

## DISCUSSION PAPER

### ECODESIGN FOR ENERGY RELATED PRODUCTS INTEGRATED INTO OTHER ENERGY RELATED PRODUCTS



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## 1. INTRODUCTION

Several Regulations adopted under Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products<sup>1</sup> apply to products integrated into other products, namely:

- Regulation 244/2009 with regard to ecodesign requirements for non-directional household lamps<sup>2</sup>.
- Regulation 245/2009 with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps.<sup>3</sup>
- Regulation 640/2009 with regard to ecodesign requirements for electric motors<sup>4</sup>.
- Regulation 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products<sup>5</sup>.
- Regulation 327/2011 with regard to ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW<sup>6</sup>.
- Regulation 547/2012 with regard to ecodesign requirements for water pumps<sup>7</sup>.
- Regulation 1194/2012 with regard to ecodesign requirements for directional lamps, light emitting diode lamps and related equipment.<sup>8</sup>

These products may also be sold as "stand alone" products.

Some of these regulations are currently being reviewed (Regulation 640/2009 and Regulation 327/2011) while the question of products integrated into other products has also been raised in the context of the draft Regulation on displays where the market will see an increasing integration of computers and electronic displays or tablet-like products into other products.

During the past years three recurrent questions have been asked by industry and Member States as regards such products/components:

- Who is responsible for compliance of the integrated product; the original equipment manufacturer or the manufacturer of the final product?
- When is the product "placed on the market"? Is it when the integrated product is sold from its manufacturer to the manufacturer of the final product, or when the manufacturer of the final product places it on the market?
- Who is responsible for affixing the CE mark and issuing the Declaration of Conformity (DoC) for a product integrated into another product?

The Commission services already provided answers to these questions in the FAQ document accompanying Regulation 327/2011. The replies provided in that document are based on the "*Blue Guide*" on the implementation of EU product rules<sup>9</sup>. Nevertheless, the topic has been raised again, both in the Administrative Cooperation (ADCO) group of Member State market

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<sup>1</sup> OJ L 285, 31.10.2009, p. 10.

<sup>2</sup> OJ L 76, 24.3.2009, p. 3.

<sup>3</sup> OJ L 76, 24.3.2009 p. 17.

<sup>4</sup> OJ L 191, 23.7.2009, p. 26.

<sup>5</sup> OJ L 191, 23.7.2009, p. 35.

<sup>6</sup> OJ L 90, 6.4.2011, p. 8.

<sup>7</sup> OJ L 165, 26.6.2012, p. 28.

<sup>8</sup> OJ L 342, 14.12.2012 p. 1.

<sup>9</sup> <http://ec.europa.eu/DocsRoom/documents/4942>

surveillance authorities and as a consequence of Commission proposals for extending the scope of Regulation 640/2009 on electric motors to single-phase motors with a rated output below 750 W. Member States and industry have specifically asked for a clear interpretation of the issue.

The objective of this document is to provide a clear interpretation of the current situation and serve as basis for further discussion.

## **2. THE LEGISLATIVE FRAMEWORK**

### **2.1. Ecodesign Directive**

The Ecodesign Directive itself<sup>10</sup> provides several relevant definitions in this context as follows:

*“Energy-related product” means any good that has an impact on energy consumption during use which is placed on the market and/or put into service and includes parts intended to be incorporated into energy-related products covered by this Directive which are placed on the market and/or put into service as individual parts for end-users of which the environmental performance can be assessed independently.*

*“Components and sub-assemblies” means parts intended to be incorporated into products which are not placed on the market and/or put into service as individual parts for end-users or the environmental performance of which cannot be assessed independently.*

*“Placing on the market” means making a product available for the first time on the Community market with a view to its distribution or use within the Community, whether for reward or free of charge and irrespective of the selling technique.*

*“Manufacturer” means the natural or legal person who manufactures products covered by this Directive and is responsible for their conformity with this Directive in view of their being placed on the market and/or put into service under the manufacturer’s own trademark [...].*

The Ecodesign Directive does not provide a separate definition of products sold to be incorporated into other products.

It is to be noted, that neither the Ecodesign nor the Energy Labelling Directives define the term “making available” which is used in other New Legislative Framework (NLF) legislation and on the “Blue Guide”, although the term is used for defining “placing on the market”.

Nevertheless, the definition of “manufacturer” under the Ecodesign Directive indicates that the manufacturer is responsible for the compliance of the product when it is placed on the market under “its own trademark”. The Blue Guide also makes clear that the manufacturer has the sole and ultimate responsibility for ensuring the conformity of the product to the applicable legislation.

## **3. THE “BLUE GUIDE”**

The *“Blue Guide” on the implementation of EU product rules* is a document that even if not legally binding, is widely referenced by the Commission services, stakeholders and Member States.

Different chapters of the Blue guide might help providing a reply to the relevant questions.

From the Blue Guide (3.1 Manufacturers)

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<sup>10</sup> No product integrated into other product has been covered by delegated Regulation under the Energy Labelling Directive so far.

*The responsibilities of the manufacturer apply also to any natural or legal person who assembles, packs, processes or labels ready-made products and places them on the market under his own name or trademark.*

*Thus, when a product is transferred to a manufacturer for further measures such as assembling, packaging, processing or labelling, when placing the product on the market, he has the sole and ultimate responsibility for ensuring the conformity of the product to the applicable legislation, and must be able to do so.*

From 2.2 making available:

*A product is made available on the market when supplied for distribution, consumption or use on the Union market in the course of a commercial activity, whether in return for payment or free of charge.*

*Supplying a product is only considered as making available on the Union market, when the product is intended for end use on the Union market. The supply of products for further distribution, for incorporation into a final product, for further processing or refinement with the aim to export the final product outside the Union market is not considered as making available.<sup>11</sup>*

*The central role that the concept of making available plays in Union harmonisation legislation is related to the fact that all economic operators in the supply-chain have traceability obligations and need to have an active role in ensuring that only compliant products circulate on the Union market.*

From 2.3 placing on the market:

*A product is placed on the market when it is made available for the first time on the Union market. The operation is reserved either for a manufacturer or an importer [...].*

*The concept of placing on the market refers to each individual product, not to a type of product, and whether it was manufactured as an individual unit or in series. Consequently, even though a product model or type has been supplied before new Union harmonisation legislation lying down new mandatory requirements entered into force, individual units of the same model or type which are placed on the market after the new requirements have become applicable, must comply with these new requirements.*

*The placing on the market is the most decisive point in time concerning the application of the Union harmonised legislation. When made available on the market, products must be in compliance with the Union harmonisation legislation applicable on the market.*

#### **4. THE DECLARATION OF CONFORMITY**

Points 2.1 on product coverage and 4.4 EU declaration of conformity (DoC) of the “Blue Guide” address the question of the responsibility for issuing a DoC for the products.

*A combination of products and parts, which each comply with applicable legislation, does not always constitute a finished product that has to comply itself as a whole with a given Union harmonisation legislation. However, in some cases, a combination of different products and parts designed or put together by the same person is considered as one finished product which has to comply with the legislation as such. In particular, the manufacturer of the combination is responsible for selecting suitable products to make up the combination, for putting the combination together in such a way that it complies with the provisions of the laws*

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<sup>11</sup> This paragraph makes reference to “aim to export the final product outside the Union market”, i.e. it refers to products that are intended to be exported.

concerned, and for fulfilling all the requirements of the legislation in relation to the assembly, the EU Declaration of Conformity and CE marking. The fact that components or parts are CE marked does not automatically guarantee that the finished product also complies.

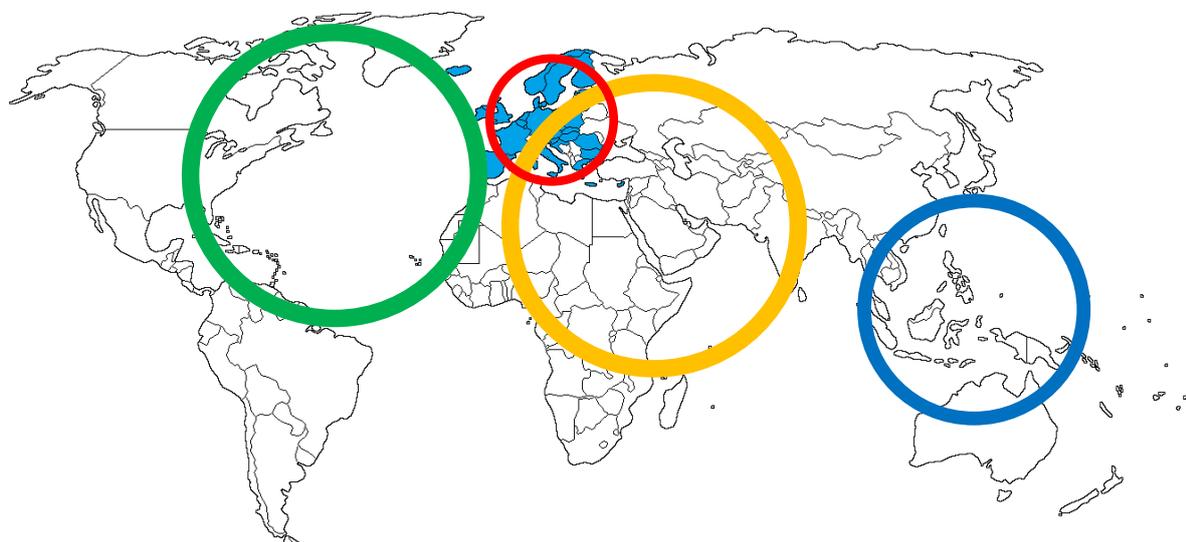
A single declaration of conformity is required whenever a product is covered by several pieces of Union harmonisation legislation requiring an EU Declaration of Conformity.

The single declaration of conformity can be made up of a dossier containing all relevant individual declarations of conformity.

The final manufacturer is responsible for the global DoC but might rely on individual DoC to create a "dossier". The final manufacturer can use the DoC issued by the original equipment manufacturer but it is not obliged to do so. In reality, the original equipment manufacturer will in most cases issue a DoC because the product will also be sold separately and customers will in most cases require a DoC.

## 5. OTHER CONSIDERATIONS

### 5.1. International trade



The international trade and the different chains that can be followed in order to place a product on the EEA market also need to be analysed. If we take the example of a motor integrated into a washing machine, several situations might exist as regards the responsibility for compliance, depending on the location of the manufacturer of the final product and the integrated product, and of the consumer.

| Situation | Location of Motor manufacturer | Location of Washing machine manufacturer | Location of Consumer |
|-----------|--------------------------------|--|----------------------|
| 1         | EEA                            | EEA                                      | EEA                  |
| 2         | EEA                            | EEA                                      | Non-EEA              |
| 3         | EEA                            | Non-EEA                                  | EEA                  |
| 4         | Non-EEA                        | EEA                                      | EEA                  |
| 5         | EEA                            | Non-EEA                                  | Non-EEA              |
| 6         | Non-EEA                        | EEA                                      | Non-EEA              |

|   |         |         |         |
|---|---------|---------|---------|
| 7 | Non-EEA | Non-EEA | EEA     |
| 8 | Non-EEA | Non-EEA | Non-EEA |

1. In this case, the responsibility for compliance of the motor should be applied to the motor manufacturer, as the motor was placed on the EEA market when it was sold to the washing machine manufacturer. The washing machine manufacturer “makes it available” when selling it incorporated into the washing machine to the distributor or the consumer.
2. This case is not relevant, as the final product is aimed to be exported (see also section 2.2 of the blue guide *"The supply of products for further distribution, for incorporation into a final product, for further processing or refinement with the aim to export the final product outside the Union market is not considered as making available"*).
3. In this case, the motor is exported outside the EEA, and in consequence no requirements apply to it, but it enters the market again as a part integrated into the imported washing machine. If the requirements on motors apply when the product is integrated into other product, the motor has to comply with the requirements. It seems clear that the only way to enforce the requirements in this case is enforcing them on the importer of the washing machine, as it is the one bringing the motor into the EEA boundaries.
4. In this case, the motor is being imported before integration into the washing machine in the EEA, which will be sold in the EEA. If the washing machine manufacturer is the one importing it, it should be responsible for the compliance of the motor. If the importer is another entity than the washing machine manufacturer, and the product is placed on the market by him, the compliance of the motor should be the responsibility of that importer.
5. This case is not relevant as the final product is aimed to be exported.
6. This case is not relevant as the final product is aimed to be exported.
7. The transaction between the motor manufacturer and the washing machine manufacturer is purely an extra EEA transaction and in consequence the requirements (including the ones applying to the integrated product) will be enforced when the final product enters the EEA market.
8. This case is not relevant, purely extra EEA market.

It seems that the only way of having a “neutral” approach that does not lead to unintended barriers to trade is applying the motor requirements not only when the placing on the market is a B2B transaction but also when the motor is first made available in the EU incorporated into a final product.

In a worst case scenario, other approaches might have as consequence a delocalisation of the motor manufacturing outside the EEA in order to avoid requirements being placed on it. Clearly, requirements cannot be set to products being placed on the market outside the EEA.

## **5.2. Products that can be sold separately or integrated**

All products covered by Ecodesign Regulations that may also be integrated into other products (i.e. lighting products, motors, fans, circulators and pumps), can also be sold separately by their manufacturer to the final consumer or distributor.

In the later case, the reply to questions about “placing on the market” and responsibility is obvious as the manufacturer has the responsibility for compliance.

### **5.3. Life Cycle Cost (LCC) analysis**

It has been claimed by some manufacturers of final products incorporating other energy-related products that setting minimum requirements for components might have a negative impact on the LCC of the final products and that it is necessary to allow manufacturers flexibility in deciding the best combination of 'measures' to meet the Ecodesign requirements for the final product (or to achieve a higher energy efficiency class).

It has to be noted that from a technical point of view, so far no evidence has been presented showing that the use of more efficient components leads to a lower energy efficiency of the final product. In reality, most of the time very efficient products are combinations of very efficient components put together in an appropriate way.

In fact, ecodesign requirements only remove the worst performing products from the market, leaving enough choice for final equipment manufacturers to integrate components allowing them to meet their design requirements including the minimum energy efficiency requirements set by a specific ecodesign measure.

The results of a LCC analysis depend on the underlying assumptions regarding production costs, energy use, and cost and hours of operation. If the assumptions regarding these parameters are set appropriately, the use of a more efficient component 'automatically' leads to a more efficient final product.

Nevertheless, as “base cases” are abstractions of reality, not all the specific uses of equipment can be captured. For instance, the assumptions regarding the use of small motors need to reflect the “typical” use of a motor in different products (ranging from domestic washing machines and fridges to commercial chillers or industrial machine tools), the operating hours of which are all different.

Moreover, the same applies to the different ways in which a final consumer may operate a (fairly homogeneous) product such as a washing machine, resulting in different LCC in reality.

As an example, the preparatory study on the review of the motor Regulation assumed 400 running hours per year for small single phase motors which is line with the assumptions usually made regarding the use of domestic appliances. In reality, these running hours may differ for certain products and use patterns.

## **6. CONCLUSION**

Based on the above, the following conclusions can be drawn with respect to products incorporated into products:

1. When the product is transferred from the original equipment manufacturer to the final manufacturer in the EEA, it is being placed on the market. In consequence, it has to fulfil any legal requirement that might apply and bear the CE mark.
2. When the final product is placed on the EEA market including the 'integrated product' (e.g. motor, fan), the final manufacturer is responsible for the legal compliance of the complete product, including integrated products, *vis-à-vis* market surveillance authorities.
3. The final product manufacturer can rely on the DoC and CE mark of the integrated products in order to build the DoC and CE mark of the final product.

4. In the case of imported final products, the integrated products regulated under Ecodesign also need to comply with the minimum requirements, and be accompanied by the DoC and bear the CE mark.
5. An additional consequence of a “placing on the market” that happens during the transaction between the original equipment manufacturer and the final product manufacturer is that the product has to comply with the requirements applicable at that point in time. New requirements coming into force before the final product is placed on the market (but after the transaction between OEM and final manufacturer has taken place) have no relevance.
6. If the final product is intended to be exported outside the EEA, the conclusions presented above do not apply.

While the implementing measures under the Ecodesign and Energy Labelling Directives do not appear to be in contradiction to the "Blue Guide", it has to be noted that the definitions in both Directives allow for applying requirements to the original equipment manufacturers, even if this may seem in contradiction to what is merely an interpretative document.

A clear application of regulatory requirements reduces the risk of loopholes.

Excluding products integrated into other products covered by Ecodesign Regulations could turn into a loophole. The formulation “when used in other products” indicates a point in time later than “placing on the market”, because a product needs to be distributed first before it can be used in another product. How can a market surveillance authority when checking at a distribution point know that the independent parts are to be used in products that are subject to ecodesign requirements and not in other products? Facing this uncertainty, they may not be able to act.

It may also lead to higher cost of the final product but if the requirements are correctly set, they will still be at the point of least LCC. Manufacturers may have less flexibility to decide what design measures to take.