

## CAPIEL Position Paper - RoHS Scope

### **1 - Purpose of this paper**

The purpose of this CAPIEL paper is to help manufacturers to determine whether or not the products they place on the market fall within the scope of the recast RoHS Directive (2011/65/EU), often known as RoHS 2.

This paper should be read in conjunction with the text of the RoHS Directive and relevant guidance issued by the European Commission and industry associations.

### **2 - CAPIEL products**

CAPIEL is the European Coordinating Committee for the National Associations of Manufacturers of Low Voltage Switchgear and Controlgear equipment for industrial and tertiary markets.

Members of national associations represented by CAPIEL include small, medium and large-sized companies that in total directly employ more than 100 000 people in Europe.

CAPIEL promotes and represents the common professional interests of its members in all areas of its competence. Essential association affairs are in the fields of standardization, legislation and common promotion.

The main products covered are the following:

- *Contactors*
- *Circuit-breakers*
- *Control devices ( switches, ...)*
- *Push buttons*
- *Fuses*
- *Motor starters*
- *Panels*
- *Cam switches*
- *Switch disconnectors*
- *Time relays*

Many CAPIEL products are sold to Original Equipment Manufacturers (OEM's), panel builders, or System Integrators (SI's), and they are intended to be assembled or incorporated into a finished EEE (e.g. machines, control panels) or installations.

Some product may be sold for direct use by end users (e.g. SI's or end customers) or as spare parts.

### **3 - RoHS 2 scope principles**

Directive 2011/65/EU entered into force on 21 July 2011 and requires Member States to transpose the provisions into their respective national laws by 2 January 2013.

It applies to several categories of Electrical and Electronic Equipment (EEE). An EEE means "equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1 000 volts for alternating current and 1 500 volts for direct current".

The scope of the directive will gradually extend to include more equipment categories and the two new categories of most relevance for CAPIEL products are:

Equipment Category	Compliance Date
<u>Category 9</u> Monitoring and control instruments	22 July 2014
Industrial monitoring and control instruments (meaning "monitoring and control instruments designed for exclusively industrial or professional use")	22 July 2017
<u>Category 11</u> Any other EEE that is not already covered by the other categories (i.e. a "catch-all")	22 July 2019

In addition, and by no later than 22 July 2014, the Commission shall examine the need to amend the scope of this Directive and shall present a report accompanied by a legislative proposal, if appropriate, with respect to any additional exclusions related to that EEE.

Some types of equipment are excluded from the scope, in particular:

"Equipment which is specifically designed, and is to be installed, as part of another type of equipment that is excluded or does not fall within the scope of this Directive, which can fulfil its function only if it is part of that equipment, and which can be replaced only by the same specifically designed equipment" (ref. Article 2(4)(c) of Directive 2011/65/EU)

Furthermore, both "large-scale fixed installations" and "large-scale stationary industrial tools" are EEE that are excluded from the scope and are therefore examples of "another type of equipment that is excluded" that are referenced above. See the detailed definition in the Annex "Definition of LSFI and LSSIT".

A number of factors therefore determine whether or not a particular CAPIEL product is in or out of the scope. These factors include the nature of the product itself and where it is intended to be used. This paper considers these factors and, when read in conjunction with the RoHS Directive itself, helps determine the requirements that apply to CAPIEL products that are being "placed on the market".

It should also be noted that CAPIEL recommends that its members' companies commit themselves on a voluntary basis to place on the market products that meet the relevant RoHS substance restrictions, even if they are not within the scope of the legislation.

#### **4 - Application to CAPIEL products**

The requirement to affix the CE mark only applies to "finished EEE" (ref. Article 15(1) of Directive 2011/65/EU and Q8.5 of the Commission FAQ's).

The following extracts from the European Commission's FAQ document <sup>1</sup> further indicate that "finished EEE" is intended for direct use by an end user, either consumer or professional / industrial (e.g. SI or end customer).

- [Q6.5]: "Are electric boards in scope?"

This depends on whether the board is placed on the market as a finished EEE product (i.e., for direct use by an end user), or it is placed on the market as a component for further production or integration in to a finished EEE product.

<sup>1</sup> RoHS 2 FAQ, Dec. 2012 ed. ([http://ec.europa.eu/environment/waste/rohs\\_eee/events\\_rohs3\\_en.htm](http://ec.europa.eu/environment/waste/rohs_eee/events_rohs3_en.htm))

An electric panelboard for use in a dwelling is a device upon which various modules (such as circuit breakers) are placed. Both the board in itself and the modules placed upon it are usually standard equipment sold to builders or home owners for direct use and so are within the scope of RoHS 2.”

- [Q6.6]: “Are fuse boxes in scope?”

Only if a fuse box is placed on the market for direct use by an end user is in scope.”

Therefore, even though a CAPIEL product may meet the definition of EEE, the intent of RoHS 2 is that products that are not sold for direct use by end users, but are instead intended to be assembled or incorporated into a finished EEE, are not finished EEE themselves, but are instead components.

Further clarification is given in [Q7.3]: “components being used in finished EEE or for repair or upgrade of used EEE, which is in the scope of RoHS 2 must meet the substance restrictions according to Art. 4 but do not need CE marking...”.

There are 3 scenarios that can be used in conjunction with the following figure to determine the requirements that apply to an individual product:

- i Check if scenario 1 applies – if YES, then the product is Type 1.
- ii Otherwise, check if scenario 2 applies – if YES, then the product is Type 2.
- iii Otherwise, the product is Type 3.

### **Scenario 1: Products sold to OEM’s/SI’s for application in EEE that is itself out of the scope of RoHS**

According to the definition of LSFI and LSSIT (see Annex), CAPIEL products are not LSFI or LSSIT themselves.

However, they are commonly integrated in LSFI or LSSIT and benefit from the exclusion given in Article 2(4)(c) when they fulfil all of the required conditions:

- they are specifically designed products as they need to be specifically dimensioned according to the LSFI and LSSIT specifications,
- they can fulfil their function only if they are part of the LSFI or LSSIT,
- they can be replaced only by the same specifically designed product.

EEE meeting all of the three conditions described above are out of the scope of the directive and they are neither directly nor indirectly subject to the legal RoHS requirements.

Some CAPIEL products can be considered “specifically designed” because they are only intended for use in these excluded applications according to their characteristics and installation requirements.

Note: CAPIEL believes that “specifically designed” should be interpreted to mean any EEE that is only intended for use in excluded applications. In other words, the EEE does not have to be unique to one individual application.

In the case of an EEE not fulfilling at least one of the three conditions described above, this exclusion does not apply. If a particular EEE can be used in both excluded and in scope equipment, it would be in scope unless it can be demonstrated (e.g. with sales documents, installation instructions, marketing literature, etc.) that it is only to be installed in an excluded equipment.

Notwithstanding that there are no legally binding provisions; CAPIEL expects its members’ companies and their suppliers to voluntarily commit to applying the RoHS substance restrictions.

### **Scenario 2: Products sold to OEM’s/SI’s for application in EEE that is itself within the scope of RoHS**

Products that are sold to OEM’s/SI’s for further integration in EEE that is itself within in the scope of RoHS are not legally required to meet the RoHS requirements. In such cases, the OEM/SI will require the product to meet the RoHS substance restrictions as determined by the final application.

Compliance with the relevant substance restrictions and evidence thereof is subject to contractual agreement with the customer.

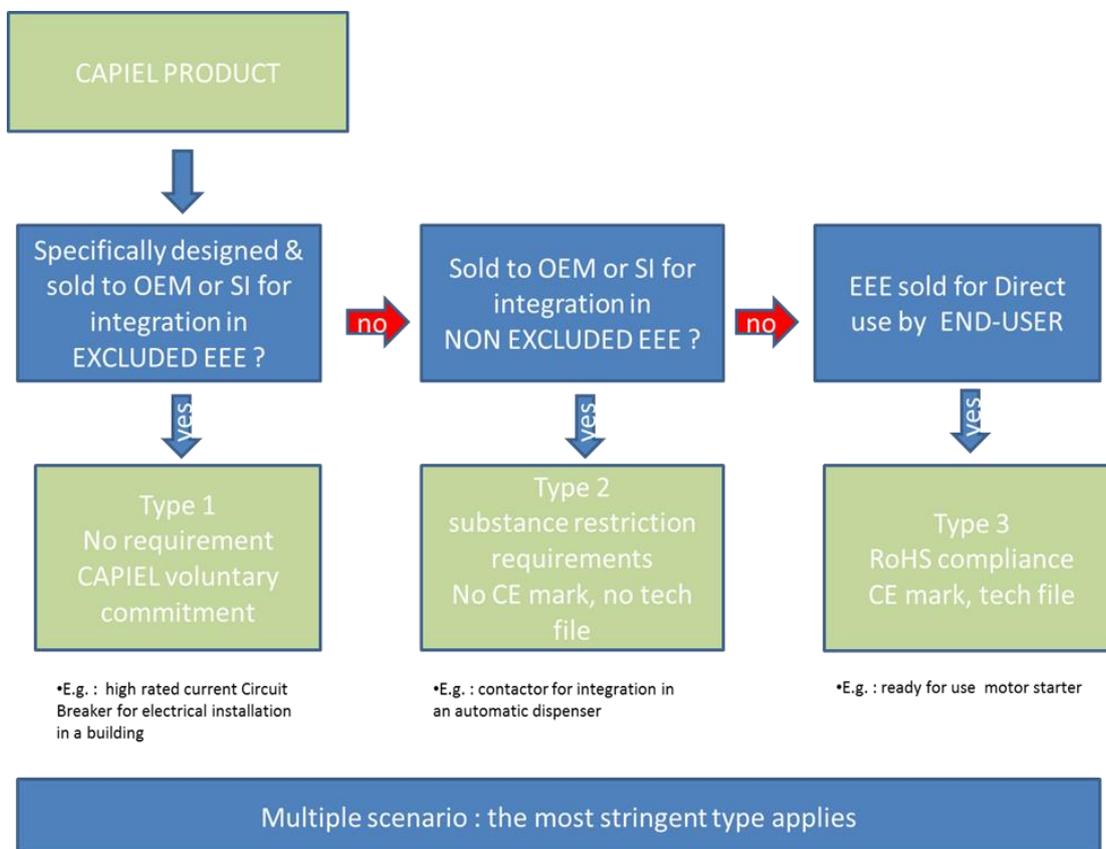
Such products are not required to have the CE marking affixed for RoHS.

### Scenario 3: Products sold for direct use by the end user

This is the case for some products (such as motor starters) intended for direct use by end users (e.g. SI's or end customers). As a consequence, these CAPIEL products are sold for direct use by end users as finished EEE and fall within the scope of the RoHS Directive. These products must meet the RoHS substance restrictions, require CE marking, must have a Declaration of Conformity, and a technical file shall be drawn up in accordance with the requirements of the RoHS Directive.

### Multiple scenarios

In the case that a CAPIEL product can be sold according to several scenarios, then the most stringent requirement shall apply.



### Spare parts

“Spare part” has a specific meaning within the RoHS Directive and is defined in Article 3(27):

- CAPIEL products (or parts thereof) that are supplied as “spare parts” for the repair / reuse / updating of functionalities / upgrading of capacity of EEE are within the scope of RoHS and must meet the substance restrictions applicable to “spare parts” i.e. substance restriction compliance but neither CE marking nor a technical file are required.
- CAPIEL products that are supplied as replacements for products that were originally in the scope of RoHS (i.e. Type 3 in Figure 1) are considered to be EEE (not "spare parts") and must comply with all the requirements of the RoHS Directive.

## **5 - Conclusion:**

Based on the above scenarios:

- Where a CAPIEL product is considered out of the RoHS 2 scope (i.e. Type 1 or Type 2), neither the CE marking nor the technical file is required. However, the contractual agreement with the OEM/SI may require that the substance restrictions are satisfied and that evidence of compliance is available, particularly if the customer application is an EEE that is itself within the RoHS 2 scope.
- Where a CAPIEL product is considered to be within the RoHS 2 scope (i.e. Type 3), it shall comply with the RoHS Directive by the date determined by its product category and fulfil all requirements including substance restrictions, the CE marking, a Declaration of Conformity and a technical file.

In each case, the CAPIEL manufacturer shall make the final decision regarding the IN or OUT status based on their business scenario and fulfil the requirement according to the appropriate product category.

CAPIEL members' companies that have signed the Code of Conduct have committed on a voluntary basis to only design, produce and place on the market products that meet the RoHS substance restriction requirements.

## Annex: Definition of LSFI and LSSIT

### Large-scale fixed installation (LSFI)

Article 3(4) of the RoHS Directive defines LSFI as follows:

- *a large-scale combination of*
- *several types of apparatus and, where applicable, other devices, which are*
- *assembled and installed by professionals,*
- *intended to be used permanently in a*
- *pre-defined and dedicated location, and de-installed by professionals*

The Orgalime Guide (Sept 2012) interprets “Large-scale” in the context of the scope exclusion of “large-scale fixed installation” as meaning “a combination of several apparatus and devices, where the combination is not intended to be placed on the market as a single commercial or functional unit and which is different from standalone consumer products due to, for example, lifespan, number of produced units or custom tailor-made characteristics of the combination, interdependency of the different apparatus/devices/subassemblies/sub-installations of the combination”.

A building electrical installation for power distribution is a typical example that corresponds to the definition of “large-scale fixed installation”.

### Large-scale stationary industrial tool (LSSIT)

Article 3(3) of the RoHS Directive defines LSSIT as follows:

- *large-scale assembly of machines, equipment, and/or components,*
- *functioning together for a specific application,*
- *permanently installed and de-installed by professionals at a given place, and*
- *used and maintained by professionals in an industrial manufacturing facility or research and development facility.*

The Orgalime Guide (Sept 2012) interprets “Large-scale” in the context of the scope exclusion of “large-scale stationary industrial tools” as meaning “an assembly of machines or systems designed to be used in an industrial manufacturing facility, consisting of components and devices, where the combination can be intended to be placed on the market as a single tool for industrial applications”.

According to this definition, examples of large-scale stationary industrial tools are large scale versions of :

- Milling machines
- Welding machines
- Vehicle component assembling stations
- Machine tools
- Paper production machines
- Printing presses
- Packaging machines
- Textile machines
- Industrial robots
- Industrial measurement and monitoring platforms (e.g. for pulp and paper).

