on 9 January 1999 .

During the 5-month public consultation period, three hearings on the Green Paper were held in February and March 1999 with individual companies, national and international associations and representative groups and administrations (i.e. Member States, EEA and other European countries). The level of participation in these meetings broadly reflects what has been stated above, i.e. the debate was very telecommunications-oriented.

These hearings not only provided an opportunity for the Commission to identify the central issues in the on-going debate on radio spectrum policy and spectrum management, but also allowed the different sectors and players concerned to hear and respond to each others' views.

2.2   Summary of comments on the Green Paper

This section summarises the contributions received in response to the Green Paper on radio spectrum policy.

2.2.1   *Strategic planning of the use of the radio spectrum*

All respondents agree that the use of radio spectrum needs to be planned strategically so as to allow for investment and regulatory decisions to be taken. The openness and transparency of the strategic planning process and the availability of information were mentioned as essential elements in this context. Overall, the strategic

implementation of CEPT measures to be improved, but were less concerned where this information should be collected and disseminated.

2.2.3 Radio spectrum assignment and licensing

It was generally considered that the distribution of radio spectrum to users should respond to local and national needs and would therefore best be carried out at national level. The fact that the amount of radio spectrum available for certain services varies between countries could therefore be accepted. However, differing licence conditions and the absence of single licences to provide service in the whole of the Community were mentioned as particularly burdensome in some cases, e.g. for providers of satellite services.

With few exceptions, charging for radio spectrum was considered by some administrations and regulators as a potential means to ease assignment decisions in case of scarcity of radio spectrum and to encourage efficient frequency usage, provided that implementation was appropriate. However, there was no consensus on the pricing mechanism to use, and views on whether to introduce a secondary market for radio spectrum diverged. On the side of the spectrum users, paying for spectrum use was not advocated and generally rejected for their own sector. However, reasons advanced diverged and some comments indicated that charging for spectrum usage should not be ruled out as a matter of principle, provided that the revenues were used to encourage more efficient radio spectrum usage, for instance to finance the clearing of radio spectrum. Apart from the requirements of transparency, objectivity and non-discrimination, many respondents pointed to the need to ensure equal treatment of radio spectrum users with regard to the payment of charges and fees and with respect to requirements to ensure efficient use of radio spectrum. Other commentators advanced the specific character of their sector as an argument against spectrum pricing.

2.2.4 Radio equipment and standards

The availability of comprehensive radio spectrum management information was identified in the public consultation as a key issue in considering whether harmonisation of the use of the radio spectrum should be achieved. Some respondents referred to the recently adopted Radio and Telecommunication Terminal Equipment (R&TTE) Directive[9] which removes many of the procedural barriers to trade which still exist in the Community. This measure was believed to boost the competitiveness of the European manufacturing industry and to foster innovation. However, further benefits were expected where the use of the radio spectrum was harmonised to the best extent possible. Strengthening the co-operation between radio spectrum management organisations and standardisation bodies, both at European and global level, was identified as a critical issue. A number of respondents called for a stronger role for the Community in this respect.

Most respondents felt that the use of the radio spectrum should be technology-neutral, but, where interfaces are needed to ensure interoperability, standardisation was necessary in order to provide Europe's consumers with seamless services and uniform, inter-operable equipment.

2.2.5 The institutional framework for radio spectrum co-ordination

There was general support for the current technical arrangements for radio spectrum *management* comprising the ITU/WRC at the global level, CEPT at the regional level, and

---

9   Directive 1999/5/EC of the European Parliament and the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity, OJ L91/10, 07.04.1999.

spectrum used for governmental or public uses (e.g. the military) and by broadcasters should be transferred to the communications sector.

The harmonisation of radio spectrum allocation was seen as crucial for the provision of seamless pan-European services. Although the co-ordination of Member States in CEPT and in ITU/WRC has thus far yielded satisfactory results, some respondents believed that there is now a need to ensure a responsive and legally certain regulatory framework for radio spectrum in order to keep pace with radiocommunications developments.

That radio spectrum assignment and licensing should take place as close to the market as possible was acknowledged. However, in view of the internationalisation of the communications market, satellite operators in particular felt that an alignment of assignment and licensing procedures and conditions would benefit market developments. On charging for radio spectrum, many contributors argued that a level playing field should be established so as to ensure that similar users of radio spectrum are subject to the same requirements and that differences across sectors are justified and proportionate. The need for comparable access conditions and appropriate safeguards was mentioned as a particular issue to be considered by regulatory authorities in this context.

In commenting on the institutional framework for radio spectrum co-ordination, the communications sector mainly suggested improving rather than replacing the current arrangements for radio spectrum management. In defined cases, Community measures would be appropriate (e.g. in the case of S-PCS and UMTS).

2.3.2   Broadcasting sector

Respondents from the broadcasting sector noted the increased demands for radio spectrum from commercial communications interests, which put pressure on the availability of radio spectrum for cultural activities in the public interest.

With regard to the strategic planning of the use of the radio spectrum, the broadcasting sector is preparing for the transition towards digital transmission. Although this would eventually result in less radio spectrum being necessary to deliver today's number of programmes, the broadcasters' comments emphasised that a period of 'simulcasting' (both analogue and digital transmission) will be required. This means more frequencies are needed in the medium term. In the longer term, the broadcasting sector expects that more radio spectrum will be needed for the provision of new multi-media services as well as for special interest channels. These could be accommodated in parts of the radio spectrum, which will become available due to digitisation, but it was acknowledged that competition for access to that radio spectrum could be expected from other sectors (e.g. communications).

For some broadcasters, the issue of the harmonisation of radio spectrum allocation was considered important but less urgent than suggested by the communications sector. The satellite operators, however, pleaded for more harmonised radio spectrum for broadcasting becoming available at pan-European level.

With regard to radio spectrum assignment and licensing, the broadcasting sector was opposed to the introduction of charging mechanisms, such as auctions, which were not believed to be appropriate in the case of services essential in the public interest.

On the institutional framework for radio spectrum co-ordination, many contributions pointed to the fact that radio spectrum availability for broadcasting purposes is and should

3.   ASSESSMENT OF THE PUBLIC CONSULTATION

Chapter 3 assesses the results of the public consultation on the Green Paper in the context of Community policy objectives with regard to radio spectrum, as identified in the Green Paper. The aim of Chapter 3 is to identify issues, which need to be addressed in order to meet these policy objectives.

Section 3.1 assesses whether the public consultation on the Green Paper on radio spectrum policy can be considered as representative, particularly with respect to the intention of launching a debate among all radio spectrum user communities and other affected parties. It furthermore identifies in section 3.2 the main areas of consensus on the various issues for comments presented in the Green Paper. Section 3.3 assesses the results of the public consultation against general Community policy objectives to be achieved with radio spectrum in the context of the internal market, in the international arena and at the level of radio spectrum management.

3.1   The public consultation process

The Green Paper sought to launch a debate on a European spectrum policy involving all relevant players, such as industry, users, administrations and radio spectrum managers in the areas of communications, broadcasting, transport and R&D.

The majority of responses received originate from the (commercial) communications sector, from national regulatory authorities and from CEPT countries. These comments generally express support for the current framework for radio spectrum co-ordination. However, several contributions noted scope for improving the arrangements, particularly by further integrating radio spectrum management in a Community policy context.

Substantially fewer comments were received from the broadcasting and transport communities, although they together occupy roughly 30% of the radio spectrum. They were critical of the current arrangements, arguing that the radio spectrum management bodies privilege communications interests and that there is a lack of political input to the radio spectrum management process and of comprehensive and understandable information and procedures. Although limited in number, respondents from other user communities expressed similar concerns.

The comments provided by the Member States were mostly produced by the national regulatory authority or by the agencies responsible for radio spectrum management (generally falling within the realm of the Ministries responsible for telecommunications). In order to appropriately express the various interests with respect to radio spectrum, co-ordination at national level between all affected Ministries responsible for the different sectors that rely on radio spectrum was required in the production of the responses by the Member States. The changing environment for radio spectrum policy therefore poses similar challenges at international, Community and national level.

The Commission considers that the debate launched by the Green Paper has contributed to raising awareness of the growing complexity of radio spectrum issues and of the need for a global approach across all sectors. The Commission also notes with satisfaction that the debate has led to an examination of the different bodies involved at Member State level.

Overall the Commission considers that the large number and high quality of the responses received provide a good basis for drawing policy conclusions .

Radio spectrum assignment and licensing[10]

- Agreement exists that the introduction of assignment mechanisms, such as administrative pricing and auctions, might improve radio spectrum usage (in terms of increasing efficiency and increasing competition), but views differ as to which assignment and licensing mechanism is best in which circumstances.

- Most parties are reluctant to have to pay for the use of radio spectrum, but, if required to do so, argue that the revenues raised should contribute to radio spectrum efficiency, for instance with regard to the re-farming of existing users.

- Most parties agree that the Community's radiocommunications market would benefit from uniform radio spectrum assignment and licensing procedures and conditions.

- Agreement exists that assignment and licensing procedures and conditions in the Community should take due account of international commitments, particularly in the area of trade.

Radio equipment and standards

- The general view is that the standardisation process needs to be industry-driven, voluntary, open, transparent and responsive to market requirements, but it is recognised that measures may be needed to ensure interoperability for some types of services.

- The globalisation of radio markets requires close co-operation between radio spectrum management, standardisation bodies and sector-specific organisations.

- From the perspective of radio equipment manufacturing, radio spectrum harmonisation would further benefit from the liberalised regime for the placing on the market and use of radio equipment, which is put in place with the R&TTE Directive.

Institutional framework for radio spectrum co-ordination

- The potential for conflicting claims for radio spectrum is generally acknowledged, as is the need to examine where such conflicts can be settled in a policy, rather than technical, context.

- The public consultation is not conclusive as to where and how the various radio spectrum requirements of potential and existing users and of countries should be balanced and agreed.

- Most respondents tend to agree that international decision-making on the harmonisation of radio spectrum should be the rule so as to avoid practical problems at the level of radio spectrum management, but sufficient scope should remain for radio spectrum policy to meet national and local needs.

- Consensus exists that the co-operation between political bodies and the authorities responsible for spectrum management needs to be improved on the basis of clearly defined roles and responsibilities.

---

[10] Based on the results of the Green Paper, the Commission takes the following positions on radio spectrum in the context of the legislative regime for electronic communications: administrative pricing and auctioning of radio spectrum can be a means to ensure the efficient use of radio spectrum; Member States should be encouraged as far as possible to use revenue raised as a result of fees, auctions and radio spectrum pricing to increase radio spectrum efficiency; the current Licensing Directive should be amended in order to allow – although not mandate – Member States to make provision for radio spectrum secondary trading as part of a process to encourage the efficient use of radio spectrum and the Commission will consider in this respect what safeguards might be necessary in the Community interest. See: Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, Towards a New Framework for Electronic Communications Infrastructure and Associated Services -- The 1999 Communications Review, COM(1999)539, 10.11.1999

In the area of radio spectrum management, the following conclusions can be drawn as regards how far the Community's policy objectives are met:

- Further efforts are needed to achieve the objective _to ensure open, transparent, objective and non-discriminatory procedures_ in support of the competitive provision of radio services and equipment. These principles need to be regularly examined and discussed in the Community context so as to determine discrepancies in national practices in radio spectrum management and licensing and in order to identify areas where a common approach might be beneficial for radiocommunications development.

- With regard to the objective _to ensure an appropriate balancing of commercial and public interests_, the public consultation showed that there is a need for policy guidance when considering technical measures. A further integration of the radio spectrum management process within a policy context is therefore essential to ensure that radio spectrum use meets the requirements of society as a whole.

- Steps should be taken _to ensure that the economic value of the radio spectrum is properly taken into account_. The introduction of market-based mechanisms in radio spectrum management, such as auctions, the administrative pricing of radio spectrum and secondary trading, can contribute to this objective, provided appropriate safeguards are in place to ensure continued availability of radio spectrum for non-commercial uses. Public interests objectives need to be clearly defined and appropriately taken into account in this context.

- The public consultation confirmed the objective _to secure radio spectrum availability for pan-European radio systems, services and equipment_ but this has to be balanced with national and local needs for radio spectrum. The scope for cross-border harmonisation of the use of the radio spectrum should be examined before networks and services are introduced at a national level. This will promote economies of scale for the introduction of equipment.

- Radiocommunications development is best served by _a legally certain environment._ Although the pace of technological innovation in the area of radio requires a flexible approach to the management of radio spectrum, this should not be at the cost of the legal certainty needed for such technological innovations to take place. Particularly with regard to the implementation of measures aimed at the harmonisation of radio spectrum allocation, further efforts are needed to provide for a legally certain climate so that investment decisions can be made.

4.1.2   Establishing a regulatory framework

The establishment of a regulatory framework in the Community for radio spectrum policy is deemed necessary in view of the following objectives:

> ➤ **To achieve the harmonisation of the use of the radio spectrum by the CEPT in response to Community requirements.**

> ➤ **To ensure that the technical harmonisation measures worked out by the radio spectrum management process are appropriately implemented by the Member States.**

> ➤ **To ensure that, in cases where the use of the radio spectrum is harmonised at Community level, general authorisations, rather than individual licenses, should be issued.**

> ➤ **To ensure that, irrespective of the particular use that is made of radio spectrum, common procedures apply to ensure radio spectrum availability, unless an exception is duly justified.**

In view of the above mentioned objectives, the Commission intends to produce a proposal for a European Parliament and Council Decision on harmonisation of the use of radio spectrum in the context of Community policies. The aim of such a Decision would be to achieve harmonisation of the use of radio spectrum where necessary to implement Community policies in the areas of telecommunications, broadcasting, transport and R&D. Rather than achieving this aim in a piecemeal fashion for each specific type of usage, which has been the case with the European Parliament and Council Decisions on S-PCS[12] and UMTS[13], the proposed Decision would for the first time offer a general framework for addressing radio spectrum policy issues rather than that these are discussed on a sector-specific basis. The Decision would simplify Community legislation by limiting the need for technology-specific Community measures. The Decision would be used as a basis for all possible Community measures related to the use of the radio spectrum.

Under the proposed Decision and with the aim to ensure pan-European availability and interoperability of services, the Commission would be empowered, subject to comitology procedures, to mandate the CEPT to draft technical measures aimed at the harmonisation of radio spectrum allocation for all Community policy areas falling under its competence. Where the work of the CEPT or the implementation by the Member States is not satisfactory, further action at Community level can be taken. Although radio spectrum availability for applications in the areas of transport, broadcasting and defence normally raise policy issues beyond the area of radio spectrum, as well as often being subject to agreements established in sector-specific international organisations, the intention of the proposed Decision is to establish a single Community regime to ensure radio spectrum availability, irrespective of the specific area concerned.

Community recommendations could also be envisaged on best practices regarding radio spectrum assignment and radio spectrum valuation. Based on the results of the consultation on the radio spectrum Green Paper, it is proposed, in the 1999 Review context, to amend the Licensing Directive in order to allow –although not mandate-- Member States to make

---

[12] Decision 710/97/EC of the European Parliament and of the Council on a co-ordinated authorisation approach in the field of satellite personal communications services in the Community, OJ L105, 23.04.1997.

[13] Decision 128/1999/EC of 14 December 1998 of the European Parliament and the Council on the co-ordinated introduction of a third-generation mobile and wireless communications system (UMTS) in the Community, OJ L17/1, 22.01.1999.

endorse these positions, where appropriate, in order to raise the necessary political support for the objectives to be reached. Where required, the Commission will be allowed to submit mandates to the CEPT to work out European common proposals for the WRC on issues which are important for the purposes of pursuing Community policies at an international level.

4.2.2 The trade context

Radio spectrum policy and radio spectrum management need to take due account of the trade context in view of the following objectives:

> ➤ To ensure that third countries allow access to their radiocommunications markets by Community operators and that such access is not unduly hampered, for instance where radio spectrum management practices favour national operators.

> ➤ To ensure that, where the Community negotiates with third countries on the establishment of international radio networks, due account is given to the radio spectrum policy objectives defined at Community level.

In view of the above mentioned objectives, industry should be consulted on difficulties encountered when seeking access to third country markets for radiocommunications. Where regulatory authorities deny access to markets for reasons of spectrum scarcity, this should be proportionate and duly justified in order to avoid that radio spectrum management measures are used as a disguise for trade barriers. The Community's commitments under the regime of the World Trade Organisation (WTO) are relevant in this respect. The Community and its Member States have already committed themselves, in the reference paper attached to their commitments on telecommunications services, that procedures for the allocation of radio spectrum will be carried out in an objective, timely, transparent and non-discriminatory manner. It may be necessary, however, to further clarify how these principles of objectivity, timeliness, transparency and non-discrimination are to be practically applied and how the various national approaches can be assessed in market access negotiations.

Where Community agreement is reached on the establishment and deployment of international strategic networks or systems which require co-operation with third countries, the Commission may seek negotiating Directives from the Council in order to safeguard Community interests. Close co-operation with the bodies responsible for radio spectrum management must be ensured if such negotiations become operational and technical in nature.

4.3   Improving radio spectrum management by the CEPT

The Community should co-operate with the CEPT in view of the following objectives:

> ➤ To achieve harmonisation of the use of the radio spectrum among the 43 member countries of the CEPT.

> ➤ To benefit from the 'en bloc' voting power of the 43 CEPT countries in multilateral negotiations on radio spectrum management.

> ➤ To make optimal use of the technical expertise available in CEPT and to ensure that all Member States are fully involved in the activities of CEPT so as to allow for an appropriate balancing of national interests at a technical level.

5. CONCLUSIONS

The public consultation on the Green Paper on radio spectrum policy received considerable attention, particularly from the communications industry and from the national regulatory authorities responsible for radio spectrum management.

On the basis of an analysis of the responses received to the questions posed in the Green Paper, as set against Community policy objectives associated with the availability of and access to radio spectrum, the European Commission has identified six areas where further Community initiatives can be envisaged:

(1)   **Addressing radio spectrum policy issues at Community level:** this would comprise the setting up of a radio spectrum policy expert group (SPEG) that would help the Commission in determining Community priorities with respect to the harmonisation of radio spectrum use.

(2)   **Establishment of a regulatory framework for Community radio spectrum policy:** this would comprise the putting into place of an European Parliament and Council Decision, the provisions of which would enable the CEPT to draft technical harmonisation measures in response to Community requirements and which would secure the appropriate implementation of such measures by the Member States.

(3)   **Ensuring the availability of information:** this concerns both the scope of information needed and the manner in which it is published, collected, and disseminated.

(4)   **Safeguarding Community interests in ITU/WRC:** building on the co-ordination of the Member States in CEPT in preparing for and negotiating in ITU/WRC, further improvements to the process are deemed necessary in order to combine the technical and political strengths of the CEPT and the Community respectively.

(5)   **Safeguarding Community interests in the trade context:** with growing portions of radio spectrum being used for international, commercial or strategic networks and services, radio spectrum management and trade are becoming increasingly linked. Close co-ordination between the responsible bodies needs to be ensured. Where necessary, the Commission should request and be granted negotiation Directives.

(6)   **Improving radio spectrum management by the CEPT:** although most actions envisaged are needed to clarify and improve the political and legal context for radio spectrum policy in the Community, certain improvements to the way CEPT works can already be envisaged at this stage.

* * *

TABLE 2: BROADCASTING

Companies	Associations
ARD/ZDF German Public Broadcasters	AMARC Europe (World Association of Community Broadcasters)
BBC	Arbeitsgemeinschaft Zukunft Amateurfunkdienst e.V. (AGZ)
Channel 4	Association of European Radios (AER)
City Television Limited	Club DAB Italia
ITV	Commercial Radio Companies Association
	Commission des Episcopats de la Communauté Européenne (COMECE)
	Digital Terrestrial Television Action Group (DigiTAG)
	Digital Video Broadcasting Group (DVB) Regulatory Ad Hoc Group
	Direktorenkonferenz der Landesmedienanstalten (DLM)
	EBU
	Fellowship of European Broadcasters
	Independent Television Commission (ITC)
	Nederlandse Omroep Stichting (NOS – Dutch Public Broadcasters Association)
	Organisatie van Lokale Omroepen (OLON)
	Radio Authority (UK)
	Verband Privater Rundfunk und Telekom-munikation (VPRT)
	Vereniging van Commerciële Radio (VCR)
	Vlaamse Gemeenschap
	World DAB

TABLE 3: TRANSPORT

	Companies	Associations
Aviation	Air France	Association of European Airliners (AEA)
	Deutsche Lufthansa AG	Eurocontrol
		European Space Agency (ESA)
		Irish Aviation Authority (IAA)
		International Air Transport Association (IATA)
		International Civil Aviation Organisation ICAO
		International Council of Aircraft Owners and Pilot Associations - European Region (IAOPA-EU)
		Irish Aviation Authority
		National Air Traffic Services
Maritime		Commissioners of Irish Lights
Railways		International Union of Railways (UIC)

TABLE 4: R&D

	Companies	Associations
Radio astronomy		Committee on Radio Astronomy Frequencies (CRAF)
Radio amateurs		Arbeitsgemeinschaft Zukunft Amateurfunksdienst AGZ
		International Amateur Radio Union (EUROCOM Working Group of IARU)
		Individual comment of Mr. Friedrichs

<div align="right">**ANNEX II**</div>

ABBREVIATIONS

CEPT	European Conference of Postal and Telecommunications Administrations
CPG	Conference Preparatory Group of the CEPT
DSI	Detailed Spectrum Investigation
EEA	European Economic Area
ERO	European Radiocommunications Office (of CEPT)
ETSI	European Telecommunications Standards Institute
EC	European Commission
EU	European Union
GATS	General Agreement on Trade in Services (of WTO)
ICAO	International Civil Aviation Organisation
IMO	International Maritime Organisation
ITU	International Telecommunication Union
R&D	Research and Development
R&TTE	Radio and Telecommunications Terminal Equipment (Directive)
S-PCS	Satellite Personal Communications Services
WRC	World Radiocommunications Conference (of ITU)
WTO	World Trade Organisation
UMTS	Universal Mobile Telecommunications System