REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

SECOND PROGRESS REPORT ON THE OPERATION OF DIRECTIVE 1999/5/EC, on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity
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1. INTRODUCTION

The R&TTE Directive 1999/5/EC (hereafter ‘the Directive’)\(^1\) establishes a framework for the placing on the market, free movement and putting into service in the European Union of radio equipment and telecommunications terminal equipment. It addresses a large part of the €90bn market for telecommunications and radio equipment, covering inter alia mobile phones, mobile network transmitters, fixed telephones and data transmission modems. Non-radio telecommunications infrastructure such as switching systems is excluded from its scope. The Directive is applied in the European Economic Area (EEA) and also in Turkey in application of the EU-Turkey Customs Union agreement. Switzerland has aligned its national legislation with the provisions of the Directive on a voluntary basis.

The equipment covered by the Directive is also strongly affected by other European legislation, such as the electronic communications regulatory framework\(^2\), and in particular by the Radio Spectrum Decision\(^3\) and its implementing measures for the progressive harmonisation of spectrum.

This 2nd progress report is being issued according to Article 17 of the Directive which calls for the Commission to periodically report on the operation of the Directive and cover inter alia progress on drawing up the relevant standards as well as any problems that have arisen in the course of implementation.

The report is based on:

- a public consultation held in 2007 when 60 respondents answered around 120 questions on the operation of the Directive\(^4\),
- the proceedings of the standing Committee (TCAM\(^5\)),

\(^1\) OJ L 91, 7.4.1999, p. 10–28
\(^3\) Decision on a regulatory framework for radio spectrum policy in the European Community (RadioSpectrum Decision) (676/2002/EC)
\(^4\) Summary of the replies on http://ec.europa.eu/enterprise/rtte/index_en.htm
\(^5\) Telecommunications Conformity Assessment and Market Surveillance Committee
feedback from national market surveillance authorities and from other stakeholders.

This report draws attention to some difficulties in the operation of the Directive in view to achieve its desired effects. Possible remedies will be addressed in a comprehensive Impact Assessment in the context of a future revision of the Directive, for which a Commission proposal is scheduled for end 2010.

2. **THE OPERATION OF THE DIRECTIVE**

2.1. **Scope of the Directive**

The legal concept of “terminal”, defined in Article 2, is an essential element of the scope of the Directive. The distinction between ‘terminal’ and ‘telecommunications network’ was introduced in EU legislation in the 1990’s in order to prevent the joint dominance of monopolistic network operators and associated manufacturers of user equipment. This distinction, and the obligation of operators to publish the technical specifications of their network interfaces, as required by Article 4.2 of the Directive, is intended to open the user equipment market to all manufacturers and thus encourage competition and innovation. Following evolutions in technology and in market conditions, the relevance of this distinction with regard to fostering competition deserves to be re-examined. Moreover, related competition issues now also include aspects of access to content that may often be independent of user terminal providers or of subscription to telecommunication services.

The scope of the Directive needs to be reviewed. For instance, the radio and TV receivers which are not able to transmit by radio or cable do not fall within the scope of the Directive, while those which are able to transmit signals do.

Some rather specific pieces of radio equipment are an integral part of systems also covered by other security and safety EU legislation or by international treaties. This is especially the case with maritime, land and aeronautic safety systems. These items do not fit well with the R&TTE procedures and standardisation processes.

2.2. **Definition of essential requirements**

The Directive contains in Article 3 a number of essential requirements to protect health and safety, ensure electromagnetic compatibility and to avoid harmful interference. The way in which these essential requirements are defined in the Directive is generally considered appropriate by stakeholders. However, the concept of ‘intended use’ of the equipment seems to create some confusion between the essential requirements of the Directive and other public interests, such as public security or freedom of communication, which are beyond its scope.

Article 3.3(e) allowing the EU to impose additional requirements on access to emergency services was effectively applied a number of times in relation to specific maritime and terrestrial safety equipment.

2.3. **Harmonised standards supporting the Directive**

The Directive is based on the “New Approach” principle: compliance with harmonised standards gives presumption of conformity with the essential requirements of the Directive, a possibility which has generally been used by manufacturers of R&TTE equipment. Alternative ways to conform with the essential requirements have remained an exception.
A comprehensive set of harmonised standards is regularly published in the Official Journal, currently adding up to more than 200 standards. Standards thus play a crucial role with regard to the application of the Directive.

Only very few problems have been encountered with standards failing to address essential requirements of the Directive and, consequently, the need for the Commission to issue guidance to standardisation bodies has not been frequent. For example, in 2007 some 5 GHz WiFi RLAN systems interfered with meteorological radars operating in the same band and in conformity with the harmonised standard. The Commission and TCAM intervened by issuing guidance to review the related harmonised standards and, in consultation with stakeholders, agreed a migration path for adaptation of WiFi RLAN products prior to mass market deployment. Following the 2003 allocation of the 5GHz band to mobile use (i.e. WiFi RLAN use) at global level in addition to the meteorological services, the full range of meteorological applications were not taken into account in European standardisation. This case thus highlights the need for all interested parties in spectrum sharing to participate in standardisation.

There has also been some evidence suggesting that harmonised standards may sometimes be too stringent. Market surveillance campaigns have shown that a proportion of unlicensed low power devices appear to be non conformant with the harmonised standards (cf. § 2.5). However, the recorded level of harmful interference does not seem to have been affected by this.

The consultation confirmed the existence of barriers preventing SMEs and consumers from fully participating in the standardisation process in the telecom area, as more generally discussed in two recent Commission Communications. The consultation also revealed that transparency of the standardisation process should be improved. Furthermore, the area of radio equipment partially shows the difficulties of the EU to lead global standardisation, as noted in the recent Commission White Paper on ICT Standardisation. The process for allocating frequency bands and subsequent usage is different between continents and standards are not always interchangeable.

The consultation also emphasized that timing of standardisation work and related processes leading to regulatory decisions on spectrum use could be improved in order to allow technical work to be based on a stable regulatory framework. This would require a stronger commitment by administrations to participate in ETSI at different levels.

Finally, the consultation highlighted a need to move towards more flexible and generic harmonised standards which are less specific to a technology or an application.

6 http://ec.europa.eu/enterprise/rtte/harstand.htm
7 Radio Local Access Networks.
8 COM/2008/133 final: Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee – Towards an increased contribution from standardisation to innovation in Europe.
9 COM/2008/394 final: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - ‘Think Small First’ – A ‘Small Business Act’ for Europe.
10 COM(2009) 324 final: WHITE PAPER Modernising ICT Standardisation in the EU - The Way Forward
2.4. **Notified Bodies (NBs)**

Where harmonised standards are not yet available or have not been followed by the manufacturer, the Directive assigns to Notified Bodies the role of assisting manufacturers throughout the conformity assessment process, in particular to issue opinions on the technical documentation of products. In practice most NB opinions concern products which use harmonised standards to ensure compliance with the essential requirements of the Directive, but for which manufacturers - due to the often high technical complexity of conformity assessment - prefer to seek an endorsement from an experienced and qualified body.

A large number of NBs have been notified by Member States to the Commission\(^{11}\). NBs are based in the EEA and also in countries with which the European Union has concluded Mutual Recognition Agreements. NBs organise themselves on a voluntary basis under the [R&amp;TTE Compliance Association](http://www.rtteca.com/).\(^{12}\) Specific problems regarding the co-operation between manufacturers and NBs have not been reported.

2.5. **Market Surveillance Authorities (MSAs), enforcement of the Directive and compliance**

Every year MSAs in charge of market surveillance notify to the Commission approximately 50 cases of non-compliant equipment banned from their national market under the safeguard clause procedure foreseen in Article 9.

MSAs co-operate actively at EU level and regularly meet in the R&amp;TTE Administration Cooperation (ADCO) group. The ADCO group coordinates joint surveillance campaigns, and should now take advantage of the provisions introduced by the New Legal Framework (NLF)\(^{13}\) for bringing its cooperation to a new level. The past campaigns already flagged **concerns about compliance levels in certain families of products.** In particular, a **very low level of compliance to the provisions of the Directive was observed among low power radio devices** and to a lesser extent in other areas. A number of importers and manufacturers of this equipment are not aware of the Directive or deliberately ignore it. A number of stakeholders noted that this has not led to obvious risks for consumer safety and for the integrity of telecommunication networks, or to an increase in harmful interference. Companies who comply with the Directive regard non-compliant products as causing unfair distortion of competition.

**Traceability of defective products** is an issue of concern: market surveillance authorities can often not identify the manufacturer or the person responsible for placing a product on the market.

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\(^{11}\) [http://ec.europa.eu/enterprise/newapproach/nando/index.cfm?fuseaction=directive.notifiedbody&dir_id=22&type_dir=NO%20CPD&amp;pro_id=99999&amp;prc_id=99999&amp;ann_id=99999&amp;prc_anx=99999](http://ec.europa.eu/enterprise/newapproach/nando/index.cfm?fuseaction=directive.notifiedbody&dir_id=22&type_dir=NO%20CPD&amp;pro_id=99999&amp;prc_id=99999&amp;ann_id=99999&amp;prc_anx=99999)


Regulation (EC) No 764/2008 of the European Parliament and of the Council of 9 July 2008 laying down procedures relating to the application of certain national technical rules to products lawfully marketed in another Member State and repealing Decision No 3052/95/EC.
market, especially for smaller market players. Strong, often costly effort is spent on finding manufacturers or importers, preventing a more efficient allocation of the limited resources of MSAs. In the consultation a compulsory on-line registration of either the manufacturers or their products and/or an adaptation of the Directive to the New Legal Framework (NLF) have been suggested to improve traceability.

The Directive provides for a safeguard measure (Article 9) as e.g. a “sales ban”. The existing procedure allows for national measures only with a notification to the Commission. This procedure has been considered as too lengthy since it can usually not be completed before the end of the life cycle of the non-compliant product. In its Opinion on “Streamlining the regulatory environment for the use of spectrum” the Radio Spectrum Policy Group (RSPG)\(^{14}\) recommended investigating the possibility of an extension of a national safeguard clause to the whole of the EU market, where appropriate\(^{15}\).

2.6. Unused and less used provisions

Application of Articles 3.3(a-d) and 3.3(f) allowing the EU to impose additional public interest requirements such as to combat fraud or to ensure interoperability or privacy, has been considered on a number of occasions but was finally discarded.

Notifications of disconnection of terminals under article 7.4 and notifications of prohibition of compliant equipment under article 9.5 have not been received.

When national radio interfaces are harmonised as a result of technical implementing measures under the Radio Spectrum Decision\(^{16}\) it is redundant to assess their equivalence under article 4.1 of the Directive in view of an equipment class.

There are eighteen administrative provisions in the Directive and the relevance of some of them has been questioned. In particular, there are various kinds of very small equipment such as RFID tags or cochlear implants, which emit radio signals that are unlikely of causing harmful interference. Applying all the administrative provisions in the Directive to those rather benign devices may not be justified, notably due to the administrative burdens involved. Benign devices require spectrum to be able to operate, it is therefore necessary to take into account regulatory decisions concerning spectrum for these devices.

2.7. Coherence with other provisions of EU law

Increasing numbers of mass market products, such as toys, now include a radio device. This causes complex situations, multiple conformity assessment procedures and non-harmonised interpretations and practices between Member States.

While the Directive has strong complementarities with the Radio Spectrum Decision\(^{17}\), there are however some issues of demarcation and consistency between both legal instruments, which create some uncertainties in their application. Also the outcome of the review of the electronic communications regulatory framework\(^{18}\) and Directives such as RoHS\(^{19}\) or

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\(^{14}\) The Radio Spectrum Policy Group (RSPG) is an advisory group to the European Commission composed of Member States’ representatives in charge spectrum policy (see: http://rspg.ec.europa.eu/).

\(^{15}\) Recommendation 5.19 in document RSPG08-246 (http://rspg.ec.europa.eu/rspg_opinions/index_en.htm)

\(^{16}\) op. cit., p. 2

\(^{17}\) op. cit., p. 2

\(^{18}\) op. cit., p. 2

\(^{19}\) Restriction of Hazardous Substances Directive (2002/95/EC).
WEEE\textsuperscript{20} as well as the implementing measures under the EcoDesign Directive 2005/32/EC, have an important impact on R&TTE equipment. The R&TTE Directive is not fully consistent with these legal texts, and this leads again to problems of application and interpretation.

2.8. TCAM and the consistent application of the Directive

The Committee of the Directive has been holding around three two-day meetings per year, with the participation of virtually all the Member States. While in the initial years of the Directive the Committee mainly discussed matters of common application, the Committee now increasingly deals with regulatory and standards-related issues, with enforcement difficulties, and with the potential application of Article 3(3), which makes it possible to stipulate additional requirements.

Member States have agreed in TCAM on a harmonised approach to specific issues. However, agreement on a common approach has not always been possible, in particular in relation to innovative technologies. This may have driven some companies and investors to introduce innovative products outside of Europe.

There has been no common criterion on notifications under Article 6.4 of equipment using frequency bands that have not been harmonised. Since January 2008, however, the One-Stop Notification system (on-line) has alleviated the consequences of existing national discrepancies without fully resolving them.

During the consultation, some stakeholders expressed the wish that, for some details of the operation of the Directive, TCAM conclusions be binding on all Member States.

2.9. Technological challenges

The Directive has allowed the addressing of most technological developments. However, particularly challenging is the case of equipment reconfigured during operations by users and/or an entity other than the initial manufacturer, such as ‘Software Defined Radio’ (SDR), or reconfigurable cognitive radio. The current Directive, which assumes that a single legal entity designs the equipment and ensures its compliance once and for all, is not well adapted to address this flexibility.

2.10. The R&TTE Directive and the general framework for competitiveness and innovation in this area

Since its entry into force the Directive has been instrumental in consolidating the Internal Market for products within its scope. The framework works well for placing on the market equipment using established technologies, and also facilitates their evolution, in particular through the timely revision of harmonised standards.

The Directive appears to be less suited to allow the placing on the market of products based on fundamentally new radio technologies not yet covered by harmonised standards. In the absence of harmonised standards, the manufacturer has to consult a NB for placing a product on the market. In its Opinion on “Streamlining the regulatory environment for the use of spectrum”\textsuperscript{21}, the RSPG noted “that stakeholders (notified bodies, manufacturers…) seem

\begin{footnotesize}
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\item \textsuperscript{20} Waste Electrical and Electronic Equipment Directive (2002/96/EC).
\item \textsuperscript{21} RSPG08-246 (http://rspg.ec.europa.eu/rspg_opinions/index_en.htm)
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unable to establish, with any certainty, the conformity of radio equipment with the essential requirements of the R&TTE Directive where a harmonised standard has not been applied or does not exist.” Regulators also tend to submit innovative radio products to conservative usage constraints within the bands that are allowed.

Furthermore, outside the scope of the Directive, but strongly linked to the introduction of innovative radio technologies, is the issue that innovations may not sufficiently fit within existing spectrum allocations and are therefore legally prevented from being used. Member States do offer the possibility of experimental rights of use which can support the development of innovative technologies at national level.

When moving from the research and development phase to commercial deployment, the lack of harmonised standards allowing to place innovative products on the market in compliance with legal requirements, and availability of suitable spectrum allocations and associated conditions of use may create legal uncertainty and thus can deter potential investors in technology. However increased flexibility for spectrum use as introduced by the 2009 review of the electronic communications regulatory framework may offer a solution to this issue.

Due to these challenges related to a complex, and somewhat inflexible regulatory environment, companies may choose to move their pilot-tests, pre-commercial and initial commercial deployment to other trading areas, such as the United States of America. This prevents innovation in radio technologies in Europe from reaching its full potential.

3. CONCLUSIONS

The Directive has been instrumental in the completion of the internal market for radio equipment, replacing thousands of national type-approval schemes and introducing a light-touch regulatory regime facilitating innovation and competition. Overall, the regulatory framework set up by the Directive has allowed to achieve its intended goals, i.e. a high level of protection of health and safety for users, the electromagnetic compatibility (EMC) for telecommunication terminals and radio equipment as well as the avoidance of harmful interference.

Regarding use of spectrum, in spite of the limited technical compliance observed in some types of products, there is no evidence of an increase of levels of harmful interference. This may suggest that standards may be too stringent, and that a review of the technical approach in this area may allow a more intense and efficient use of spectrum.

There are two main issues that merit a more in-depth investigation: market entrance for innovative radio technologies due to the existing process for putting in place the necessary regulatory decisions concerning spectrum use and harmonised standards, and the traceability of the manufacturer or the person responsible for placing products on the market.