03.07.2003

A R D - M E M O R A N D U M
Ensuring Interference Protection for Broadcasting in the European Union

1. The importance of interference protection for broadcasting

Interference protection is extremely important for the public broadcasting sector; it is one of the key factors that helps to ensure that public broadcasters can perform their valuable democratic and pluralism promoting functions continuously and effectively. The EU Member States have explicitly recognised the significance of broadcasting in the Amsterdam Protocol to the EC-Treaty, which is to be adopted as part of the new European Constitution. Pursuant to these provisions, defining or framing the scope of the responsibilities and functions of public service broadcasting lies within the competence of the individual Member States.

The German legislature is constitutionally bound to create the legal basis for the dissemination of radio and television programmes. The German Constitutional Court has expressed the opinion that freedom of expression pursuant to Article 5 of the German Constitution can be compromised by the modalities of the dissemination of these programmes. The public service broadcasters thus request that this approach be taken into consideration in the revision of the EMC Directive, because this directive significantly effects the dissemination and reception of radio and television programmes. This applies to both analogue and digital distribution of the broadcasting programmes.

Furthermore, the provisions of the Radio Regulations of the ITU, a subsidiary organisation of the United Nations, are also relevant to the revision of the EMC Directive. These provisions include specific definitions of the term interference and also set minimum standards for field strength and signal-to-noise ratios in the reception areas served (see enclosure). Pursuant to Article 15.12 of the Radio Regulations, the signatory states must ensure that the operation of elec-

trical apparatus or installations does not cause harmful interference with radio communication services operating in accordance with the provisions of the Regulations, and must intervene and take corrective action in the event of such interference.

In our opinion, the provisions of the proposal for revision of the EMC Directive (hereinafter referred to as the EMC Draft Directive) do not comply with the provisions of the ITU Radio Regulations.

2. Key changes in the EMC Draft Directive as compared to the current EMC Directive 89/336/EEC

a) Subordination of interference protection to the interests of the manufacturers of apparatus and installations

Recital 2 and Article 4 of the current EMC Directive 89/336/EEC give interference protection primary importance in connection with the introduction and use of equipment. This objective is no longer apparent in the EMC Draft Directive. Drawing on Article 95 of the EC-Treaty, the EMC Draft Directive focuses primarily on ensuring the free movement of electrical equipment (apparatus and so-called fixed installations) by imposing standardised requirements for electromagnetic compatibility. The objective of the EMC Draft Directive is to introduce special regulations for fixed installations, to clarify the role of the harmonised standards, and to simplify the evaluation of conformity for apparatus. According to the statements made by the Commission on the EMC Draft Directive, these measures are designed in particular to enhance legal certainty and make planning easier for the manufacturers of apparatus and installations. The associated negative consequences for radio services and planning certainty for the broadcasting sector are not taken into account.

According to the Explanatory Memorandum of the EMC Draft Directive, fixed installations can include electricity distribution networks, telecommunication networks, large machinery and assemblies of machinery on manufacturing sites. However, electricity distribution networks can also be used for the dissemination of Powerline communications applications (PLC

applications), which use unshielded power mains as their communications medium. The higher emissions limits requested by the industry in connection with PLC applications are potentially capable of causing interference with the reception of broadcasting programmes, particularly to the in-house systems essential for the introduction of DVB-T, but also to the reception of DRM (digital medium wave). In some locations, these limits could even make reception completely impossible.

According to the EMC Draft Directive (Recital 2), “Member States are responsible for ensuring that radiocommunications, electrical supply and telecommunications networks, as well as equipment connected thereto, are protected against electromagnetic disturbance.” Furthermore, Annex I (1.1), stipulates under the heading Protection Requirements that equipment must be designed and manufactured in accordance with the current state of the art so that “(a) the electromagnetic disturbance generated does not exceed the level above which radio and telecommunications equipment or other equipment cannot operate as intended;”.

However, these regulations aimed at protecting radio broadcasting are undermined by Article 6 of the EMC Draft Directive. Under the draft proposal, if apparatus and installations comply with applicable harmonised standards the presumption is allowed that the equipment in question conforms to the essential requirements of Annex I of this Directive and that sufficient interference protection is thus ensured. However, standards are only developed using statistical methods on the basis of a variety of assumed values that necessarily constitute generalisations and averages. Because of this, it can become necessary in certain cases to call for amendments that go beyond the requirements of the general JWG Installation Standard on the basis of internationally agreed emissions guidelines in order to achieve the level of interference protection for broadcasting reception laid down by the International Telecommunications Convention. However, the possibility of making such amendments is explicitly excluded by the provisions of the EMC Draft Directive which restrict national regulations with a larger aim. Under the draft proposal, national administrations which are specifically required by the International Telecommunication Convention and the associated Radio Regulations to take action to protect broadcasting against interference would only be permitted to

implement such measures in exceptional cases and subject to the narrowly-defined conditions of the provisions of the EMC Draft Directive.

Whilst EMC Directive 89/336/EEC places interference protection under the competence of the Member States in accordance with the requirements of the Radio Regulations, Member States' options for ensuring effective protection against interference are restricted by the presumption principle of Article 6 of the EMC Draft Directive. This will be demonstrated in detail in the following sections of this memorandum.

b) Restriction of Member States' competence to implement regulations

The ETSI/CENELEC Joint Working Group called into being by the European Commission with Mandate M313 has been charged with drawing up a unified, harmonised standard on electromagnetic compatibility requirements for cable-based telecommunications networks and systems. However, since the members of the Joint Working Group consist primarily of individuals representing the interests of the industry, the public broadcasting sector has grounds for concern that the emissions limits defined by the group could turn out to be one-sided, favouring providers of new telecommunications services to the disadvantage of broadcasters. Emissions limits providing less interference protection than currently enforced in Germany by the NB30 standard, which is already extremely tolerant, could result in a significant number of cases of interference prejudicing broadcasting reception quality. The draft standard now under discussion by the Joint Working Group actually contains even higher electromagnetic field emission levels.

In the event of disturbances, the current EMC Directive allows Member States to set their own limits for interference suppression in compliance with the ITU Regulations. This would no longer be possible under the provisions of the EMC Draft Directive. Pursuant to Article 6 (3) of the EMC Draft Directive, any concerns of a Member State or the Commission as to whether a harmonised standard complies with the essential requirements referred to in Annex I are to be brought before a Standing Committee. The Commission must then make a decision without delay on the basis of the opinion submitted by the Committee (Article 6 (4) EMC Draft Directive).

In order to protect freedom of dissemination, public service broadcasters also believe that Member States should be able to take preventive action against apparatus and installations that generate interference. However, the EMC Draft Directive makes no provision for preventive action by Member States when emissions are found to exceed the limits unless there is a reported actual case of interference. Member States can only implement measures against apparatus and installations in the event of an actual case of interference. Pursuant to Article 9 (1) of the EMC Draft Directive, if an apparatus bearing the CE marking does not comply with the requirements of the Directive, a Member State is entitled to take all appropriate measures to withdraw the apparatus from the market, to prohibit its marketing or operation, or to restrict its free movement. However, such measures must be reported immediately to the Commission and the other Member States, along with the reasons and specific grounds for the non-compliance. Pursuant to Article 9 (3) of the EMC Draft Directive, only the Commission shall be entitled to decide whether or not it finds the measure to be justified, following consultation with the parties. If the measure is based on “a shortcoming of the harmonised standards” and if the Member State concerned intends to uphold the measure, then the Commission, after consulting the parties, brings the matter before the Committee and initiates the procedure laid down in Article 6 (3). This in turn leads to a Commission decision on whether the measure is justified.

Installations can only be checked by Member States when there are grounds to believe that the installations in question do not comply with the requirements of this Directive, and in particular when there are complaints regarding interference caused by them (Article 12 (2) of the EMC Draft Directive). If it is found that the installation does not comply with the requirements of the Directive, the competent authorities can request measures to ensure compliance with the essential requirements referred to in Annex I.

Public service broadcasters fear that the high limits for permissible emission levels – such as those that can currently be observed in the medium and short wave bands in connection with in-house applications using PLC technology – could also cause reception failures in other frequency bands,

particularly of in-house radio communications reception. Measurements indicate that significant disturbances of the reception of DVB-T and DRM broadcasts can be expected. It is the view of public service broadcasters that the introduction of new, cable-based broadcasting media should not be permitted to restrict the development of the broadcasting industry in connection with the introduction of DVB-T or DRM.

c) Lack of demonstration of conformity for installations / facilitation of conformity demonstration for apparatus

For practical reasons, the Commission wishes to dispense with the requirement that the compliance of installations should be demonstrated before they go into operation. In the opinion of the Commission, a formal assessment of conformity of fixed installations would be difficult and also inappropriate because of the complexity of such installations and the possibility of later changes to them. An important question remains unanswered, however: How is mass interference associated with excessively high limits of the standard to be dealt with in the case of finalised installations?

The EMC Draft Directive also provides for fundamental changes in the requirements for demonstration of conformity by apparatus manufacturers. Under the proposal, apparatus can be marketed and operated in any location in the European Union provided it conforms with the essential requirements of the Directive. Performance of conformity assessment for apparatus is entirely the responsibility of the manufacturer, and in the performance of the assessment even the application of listed relevant EMC standards is no longer mandatory.

This puts an end to the system of “competent authorities” which the Member States must currently name to the Commission (Article 10 (6) of the current EMC Directive). Under the current legislation, the findings of these authorities are crucial for the assessment as to whether a CE mark has been applied without justification. Pursuant to Article 10 (7b) of the EMC Directive 89/336/EEC a Member State may currently take appropriate measures to restrict or prohibit the placing on the market of the product in question or to ensure that it is withdrawn from the market in accordance with the procedures laid down in Article 9, if it continues to contravene the applicable standards.

In the opinion of the public broadcasting sector, the procedure proposed by the EMC Draft Directive does not provide adequate consumer protection. Furthermore, there is real danger that apparatus generating high interference emissions and causing massive disturbances to broadcasting will come into circulation on the market.

3. Necessary changes to the EMC Draft Directive

In the opinion of the public service broadcasters, the interests of broadcasting providers and the general public in connection with the reception of broadcasts must be properly reconciled with the interests of manufacturers and installers of apparatus and installations and providers of new telecommunications services.

For example, it would be possible to make different standard provisions for apparatus and respectively for fixed installations. Standards permitting higher limits for apparatus could possibly be justified because consumers themselves are normally able to decide whether or not to switch on such apparatus (e.g. hair dryers or electric power tools), and the broadcasting reception interference caused by these apparatus is only temporary and restricted to a small area (single-point interference sources). However, the situation is different in the case of fixed installations like Powerline systems. Here the consumer receiving the interfering emissions for cables usually has no way of controlling the nature and extent of the interference. The interference can originate from all neighbouring lines and can occur without time limit for 24 hours a day and with as yet unknown interference characteristics.

The standards on which the EMC Draft Directive is based should take the requirements of interference protection into account. Emissions limits for apparatus and installations with values higher than those imposed by the NB30 standard currently in force in Germany constitute a threat to the reliability of broadcasting services.

It should be made possible for Member States to continue to take preventive and repressive measures (Article 6(9) EMC Directive 89/336/EEC) in order to ensure adequate protection

against interference following ITU Recommendations. Decisions on the compliance of apparatus and installations with emissions limits should be taken jointly by the Member States and the Commission.

Apparatus and installations should continue to be subject to a conformity assessment by bodies authorised by the state (“competent authorities”), as currently provided for in Article 10 of the EMC Directive 89/336/EEC.

Enclosures