



# International Amateur Radio Union Region 1

## Feedback on European Commission Published Initiative on Electromagnetic compatibility - evaluation of the EU rules

### 1 Introduction

The International Amateur Radio Union (IARU) is a Non-Governmental Organisation representing the interests of Radio Amateurs globally.

The amateur service is one of the oldest radio services recognised and regulated by the International Telecommunication Union (ITU) and pre-dates the regulation of radio communications. Having a proactive and innovative amateur radio population has been recognised by Governments, not only for the development of technical knowledge but as providing a network of radio stations which is geographically diverse and able to assist in times of disaster.

As part of its commitment to amateur radio and to radio science, IARU actively participates in the work of standards bodies such as CISPR, the ITU, CEPT and other regional telecommunication organisations, as well as EC working groups.

IARU welcomes this opportunity to comment on the Roadmap for the review of the EMCD.

### 2 Background

The latest EMC Directive (2014/30/EU) was published in 2014. Since then there has been accelerating usage of electrical and electronic equipment. The welcome advances in the provision of wind energy and Solar PV systems provide a cleaner carbon environment. The Internet of Things (IoT) and Wireless Power Transfer (WPT) have expanded rapidly, to such an extent that every street and every home has potentially a multiplicity of devices covered by the EMCD.

From a noise and EMC perspective this has resulted in an increase in radio spectrum pollution which it was hoped the EMCD would obviate.

### 3 EMC Directive

It is difficult to examine the EMCD in isolation. The efficacy of the Directive relies both on its interpretation through harmonised standards, the EMC Guide, and ultimately the 'Blue Guide' and the application of market surveillance. In some cases different language versions can affect local interpretation. We believe that the review of the EMCD is appropriate and should extend to consideration *inter alia* of the following issues.

#### Essential Requirements

The essential requirements (Annex 1) of the Directive are absolute and refer to equipment and fixed installations. However, the definitions in Article 3 refer to, "single functional units". This does not take into account the effects of the aggregation of noise from multiple sources which also may well be within 10m of the system suffering from unwanted disturbances.

Given the scenario described in (2) there is a significant weakness in the Directive. As a result, the way its objectives are interpreted in Harmonised Standards often legitimise a significant increase in the noise floor.

### **Presumption of Conformity**

Emission limits in many CISPR/harmonised standards are based on a statistical assessment of levels which will protect radiocommunication services in the *majority* of cases; inevitably there will be cases where they do not provide adequate protection.

Article 13 of the EMCD would appear to tie the hands of those who might otherwise intervene in cases of harmful interference from devices subject to the EMCD. By stating that conformity with a harmonised standard (which of itself does not protect in all cases) provides a presumption of conformity with the EMCD, the opportunity for remedial action is curtailed. Regulators and others are reluctant to take action when there is such a clear statement about presumed conformity. The EMCD is therefore loaded in favour of devices which cause interference in a minority of cases.

### **Fixed installations**

The good engineering practice referred to in Annex 1, point 2 could arguably be considered as ambiguous; the term good **EMC** engineering practice would remove this ambiguity.

The Directive is silent on the issue of modifications to fixed installations which may require further compliance certification and places significant onus on market surveillance authorities.

## **4 EMCD and other Directives**

The EMCD would appear to lack the strength of other directives such as those concerned with health and safety. Lack of effective electromagnetic compatibility in certain areas has the capacity to cause potential danger to life

## **5 Summary**

In IARU's opinion, in the light of experience and the context of the ever changing electromagnetic landscape, the Directive and consequently its implementation and interpretation would benefit from the proposed detailed review.

IARU looks forward to contributing fully to the upcoming consultation.

*Séamus McCague, Chair, IARU Region 1 Political Relations Committee*

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