

# Making your mark

Finding a route through the CE marking maze.

By **Jean-Louis Evans.**

In order to meet the demand for low cost electronics, companies are increasingly sourcing products directly from manufacturers outside the EU. By law, whoever is placing an electronic product or component for sale in Europe is responsible for its compliance with the CE marking directives.

Customs officials keep watch for the CE marking and the importing business is required to hold evidence of test reports and certificates, and if such information is missing it may be prosecuted. A business that cuts out the traditional supply chain therefore needs to take steps itself to ensure compliance, rather than rely on its suppliers to take on the burden of proof.

There is a widespread assumption that the very fact a CE mark has been stamped on a product by its manufacturer is proof of its safety. Those that buy directly from a manufacturer outside the EU run the risk of falling foul of this misunderstanding. In fact, rather than as a proof of safety, the CE mark was actually introduced to enable the free movement of goods across the EU. CE marking simply provides a common set of standards to bring down barriers to entry between EU member states, replacing the requirements of individual countries.

The CE marking itself is a manufacturer's self declaration that the product complies with the relevant European legislation. Less scrupulous manufacturers may not bother to test products and simply affix the CE marking and sign the declaration of conformity. Due to language issues, other manufacturers misunderstand the requirements of a complex set of Directives – giving products that should fail tests a CE marking.

The Radio and Telecommunications Terminal Equipment Directive (R&TTE) is an excellent example of how this self declaration approach is failing. Since its introduction in April 2000, the Directive has meant that manufacturers or

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- Decide which Directives are applicable to your product
- Ensure that your product is compliant with the applicable Directives
- Compile and retain a technical file, which satisfies the requirements of the Directives
- Write and sign a Declaration of Conformity, which has a format which satisfies the requirements of the applicable Directives, and keep the original with the technical file
- Apply CE marking to the product in accordance with the requirements of the applicable Directives



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To achieve certification, products must be independently tested

importers of radio and telecoms equipment can simply sign a declaration of conformity indicating that the product meets the Essential Requirements. They can also apply CE marking themselves, provided of course that there is an adequate technical file supporting the claim.

However, a market surveillance report conducted in 2003 in 19 European countries showed that 76% of equipment that relies on the radio spectrum failed to comply with the R&TTE. Another market surveillance campaign conducted in 2005 showed that 88% of the terminal equipment checked failed to comply with the Directive's technical requirements.

As there is no standard European consumer safety mark, companies often have safety testing carried out or verified by an external body. This means that products sold in Europe should ideally carry both a CE marking and a safety mark, such as the TÜV certification, German GS mark or French NF mark. In the North American market, this would be a UL or CSA mark.

To achieve one of these certification marks, the product must be independently tested and factories subject to routine inspections to check for conformity and consistency in production. Indeed, TÜV Product Service completes thousands of such tests a year for its customers and finds many of these products fail. This raises the question – how many unsafe electronics are on the market from those companies that don't invest in such third party safety testing?

The Directives that require CE marking are complex and the amount of confusion

surrounding the matter is evident in the fact that many manufacturers apply a CE mark to goods that are not covered by the Directives. For many, it seems to be a case of applying the CE marking as a 'better safe than sorry' approach.

Many companies therefore send their own testing experts to regularly audit factories abroad. These audits also check for continual conformity as the product evolves and changes are made to the materials used, or to the manufacturing process itself. This ensures that the products or components still match the ones originally tested for CE marking conformity. This might seem an expensive option, but if a company is buying electronics in bulk, at low prices, the extra auditing costs will be easily outweighed by the savings available.

As with factory audits and additional safety marks, many companies also choose to outsource the support they need with CE marking. The compliance maze is so complex that even large international companies rely on the expertise of others to guide them through it. An independent consultancy service is therefore a cost effective way of obtaining the right information to ensure compliance.

Finding a partner that can be trusted to give a business the appropriate advice is essential. Such consultancies can give guidance about CE marking and other quality marks by using engineers who are experts in many fields, including product design, as well as regulatory and voluntary market access requirements. It is their in depth knowledge of all relevant

regulatory requirements which will not only ensure compliance, but speed up the process and time to market for new products.

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#### Watering down safety?

Despite the obvious desire by the EC for a single EU wide approach, the surveillance of CE marking is still left to each country and there is a great diversity in the level of funding and the approach taken. For example, UK Trading Standards tends to take a reactive approach to investigating complaints, while French and German authorities pull products systematically to test against the CE marking Directives.

The EC also seems frustrated by the variety of safety marks – such as GS, NF or TÜV – that can be bestowed by certified bodies. It views such voluntary safety marks as eroding the importance and recognition of CE marking and wants to introduce a single EU wide consumer safety mark. However, it appears to have a very idealistic or 'rose tinted' view of what CE marking has achieved so far.

The concern is that the EU currently appears to be pushing towards the introduction of a 'watered down' safety mark that, like CE marking, will allow manufacturers to self declare conformity. This utopian approach to an imperfect world would ban third party safety certification marks in favour of a single self declaration marking, making the resulting quality mark no more valuable than current CE marking. It seems that the maze may get yet more confusing, leading to more unsafe and non compliant products on the market.

#### Author profile:

Jean-Louis Evans is managing director of TÜV Product Service ([www.tuvps.co.uk](http://www.tuvps.co.uk)).