European Semiconductor Industry Association

ESIA response to Oko-Institut Consultation on the Revised manual (draft) methodology to identify and assess substances for possible restriction under RoHS Directive. (Pack 15)

20th December 2018

The European Semiconductor Industry Association that represents the European Semiconductor Industry thanks the Oko-institute for their efforts and welcomes the opportunity to respond to the consultation on the revised manual draft substance methodology.

ESIA is a member of the Commission Expert Group accompanying future substance reviews under the RoHS 2 and supports the objective of the RoHS Directive on the restriction of the use of hazardous substances in Electrical and Electronic Equipment (EEE) with a view to contributing to the protection of human health and the environment, including the environmentally sound recovery and disposal of waste EEE. RoHS with its defined criteria, annex ll and exemptions remains one of the critical directives for the European Semiconductor manufacturers as it frames the conditions for the product design for semiconductors that will end up in final pieces of electrical and electronic equipment.

Article 6

Article 6(1) of the RoHS 2 directive gives a clear outline of what shall be considered in any review and amendment of the list of restricted substances in annex ll. The specific terms of reference of the framework contract for this pack 15 project also makes this very clear; 'The updated methodology shall not include or imply provisions other than those listed in Article 6'. The draft methodology manual as updated on this project includes many new interpretations produced by the consultants (e.g. pages 12-17). Interpretations however should not form part of the substance review methodology. The specific relevant elements are clearly outlined in legal text of article 6 (1) and 6 (2).

In addition to the substance knowledge available from the application of the REACH legislation, four additional specific criteria have been provided in RoHS 2 Article 6(1)(a)-(d). During any review, all the four criteria are to be taken into special account to decide on the restriction of additional hazardous substances. This should be clear in the methodology. It is not sufficient to consider only one criterion in the methodology as proposed on page 15 of the interpretations proposed by the consultant.

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Methodology should assist relevant identification and assessment of possible substances contained in EEE that meet the criteria of article 6 (1) (a-d)

The scope of annex ll of the RoHS directive is clear and based on the prevention that EEE placed on the market does not contain those substances listed in annex ll. The directive itself drives the design of EEE products that will be put on the market. Article 1 of the Directive states *'this directive lays down rules on the restriction of the use of hazardous substances in electrical and electronic equipment (EEE) with a view to contributing to the protection of human health and the environment including the environmentally sound recovery and disposal of waste EEE'* . The clear reference in article 1 to the use 'in EEE' is important to note and the methodology defined should be well aligned to this.

Furthermore Article 4 (1) states that *Member States shall ensure that EEE placed on the market, including cables and spare parts for its repair, its reuse, updating of its functionalities or upgrading of its capacity, does not contain the substances listed in Annex II.* It remains unclear why the methodology interpretation proposed by the consultants in this consultation does not align with annex ll for substances that are contained in EEE per Article 4 (1).

To be in line with the legal text and for clarity and practical reasons all of which are desirable in a finished methodology, ESIA would recommend that the methodology and the development of any inventory should be edited with a clear reference 'substances contained in EEE'. Otherwise without this, there can be a high risk of undertaking redundant reviews of substances that could be used in a stage of the EEE manufacturing process but are not contained in the final EEE put on the market, and thus have no relevance for the RoHS annex ll list or the development of a methodology for the identification and assessment of possible substances for that list nor the relevance to achieve a sound recovery and disposal of waste EEE. RoHS is not targeting or impacting manufacturing materials. This is the focus of REACH and CLP.

Links to other Legislation

To ensure legislative coherence and the avoidance of redundant duplication it is useful that this methodology takes some account of other chemicals legislation particularly the REACH chapters on authorisation and restriction as outlined in article 6. RoHS it is worth underlining is sectoral legislation for EEE, REACH is a framework legislation for all chemical substances for manufacturers and all users. Both the scope and intent of the legislations are vastly different. The substance methodology however should be manageable and focused on RoHS primarily as this is product specific harmonising legislation. The methodology should not be a catch all document with interpretations presented by the consultant for any piece of legislation that has a reference to chemicals or waste. Such an approach may not bring the required clarity and added value to the methodology document. The methodology should also not presume to include non-legislative elements or policy ideas such as the CPW interface.

Substance Grouping

The substances can be grouped for assessment only if they have similar structure, common physio-chemical properties, equivalent hazard behaviours and toxicological effects and pathways, etc. Unless every substance in the group meets RoHS Directive Article 6(1)(a-d)

criteria, it is inappropriate to consider restriction on the whole group of substances. It cannot be “assumed that members shall have similar classifications as this is often the rational for group restriction, where one member may constitute a substitute for another” without scientific evidence. There should be a balance between avoiding regrettable substitution and restricting substances which do not pose a risk. Grouping for organic substances will usually not be possible as even very small changes in the molecular structure can cause completely different biological effects. It would be useful to distinguish between organic and inorganic.

EU Commission Expert Group

ESIA is concerned that the previous detailed work of the EU Commission Expert group accompanying future substance reviews is not included in the current draft methodology. This work was developed on a common basis by the EU Commission, Electronic Industry experts and Member State representatives. This work produced documents that should be used to inform the development of the methodology. The revised methodology must not be based only on a revision of the manual published in 2013 by the Austrian UBA. Documents were prepared on relevant areas; Substance Grouping, Article 5 & 6, Substitution, Data Quality and Data gaps and the content of Member State dossiers for a restriction.

Nanomaterial

The draft methodology should apply a consistent assessment process on the substances, regardless of the size and structure. If there is no sufficient data demonstrating that a nanomaterial meets the RoHS Directive Article 6(1)(a-d) criteria, it should not be recommended for prioritisation in assessment and restriction.

EEE Substance Inventory

The Semiconductor industry does not put finished EEE on the market and therefore does not have an overview on the total quantity of substances that may be in the EEE that may be present in Europe, as the EEE products in Europe can be composed of elements from many thousands of electronic suppliers worldwide. The substance inventory contains over 800 substances and polymers which could be contained in EEE products. A lot of common substances (e.g. copper, gold, silver) and polymers (e.g. PS, PU, LC-Polymer) are listed, which are not considered as hazardous. It does not add much value to create such inventory of all substances with a connection to EEE. Instead, the inventory should only list the hazardous substances contained in EEE, which is a subset of the inventory of hazardous substance (Step P I-1).