

## Liability and guarantee of the components supplier towards the producer of the equipment/system in which they are incorporated

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The supplier TOM sells components/sub-assemblies to the producer DICK (e.g., printed circuit boards, diodes, LEDs, transistors, hard disks, but also finished products, such as vaporizers, fan coils, chillers or industrial PCs) intended to be incorporated by the latter into a final product (whether this is a single good, such as a TV set, or a system as, for example, a refrigeration unit).

The question arises as to what are the guarantee obligations of TOM towards DICK and how TOM may somehow limit them. This with particular regard to one of the most transversal regulations in the electronic sector – where often in such cases conflicts occur between supplier and producer – namely that on electromagnetic compatibility.

### The electromagnetic compatibility legislation

When speaking of “*electromagnetic compatibility*”, we refer to the EMC Directive 2004/108/EC, implemented in Italy with Legislative Decree No. 194 of 06/11/2007.

The EMC Directive applies to: (1) “*equipment*”, i.e. any “apparatus” (intended as “... any finished appliance or combination thereof made commercially available as a functional unit, intended for the end-user and liable to generate electromagnetic disturbance, or the performance of which is liable to be affected by such disturbance”) and (2) any “*fixed installation*” (i.e.: “... 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 predefined location”; as, for example, a civil or industrial air conditioning/cooling system).

The EMC Directive aims to ensure the **satisfactory internal functioning of the “equipment”**, in the sense of not being affected by and not **introducing intolerable electromagnetic disturbances** to other equipment or systems.

**What is it meant by components/sub-assemblies to be incorporated into a final product or system?**

It is meant both “unfinished” and “finished products”, as follows:

(1) Unfinished products: components/sub-assemblies intended for an installer or a producer, but not for an end-user (= the unfinished product does NOT have its own container case and is intended to be incorporated into an apparatus or a system by an experienced operator). Some examples from the Guide for the EMC Directive published in February 2010: “*Electrical or electronic components forming part of electrical or electronic circuit: Resistors, capacitors, inductors, filters; Diodes, transistors, thyristors, triacs, etc; Integrated circuits; Simple Electromagnetic relays; LEDs; Simple thermostats; Cathode ray tubes*”.

The unfinished product is not subject to the EMC Directive. In terms of EMC, it is recommended that the unfinished component-product is delivered accompanied by a declaration from the Producer regarding its EMC compatibility characteristic and the indication of the product/system in which it may be usefully incorporated. The unfinished product – even though not requiring the CE marking – is however covered by the guarantee imposed by law on the seller (Articles 1490 and following of the Italian Civil Code, hereafter “CC”), which will be examined further on. It is therefore necessary that the use for which the same is intended is made clear by the seller in the sales documents and in those accompanying the unfinished product it, unless such use is not already unequivocal and obvious .

(2) Finished products: all other components/sub-assemblies intended to be incorporated into other products and/or systems/fixed installations. Here some examples always from the same EMC Guide: “*Plug-in cards for computers; Programmable logic controllers; Electric motors (except for induction motors, see section 1.1.4); Computer disk drives; Power supply units where they take the form of autonomous appliances or sold separately for installation by the end-user; Electronic temperature controls*”. These components, if configured so that they can be incorporated into the final product only by an expert assembler and not by the equipment end-user, fall into the category of unfinished products (e.g., PC’s internal hard disk drive).

- Components making up the finished product must comply with all requirements of the EMC Directive (CE marking, declaration of conformity and EMC evaluation), including the “**essential requirements**” set out in Article 5 and Annex I (active and passive electromagnetic compatibility).

- Fixed installations in which such components/sub-assemblies are incorporated do not require – due to their “fixed” nature – the CE marking, declaration of conformity and EMC

evaluation, but they must however meet the "**essential requirements**", including the "**specific requirements for fixed installations**", set out in Point 2 of Annex I to EMC Directive, i.e.:

- 1- components must be installed in accordance with good engineering practices;
- 2- components must be accompanied by indications regarding the use for which they are intended in order to meet the "essential requirements";
- 3- applied engineering practices must be documented and the documentation must be kept by the person responsible for the system/fixed installation at the disposal of the authorities for as long as the fixed installations are in operation.

### **What guarantees must be provided by the supplier of components/sub-assemblies intended for an equipment or fixed installation?**

The general rule is that, in the case of sale, the seller must guarantee to the purchaser that the thing sold is free of "**defects**" which may diminish its value (Article 1490 of the CC), nor "**lack of quality**" (Article 1497 of the CC): **(1)** are considered "defects" of the thing sold those flows which render it unsuitable for the use to which it is intended (for example, a mobile phone that does not work at all) or which may diminish appreciably its natural usefulness in the future (for example, an appliance connected to the mains via an undersized electrical cable, and hence of limited duration); **(2)** the thing sold may also not have the promised or essential qualities for the use to which it is intended (example of lack of promised quality: an air conditioner less powerful than the one agreed upon; example of lack of essential quality: a PC without CE marking or not compliant with the LVD or EMC Directives).

### **How can the supplier Tom limit his liability towards the producer DICK?**

- It follows from what has just been said that the in the case of the supplier TOM wanting to lawfully limit the mandatory guarantee, he must unequivocally specify and delimit in the description accompanying the sale of the product the "**use for which the same is intended**".

- Note, though, that TOM CANNOT exclude his contractual liability regarding the damage suffered by the buyer DICK as a result of defects or lack of quality of the product sold when this liability is due of gross negligence. This is precisely the case with products that do not conform to the "essential – active and passive – requirements" laid down in Annex I of the

Electromagnetic Compatibility (EMC) Directive 2004/108/EC (transposed into Annex I of Legislative Decree No. 194/2007, i.e. the Italian implementing law).

- Consequently, the only effective way to limit the liability of the seller of components/sub-assemblies intended to be incorporated into an equipment or a fixed installation is to describe in more details in the contracts, accompanying documentation, brochures and leaflets, the only possible uses (in the case of fixed installations only the configurations) and applications for which – in EMC terms – such components/sub-assemblies are intended by the seller.

### **And what about the components destined to be incorporated into fixed installations?**

In this case, the instrument for providing this detailed description and delimit the scope of the EC certification of EMC compliance for the components/sub-assemblies being supplied are the manuals that must accompany them, as clearly inferred from Point 2 of Annex I to EMC Directive (“*specific requirements for fixed installations*”). In fact, given that as mentioned above DICK who builds/assembles fixed installations is required to: (a) install them applying “*good engineering practices*”; (b) provide buyers the “*indications on the use for which the various components are intended*”; and (c) “*prepare the relevant documentation for the authorities*”, TOM who supplies the sub-assemblies/components must enable DICK to meet all three requirements by in turn supplying him the manuals containing the aforesaid information for each component/sub-assembly sold.

The manuals must obviously be compliant with the information provided by the supplier of sub-assemblies/components in the declaration of conformity and the technical documentation prepared by the same.

### **What happens to the software embedded in the supplied sub-assembly? What guarantee must be provided by the supplier?**

The proprietary software incorporated by the supplier into a component/sub-assembly, which would not work for the intended use without such computer program, cannot be logically separated from the hardware in which it is embedded and does consequently carry the same guarantees – and the same guarantees limitations – applying to the latter and that we have just examined.

This conclusion is reached both on the basis of logic and on the basis that the link between the embedded software and equipment in which it is incorporated is so tight that this the

only case in which it is possible to patent the software together with the related equipment (Article 52 of the Convention on the Grant of European Patents - EPC, ratified in Italy by Law No. 224 of 29 November 2007) instead of just protecting it with the copyright law (in accordance with Directive 91/250/EEC implemented in Italy with Legislative Decree 518/1992). It should be noted in this respect that the new Radio and Telecommunications Terminal Equipment (R&TTE) Directive 2014/53/EU – anticipating the legislative developments that could eventually be extended to all product conformity regulations in this field – sets out in Article 4 that the producers of radio equipment and software which allow their combined functioning, along with the declaration of conformity are required to provide specific information on the compliance of intended combinations of radio equipment and software with the essential requirements and, if necessary, on the basis of specific indications that may be requested by the Commission with regulations or other delegated acts.

### **What happens if the supplier TOM makes any adaptations at the request of the producer DICK?**

If TOM cooperates with its clients by agreeing to make changes and adaptations to the sub-assemblies/components supplied according to the same clients' requests, he will have to indicate in advance, in writing with suitable contracts to have tested and ensured the EMC compliance of his components/sub-assemblies solely and exclusively for the original configurations/uses described in the manuals accompanying them and specify that any changes made will be at the risk of the client who will be solely responsible for having the necessary technical tests carried out on the sub-assemblies/components in order to ascertain their EMC compliance or not (without prejudice to his obligation to pay TOM the fee agreed for the services performed).

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