



Mr. Carl-Otto Gensch
Head of Sustainable Products & Material Flow Division
Öko-Institut e.V. – Institute for applied ecology

Brussels, 18 December 2008
Sent by Email

Dear Mr. Gensch,

Please find attached a few initial comments and requests from JBCE¹ regarding the “Study on Hazardous Substances in Electrical and Electronic Equipment not Regulated by the ROHS Directive”. They have been made particularly from a Categories 8 & 9 perspective.

We would appreciate if this first input is taken into consideration during the study work and would also like to express our willingness and readiness to make further contributions.

Yours sincerely,

Lars Brückner

Chairman Environment Committee
Japan Business Council in Europe (JBCE)

¹ The Japan Business Council in Europe (JBCE) represents Japanese companies which have significant operations in Europe and belong to the world's leading multinational corporations.

Suggestions for “Study on Hazardous Substances in Electrical and Electronic Equipment, not Regulated by the RoHS Directive”

Our main concern here is equipment belonging to Categories 8 and 9, which is exempted from the current ROHS directive.

Last year ERA Technology made a detailed study on these Categories and thus the specific aspects of equipment belonging to them¹. We would like to ask you to take into serious consideration the analysis and conclusions of the ERA Report when carrying out the study into hazardous substances not regulated by the ROHS Directive.

Even though, of course, the ERA study only dealt with existing ROHS substances, several key points and conclusions are certainly valid also in relation to other substances.

One key suggestion in the report was that lead, cadmium and mercury used for sensors, detectors, and electrodes should generically be exempted, because they provide a significant technical advantage that could lead to products which are beneficial to human health, safety or the environment.

Indeed, it is crucially important to realise that other hazardous substances may be/are also essential to the functioning and performance of sensors, detectors and electrodes etc. for the same reason.

The ERA report highlighted that innovations in the field of Category 8 equipment are intended to give better and earlier diagnosis, more effective and successful treatment or completely new treatments.

For example, new semiconductor X-ray detector arrays based on cadmium telluride have been introduced in the last few years. These allow up to a ten-fold reduction in X-ray dose - clearly a health benefit to the patient and a

¹ "Review of Directive 2002/95/EC" (RoHS) for the possible inclusion in the scope of this Directive, equipment which falls under categories 8 and 9 set out in Annex IA to Directive 2002/96/EC (WEEE).

http://ec.europa.eu/environment/waste/weee/pdf/era_study_final_report.pdf

reduction in risk to healthcare professionals. Also, the images obtained with these detectors are clearer so that earlier diagnosis is possible which improves survival and recovery rates.

Another example of a beneficial innovation is MRI scanners, which rely on superconducting connections made from lead/cadmium alloys. This technology, and its associated healthcare benefits would not have been developed if these metals were excluded from research.

Innovations in the field of Category 9 equipment, as underlined by the ERA report, provide better precision, accuracy, sensitivity, and discrimination, give earlier warnings of hazards such as pollutants, fire, etc and potentially reduce the risk to the environment and to safety. Improved control systems can also reduce energy consumption and greenhouse gas emissions.

Continuous monitoring of water supplies for toxic pollutants such as cadmium at remote locations is possible using ion selective electrodes. These are used to analyse for cadmium and lead to enable pollution to be detected much earlier than would be possible using alternative techniques. This would not have been possible if cadmium and lead were excluded as materials for research.