THE RSPG OPINION ON

SECONDARY TRADING OF RIGHTS TO USE RADIO SPECTRUM

Note: please note that, unless specifically stated, information included in the annexes to this Opinion provide supporting material and is therefore not integral part of the body of the Opinion.

The Radio Spectrum Policy Group Opinion on Secondary Trading of Rights to use Radio Spectrum RSPG04-54 FINAL VERSION

1 Introduction

In its meeting on 19 September 2003, the Radio Spectrum Policy Group (RSPG) decided to form a working group in response to the Commission's Request for Opinion on Secondary Trading of Rights to use Radio Spectrum (document RSPG03-13).

This paper represents the RSPG Opinion on this topic.

In accordance with the Commission's request, the RSPG has considered:

- The potential benefits and drawbacks of secondary trading of spectrum for European Community policies and in particular the EC internal market, i.e. whether secondary trading can contribute to reach the strategic goal set by the European Council in Lisbon "to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion"
- The procedures and conditions to be addressed when introducing spectrum trading
- The potential need for co-ordination among Member States regarding introduction of spectrum trading in order to avoid a fragmentation of the market for spectrum and wireless technologies.

The RSPG has performed a public consultation, and taken into account its results in formulating the Opinion given in section 2 and the additional considerations given in annex I, which are also part of this opinion. Details on the public consultation are given in Annex II, the replies to the consultation have been published on the RSPG website¹. The list of documents considered is found in section Annex III.

Since the Commissions Request for Opinion, there have been some related developments at European level, notably the Commissions request for an Opinion on WAPECS², the study on secondary trading by Analysys et al.³, the

¹ http://rspg.groups.eu.int/Default.htm

² Request by the European Commission to the Radio Spectrum Policy Group for an opinion on a coordinated EU spectrum policy approach concerning wireless access platforms for electronic communications services (WAPECS) (RSPG04-45 Rev.1)

associated workshops and the establishment of ECC/PT8 to continue the work of ECC/RA/PT12 on flexibility and harmonisation issues. This report takes account of these developments and results where appropriate.

2 The Opinion of the RSPG

- 1. The RSPG considers that secondary spectrum trading could be beneficial in certain parts of the spectrum, provided that sufficient safeguards are implemented by administrations to ensure that the potential benefits of this introduction are not offset by adverse consequences. On this basis the RSPG considers that secondary trading can contribute to reach the strategic goal set by the European Council in Lisbon.
- 2. The RSPG considers that European harmonisation of spectrum trading rules should not be considered until Member States have greater experience of secondary trading, because such rules might delay the developments in countries where secondary trading is being introduced and might have negative impact in countries that are more hesitant. The RSPG considers however, that there is a need for some commonality of approach to trading among Member States. This could be achieved through promotion of discussion and exchanges of experience, as outlined in point 10 below.
- 3. Under the EU regulatory framework, it is for individual administrations to decide whether to introduce secondary trading and the timing and phasing of this. In this context, and taking into account points 4 and 5 below, the RSPG considers that there are advantages in a progressive introduction of secondary trading and that European administrations should introduce secondary trading with due care.
- 4. The RSPG therefore favours a phased introduction of secondary trading, initially focused on frequency bands where this introduction would present minimum risks and maximum expected benefits.
- 5. The RSPG considers that, in certain frequency bands, secondary trading may lead to significant risks, questionable benefits, practical difficulties or involve wider public policy issues. Hence secondary trading in these bands should be avoided or introduced only after careful studies. These include frequency bands:
 - a. used for government services (e.g. for defence and security) and safety-of-life services (e.g. for civil aviation);

³ Study on conditions and options in introducing secondary trading of radio spectrum in the European Community, Analysys Consulting, DotEcon, Hogan & Hartson (2004)

- b. allocated to terrestrial broadcasting service, to the broadcasting-satellite service and the fixed-satellite service where it is used for direct-to-home television;
- c. allocated to scientific services (e.g. radioastronomy, Earth-exploration, space research).
- 6. The RSPG also considers that European administrations should monitor the development of secondary trading, exchange experience and gain sufficient understanding of its mechanisms.
- 7. The RSPG considers that European harmonisation of spectrum use through CEPT will continue to be a key element in securing maximum economic and social benefits from use of the radio spectrum, provided that it is sufficiently flexible, technology-neutral and dynamic enough to encourage innovation, competition and the European Single Market. The RSPG considers that European harmonisation of spectrum use should continue to be pursued actively with these objectives in mind.
- 8. For control of interference, spectrum efficiency and other reasons, licences include technical and operational restrictions on the conditions of use of spectrum within the scope of the licence. The RSPG considers that it could be beneficial to define these conditions of use as broadly as possible, with a view to ensuring technological neutrality and flexibility in future use of the spectrum.
- 9. Licensees may wish to change conditions of use outside the terms of the licence. The RSPG considers that any such change of conditions should be subject to exante authorisation, after thorough analysis of the spectrum management implications, on a band-by-band, case-by-case basis. In any case, such changes should not be permitted where they would be contrary to European harmonisation obligations.
- 10. The RSPG considers the following as possible areas for action at EU level.
 - a. Member States to provide regular reports on roll-out and implementation of secondary trading to the RSPG
 - b. Member States and the Commission to build on this by continuing the successful public workshop approach by holding further workshops at which Member States and spectrum users can report on and discuss their experiences of secondary trading
 - c. In the light of developing national experience, Member States and the Commission, working through the RSPG, to discuss and provide guidance on best practice in areas including:

- i. definition of spectrum rights and obligations;
- ii. provision of information to users by the SMA;
- iii. interference management and dispute resolution including cross-border co-ordination;
- iv. transition issues.
- d. The Commission and Member States through the RSPG and the Radio Spectrum Committee (RSC) to give consideration to ways in which licences may be made more flexible and technology-neutral in pursuing harmonisation objectives, taking into account the work of ECC/PT8
- e. The Commission and Member States through the RSPG and the RSC to consider the scope for a common approach to national information requirements for trading, in the light of Article 5 of the Spectrum Decision, including how to build on the potential role of the European Frequency Information System, EFIS.

ANNEX I

ADDITIONAL CONSIDERATIONS

1 Objectives

The introduction of a secondary market in rights of use of parts of the spectrum is perceived as having the potential of increasing the flexibility, hence the efficiency of the use of spectrum. Given the variety of possible situations in different parts of the spectrum and in different geographical areas, this potential advantage has to be evaluated, on a band-by-band basis, keeping in mind the public interest (which includes consumers, manufacturers, R&D, operators, government services, etc), and the general objectives and constraints of frequency management. Spectrum Management Authorities (SMA) should have particular regard to:

- a. promoting the development of the market;
- b. ensuring that broader public policy and national economic development objectives are achieved, such as nationwide coverage, social aspects and reduction of the digital divide;
- c. promoting the interests of consumers, economic benefits, innovation and competition;
- d. ensuring that national interests, including defence and security or audiovisual policies (pursuing pluralism of information and cultural diversity) are not affected;
- e. ensuring transparent, objective and non-discriminatory access to spectrum;
- f. ensuring and promoting efficient use of the spectrum;
- g. facilitating Europe wide harmonisation and enabling economies of scale taking due account of differences in national requirements and market developments;
- h. providing regulatory certainty to encourage new entrants and to protect existing users from harmful interference;
- i. ensuring compliance with international obligations and commitments.

2 Potential benefits and drawbacks of secondary trading

The RSPG considers that secondary spectrum trading could be beneficial in certain parts of the spectrum, provided that sufficient safeguards are implemented by administrations to ensure that the potential benefits of this introduction are not offset by adverse consequences.

Potential benefits of trading include facilitating market entry and exit, permitting more rapid redeployment and faster spectrum access for innovators and new players and allowing new technologies to gain access to spectrum more quickly. For existing operators, benefits could include the opportunity to sell unused or underused spectrum and make more flexible use of spectrum. Secondary trading may also provide incentives to transfer underused spectrum to those who can utilise it better and a mechanism to address excessive spectrum fragmentation through the amalgamation of spectrum holdings.

Potential drawbacks relate to anti-competitive behaviour, spectrum hoarding, spectrum fragmentation and interference control.

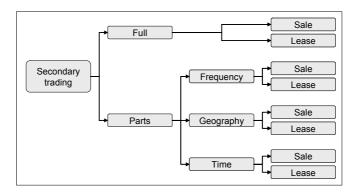
Given the limited experience available on secondary trading, and the associated risks in the European countries, where this experience may not be directly translated, a phased introduction of secondary trading is therefore suggested. This would enable European administrations to gain experience on the implementation of secondary trading in frequency bands where this would present minimum risks and maximum expected benefit. This experience would enable administrations to refine the regulatory framework necessary for this implementation, in particular in terms of definition of rights and obligations, technical compatibility, data base development, competition and hoarding control.

If this experience is proving positive, extension of this approach may be envisaged, again in a phased manner. In cases where this experience is negative, proportionate provisions should be available to strengthen safeguards against the detrimental consequences or possibly even to discontinue the secondary market.

3 Procedures and conditions relating to secondary trading

According to Article 9 of the Framework Directive, Member States may make provision for undertakings to transfer rights to use radio frequencies with other undertakings, as long as there are sufficient safeguards in place to protect the public interest, in particular the need to ensure transparency and regulatory supervision of such transfers and provided that competition is not distorted as a result of any such transaction. Where radio spectrum has been harmonised pursuant to Community measures, any such transfer shall not result in change of use of that frequency.

There are many ways in which secondary trading may take place, below is an illustration of some of these. In the case of sale the rights and obligations may be fully transferred or in parts, in the case of a lease the licensee may retain the rights and obligations.



The RSPG considers that there is a need for SMAs to establish a clear regulatory framework to implement secondary trading and clearly establish the rights and obligations associated with a licence to use spectrum.

The RSPG considers that some general principles should apply to all bands where secondary trading is introduced, but due to the differences in situation from one frequency band to another there may be different regulatory/technical provisions, at least initially.

Spectrum trading can be expected to promote competition. However, the introduction does raise concerns about the potential for competition to be distorted. The RSPG considers that the question of whether existing general competition law is sufficient to prevent this is complex, particularly as it may be necessary to consider competition in the market for communications services as well as within the spectrum market itself.

The RSPG considers that in many cases general competition law may be sufficient, in some cases it may need to be complemented by specific rules.

Since trading represents a significant change to the way in which spectrum is managed, RSPG therefore considers that SMAs should carefully monitor the development of the spectrum market and the effects on competition and be prepared to act to complement general competition law by sector-specific rules if general competition law proves to be insufficient.

4 Expected role of SMAs

The RSPG considers that a successful introduction of secondary trading requires SMAs to play the following new roles.

- a. Establish clear and detailed rules for secondary trading, with clearly defined rights and obligations for all parties involved
- b. Ensure, as far as the secondary market is concerned, observance of competition rules, in particular detect and deal with anti-competitive behaviour and control market failure (e.g. caused by excessive concentration of market power)
- c. Provide on-line registries including information on licence conditions, rights and obligations. These should record and maintain, in a transparent and nondiscriminatory manner, the information relating to rights and obligations associated with each trade, the corresponding assignments and any information affecting the price, in particular the content of all relevant coordination agreements.

The RSPG also considers that the successful introduction of secondary trading requires SMAs to continue to play the following roles.

- d. Protect spectrum rights, police obligations, investigate possible infractions and manage disputes between users by taking binding decisions on them, this role may be expected to increase as a result of the introduction of secondary trading.
- e. Establish levels of acceptable interference and ensure that these levels are not exceeded.
- f. Ensure efficient and effective use of spectrum. This may include preventing hoarding and avoiding excessive spectrum fragmentation.
- g. Continue spectrum harmonisation on an international basis in a way that is sufficiently flexible, technology-neutral and dynamic enough to encourage innovation, competition and the European Single Market as well as the global market.
- h. Evaluate and control change of use beyond the terms of licences.

Furthermore, the introduction of secondary trading will result in rebalancing of roles of SMAs and licensees. In particular, licensees will have to accept more responsibilities due to new rights and obligations relating to secondary trading, especially in the case of change of use beyond the terms of licences.

5 Rights and obligations

The RSPG considers that a clear definition of the rights and obligations associated with a licence, and which will be subject to trading on the secondary market, is a key element in the successful introduction of this market in the European framework.

The attachment to annex 1 provides detailed considerations on this issue, which are intended to assist administrations in sharing a common understanding of the subject matter, and the limitations to spectrum trading which arise from the European regulatory framework and other international agreements.

6 Notification and control of trades

Several approaches may be used for notification and control of licence trades, which may involve the transfer of all the licence, or part of it, for a limited time or the remaining time of the licence.

In accordance with the Framework Directive, notification of trades to the SMA should be mandatory in all cases.

For most cases, notification with a posteriori control should be sufficient.

In some cases, in particular where justified by public interest objectives, *a priori* control by the SMA may be required.

7 Potential need for co-ordination among Member States regarding introduction of secondary trading

The RSPG considers that some commonality of approach in trading regimes is desirable but that detailed harmonisation would be difficult because of the wide range of national positions.

The RSPG consultation has not identified a clear wish to use trading as a means of entering another national market in the EU or planning to trade across national boundaries.

The RSPG supports an EU approach based on promotion of discussion and exchanges of national experience, identification and promulgation of best practice, including ad hoc events and encouraging the development of a level playing field.

The Radio Spectrum Policy Group Opinion on Secondary Trading of Rights to use Radio Spectrum RSPG04-54 FINAL VERSION

The RSPG considers that European harmonisation of spectrum trading rules should not be considered until Member States have greater experience of trading, because it might delay the developments in countries where secondary trading is being introduced and might have negative impact in countries that are more hesitant.

ATTACHMENT TO ANNEX I

RIGHTS AND OBLIGATIONS

1 Rights and obligations

In this framework, there is a need to accurately specify what is to be traded on this secondary market, i.e. the rights of use (and not property rights to spectrum itself) of a given part of the spectrum, together with the obligations attached to these rights. It is not possible to separate these rights and the obligations attached to them.

These, however, may be difficult to define exhaustively, as they are polymorphic and can vary from band to band and from Member State to Member State.

1.1 Dimensions of spectrum rights

The *rights* are the rights of use of a given part of the spectrum to provide a given radiocommunication service, under certain conditions/limitations which are part of the authorizations. These include the right to implement transmit and receive radiocommunication stations, with a certain degree of protection from interference. Depending on the situation, the degree of protection from interference may vary from no protection to international recognition, which includes protection from harmful interference.

In any case, spectrum is a National asset and remains the property of the State. Its use will continue to be authorised by the State. The SMA may decide to withdraw the authorisation, for reasons of public interest or any other reason foreseen in the authorisation, and may be subject to appropriate compensation, subject to the requirements of the EU regulatory framework for electronic communications.

Individual spectrum rights have at least three dimensions.

- Spectrum band which can be used (radio frequency area from x MHz to y MHz)
- 2. Geographical area where rights to use can be exercised
- 3. Time.

The validity of spectrum rights is normally limited in time. Time limitations may differ according to the type of service provided. The parties may agree between themselves that the transfer is to be for a limited period only and that the rights and obligations should revert to the vendor after a predetermined time. Alternatively, the transfer may be limited to a recurring transmission period, e.g. between midnight and 6 am.

If rights of use can be partially traded, these dimensions may lead to different trading possibilities.

Rights of use and the associated obligations may be transferred in their entirety to the purchaser or in part.

It is particularly important to define the period for which the licence remains in force and the degree of security of tenure, in particular the period of notice that the SMA will give before revoking or varying the licence and the limited circumstances in which revocation or variation might take place without that period of notice.

1.2 Obligations and restrictions of use of spectrum

The obligations attached to these rights result from the fact that these rights are to be exercised in a legal context and a regulatory framework which involves national and international constraints.

Regulatory bodies/Administrations may impose obligations to share spectrum with other services and networks, to use spectrum efficiently and to limit interference. Regulatory bodies/Administrations may also impose obligations to promote competition, to contribute to the development of the internal market and to promote public interest.

The following is a non-exhaustive and illustrative list of different obligations and restrictions that traditionally have been applicable to the use of or control of spectrum rights — without prejudice to the application of EC regulation, in particular annex B of the Authorization Directive, as explained below. Not all of these are applicable in all cases.

- 1. Regulatory/administrative obligations related to use or control of spectrum rights
 - a. Coverage requirements
 - b. Quality of service requirements
 - c. Interoperability obligations (roaming, infrastructure sharing)

- d. Minimum service offering (e.g. location-based services, high speed data transfer, video telephony, virtual domestic environment)
- e. Access for third parties to the network
- f. Public network obligations
- g. Social aspects and Universal Service Obligations, for instance special services for the disabled
- h. Protection of health
- i. Protection of environment (e.g. infrastructure sharing, camouflage of antennas)
- j. Prevention of handset robbery (e.g. constitution of blacklists).
- 2. Obligations that are part of a commitment which the undertaking obtaining the usage right has made in the course of competitive or comparative selection procedure
- 3. Technical requirements of use
 - a. Obligations resulting from the Radio Regulations, applicable CEPT/ECC decisions/EC directives and National Table of Frequency Allocations (service, system, applications, technical limitations, compatibility criteria, sharing criteria)
 - b. These obligations result from the need to optimize spectrum use for the benefit of the whole radiocommunication community
 - c. These obligations include in particular, technical parameters such as limitations in order to limit interference (e.g. power limitations, spectrum masks, DFS, power control).
- 4. Channelling arrangements (including duplex couplings) and essential requirements, in order to ensure efficient use of spectrum
- 5. Payments for use of spectrum
 - a. Administrative charges to cover management of spectrum by Spectrum Management Authority (SMA)
 - b. Payment for access to spectrum usage rights to promote efficient use of spectrum. It is arguable that trading provides sufficient market incentives for optimal use of the spectrum, making administrative incentive pricing (AIP) unnecessary. On the other hand, there are arguments that AIP should, at least in the early stages, continue in parallel with trading

- i. The volume of trading may initially be low and transaction costs may deter otherwise beneficial trades
- ii. AIP provides a direct economic incentive through the licence fee whereas trading does not
- iii. AIP can provide a disincentive to hold onto spectrum for speculative reasons in expectation of future gains
- iv. Some spectrum users are not driven by profit and possible trading gain will not provide sufficient incentive for spectrum efficiency.
- c. AIP can be complementary to trading and should not harm trading if it is set conservatively to be below the market clearing level.

6. Information about use

- a. Provision of information to the SMA or to the public
- b. Obligations to disclose air interfaces.
- 7. Other technical conditions for the use of the frequencies
 - a. The transmission to adhere to specific technical specifications, such as channel width, modulation technique, duty cycles etc.
 - b. Limitation of usage rights to certain "time slots"
 - c. Obligation to co-ordinate spectrum use in case of potential interference.

2 Limitation of secondary trading arising from the EU regulatory framework

Rights and obligations must be defined within the limits set out by regulations. Presently, the most elaborate EC regulatory framework covering the use of radio spectrum has been defined for the communication sector. A new EC regulatory framework for electronic communications was adopted in 2002 and entered into force in July 2003.

This framework establishes the possibility for Member States to allow for trading of radio spectrum, Framework Directive Art.9 (3). Furthermore, Art. 9 (4) defines some restrictions on transfer of spectrum rights. These restrictions include obligation of notification of trading, compliance of trading modalities with specific rules the national regulatory authority has set out, and a requirement to the MS that the transfer must not result in a distortion of competition. Moreover, where spectrum harmonisation has been achieved at Community level, transfer should not result in change of use of that spectrum.

The Authorisation Directive (Art. 5 and 7 in particular) makes use of general authorisations the rule and the imposition of individual rights the exception. Such individual rights apply for the use of radio spectrum where the risk of harmful interference is not negligible. Where the risk is negligible, conditions for usage of radio spectrum have to be included in general authorisations. Moreover, limitation in the number of rights to use spectrum is subject to specific procedures and is only allowed where necessary to ensure the efficient use of radio spectrum, which must be justified. Furthermore, in case the number of rights of use to be granted for use of radio frequencies is limited and individual spectrum rights have been granted and where a member state concludes that further rights for use of radio frequencies can be granted it shall publish that conclusion and invite applications for such rights, Art. 7, 1 and 2.

Under EC competition Law, special and exclusive rights, including for using spectrum, are not allowed.

The new framework also constrains conditions, which can be attached to general authorizations or individual rights regarding the regulation of use of radio spectrum (Authorisation Directive annex A, B).

Finally, it is recalled that radio spectrum trading should not alter the conditions of spectrum usage if this would be contrary to a Community measure, including one adopted pursuant to the provisions of the Radio Spectrum Decision (Framework Directive, Art. 9 (4)).

In addition the new regulatory framework consists of several general principles relevant to spectrum trading. Some of them are stipulated in the Framework Directive, e.g. Art. 8 (2) c, d. These principles refer to promotion of innovation, efficient use of spectrum, effective management of spectrum. The Authorisation Directive Art. 6 (1) requires that conditions attached to spectrum rights must be objectively justified and proportionate, as well as non-discriminatory and transparent. Restrictions not meeting these criteria may not be imposed.

The obligation to make use of general authorisations and the regulatory limitations to the imposition of conditions restricting the provision of communication services have legal implications for conditions for use of spectrum. The other Directives such as the Access Directive, Universal Service Directive, Directive on privacy and electronic communications) and the Framework Directive are also relevant in that context.

3 Impact of other international agreements

Other obligations related to national and international frequency constraints may also be necessary:

At the ITU level, the Radio Regulations (RR) contain the frequency allocation table, which define the allocation of frequencies to the various radiocommunication services and provide the regulatory and procedural framework in which these frequencies may be used in a way that ensures efficient and equitable access by the various countries in the world. The regulatory provisions and associated procedures included in the RR are to be applied by administrations. Among them is the requirement for any transmitting station to receive a license by or on behalf of the government of the country to which the station is subject (Article 18, No.18.1). This provision is central to the continuity of the legal link between the source of potential interference in one country and the potential victim of the interference, in another country. No right for any kind of protection could be guaranteed at international level if this link was to be threatened by the implementation of a secondary market.

The Radio Regulations have treaty status and are legally binding to the ITU Member States. During World Radiocommunication Conferences (WRCs), the Radio Regulations are modified in order to adjust the international legal framework to the evolution of the requirements and technologies. These modifications to the RR are accepted through a global negotiation, hence may have adverse consequences on the technical and/or legal framework in which a particular service is operated. Such modifications will subsequently apply irrespective of the existence of a secondary market in a particular country. Uses other than those specified in Radio Regulations are allowed on a non-interference, non-protected basis.

Regional Radiocommunication Conferences (RRC) also conclude international agreements with treaty status, between the Member States of a particular geographic area, in order to more accurately define the technical/regulatory conditions in which a particular service is to be operated within that area, while remaining within the framework defined by the RR. This is especially the case for broadcasting and certain mobile services in bands below 1 GHz.

At the European level, the CEPT, in many cases following a mandate from the European Commission, undertakes to harmonise the use of frequencies within Europe, within the legal framework defined by the ITU (RR and regional agreements) by adopting decisions, which, once signed by administrations, become binding for them. They may also be imposed on Administrations of the European Union pursuant to Article 4 of the Radio Spectrum decision. These decisions define the type of service and application to be used in a given frequency band, and the associated technical, operational and regulatory provisions under which spectrum is to be used in accordance with the decision. Administrations may also conclude multilateral agreements, such as the Vienna/Berlin Agreements, in order to specify the procedures to be applied in bilateral coordinations.

Also at international level, Administrations regularly meet bilaterally in order to coordinate the use of frequencies at their borders. This type of negotiation

generally involves many frequency bands, services and operators, which may lead to new constraints on existing assignments, hence licences.

At national level, each government has the duty to adopt a national frequency allocation table, which by necessity, has to reflect the agreements committed to by the corresponding country within the ITU or CEPT. This National frequency allocation table also reflects the specific choices which may be made in this particular country, in particular in respect of accommodating national defence, security, research, audiovisual policies or industry requirements, which may differ from one country to the other.

Obligations derived from international agreements, such as the ITU Radio Regulation, may directly influence on the content of obligations and rights that can be attached to spectrum use. However, Member States cannot enter into international agreements which would not be compatible with EC Law.

Furthermore, Radio Regulations do not automatically imply that national assignments must follow the usage conditions stipulated by the Table of Allocation (Article 5) of the RR, as long as deviating assignment conditions do not create interference or otherwise harm the spectrum usage made by other ITU member countries who decide to adhere to Article 5 of the RR.

Requirements in relation to international agreements, such as NATO agreements, may on the other hand limit the competence of spectrum management for the parties. These restrictions may be related both to the conditions of use and of transfer of spectrum rights.

Given this general framework, licences often include the following obligations, the non-observance of which may lead to revocation of the licence.

- a. Provision of a specific service (in conformity with the RR)
- b. Use of a specific application/system in that service (in conformity with RR/CEPT decision)
- c. Specific technical, operational and regulatory conditions necessary to avoid causing harmful interference to other users of spectrum (RR or CEPT)
- d. Obligations related to coverage and quality of service objectives, including deployment calendar. Among these, the obligation of nation wide coverage is a key element for mobile cellular networks
- e. A maximum period of operation, and specific conditions under which this period may be shortened
- f. Payment of fees for spectrum usage
- g. Specific commitments taken during the initial selection process

- h. Obligations resulting from past or future international agreements (ITU, CEPT, EU, bi-lateral or multilateral agreements such as coordination agreements or regional plans)
- i. Other specific obligations resulting from national laws/decisions.

The above framework is intended to ensure the continuity of the legal link between the spectrum users and the administrations, which is key in safeguarding other spectrum users from unacceptable levels of interference.

Given this, there is a need to ensure that, in the process of trading of rights of use on a secondary market, any total or partial transfer of these obligations needs to be formally effected in a transparent and controlled way within a framework of effective but proportionate regulation.

ANNEX II

THE PUBLIC CONSULTATION

Acknowledging the importance of radio spectrum for significant industrial and economic activities and in order to ascertain the views of spectrum users, the RSPG conducted a public consultation according to article 5 of the radio spectrum policy group decision⁴, via the RSPG website, on 10 February 2004, with a closing date for comment of 2 April.

1 Scope

The purpose of the consultation was to seek the views of spectrum users on the possible introduction of spectrum trading. Views were sought on a range of questions, covering the following issues.

- a. The general case for trading, including advantages and disadvantages and potential value, both in general and for the respondent's business
- b. The necessary legal framework for trading in terms of types of transaction permitted and associated rights and obligations, including licence-term and security of tenure, and whether there should be different rules for different frequency bands
- c. Spectrum management implications including benefits and difficulties caused by allowing reconfiguration or change of use of spectrum
- d. The role of the spectrum management authority in facilitating trading, e.g. through provision of online information
- e. The role of the spectrum management authority in controlling trading, e.g. how far it is necessary to grant prior approval and the kind of competition rules that will be appropriate
- f. The EU Dimension, including the possible advantages of a co-ordinated approach, as against unilateral national action, and how far it is necessary for the EU to take measures to facilitate the implementation of trading
- g. Specific examples of areas where trading would be beneficial and priority areas for introduction of trading.

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⁴ 2002/622/EC

2 Responses

The RSPG received a total of 34 replies from a range of organisations, broken down as follows.

•	Large	telecoms	operators
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- Bouygues Telecom - Telecom Italia Group

European Telecommunications
 Networks Operators Association
 (ETNO)
 Telefónica Group
 T-Mobile International

- France Telecom - Vodafone

- O2 - Wind Telecommunicazioni

• Equipment manufacturers

- Ericsson - European Industry
Association/Information Systems,

- Nokia Communication Technologies,
Consumer Electronics (EICTA)

- EADS/Astrium

• Satellite operators

- Siemens

- EUTELSAT - Hispasat

European Satellite Operators
 Association (ESOA)
 Satellite Action Plan Regulatory
 Group (SAPREG)

Broadcasters

- ARD - Retevisión and Tradia

- European Broadcasting Union

• Small telecoms companies

- European Access Providers - NEO-SKY 2002

The Radio Spectrum Policy Group Opinion on Secondary Trading of Rights to use Radio Spectrum RSPG04-54 FINAL VERSION

- Interest organisations and others
 - CDMA Development Group
 - German Association for Information Technology, Telecommunications and new media (Bitkom)
 - Grupo Auna
 - GSM Europe (GSME)
 - Institution of Electrical Engineers (IEE)

- Regulatory Group of the Spanish Telecommunication Engineers Assocation (GRETEL)
- Spectrum Trading Associates
- UMTS forum

ANNEX III

LIST OF DOCUMENTS CONSIDERED

The Framework Directive (2002/21/EC)

The Authorisation Directive (2002/20/EC)

Radio Spectrum Policy Group Decision (2002/622/EC)

Provisional Rules of Procedure for the Radio Spectrum Policy Group (RSPG03-12)

Request by the European Commission to the Radio Spectrum Policy Group for an opinion on secondary trading of rights to use radio spectrum (RSPG03-13)

Responses to the public consultation (http://rspg.groups.eu.int/Default.htm)

Study on conditions and options in introducing secondary trading of radio spectrum in the European Community - Analysys Consulting, DotEcon, Hogan & Hartson, 2004