Questions and answers on the revised directive on restrictions of certain dangerous substances in electrical and electronic equipment (RoHS)

What is RoHS about?

The RoHS Directive¹ is intended to restrict the use of certain hazardous substances in electrical and electronic equipment. This increases the protection of human health and aids the environmentally-sound recovery and disposal of waste electrical and electronic equipment.

The ban of four heavy metals (lead, cadmium, mercury, hexavalent chromium) and two categories of brominated flame retardants (PBBs and PBDEs) entered into force in July 2006, although certain applications of these substances have been temporarily exempted until their substitution becomes scientifically and technically feasible.

Why is RoHS necessary?

Innovation cycles for many electrical and electronic products are short, and such products often contain a great variety of materials and components, some of which are hazardous. RoHS is a legal instrument designed for and adapted to these specific risks. It ensures that restrictions in the use of substances in such products which affect directly product design are implemented in a harmonised way throughout the EU, facilitating the free movement of these products in the internal market.

What products does it cover?

RoHS covers a vastspectrum of products that use electricity, including small and large household appliances, IT and telecommunications equipment and consumer goods such as radios, TV sets, video cameras and hi-fi systems.

How has it functioned until now?

RoHS has prevented many thousands of tonnes of banned substances from being disposed of and potentially released into the environment, and has brought about important changes in the design of electrical and electronic products by increasing producers' awareness of product composition and toxicity. Other countries, including the EU's major trading partners, have followed the EU example and brought in similar legislation. Manufacturers complying with the RoHS requirements are now better prepared to face this global challenge.

National authorities have intensified cooperation for spotting and removing from the market non-compliant products, basing their approach on products that due to their nature, volume of trade and marketing structures are more liable to create environmental problems.

Why did it need to be modified?

The Commission plans to recast RoHS are part of its overall commitment for a better regulatory environment. The reforms cover improvements in implementation, enforcement and coherence. The current RoHS Directive also requires a review, especially with regard to the inclusion of medical devices and monitoring and control instruments in its scope and to the adaptation of the list of restricted substances.

Experience with the first years of implementation and two extensive stakeholder consultations in the run-up to the recast revealed implementation-related problems, such as difficulties in deciding whether certain products fall within the scope, too many non-compliant products and differences between Member States' methods for assessing product compliance and carrying out market surveillance. There was also a potential for confusion over the relation between RoHS and newer policies and legislation covering for example chemicals, which increased the risk of inadequate or inefficient implementation of the directive.

Which are the main proposed modifications?

- Changes in the legal text to clarify scope and definitions, in particular by creating a binding list of products defining the scope of the RoHS Directive;
- Introduction of all relevant provisions already used in the EU "Marketing of products" package of legislation concerning, in particular national market surveillance activities and mechanisms for assessing the conformity of the product;
- Adaptation of the procedure for exemptions, for instance by introducing additional socio-economic criteria for granting exemptions and a requirement for applicants to evaluate substitutes before submitting a request;
- Inclusion in a staged manner medical devices and control and monitoring instruments within the scope of RoHS of;
- Establishing a clear mechanism for identifying and if necessary restricting the use of additional hazardous substances, exploiting all possible synergies with EU chemicals legislation and a list of hazardous substances to be examined as a matter of urgency via this mechanism.

What are the benefits of RoHS and its revision for the environment?

Environmental improvements will result from the inclusion of new product categories. In the medium to long term this will eliminate the presence of banned substances in these products and in the waste derived from them. Moreover, clear conformity assessment procedures and effective market surveillance mechanisms at national level will substantially reduce the number of non-compliant products in the market and boost the environmental benefits of the directive.

What will be the cost of the revision for manufacturers and other economic operators?

In the case of medical devices and control and monitoring instruments, higher costs are expected for a few complex products that are produced in low numbers and have critical applications. However, the proposed staged introduction of these products and the proposed exemptions will allow the conversion to take place in the framework of existing resources and product development cycles.

¹ Directive 2002/95/EC on the restriction of certain substances in electrical and electronic equipment

The introduction of harmonised requirements for scope, definitions, assessment of product conformity and market surveillance which are in line with other product-related EU legal requirements and the harmonisation of requirements for the contents of the exemption application and clarifying the period of validity of exemptions will increase legal certainty and thus reduce the administrative burden.

The Commission services estimate that overall net benefits will ensue, although these may be modest. The recommended options will have an important cumulative effect in clarifying the directive and harmonising its implementation and enforcement with a positive contribution to better regulation.

Description of main measures

A. Clarification of the scope and definitions

What is proposed?

- Two new annexes describing the scope of the directive have been added, the first describing the broad product categories and the second, amendable by the Commission, providing binding product lists within each category.
- Medical devices and monitoring and control instruments are included in the scope in a staged manner.
- The definitions for economic operators are aligned to the "Marketing of products" package and new definitions, such as for "medical devices" and "homogeneous material" are added.

Why is it being proposed?

- A harmonised scope improves implementation of the directive and the proper functioning of the internal market;
- Medical devices and control and monitoring instruments are included to reap the environmental and health benefits from the reduction of use of hazardous substances in such equipment but in a staged manner so that adverse socioeconomic impacts are avoided;
- Harmonised definitions coherent with related Community legislation will enhance legal clarity and reduce administrative cost.

B. Substance ban

What is proposed?

- The current directive's list of banned substances and the maximum concentration values are moved to an Annex to be amended through comitology;
- The list of banned substances is not changed, however, 4 substances are identified for priority assessment in view of a possible future inclusion in the list of banned substances;
- Permission to use non-compliant spare parts is extended to equipment benefitting from an exemption when placed on the market;
- A new annex with exemptions specific to the new product categories (medical devices and control and monitoring instruments) is added for cases where substitution is currently not feasible;

 A mechanism for introducing new substance bans in line with the REACH methodology is inserted to ensure coherence and maximise synergy with the work carried out under the chemicals' legislation.

Why is it being proposed?

- Four substances have been identified as presenting potential environmental risks when used in electrical and electronic equipment. These substances need to be kept under close scrutiny in view of a possible future inclusion in the list of banned substances;
- Permission to use non-compliant spare parts in equipment which benefitted from an exemption is necessary to prevent premature withdrawal of equipment from use.
- The exemptions for medical devices and control and monitoring instruments are justified as substitution is currently not feasible.

C. Exemption mechanism

What is proposed?

- The 4-year review has been replaced with a 4-year maximum validity period for exemptions, with a possibility of requesting renewals.
- New exemption criteria have been introduced covering the availability and reliability of substitutes and the inclusion of socio-economic impacts.
- The Commission now has a mandate to establish detailed rules for exemption requests to establish legal certainty for economic operators pending a Commission decision on a renewal request.

Why is it being proposed?

- The 4-year maximum validity period for the exemptions should stimulate substitution efforts, provide legal security and shift the burden of proof to the applicant, in line with REACH.
- New criteria such as availability and reliability for granting exemptions are being introduced to take into account broader socio-economic aspects.

D. Product conformity assessment requirements and market surveillance mechanisms

What is proposed?

Articles 7-17 are new and introduce product conformity assessment requirements and market surveillance mechanisms in line with the "Marketing of products" package (Commission decision 768/2008/EC on a common framework for the marketing of products).

Why is it being proposed?

- Reducing the number of non-compliant products through strengthened and harmonised market surveillance is a cost effective way for increasing the environmental benefits provided by the directive;
- Harmonised conformity assessment requirements increase legal certainty and reduce administrative cost for Member States and manufacturers.

Further information:

European Commission webpage on electrical and electronic equipment http://ec.europa.eu/environment/waste/weee/index en.htm