

# CE MARKING OF ROAD TRAFFIC SIGNS



## Introduction

ARTSM is the trade body for companies that manufacture and supply traffic signs in the UK. Its members are committed to following all the relevant national and European standards, and have prepared this guidance for those purchasing and/or installing traffic signs and associated products to help you through the complexity and to ensure you get the product you need that will perform well for its intended life.

The principal standard for the manufacture of permanent traffic signs and associated products is EN 12899-1:2007. For installations on trunk roads (maintained by the Highways Agency, Transport Scotland or Welsh Government), the assembler and or installer must be certified to the relevant National Highways Sector Scheme (NHSS). Some local authorities also have this requirement for their own roads. Installation of external luminaires is covered by NHSSD 8.

## Applicability of EN 12899 to traffic signs

EN 12899-1, -2 and -3 apply to “Fixed, vertical road traffic signs”, and so do not apply to portable signs. Part 1 deals with fixed signs, Part 2 with transilluminated traffic bollards and Part 3 with delineator posts and retroreflectors. Other standards, e.g. EN 12966, apply to Variable Message Signs (VMS) and other types of traffic sign not within the scope of EN 12899. The rest of this document covers fixed signs to EN 12899-1.

Section 64 of the Road Traffic Regulation Act 1984 (RTRA) defines a traffic sign as “any object or device (whether fixed or portable) for conveying, to traffic on roads or any specified class of traffic, warnings, information, requirements, restrictions or prohibitions of any description:

- (a) specified by regulations made by the Ministers acting jointly, or
- (b) authorised by the Secretary of State.

Paragraph (2) goes on to say that traffic signs shall be of the size, colour and type prescribed in regulations. Any such device erected on a road is a traffic sign and is governed by section 64. Case law has established that any road to which the public has access, including roads in car parks, airports (landside but not airside) etc. is a road for the purposes of RTRA.

The scope of EN 12899-1 states that the main intended use of fixed signs is for the instruction and guidance of road users “on public and private land”. This seems to go slightly wider than RTRA, and arguably makes CE marking applicable to all such signs even if erected on roads to which the public does not have access. It is open to question whether “private” designs for signs used off the public highway have to be CE marked or not, because they are not covered by regulations. If the customer is happy for them not to be, it seems likely that no problem would arise. But, as a general principle, if the customer requires the marking or if there are any doubts, ARTSM manufacturers should be using CE marking.

## CE marking requirements

Permanent traffic signs to EN 12899-1 are covered by the Construction Products Regulation (CPR), implemented in over 30 European countries and which replaced the Construction Products Directive (CPD). In the UK from 1 July 2013 it became unlawful to supply permanent traffic signs (and associated products within the scope) where the performance has not been assessed by a Notified Product Certification Body in accordance with the provisions of EN 12899-1. It will also be unlawful to supply traffic signs and associated products without a Declaration of Performance (DoP) from the manufacturer and without CE marking.

EN 12899-1 has attestation System 1, requiring a Notified Product Certification Body to take responsibility for determination of product type (DPT) and assessment of the manufacturer’s factory production control (FPC) system.

This document is intended to provide guidance using industry-agreed interpretations (which also included guidance from the CPD’s Group of Notified Bodies (GNB)<sup>1</sup>) in demonstrating compliance, but does not remove responsibility from the manufacturer or organisation that may be affected by this standard for meeting regulatory requirements as they affect their product or actions. These can be found in the relevant parts of the standard. Manufacturers may also use the standard to address non-regulatory requirements where these are needed for the sale of signs in the UK.

CE marking indicates that a product is consistent with its DoP for its intended purpose as declared by the manufacturer. By making a DoP, the manufacturer is assuming legal responsibility for the conformity of the product with its declared performance. Importers and distributors also have an obligation not to offer non-conforming products and to pass on the DoP with the product.

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<sup>1</sup> Unless and until other advice is given by the European Commission, guidance from the GNB and its Sector Groups, developed under the CPD, will continue to apply under the CPR.

## Who is responsible for CE Marking?

The commercial supply of any sign-related products will involve a number of different parties. Depending on their individual responsibility in the supply chain, the role may be classified as one of those in the following table.

It is always the ‘manufacturer’ who takes responsibility for CE marking. In many cases, the manufacturer will be the organisation producing the products or kit, but it may also be the person who buys a product, or buys and assembles components to form a kit, and then sells it in his own name by excluding the name of the original producer(s). This is explained in more detail below but “branding”, where a distributor or merchant adds his name to a product while keeping the name of the manufacturer evident does not mean that the distributor or merchant becomes the ‘manufacturer’.

Supply chain	Responsibilities	Explanatory notes
Client, e.g. a purchaser, highway authority, consultant or specifier	Specify to correct performance levels or classes. Understand “kit of products” and CE marking responsibilities when purchasing a kit from one supplier or individual products from more than one supplier.	A
Manufacturer (of complete signs, sign plates, supports or retroreflective sheeting)	Able to place conforming products on the market, with a DoP and CE marking.	B
External luminaire manufacturer Fixing clip manufacturer Printed sign face manufacturer	Able to place suitable products on the market. These products are not currently covered by ENs of the CPR so cannot be CE marked under the Regulation. Luminaires require CE marking under the Low Voltage and Electromagnetic Compatibility Directives.	C
Importer, distributor or supplier	Able to place conforming product on the market.	D
Assembler and installer	Understand “kit” of products and CE marking when purchasing a kit from one supplier or individual products from more than one supplier. Able to follow installation instructions.	E
Local Authority sign shop	Understand both supplying conforming signs (for local use) and CE marking if supplying to another Authority.	F

## Responsibilities explanatory notes

### A: Client, e.g. a purchaser, highway authority, consultant or specifier

Clients are responsible for the specification, purchase and installation of traffic signs, which they may purchase as individual products (components) or as partial or complete kits; they have no responsibility for CE marking. A client may use a designer to design the sign (in which case the manufacturer will supply to this design), or he may purchase components or kits which have the necessary performance levels.

Because only sign products according to EN 12899-1 are allowed onto the UK market, when the client specifies products he has to do so according to the essential characteristics given in the standard. He is not, as a matter of principle, allowed to specify any technical requirements which are not in the standard.

It is clients, not manufacturers (but see also below), who are responsible for ensuring that components and complete signs meet both regulatory and non-regulatory requirements applicable for the sign in its intended end use. They are also responsible for ensuring that the sign is installed in accordance with any installation instructions from the manufacturer or supplier of components or kits, but they may satisfy these responsibilities by employing others, such as designers and installers.

If the client buys separate components from different suppliers (e.g. supports, fixings and sign plate), and the suppliers do not state that their component can be used with the others, then the client becomes responsible for ensuring that all components are compatible and give the desired levels of performance. If suppliers do state compatibility, or if a kit is bought (see below) then the client is entitled to assume that they will work together. Similarly, if a characteristic (e.g. wind load resistance) cannot be known because, for example, the support manufacturer has declared NPD (see below), and then the client is responsible for assessing the performance of the characteristic and checking that this meets local requirements.

## **B: Manufacturer (of CE marked complete signs, sign plates, supports or retroreflective sheeting)**

### ***General***

EN 12899-1 includes four components or products which are subject to CE marking: retroreflective sheeting, supports, sign plates and complete sign assemblies. When these products are first placed on the market (i.e. they are intended to pass from manufacturer to customer), they have to be CE marked.

All products come under Assessment and Verification of Constancy of Performance (AVCP) System 1, product certification. This means that the product has to be subject to Determination of Product Type (DPT) performed by a Product Certification Body and that the manufacturer operates an FPC system which is assessed by the same body. Although not mandatory, a manufacturer who operates an appropriate ISO 9001 system is considered to meet FPC requirements.

It is the manufacturer of the CE marked product who is responsible for having DPT done. However, if he buys CE marked components which have already been correctly tested, he is entitled to accept the declared performance without re-testing, as long as what he does to the component does not change its performance. An example of this is a sign plate manufacturer using retroreflective sheeting whose visibility and durability have already been tested to EN 12899-1. Cascaded type testing (see below) is also possible.

All characteristics, relevant for a particular product, given in EN 12899-1, Tables ZA.1 to ZA.6, must be declared with a value (or class) or with "NPD" (no performance determined). Manufacturers must declare those characteristics regulated in the UK (e.g. colour and reflectivity, irrespective of whether regulations require specific values or not) with values; they should declare other characteristics not regulated but required for use in the UK (e.g. wind load resistance and impact performance) with values; and they have the choice, for all other characteristics, to either declare a value or state "NPD".

### ***B.1 Retroreflective and non-retroreflective sheeting manufacturers***

The manufacturer who first sells a retroreflective sheeting product to be used for fixed vertical traffic signs (e.g. a roll of sign face material) within the EU places this on the market and is responsible for CE marking in accordance with EN 12899-1. The characteristics of retroreflective sheeting are given in Table ZA.1.

Non-retroreflective sheeting cannot be CE marked by the sheeting manufacturer, but it should have performance values which allow the sign plate or complete sign to meet the requirements of Tables ZA.5 and ZA.6.

### ***B.2 Supports (posts) manufacturers, the support purchased as an individual product***

The manufacturer who first sells a support (defined as a component which supports the sign plate) to be used for fixed vertical traffic signs in the EU and places this on the market is responsible for CE marking in accordance with EN 12899-1. The characteristics of supports are given in Tables ZA.2, ZA.3 or ZA.4.

There are three different ways in which the characteristics of a support may be declared (which correspond to the ways in which structural products are covered by the structural Eurocodes standards), and these are covered by the three different tables:

- a) Stock items described by performance: in this option, the support manufacturer declares each characteristic directly. For example, he declares resistance to horizontal loads in kNm, and he may assess these values himself (by testing or calculation) or may respond to a request from someone else such as a designer.
- b) Stock items described by material grade and geometric characteristics: this option mainly applies when the support manufacturer is responding to an order where the purchaser has done structural calculations. The manufacturer declares the material grade and dimensions sufficient to allow the purchaser to know the structural performance.
- c) Stock items described by purchaser specification: this option applies only to when the manufacturer responds to an order from someone who has already done the structural assessment. In this case, the support manufacturer's DoP and CE marking simply refer to the purchaser's design documentation.

DPT depends on which option is used (i.e. on the relationship between manufacturer and purchaser). In Option a), if testing is used then the Notified Certification Body (CB) will perform the tests, while if the manufacturer calculates performance, the CB will check some calculations and will approve any software used. In Options b) and c), where responsibility for structural performance is taken by the purchaser (directly or through a designer), no structural testing is required. The CB will perform indirect testing (of dimensions) and check that the manufacturer is supplying the correct material grade.

Note that, in general, the CPR does NOT make the support manufacturer responsible for the suitability of the support for a particular end use; this is the responsibility of the purchaser. The manufacturer is responsible only for declaring the performance or other information, and the purchaser is responsible for checking that these are appropriate for selecting the right supports. Only if the manufacturer was asked or opted to take responsibility for structural design for a particular end use would he become responsible.

If supports are used for purposes other than those for which they have been structurally designed, this will nullify any legal responsibilities of the sign manufacture. This also applies for stock items such as random post lengths.

### **B.3 Sign plate manufacturers**

When someone applies sheeting material to, or otherwise prepares a substrate as a sign face and then sells the resulting sign plate, he is a sign plate manufacturer and must have the sign plate CE marking in accordance with EN 12899-1. The characteristics of sign plates are given in Table ZA.5.

Where the sign plate manufacturer uses sheeting which is CE marked with reflective and durability characteristics declared, as long as the application does not change these, then no re-testing is required and the manufacturer may use the sheet manufacturer's values in his DoP and CE marking. If the application process changes the performance, such as if white sheeting is printed and is no longer white or if the sheet is not used according to its manufacturer's instructions, then new DPT are required.

Two examples illustrate the above principles:

*Example 1:* Original coloured retroreflective sheeting arrives from the sheeting manufacturer already CE marked with declared values of daylight chromaticity and luminance factor, retroreflectivity (coefficient of retroreflection), impact resistance and resistance to weathering. The sign plate manufacturer does not need to repeat the testing of these characteristics, provided the original product performance is not detrimentally affected by the manufacturing process. His FPC system will, however, need to contain provisions for checking the documentation (hence the performance) of the incoming sheeting, and he will have to have other characteristics of the sign face tested.

*Example 2:* Translucent coloured overlays applied to white base sheeting. Where the reflective sheeting manufacturer has tested his coloured overlays and base sheeting together (and the results are available to the sign plate manufacturer) then the tests performed by the sheeting manufacturer do not have to be repeated by the sign plate manufacturer. The standard permits a 30 % deterioration in retroreflectivity, (colours shall not be less than 70 % of those in Tables 3 and 4), but white does not have the possibility of any deterioration, so as long as the white parts of the sign are not overlaid (or the overlay is cut out over any white parts), the provisions of the standard can be met as long as the sign plate manufacturer follows the sheeting manufacturer's instructions.

One possibility not considered in the two examples above is where the sign plate manufacturer overlays the whole sign with a protective layer (e.g. anti-graffiti or anti-dew forming), the effect of which is to change the retroreflective properties of all colours. In this case, the sign plate manufacturer will need to have the performance of the sign tested by the CB, unless he has this information already from the sheeting and/or protective layer manufacturer(s).

Where traffic signs contain areas of non-standard retroreflective colours (e.g. colours not included in Table 1 of EN 12899-1) or pictorial images, manufacturers are permitted to apply CE marking to the sign and declare "No performance determined" (NPD) for relevant characteristics in these areas as long as these are not subject to regulatory requirements in the intended end use.

Printed sign faces (not laminated to substrate) cannot be CE marked and they are therefore considered under C below.

When purchasing sign plates, the client should provide information on the wind loading and type of support on which the sign will be installed and indicate if the sign is to be illuminated. The manufacturer then prepares the sign substrate with the appropriately positioned strengthening channels for the wind loading and support(s). Appropriate fixing clips can then be identified (see C.1). The sign manufacturer will manufacture the sign plate in accordance with the client's instructions and provide him with a DoP as a CE-marked product. The CE marking will be applied to the back of the sign or included with supporting

documentation. The client is then responsible for ensuring the sign is installed correctly on the supports advised to the sign manufacturer.

However, if the client does not provide sufficient information, the sign manufacturer will use ARTSM assumptions as specified in the ARTSM Guidance Document for Specifying Permanent Traffic Signs, WG2/01 and this means assessing the sign plate for wind load class WL6 and following suggested visibility classes. It is still a requirement for the sign plate to be CE marked (and the CPR requires that the manufacturer declares at least one characteristic), but the sign manufacturer may declare NPD for any characteristic which he cannot assess because of a lack of information (such as details of the support). The sign manufacturer cannot be held responsible for the performance of a sign mounted differently or at particularly windy locations, unless these have been specified by the purchaser in advance.

#### ***B.4 Complete sign (kit) manufacturers***

Traffic signs may also be sold as a complete or partial kit of components, where a kit is defined as a set of at least two components, bought in one purchase from a single supplier, and intended to be put together on site to form the complete sign. It is important here that the supplier (the manufacturer) makes claims about the performance of the kit, and this is done by declaring the characteristics of Table ZA.6 of EN 12899-1. The purchaser could, for example, buy the supports, the sign plate and the fixings from a stockist but unless the stockist claims to be the manufacturer selling a kit, a kit would not be being sold.

When a kit is being sold, it has to have a DoP and be CE marked. As long as at least two components form the kit, the manufacturer may specify other components or materials to be used with the kit on site to form the installed sign. For example, the kit manufacturer could supply the supports and sign plate, and specify the fixings and or luminaire without supplying them.

Any tests of the complete sign would need to be done by the Notified Certification Body, using all components of the kit and any components not supplied but specified. As above, however, the kit does not need re-testing against characteristics which have been assessed and declared by the component suppliers with the CE marking. However, if the supports are supplied to order or by material grade and dimensions, because strength values have to be declared as such (e.g. wind action is declared as a class or a value in  $\text{kN/m}^2$ ), the kit manufacturer needs to calculate strength values from the information from the post supplier.

Because a kit manufacturer is making claims about the performance of the installed sign, he must declare all characteristics subject to regulations for the intended use of the sign, and he should declare non-regulated characteristics where these are required (e.g. wind load). He must not declare NPD against any regulated or required characteristic even if these are not specified in an order from a client.

The kit manufacturer will supply installation instructions with his kit. If someone else is employed to buy specified but not-supplied components and install the sign, responsibility for the sign having the performance declared by the manufacturer rests with the installer and not the manufacturer.

## **C: External luminaire manufacturer, fixing clip manufacturer, printed sign face manufacturers**

### ***General***

Three components of traffic signs are not covered by EN 12899-1 and they cannot, therefore, be CE marked according to that standard. These are: fixings, luminaires and printed sign faces. Because these products are not subject to CE marking, there is no AVCP system, no intervention of a Notified Body and no requirement

on their manufacturers to prepare a DoP (all of which are CE marking concepts). How these components are supplied is therefore dependent on the relationship between their manufacturers and their purchasers.

The manufacturer of non-CE marked products is expected to provide performance information in the form of a performance data sheet<sup>2</sup>. Some of this information may be able to be used by component purchasers.

Other products (such as the constituents of concrete used in foundations) are subject to CE marking under other CPR standards, but the details are not considered here because foundations will usually be specified by the client.

### ***C.1 Fixings manufacturers***

Fixings manufacturers should supply fixings with a performance data sheet. Where this is not provided, the purchasers of the fixings (e.g. the sign plate manufacturer) would need to have the strength tests required by EN 12899-1 performed by the notified CB to determine their suitability.

### ***C.2 Luminaire manufacturers***

Luminaires (mains voltage) are required to be CE marked to the provisions of, for example, the Low Voltage and Electromagnetic Compatibility Directives, but these directives cover only safety aspects etc., not performance. The luminaire intensity data could be provided by the manufacturer but they may not be.

A given luminaire will have quite different performance characteristics when used with signs of different sign plate heights, widths and areas. For CE marking of the sign plate or sign, however, it is their performance which needs to be assessed and declared, and EN 12899-1 provides two options to do this: calculation and testing. It is obviously not practicable to test every luminaire with every permutation of sign dimension, so in practice the calculation method is likely to be used. This requires the intensity data of the luminaire to be known, either supplied by its manufacturer or determined by testing in accordance with 7.4.1.4.2 of the EN. In this case, the Notified Certification Body will check the calculations made.

### ***C.3 Screen-printed or digitally-printed sign face manufacturers***

As stated above, printed sign faces cannot be CE marked. However, according to guidance from the Sector Group of Notified Bodies for sign products (SG04), a cascaded type testing approach may be used for such sign face constructions. Cascaded type testing (see Annex 1) is defined in the CPR for a system made of components, which the manufacturer assembles, following precise instructions given by the provider of such a system or of a component thereof, who has already tested that system. If the sign plate/sign manufacturer has an agreement with the system supplier, he may use performance data obtained by the system supplier, but has to demonstrate that he can produce the system correctly.

The cascaded approach may be applied for screen-printed or digitally-printed sign faces. Some additional testing on behalf of the sign plate/sign manufacturer may be needed, and their manufacturers should consult their chosen Notified Certification Body. If the cascaded approach is not followed, and no performance information is available from the printed sign plate material supplier, then the sign plate/sign manufacturer would need to test the finished sign plate.

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<sup>2</sup> The term "Certificate of Conformity", used by the sign industry, implies the intervention of a certification body, but there is no regulatory or standardisation obligation on manufacturers of these components to use such a body. The term "Performance data sheet" is therefore preferred, although this does not prevent manufacturers from voluntarily involving third parties to determine or guarantee their performance information.



The responsibilities for the different components of a traffic sign are summarised in the following table, which is taken from SG04 guidance. In this table, “supplier” refers to the supplier of the component concerned. A distinction is made between “raw material” and “component”, where the raw material is used in the production of the component and the component is then used in the production of the sign face or completed sign.

<b>Product parts and responsibilities</b>	
Steel tubes	<p>Steel tubes are considered as raw material.</p> <p>The supplier declares the material grade and dimensions.</p> <p>The support manufacturer evaluates the raw material (material grade, dimensions).</p> <p>Type testing of the characteristics of Annex ZA of EN 12899-1, where required, is made on behalf of the support manufacturer on the support made from the steel tube.</p>
Sign substrate	<p>Sign substrates are considered as raw material.</p> <p>The supplier declares the material grade and dimensions.</p> <p>The sign plate/sign manufacturer evaluates the raw material (material grade, dimensions).</p> <p>Type testing of the characteristics of Annex ZA of EN 12899-1 is made on behalf of the sign plate/sign manufacturer on the sign plate made using the substrate material.</p>
Ink for screen printing	<p>Ink is considered as raw material.</p> <p>The supplier declares the material type (identification code).</p> <p>The sign plate/sign manufacturer evaluates the raw material (identification code).</p> <p>Type testing of the characteristics of Annex ZA of EN 12899-1 is made on behalf of the sign plate/sign manufacturer on the sign plate on which the ink is used, although the cascaded approach may be used.</p>
Clamps and fixings	<p>Clamps and fixings are considered as components.</p> <p>The supplier declares the material grade and dimensions.</p> <p>The sign plate/sign manufacturer evaluates the material grade and dimensions.</p> <p>Type testing of the characteristics of Annex ZA of EN 12899-1 is made on behalf of the sign plate/sign manufacturer on the sign plate/sign on which the clamps/fixings are used.</p>
Profiles or channel sections	<p>Profiles or channel sections are considered as raw material.</p> <p>The supplier confirms the material grade and dimensions.</p> <p>The sign plate/sign manufacturer evaluates raw material (material grade, dimensions).</p> <p>Type testing of the characteristics of Annex ZA of EN 12899-1 is made on behalf of the sign plate/sign manufacturer on the sign plate/sign on which the profiles are used.</p>
Sign face	<p>Sign faces are considered as a component.</p> <p>The supplier is normally responsible for type testing.</p> <p>The supplier provides the sign plate/sign manufacturer with the relevant test results.</p>
Light sources, electrical equipment	<p>Supplied components shall be in compliance with at least the Low Voltage and the EMC Directives.</p>
External lighting units	<p>The sign plate/sign manufacturer evaluates the supplied components.</p> <p>The sign plate/sign manufacturer is responsible for type testing related to the complete sign face or sign.</p>
Retroreflective sheeting	<p>This sheeting is a component within the scope of EN 12899-1.</p> <p>The sheeting manufacturer is responsible for type testing.</p> <p>The sheeting manufacturer supplies the DoP and CE marking to the sign plate/sign manufacturer.</p>

## D: Importer, distributor or supplier

### D.1 General

It is the 'manufacturer' (the person who first places a product on the EU market), who is always responsible for preparing a DoP and affixing the CE marking. Other actors in the supply chain, as long as they only pass the products on (but see re-branding below), have no CE marking obligations. The CPR (Articles 13 and 14 respectively) place certain obligations on importers and distributors (suppliers, stockists and wholesalers, can all be considered as 'distributors').

Both importers and distributors must ensure that the products they sell have the correct documentation and information (DoP, CE marking and instructions and safety information), and they must ensure that this is passed on through the chain (this requires copying if a batch is split). They must also ensure that they do not pass on products which they have reason to believe are not in conformity with the DoP or not in compliance with other applicable requirements of the CPR, and they must keep and supply details of the products to market enforcement authorities if asked to demonstrate that the products they supply conform.

There is a further, specific, obligation on an importer (the person first placing a product from outside the EU on the EU market) that their name appears on or with the product, and both actors would need to ensure that, if they receive an order for a specific product, they supply a product with the levels of performance specified in the order. But other than these general obligations, importers and distributors have no other CE marking obligations.

### D.2 'Manufacturer' and re-branding

There are three ways in which an actor in the supply chain (client, contractor, sub-contractor, importer or distributor, etc.), other than the person who produced the product, can become the 'manufacturer' in the meaning of the CPR:

- a) he sells on a product in his own name and exclude entirely all reference to the initial manufacturer,
- b) he changes the performance of the product,
- c) he purchases products from a number of different sources, and then sells them on as a kit.

A contractor or sub-contractor becomes a "manufacturer" if they do not purchase the complete sign kit (sign plate, support, fixings, etc.) from a single supplier. **This is a critical point in the supply chain.** Therefore if they buy separate components from different suppliers (e.g. supports, fixings and sign plate) and sell them on as a complete kit, and the suppliers do not state that their component can be used with the others, then the contractor or sub-contractor becomes responsible for ensuring that all components are compatible and give the desired levels of performance.

Once an actor becomes the manufacturer, he takes on the full responsibilities of a manufacturer. This means that the products he sells are subject to DPT by a Notified Product Certification Body under AVCP System 1, that he operates an FPC system and that this system is assessed by the Certification Body, and that he has a certificate from the Notified Body. He must then draw up a DoP and affix the CE marking.

There are different ways in which an actor can fulfil his obligations as ‘manufacturer’ and, in particular, satisfy FPC and DPT testing requirements and it is beyond the scope of this Guidance to describe them. For any actor wishing to become a manufacturer, it is recommended that he discusses this with his Notified Certification Body of choice. Notified Bodies Group guidance, however, generally requires that it is the FPC system(s) of the original producers which is/are assessed, requiring some type of agreement between the ‘manufacturer’ and his suppliers.

An actor should not, however, be considered as the manufacturer if he re-brands the product (such as DIY stores selling products in own-brand packing) while keeping the name of the actual manufacturer (i.e. the person responsible for CE marking) evident. Care should be taken, however, that the actor’s name does not appear in a way in which it could be assumed that he is responsible for the CE marking.

## **E: Assembler and installer**

When a contractor or sub-contractor purchases a complete sign kit (sign, supports, fixings) from a sign manufacturer, and the sign manufacturer provides the DoP and CE marking for the complete sign assembly, the contractor or sub-contractor who assembles and installs the kit has no further CE-marking obligations when he sells on (e.g. under a contract with a highways authority), as long as he follows the sign manufacturer’s instructions.

When a client, contractor or sub-contractor engages a sign manufacturer to provide and install the complete sign assembly, the client, contractor or sub-contractor has no further CE marking obligations either.

In both of the above cases, however, the client, contractor or sub-contractor (depending on the relationship between them and possibly a highways authority) will have responsibility for ensuring that the installed sign meets all requirements (regulatory and non-regulatory) placed on it for its particular place of installation.

When a client, contractor or sub-contractor purchases individual products supplied with a DoP and CE marking in line with EN 12899-1, assembles and installs these on site, he has no further CE marking obligations but he has other possible obligations depending on how the products have been specified and supplied. If all of the components have been supplied in response to a design and therefore are known to be compatible and to have the necessary levels of performance, his responsibility is simply to correctly assemble and install them. If some performance characteristics (e.g. wind load resistance) are missing (because they were not included in the original specification), then he would have the additional responsibility of assessing the missing characteristic(s) and ensuring that these satisfy all local requirements.

## **F: Local Authority sign shop**

If a sign is manufactured by a Local Authority sign shop and installed within its county boundaries by its own work force, all of which are the same legal entity, then there is no requirement for CE marking either of the sign or the assembly because these have not been placed on the market. This does not negate the sign shop’s responsibility for providing products which conform to EN 12899-1.

If the Local Authority sign shop supplies a sign or a kit of products to a third party either within its county boundary or outside, then CE marking is a legal requirement. This will require DPT testing and the sign shop’s FPC system being audited to EN 12899-1 by a Notified Certification Body, and the sign shop providing a DoP and CE marking.

## DoP, CE marking, labelling and product information

At present, EN 12899-1 does not specify the form or content of the Declaration of Performance (DoP). Manufacturers have, therefore, to follow the provisions of Annex III of the CPR, other guidance from the European Commission (work is already underway to change the content of the DoP) and/or guidance from CEN.

In addition, the manufacturer shall provide CE marking information as required by ZA.3 of EN 12899-1. Therefore the component or sign manufacturer must understand his responsibilities when manufacturing a component of a sign as well as when supplying a complete sign assembly. If in doubt, manufacturers may consult ARTSM and/or the Notified Product Certification Body they have chosen.

## Terms and definitions

The following terms and definitions, some of them taken from the Construction Products Regulation [CPR], might be helpful in understanding this guidance document.

**Assembler and installer:** The person who takes the necessary measures to ensure that a product or kit, when installed, still complies with the essential requirements. Mainly this means that he must select products and components which work together, and install them in accordance with the manufacturers' installation instructions.

**Assessment and Verification of Constancy of Performance (AVCP):** Procedure by which the manufacturer, possibly involving a Notified Body (Certification Body or test laboratory) demonstrates that the product meets the requirements of the harmonised technical specification. Always involves Determination of Product-Type (DPT) and factory production control (FPC). AVCP is a CPR term, equivalent to Attestation of Conformity (AoC) under the CPD and, until standards are revised, they will continue to refer to AoC.

**Authorised Representative [CPR]:** any natural or legal person established within the Union who has received a written mandate from a manufacturer to act on his behalf in relation to specified tasks. Intended mainly for manufacturers outside the EU; EU-based manufacturers do not usually require one.

**AVCP System 1:** Product certification (the procedure required for signs and sign components according to EN 12899-1). DPT and initial and then routine assessment of the manufacturer's FPC system is performed by a Notified Product Certification Body. Equivalent to AoC System 1 under the CPD as defined in EN 12899-1.

**Cascaded initial type testing [CPR]:** The construction product, covered by an EN, is a system made of components, which the manufacturer assembles duly following precise instructions given by the provider of such a system or of a component thereof, who has already tested that system or that component for one or several of its essential characteristics in accordance with the EN. When these conditions are fulfilled, the manufacturer is entitled to declare performance corresponding to all or part of the test results for the system or the component provided to him. The manufacturer may use the test results obtained by another manufacturer or system provider only after having obtained an authorisation of that manufacturer or system provider, who remains responsible for the accuracy, reliability and stability of those test results.

**CE marking information:** All products covered by an EN under the CPR must be accompanied by the CE marking symbol and other identification and performance information. The location and content of this is given in Annex ZA.3 of EN 12899-1 and manufacturers must following what is prescribed.

**Client:** May be one of several different organisations. Depending upon the circumstances, could be a highway authority, consultant, specifier, purchaser, civil contractor, lighting contractor, etc.

**Complete sign assembly:** The combination of sign plate, support and fixings, or a sign, support, fixings and external luminaire, when installed on site.

**Construction Products Directive (CPD):** An EU directive intended to remove barriers to trade in construction products within the European Union and allow the ability of products to satisfy regulatory requirements on construction works to be known. Now replaced by the Construction Products Regulation (CPR).

**Construction Products Regulation 2011 (CPR):** An EU regulation having the same aims as the CPD but designed to clarify, simplify and strengthen the existing framework for the placing on the market of construction products.

**Declaration of Performance (DoP):** All products covered by an EN under the CPR must be supplied with a DoP which contains identification, performance and other relevant information related to the product. The content of the DoP is currently given in CPR Annex III and will, in the future, be included in EN 12899-1.

**Determination of Product-Type (DPT):** The method or methods by which the set of performance values of a product is determined. Most often involves testing, but may also include other methods such as calculation.

**Distributor [CPR]:** Any natural or legal person in the supply chain, other than the manufacturer or the importer, who makes a construction product available on the market. The distributor may re-batch or re-package the product, and has to pass on the DoP and CE marking. The distributor becomes the manufacturer if he modifies the product or its intended use(s), or if he sells it in his own name by excluding the name of the initial manufacturer. The distributor must retain records and must not pass on products which he knows or suspects do not meet the requirements of the CPR or the performance values stated in the DOP.

**Essential characteristics:** Performance requirements of the product needed to satisfy regulatory requirements. These characteristics are detailed in Annex ZA, Tables ZA.1 to ZA.6 of EN 12899-1. They are usually assessed by testing but may also be assessed by other means, such as calculation.

**Factory Production Control (FPC) [CPR]:** The documented, permanent and internal control of production in a factory, in accordance with EN 12899-4. Intended primarily to ensure that products retain the performance values declared.

**Importer [CPR]:** Any natural or legal person established within the Union, who places a construction product from a third country on the Union market. The importer has the same responsibilities as the distributor but, in addition, his name and identification information has to appear with the product.

**(Initial) Type Testing ITT:** Determination of product performance to derive the product-type using testing (for signs in accordance with EN 12899-5). The word "initial" should no longer be used, because it implies that Type Testing may need to be repeated, which is not the case unless something changes.

**Kit [CPR]:** A construction product placed on the market by a single manufacturer as a set of at least two separate components that need to be put together to be incorporated in the construction works (and bought in a single purchase). Could be a sign face with fixings, or a complete sign assembly, e.g. a sign face, support and fixings, or a sign face, support, fixings and external luminaire.

**Making available on the market [CPR]:** Any supply of a construction product for distribution or use on the Union market in the course of a commercial activity, whether in return for payment or free of charge.

**Manufacturer [CPR]:** Any natural or legal person who manufactures a construction product or who has such a product designed or manufactured, and markets that product under his name or trademark. The definition for the purposes of the CPR is therefore somewhat different from common usage; the manufacturer may produce the product but he may sell products or kits produced by someone else. The manufacturer has an obligation to ensure that a product placed on the market is designed and manufactured in accordance with the provisions of the CPR. The manufacturer does not have to be based in the EU.

**NPD:** No Performance Determined. Declaration made against a characteristics where that characteristic is not subject to regulatory requirements in its intended end use or to a threshold value.

**Performance data sheet:** Performance information provided by the manufacturer of a component that cannot be CE marked within the scope of EN 12899-1. This term should be used instead of Certificate of Conformity, which implies the intervention of a certification body.

**Placing on the market [CPR]:** The first making available of a construction product on the Union market.

**Producer:** Someone who produces a product or component. The producer becomes the manufacturer if he sells the product in his own name, but he does not need to be the manufacturer. In most cases, however, the person who produces the product sells the product in his own name, becomes the manufacturer and takes responsibility for its CE marking. The term is not, however, used in the CPR or CPD.

**Re-branding:** When someone sells a product under his name and not that of the original producer and therefore becomes the ‘manufacturer’ in the meaning of the CPR. An importer who adds his name to a product without changing it at all does not become the manufacturer, and it seems likely that a distributor could add, outside the CE marking information, “Distributed by ...” without becoming the manufacturer either.

**Sign face:** The visual element of the sign seen by the driver; typically retroreflective or non retroreflective self-adhesive sheeting not laminated to substrate and provided to another manufacturer for lamination to substrate in the finished sign. Sign faces cannot be CE marked and, for a sign face to become a sign plate, it needs to be fixed to a supporting substrate.

**Sign plate:** Fabrication comprising the substrate, typically with reinforcing members attached and fixings supplied. Sign plates must be CE marked when placed on the market.

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