

# **Electromagnetic Compatibility**

*The Electromagnetic Compatibility Regulations 2006: 3418 ECA  
as amended by 2012: 1848 and 2015: 1630*

*Time limit: earliest of 3 years from commission / 12 months from discovery  
TSO's: duty to enforce regs **except** in relation to electricity meters which are  
not wireless telegraphy apparatus.*

***NB:** Offences concern the first placing on the market: use s. 10 CPA for new  
apparatus which was first placed on the market in another member state.*

## **Definitions**

**Apparatus** - any finished appliance, or combination of appliances, made commercially available as a single functional unit, intended for the end user and liable to generate electromagnetic disturbance, **or** whose performance is liable to be affected by such disturbance, including

- ♣ components or sub-assemblies intended for incorporation into an apparatus by an end-user, which are liable to generate electromagnetic disturbance, or whose performance is liable to be affected by such disturbance,
- ♣ mobile installations defined as a combination of apparatus and, where applicable, other devices, intended to be moved and operated in a range of locations.

**Equipment** - any apparatus or fixed installation.

**Fixed installation** - a particular combination of several types of apparatus and, where applicable, other devices, which are assembled, installed and intended to be used permanently at a pre-defined location.

**Responsible person** –

- ♣ in relation to apparatus: the manufacturer established in the Community, the manufacturer's authorised representative, **or** where the manufacturer is not established in the Community and he has not appointed an authorised representative, the person who places the apparatus on the market or puts it into service,
- ♣ in relation to a fixed installation: the person who, by virtue of their control of the fixed installation is able to determine that the configuration of the installation is such that when used it complies with the essential requirements.

**Special apparatus** - *in these notes* - apparatus which is intended for incorporation into a given fixed installation **and** is otherwise not commercially available.

## **Application**

1). Applies to equipment placed on the market or put into service since 20<sup>th</sup> July 2007, including a fixed installation put into service before that date if it is modified after that date in a way that may affect its electromagnetic compatibility.

2). Does not apply to

- ♣ equipment whose inherent qualities are such that
  - ♥ its electromagnetic emissions cannot adversely affect other equipment, **and**

- ♥ it will operate without unacceptable degradation in the presence of electromagnetic disturbance normally consequent upon its intended use,
  - ♣ aeronautical products, parts and appliances covered by EC Reg 1592/2002,
  - ♣ equipment covered by Directive 1999/5/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity,
  - ♣ radio amateur apparatus (but not CB radio) which is not commercially available (ie not manufactured in the course of a business of manufacturing such apparatus),
  - ♣ the following (to the extent that the Directives listed specifically lay down, in whole or part, the essential requirements in relation to such equipment):
    - ♥ active implantable medical devices (90/385/EEC),
    - ♥ in vitro medical devices (98/79/EC),
    - ♥ medical devices (93/42/EEC),
    - ♥ the radio interference (electromagnetic compatibility) of vehicles (72/245/EEC),
    - ♥ the suppression of radio interference produced by agricultural or forestry tractors (electromagnetic compatibility) (75/322/EEC),
    - ♥ certain components and characteristics of two and three-wheel motor vehicles (97/24/EC),
    - ♥ marine equipment (96/98/EC),
    - ♥ the harmonisation of the laws of the member States relating to non-automatic weighing instruments (90/384/EEC),
  - ♣ a measuring instrument or sub-assembly covered by Directive 2004/22/EC which bear the CE marking, M marking, **and** the identification number of the notified body responsible for carrying out the conformity assessment of the instrument or sub-assembly in accordance with the requirements of that Directive, as regards the immunity of such instrument or sub-assembly,
  - ♣ equipment which is not compliant with the requirements of these Regulations **and** which is displayed, demonstrated or presented at any trade fair, exhibition or similar event if a sign displayed visibly on or near the equipment clearly indicates that it
    - ♥ is not compliant with these Regulations, **and**
    - ♥ cannot be placed on the market or put into service, or both, until it is made compliant with those requirements.
- NB:** Equipment may be demonstrated only if adequate measures are taken to avoid electromagnetic disturbance.

## **General Requirements**

**NB:** Nothing in these requirements affects the application of any other UK or EC legislation as regards the safety of equipment.

1). **Except** for apparatus which was placed on the market before 20 July 2009 in respect of which a declaration of conformity had been issued before 20 July 2007 by the manufacturer or his authorised representative, apparatus must not be placed on the market **unless**

- ♣ it complies with the essential requirements, ie

- ♥ it is designed and manufactured, having regard to the state of the art, so as to ensure that
  - ◆ the electromagnetic disturbance it generates does not exceed a level above which radio and telecommunications equipment or other equipment cannot operate as intended, **and**
  - ◆ it has a level of immunity to the electromagnetic disturbance to be expected in its intended use which allows it to operate without unacceptable degradation of its intended use,
- and**, if it is a fixed installation it must be installed
  - ♥ applying good (documented) engineering practices, **and**
  - ♥ respecting the information on the intended use of its components,
- and** the responsible person in relation to a fixed installation must hold the documentation for inspection by an enforcement authority for as long as the fixed installation is in operation.
- ♣ compliance with the essential requirements has been demonstrated by
  - ♥ the internal production control procedure referred to below, **or**
  - ♥ the internal production control procedure followed by the involvement of a notified body. A statement issued by a notified body must
    - ◆ be in English,
    - ◆ give the name and address of the applicant, **or** where the applicant is not the manufacturer, the manufacturer,
    - ◆ be signed by or on behalf of the notified body with the notified body's identification number,
    - ◆ bear the date of issue,
    - ◆ give particulars of the apparatus (in relation to each variant, if any) sufficient to identify it, **and**
    - ◆ confirm that the apparatus and the technical documentation to which it relates complies with the relevant requirements,
- ♣ the technical documentation including any statement issued by a notified body is available to the enforcement authority,
- ♣ the CE marking has been properly affixed by the manufacturer or his authorised representative (see 'CE Marking' below),
- ♣ an EC declaration of conformity has been issued (see 'The Internal Production Control Procedure' below),
- ♣ it is identified (eg type, batch, serial number),
- ♣ it is accompanied by the name and address of the manufacturer **and**, if he is not established in the Community, the name and address of the responsible person,
- ♣ the manufacturer has provided information on any specific precautions that must be taken when the apparatus is assembled, installed, maintained or used in order to ensure that when put into service the apparatus complies with the essential requirements,

- ♣ , where the apparatus for which compliance with the essential requirements is not ensured in residential areas, it is accompanied by a clear indication of this restriction of use, **and**, where appropriate, this indication is also on the packaging, **and**
- ♣ the information required to enable the apparatus to be used in accordance with its intended purpose is contained in the instructions accompanying it.

2). **Except** for apparatus which is put into service having been placed on the market before 20 July 2009 in respect of which a declaration of conformity had been issued before that date by the manufacturer or his authorised representative, apparatus must not put into service unless it complies with the essential requirements when properly installed, maintained and used for its intended purpose.

**NB:** Where there is an issue about whether equipment complied when it was placed on the market or put into service, a court may infer that it did not comply if

- ♣ it is proved that it did not comply later on, **and**
- ♣ it appears to the court that its failure to comply is not due to any cause arising after it was placed on the market or put into service.

## **The Internal Production Control Procedure**

1). The manufacturer must assess the electromagnetic compatibility of the apparatus, on the basis of the relevant phenomena, to ensure that it complies with the essential requirements, taking into account all normal intended operating conditions.

**NB1:** Where the apparatus is capable of taking different configurations, the assessment must confirm that the apparatus meets the essential requirements in all the possible configurations identified by the manufacturer as representative of its intended use.

**NB2:** The assessment requirements are complied with if the manufacturer correctly applies a harmonised standard which makes complete provision in respect of the apparatus, and apparatus which is compliant with that harmonised standard is presumed to be compliant with the essential requirements. However, where the apparatus is compliant only in part with the harmonised standard, it is presumed to be compliant only with those parts of the essential requirements which correspond to the elements of the harmonised standard with which the apparatus is compliant.

2). The manufacturer must draw up technical documentation which provides evidence of the compliance of the apparatus with the essential requirements. That documentation must cover the design and manufacture of the apparatus, in particular

- ♣ a general description of the apparatus,
- ♣ evidence of compliance with the relevant harmonised standards, if any, applied in full or in part,
- ♣ where the manufacturer has not applied relevant harmonised standards, or has applied them only in part, a description and explanation of the steps taken to meet the essential requirements, including a description of the electromagnetic

compatibility assessment mentioned in note 1). above, results of design calculations made, examinations carried out, test reports, etc, **and**

- ♣ a statement from the notified body, if a notified body has been involved.

3). The compliance of apparatus with the essential requirements must be attested by an EC declaration of conformity issued by the manufacturer or his authorised representative in the Community. The EC declaration of conformity is properly issued if

- ♣ the apparatus is compliant with the essential requirements, **and**
- ♣ it contains
  - ♥ a reference to the EMC Directive,
  - ♥ an identification of the apparatus,
  - ♥ the name and address of the manufacturer, **and**, where applicable, his authorised representative,
  - ♥ a dated reference to the specifications under which conformity is declared,
  - ♥ the date of that declaration, **and**
  - ♥ the identity and signature of the person empowered to bind the manufacturer or his authorised representative.

4). The manufacturer must ensure that the apparatus is manufactured in accordance with the technical documentation.

5). The responsible person must retain the EC declaration of conformity, any statement of a notified body, and the technical documentation, for ten years after the date on which such apparatus was last manufactured, and make it available to an enforcement authority on request. The documentation

- ♣ may be recorded in any form, provided that adequate precautions are taken to guard against falsification,
- ♣ may be recorded otherwise than in legible form, so long as it can be reproduced in a legible form.

## **Fixed Installations**

1). 'General Requirements' above does not apply to special apparatus where the following requirements (**or** the corresponding requirements of the EMC Directive as implemented under the law of another state in the EC) are met:

- ♣ the manufacturer or his authorised representative provides information identifying the fixed installation and its electromagnetic compatibility characteristics in accompanying documentation,
- ♣ the accompanying documentation
  - ♥ indicates any specific precautions that must be taken for the incorporation of the apparatus into the installation so as not to compromise the conformity of that installation,
  - ♥ identifies the apparatus (eg type, batch, serial number), **and**
- ♣ the apparatus is accompanied by the name and address of the manufacturer, **and**, if he is not established in the Community, the name and address of the responsible person.

2). Must not put into service a fixed installation **unless**, when it is properly installed, maintained and used for its intended purpose,

- ♣ the essential requirements are complied with, **and**
  - ♣ the name and address of the responsible person is available on request by the enforcement authority.
- 3). Where the fixed installation incorporates special apparatus
- ♣ the apparatus must be incorporated into the fixed installation for which it was intended in such a way that intended use of the apparatus is respected, **and**
  - ♣ the incorporation must comply with good engineering practice.
- 4). As long as the fixed installation is in operation the responsible person must have available for the enforcement authority documentation showing that it complies with the essential requirements.

## **CE Marking**

- 1). The CE marking must be affixed to the apparatus or to its data plate **unless** it is not possible or this is not warranted on account of the nature of the apparatus, in which case it must be affixed to the packaging, if any, **and** to accompanying documents.
- 2). Where the apparatus is the subject of other directives covering other aspects which also provide for the CE marking, the CE marking must indicate that the apparatus also complies with those other Directives **except** that where those other directives allow the manufacturer, during a transitional period, to choose which arrangements to apply, the CE marking must indicate conformity only with the directives applied by the manufacturer, in which case particulars of the directives applied must be given in the documents, notices or instructions required by the directives and which accompany the apparatus.
- 3). The CE marking must
- ♣ be at least 5mm high,
  - ♣ not be accompanied by any marking on the apparatus, its data plate, packaging, or the instructions, which
    - ♥ is likely to deceive third parties as to the meaning and form of the CE marking, **or**
    - ♥ reduces the visibility and legibility of the CE marking.

## **Compliance Notice**

- 1). If
- ♣ the apparatus complies with the essential requirements, **and**
  - ♣ the CE mark has been unduly affixed to apparatus,
- a compliance notice must be served on the responsible person requiring him to make the apparatus conform and to end the infringement before
- ♣ a suspension notice may be served,
  - ♣ proceedings are commenced for
    - ♥ forfeiture, **or**
    - ♥ infringements relating to
      - ◆ conformity assessments,
      - ◆ the CE mark, **or**
      - ◆ an EC declaration of conformity.
- 2). The notice must at least
- ♣ describe the apparatus enough to identify it,

- ♣ state that the CE mark is unduly affixed to the apparatus, its packaging, instructions, or guarantee certificate, or that it is affixed to some other item accompanying the apparatus,
- ♣ state the grounds on which it is established that the CE mark is unduly affixed, **and**
- ♣ indicate which of the above enforcement actions cannot be commenced until the compliance notice has not been complied with,

**and** may suggest actions to end the infringement.

3). Enforcement action may be taken if the responsible person fails to comply with the notice.