

RoHS Directive 2011/65/EU Additional restricted substances - Minimum transition time required for industrial EEE

Introduction

Should the Commission decide to proceed with restricting additional substances, we would like to remind the Commission that significant quantities of industrial EEE are special cases (used in hazardous environments, mission critical functions requiring high reliability, etc.) and as such need additional time to comply with any new substance restrictions.

In the case of malfunction of such EEE, the safety of the user can be jeopardized with serious consequences. These products must therefore meet the stringent requirements set out in both European and International standards and the producers must perform a series of tests in order to obtain compliance certificates from independent third parties. Because of these tests, the development process is much longer compared to household EEE. The information given in this paper shows that it can take up to 8½ years to replace a substance in an existing industrial EEE.

Typical scenarios

The following 3 cases describe typical scenarios for industrial EEE:

1. **An alternative substance has already been identified and is available on the market:**

An initial 18 months for technical studies and laboratory tests are needed. Unlike consumer products, industrial EEE intended for professional users is designed to have a long working life, sometimes several decades. As a consequence such products are required to undergo lengthy testing in working situations in order to ensure that the product will function as intended during its complete working lifetime.

A further 18 months for certification by a third party (e.g. EU Notified Body) followed by another 18 months for upstream stock cleansing of specialised components in the manufacturing plants are required.

2. **An alternative substance is not already identified:**

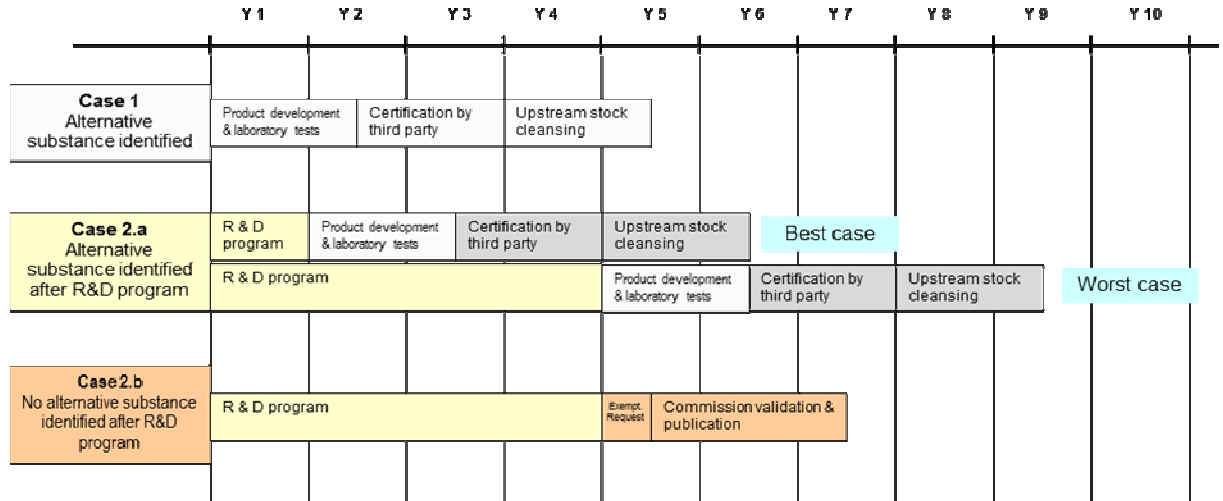
The study starts with a program of research and development (R&D) to identify and qualify a new substance. The duration of this program varies between 12 months and 48 months. Following completion of this R&D program there are two possible outcomes

- Case 2.a

An alternative substance has been qualified and case 1 can then begin.

- Case 2.b

An alternative substance is not available, and the manufacturer then needs to apply for an exemption. The time necessary for submitting such a request is typically 6 months, after which the Commission will need to undertake a study, approve and then publish the exemption in the Official Journal (typically 24 months).



Therefore, for industrial EEE for safety applications, the lead-time to implement a substitution solution for a restricted substance is a minimum of **4½ years** and can be up to **8½ years**.

Note: The above timescales assume that suitable components are widely available in the market place.

Additional implications of short transition times

Other unintended effects of applying additional substance restrictions to industrial EEE too quickly could include:

- EEE would be withdrawn from the EU market, thus disadvantaging European end users who have already made significant investments in systems and personnel that utilize these EEE. These European users, such as health, research and development, aerospace, industrial manufacturers, power generation, defence, communication, etc. will no longer have access to proven safe and reliable EEE on the EU market, even though they may still be available to end users outside the EU.
- Submissions of a large number of specialised exemption requests, requiring significant time and investment not only from the manufacturer but also the consultant/Commission/TAC.
- Due to their reliability and cost advantages, many industrial EEE are increasingly being used in applications that are specifically excluded from the scope of the RoHS Directive – these include safety applications in military systems, ships, large amusement rides, power generation facilities, chemical and petro-chemical plants etc. Any early application of additional substances in RoHS Directive will therefore inevitably also impact safety applications that are outside the scope of RoHS.
- Negative consequences for additional waste generation. Because of the long product lifecycles of industrial EEE, some products are produced and held on stock. Short transitions periods will force already manufactured products and components to be scrapped with no benefit for the environment and to the detriment of the resource efficiency policy.

Summary

Category 9 “industrial monitoring and control instruments” requires a minimum transition time of 8½ years whenever a new restricted substance is added to Annex II of the RoHS Directive

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