Reach and RoHS - complementary regulations

The objective of EU Directive 2002/95/EC on the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (EEE) is to protect human health and the environment and to contribute to environmentally sound recovery and disposal of electrical and electronic equipment. The revision of RoHS offers a unique opportunity to drive innovation towards the next generation of electronic devices.

BACKGROUND
Article 6 of the current RoHS Directive asks the Commission to review the RoHS Directive. In the current RoHS Directive there is no mechanism for introducing new bans on hazardous substances. In its review, the Commission shall study the need to adapt the list of substances of Article 4(1), taking into account the impact on the environment and on human health of other hazardous substances and materials used in electrical and electronic equipment.

The Commission’s recast proposal includes no proposal to restrict more substances but introduces a mechanism (Art. 4.7) for bans on specific substances, which is based on the REACH methodology for Restrictions (Art. 69-72). The aim of the proposal is to align provisions where possible with other pieces of Community legislation such as REACH to avoid potential duplication of procedures for banning substances and improve the legal security in the procedures aimed at banning substances in Electrical and Electronic Equipment (EEE).

An important issue in the discussion on the recast of RoHS accordingly focuses on the relationship between RoHS and REACH. With REACH in place, what is the added value of RoHS?

HAZARDOUS CHEMICALS IN REACH
Under the REACH regulation there are two alternative procedures that can lead to a ban on the placing on the market, the use and manufacturing of chemical substances: Authorisation (Art. 55-66) and Restriction (Art. 67-73):

- REACH Authorisation targets the use of Substances of Very High Concern (SVHC) on the European market.
- REACH Restriction target both the use of a substance on the European market as well as the use of the substance in articles imported from a country outside the European Community.

OBJECTIVE OF ROHS
The aim of the RoHS Directive (Art. 1) is to lay down rules on the restriction of hazardous substances in electric and electronic equipment (EEE) with a view to contribute to the protection of human health and the environmental sound recovery and disposal of waste from EEE.

OBJECTIVE OF AUTHORISATION
The aim of Authorisation under REACH is to ensure the good functioning of the internal market while assuring that the risks from substances of very high concern (SVHC) are properly controlled and that these substances are progressively replaced by suitable alternative substances or technologies where these are economically and technically viable (Art. 55).

OBJECTIVE OF RESTRICTION
The Restriction procedure under REACH aims to manage unacceptable risks to human health or the environment arising from the manufacture, use or placing on the market of e.g. substances in articles.

Accordingly, a clear difference between RoHS and REACH in terms of potential restrictions is that REACH limits the scope
of its restriction measures to those substances that pose an “unacceptable risk to human health or the environment, arising from the manufacture, use or placing on the market of substances, which needs to be addressed on a Community-wide basis”, while RoHS also covers “the sound disposal of waste electrical and electronic equipment”.

COMMISSION PROPOSAL

In the recast proposal for RoHS (Art 4.7) the Commission proposes that the REACH methodology for Restrictions should be used in RoHS to assess the need to restrict further substances which poses unacceptable risks, in particular the substances listed in Annex III. However, the Commission proposes that exemptions from the ban under the RoHS Directive shall be considered as exemptions from REACH Authorisation (Art. S.4).

In addition, the proposed criteria for exemptions in the RoHS recast proposal differ from the conditions for a REACH Authorization, especially from the conditions to obtain an Authorization according to the socio-economic analysis (Art. 60.4).

This fact, along with the proposed Art 5.4 in the RoHS recast, implies that uses of SVHC in EEE are differently dealt with (with respect e.g. to the level of protection) compared to uses subjected to REACH Authorisation. The level of protection might be lower for uses of SVHCs in EEE than in other articles!

Furthermore, the REACH methodology does not contain any reference to “the sound disposal of waste” which implies that only risk based justifications for restriction measures can result from using the "methodology based on the process set out in Articles 69 to 72" of REACH, as stated in the RoHS recast (Art. 4.7).

ADDED VALUE ROHS

In line with above-mentioned differences in objectives and process in REACH and RoHS, instead of basing the mechanism for further restrictions in the RoHS Directive on the Restriction procedure in REACH, which is limited to risk based restrictions, it is more appropriate to develop a RoHS mechanism which also protects waste streams against hazardous substances, not based on risk based restrictions.

This would be in line with the stated objectives of RoHS, would not be in conflict with REACH, and would accordingly capture the added value of RoHS.

The objective of protecting the waste steams against hazardous substances could be achieved using e.g. the following criteria:

- the substances used in EEE are known precursors to secondary toxic substances, e.g. dioxins
- the presence of the hazardous substance in EEE reduces the possibilities for the recycling/reuse of materials from WEEE
- the use of the substance in EEE leads to uncontrolled/ diffuse dispersion of the substance to the environment through recycling/reuse of materials from WEEE
- the use of the substance in EEE will lead to uncontrolled/ diffuse dispersion to the environment through the lack of proper waste management
- the use of the substance in EEE could entail unacceptable exposure to workers i.e. via WEEE recycling plants.

RoHS would hereby complement, rather than be in conflict with REACH. By taking into account recycling and waste treatment RoHS continues to contribute to a reduction of the use of hazardous material in electrical and electronic equipment.

For further information and questions on how ChemSec engages with policy-makers, industry and public interest organisations on RoHS, please visit www.chemsec.org/rohs