

ETNO Reflection Document commenting on the "First annual report on radio spectrum policy in the European Union" (COM(2004) 507)

Executive Summary:

ETNO is in favour of evolutions in radio spectrum management with the potential to improve its usability for operators and users and welcomes the Commissions' cooperation with CEPT on this subject. This cooperation will benefit from a closer collaboration with stakeholders.

Almost all topics in the Commission Communication are related to possible/potential improvement of radio spectrum regulation.

With regard to the means of spectrum management under discussion, ETNO is of the opinion that

- requirements for efficient spectrum use should apply to all spectrum users and not limited to the telecommunications sector,
- an appropriate balance between flexibility in spectrum use (like change of use and technology neutrality) and harmonisation needs has to be established,
- faster standardisation and harmonisation processes would enhance innovations,
- adequate protection from harmful interference is essential to maintain quality of radio services and the confidence of users.

Introduction

ETNO appreciates the publication of the COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL including the "FIRST ANNUAL REPORT ON RADIO SPECTRUM POLICY IN THE EUROPEAN UNION". This document clearly highlights past evolutions and future perspectives in this field and the growing importance of radio spectrum as a scarce resource.

Radio spectrum plays an important role for the development of telecommunications, and the way it is managed impacts directly telecommunications operators' strategies and investments and consequently the Information Society as a whole.

As public radio network operators are particularly involved in the evolution of the European radio frequency management, ETNO has been following the developments around this issue right from the beginning and participated actively in different consultations related to the new regulatory framework for Electronic Communications in the European Union.

ETNO would like to take the publication of the "FIRST ANNUAL REPORT ON RADIO SPECTRUM POLICY IN THE EUROPEAN UNION" as an opportunity to reaffirm its views and comments on the present situation and on the future actions envisaged by the Commission.

Policy making and implementation

ETNO considers that the current spectrum regulations developed within ITU and CEPT have been very efficient in allowing the development of public radio systems and networks, and their introduction for the provision of services in Europe.

The efforts in terms of spectrum harmonisation associated with equipment standardisation, by allowing wide area markets and economies of scale, created excellent conditions for the development of affordable and successful radio-communications services. The flexibility of the regulations allowed their progressive adaptation within European countries according to their will to collaborate. The harmonisation efforts, together with the open and transparent working methods of ITU and CEPT, are beneficial for the telecommunications sector. ETNO applauds the improved openness and transparency of CEPT ECC within spectrum management and planning work. The success of GSM and its worldwide dominance as 2G mobile technology is a bright example for this, as also mentioned in the Commission Communication.

ETNO welcomes the Commission's decision to cooperate with CEPT and to complement their work and appreciates the various initiatives launched in order to improve spectrum regulation in the European Union and the functioning of the single market.

ETNO considers the establishment of the Radio Spectrum Committee as an important element in the European decision process, and the Radio Spectrum Policy Group should also play a significant role in the development of a coherent European radio spectrum policy.

ETNO believes that technology innovation coupled with an appropriate regulatory evolution will release constraints and ease the access to radio frequency spectrum. These improvements will benefit from a coordinated and coherent approach based on a fruitful collaboration between European regulatory bodies and stakeholders.

Evolution of Spectrum management methods and future actions

With regard to the current debates around the evolution of spectrum management methods, ETNO shares concerns on several issues presented hereafter.

In order to take action against *spectrum scarcity*, similar spectrum management rules should apply to the various radio services including governmental use and broadcasting. In particular, ETNO is worried to see new spectrum management initiatives mainly applying to the telecommunications sector by the means of the new regulatory framework. All radio spectrum users should benefit from the move towards flexibility and innovation and the efforts for an efficient spectrum use should apply to the whole frequency spectrum and all spectrum users.

Adequate balance should be established between *flexibility* in the use of spectrum and the needs for *harmonisation*. The development of investment and the provision of affordable services are based on stakeholders confidence in the availability of "clean" radio spectrum and on the protection from unacceptable interference. As already mentioned, the possibilities for spectrum trading and allowance of change of the use of radio spectrum should be carefully considered before being implemented. ETNO welcomes all efforts to fasten administrative procedures and lighten burdens of control when possible, but we believe that risks associated with liberalisation of the use of spectrum should be carefully assessed before any decision is taken. However, simplistic economic theories might not be applicable to radio spectrum management. Increase of interference caused by uncontrolled change of use could jeopardise the use of the frequency bands concerned and the provision of services.

The principle of *technology neutrality*, which is very often put forward as a means to enhance the flexibility of spectrum use has to be investigated carefully and in greater detail.

The current spectrum management regime favours sharing of frequency bands by different services using technologies specified in harmonised standards. Detailed specifications allow for thorough compatibility studies which usually result in sharing feasibilities with limited technical constraints. Introducing the concept of technology neutrality by relaxing the elements of standardisation will make sharing more difficult, multiply the number of sharing studies needed and potentially adds harmful interference. This has to be taken into account in the economic considerations as well as in the speediness of the process.

Enhancement of innovation is generally presented as the main benefit gained from relaxed spectrum regulation. This idea seems to be intuitively acceptable when considering mass market low power devices for which timely introduction is a key aspect for economic success.

However, successful innovative applications in telecommunications are usually based on harmonised standards and harmonised frequency bands. This allows scaled economies by network deployment, higher numbers in terminal production and circulation in extended geographical regions. A recent example is the significant development of WiFi equipment after decisions taken at the WRC-03. Moreover, the designation of harmonised frequency bands is an incentive for entrepreneurs to invest in the development of new technologies. Therefore, in ETNO's view, prospective planning remains a powerful tool to allow the development of innovative applications.

Promotion of innovation should be best served by efforts to fasten the standardisation and harmonisation process. The timely availability of frequency bands does not seem to be the main limitation at present, provided adequate prospective planning is achieved by the bodies concerned.

Experimental rights : The proposal to authorise the implementation of new technologies on an experimental basis rather than to rely on compatibility studies can in some cases prove to be very dangerous.

UWB is a striking example of such a danger. UWB devices could only be allowed on the basis that they will not interfere with nor claim protection from existing services. A limited number of UWB devices can coexist with present radio applications; however, if the number of UWB devices becomes high enough the aggregate noise produced can disrupt those applications. The unlicensed use of UWB devices would not allow for the products to be withdrawn from the market in response to an increase in the risk of harmful interference for other radio applications.

Moreover, the ECC has noted that the provisions of the R&TTE Directive and the Framework Directive could make it difficult to change the regulation for the use and/or to limit placing of UWB products on the market in response to an increased risk of harmful interference for other radio applications.

This justifies that the regulatory regime is defined by taking into account long-term scenarios. The protection of existing services should consequently better rely on previous compatibility studies in order to impose adequate conditions for the deployment of such devices right from the beginning in order to ensure effective protection of existing radio spectrum users.

Conclusions

ETNO favours any evolution of spectrum regulation which improves the possibility to adapt the spectrum resources to operators and users needs. We believe that technology innovation will, in a foreseeable future, allow significant progress in that respect by allowing an improved flexibility in the use of spectrum. Some release of undue constraints is already possible by adapting the regulation at national level. The new regulatory framework establishes the conditions for such positive change.

However, while evolutions are needed, ETNO considers that a careful approach should be favoured in order not to jeopardise the benefits of the existing framework and conventional spectrum harmonisation. The present spectrum regulation system, while obviously capable of being improved, is satisfactory for the most stakeholders as it allows confidence for investments and technology development, and consequently affordable and widely usable services for customers and users.

Evolutions in spectrum regulation would take the best advantage from a continued fruitful collaboration between the European Commission bodies, CEPT, ITU and industry associations. Moreover, ETNO considers that the RSC and the RSPG should take advantage of the possible closer collaboration with industry, e.g. network operators and manufacturers, by associating with their representative associations in a balanced manner. This procedure would improve efficiency and transparency of the decision making process.