

# TECHNICAL STATEMENT

## Remanufacture of Luminaires

### 0.1 Executive Summary

If a lighting product (luminaire; lamp; controlgear; etc.) is modified without the specific endorsement of the original manufacturer, those undertaking the modification (user or commercial modifier) assume responsibility for ensuring the modified product, in its entirety, is compliant with applicable legal and safety requirements. These responsibilities include the need to identify themselves on the product as manufacturer or responsible vendor. Furthermore, any warranties or guarantees offered by the original manufacturer may no longer be applicable unless the modification has been expressly authorised by them.

### 0.2 Definitions

*Note: These definitions do not infer they are the only definitions available and do not constitute an exhaustive list of potential definitions.*

#### 0.2.1 Relamping

A process of changing the lamp within a luminaire which does not require any modification to the luminaire.

*Example: replacing a lamp with an original or retrofit lamp within a luminaire without needing to replace, modify or remove from circuit any controlgear.*

#### 0.2.2 Substantial Modification

A modification that triggers a need for fresh compliance assessments due to a change in the product's original performance, purpose, without being foreseen in the initial risk assessment.

*Note: The EU Blue guide carries this definition of a substantial modification and it is generally accepted by MSA's within the UK and EU as the method of identifying who the responsible "producer" is.*

#### 0.2.3 Repair

A process of carrying out work on a broken or non-operational product, to return it to its original operation.

*Example: replacing a broken diffuser with a manufacturers' replacement new diffuser*

#### 0.2.4 Refurbish

A process of carrying out work on an operational product to bring it back to its original appearance or functional specification.

*Example: replacing a discoloured diffuser with a manufacturers' replacement new diffuser*

#### 0.2.5 Upgrade

A process of improving the performance or function of a luminaire, in line with expected use by the manufacture.

*Example 1: Installing a photocell, or emergency pack, where the manufacturer has provided plug-and-play connection for these add on devices, and where they were originally assessed by the manufacturer before placing on the market.*

*Example 2: Removing a knock-out within the product and installing a photocell in line with the original luminaire manufacturer's instructions.*

#### 0.2.6 Remanufacture

A substantial modification to an existing product, or part of an existing product, to create a new product. The new product may have the same or different function from the original product

*Example 1: taking a luminaire and changing it from fluorescent to LED technology*

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*Example 2: taking the body of a luminaire and creating a new product using that body*

*Example 3: Using a retrofit lamp where the controlgear needs to be removed from circuit, modified or replaced*

*Note: Conversions are considered a remanufacturing process see 0.27 below*

### 0.2.7 Conversion

A remanufacturing process whereby the operation of a working product is changed to a different operation.

*Example: taking an ordinary luminaire and changing it to an emergency luminaire*

## 1. INTRODUCTION

Within the European Union and the United Kingdom, manufacturers of lighting equipment carry prime responsibility for ensuring the legal conformity of their products with the legislation that is in force at the time of the product being placed on the market/put into service. In the past product conformity legislation had a main focus to ensure safety (LVD and EESR) but increasingly the requirements for product conformity become much more complex extending to electromagnetic interference (EMC), performance/environmental (ErP) and material chemical composition (REACH/RoHS).

Note: Where a product is remanufactured outside of Great Britain, the general responsibilities of the remanufacturer are carried by the importer. There will be exceptions to this rule so you must take local regulations into account when performing remanufacturing work outside of Great Britain.

A major part of this conformity responsibility is carried under the scope of the CE or UKCA mark, where a manufacturer must:

- a) Clearly identify the product with name/brand of the responsible manufacturer/vendor
- b) Make a self-declaration of legal conformity by marking the product 'CE/UKCA'
- c) Maintain a CE/UKCA declaration and the technical records/reports to demonstrate conformity.

In addition to these legal conformities the manufacturer is also responsible for other commercial commitments to the product such as warranty and service support.

It is important to recognise that the manufacturer will only maintain these responsibilities for the product as it has been supplied and for its specified conditions of use. Where a product is remanufactured, by the user or an intermediate third party without permission of the original manufacturer, then the legal responsibilities of the original manufacturer will be passed to the modifier and commercial support such as warranty will be invalidated.

Explanatory Note: Even the simplest of modifications to a product, in general terms, can void a warranty, the reasons for this concern legal compliance with technical documentation rules. When a product is placed on the market a technical construction file is created with detailed information about the product that has been sold, this will detail the product, including design information and any test certificates. All these documents will be against the original products and not for the modified product, therefore they are no longer applicable and as such the presumption of conformity and all associated risk mitigation no longer applies.

Note: Definitions 0.2.6 – 0.2.7 are considered substantial modifications to the original manufacturer's specification.

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Note: Although it is generally accepted that modifications to a product without the approval of the original manufacturer would be seen by MSA's as a change in "producer" responsibility, this may not occur in all cases.

There are a few exceptions to this rule which will be discussed in section 2.3 below

## 2. THE RESPONSIBILITY OF REMANUFACTURERS

### 2.1 Third Party Remanufacturing

Sometimes remanufacturing of a product may be made by intermediate third parties who take the product of an original manufacturer and perform some re-engineering (e.g. fitting of emergency lighting components; additional lighting controls, etc). The product is then resold to an end user by the remanufacturer or by the supplier who has commissioned the work.

Anyone re-manufacturing a product invalidates the original legal validations and assumes the full responsibility for these (including CE/UKCA compliance) for the whole unit (Except in situations as discussed in section 2.3.2 below). It is the responsibility of the company or individual making any modifications to remove the original manufactures labels and CE/UKCA mark and replace them with their own CE/UKCA mark and remanufacturers identification.

The product must now meet all the relevant legislation related to it and the remanufacturer shall be able to supply on request a technical construction file for the product in total. This file must enable compliance to be validated and would be expected to include at least:

- CE and/or UKCA declaration
- A general description of the electrical equipment
- Manufacturing drawings or details of modifications
- Schedule of all parts (components, sub-assemblies, circuits, etc) used.
- A list of all standards applied in full or part.
- Test Reports.

Note: The original luminaire could be considered a sub-assembly or component.

Any modifications carried out by a third party will invalidate the original warranty and new warranty arrangements should be established by the third party. Irrespective of manufacturers marking that remains on the product.

NOTE: - If the remanufacturer were to leave the original manufacturer's marks in place, this increases the risk of inappropriately passing off their own responsibility for the product.

### 2.2 Second Party Remanufacturing

Increasingly, conversion products (or kits) are being offered on the market to end users of lighting equipment for 'improvement' of the original luminaire. Often these products are marketed with the claims of improved energy efficiency, improved performance, or reduced maintenance care for the future. Examples of such products are: power reduction devices; alternative lamp technologies; optical controls.

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As for the situation with third party remanufacture, the use of these devices will normally invalidate the legal conformities and warranty of the original product manufacturer. The user of the luminaire who has fitted the modification device will assume the general responsibilities appropriate to a third-party modifier and should similarly ensure conformity of the modified unit (particularly where they have legal responsibilities for the safety of the area in which the product is used).

In case of doubt the purchaser/user of such modification devices should take all measures to ensure themselves of the conformity and performance of the conversion product and consult with the manufacturer of the original luminaire to verify that use of the particular device is supported.

### **2.3 First Party Remanufacturing**

Sometimes remanufacturing of a product may be made by the original manufacturer or an authorised sub-contractor.

#### **2.3.1 Remanufacture by the OEM**

If the original manufacturer remanufactures the product, for example taking a product from stock and changing the functionality (i.e. emergency conversion) then the manufacturer must ensure that all necessary additional checks are performed. This may have been done at the type testing stage (If this is a planned process) or may need to be done if this is a non-standard conversion (modification at client request)

All legal responsibility remains with the original manufacturer.

Additionally covered under this item are conversion kits provided by the original luminaire manufacturer for use within their products. Unlike in item 2.2 above, these devices may allow continuation of the original equipment warranty and validity of the technical construction file, provided the original manufacturer has documented the installation procedure correctly, and carried out all the required assessments (including testing where relevant / necessary) to ensure that the product still meets all legal requirements when installed in accordance with provided instructions.

#### **2.3.2 Remanufacture by an authorised sub-contractor.**

In this situation the original manufacturer will determine the amount of responsibility taken by the sub-contractor and a legal contract would need to be created to apportion that responsibility.

## **3. CONCLUSION**

Original manufacturers can only be expected to be responsible for their products as supplied and as specified for use. Third parties modifying products for resale become responsible as the manufacturer of the product. This is to ensure that liability and assurance follow the party in control of the safety and conformity of the final product placed on the market. For the fitment of modification parts and/or accessories, both the manufacturer of these parts and the user who fits the part inherit responsibility from the original manufacturer of the product, except where the manufacturer has provided the parts and instructions for their installation as per the definition of "Upgrade"

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### 4. Glossary

CE – {conformité européenne} European self-declaration mark for safety

EESR – Electrical Equipment Safety Regulations

EMC – Electromagnetic Compatibility (UK Regulation/ EU Directive)

ErP – Energy Related Products (Directive)

LVD – Low Voltage Directive

MSA – Market Surveillance Authority

OEM – Original Equipment Manufacturer

REACH – Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation)

RoHS – Restriction of Hazardous Substances (Regulation)

UKCA – {United Kingdom Conformity Assessment} UK self-declaration mark for safety