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Öko-Institut  
Freiburg Head Office  
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Subject: Öko-Institut Stakeholder Consultation Request Concerning Selected High-priority Substances

Rockwell Collins understands that the EU has chartered Öko-Institut with review of the current RoHS (Restriction on certain Hazardous Substances) legislation, with the objective of expanding its scope. The additional materials which are being considered include basic or foundational materials for many polymeric compounds and metallic alloys. In addition to the added materials, it is our understanding that exempted markets may be included in a coming amendment to the RoHS legislation.

Öko-Institut is currently examining the risks for environment and human health arising from the use of the hazardous substances in EEE. The stakeholder consultation request has asked that the following points of interests be addressed:

1. Are there other substances that should be included in the present list of hazardous substances in EEE?
2. In which specific components (e.g. in transistors, capacitors, resistors, printed circuit boards, etc.) are the listed hazardous substances contained, including their concentration ranges?
3. Are there risk/exposure assessments available for the listed hazardous substances beyond the EU Risk Assessment Reports?
4. Information on possible substitutes / alternatives for the listed hazardous substances in EEE? Advantages and disadvantages of substitutes?

The allotted response time given by Öko-Institut for providing stakeholder input is insufficient to furnish a detailed response on the proposed list of selected high-priority substances. The High Performance Electronics Market Segment (i.e. Avionics, Military / Defense, Medical) have life-critical, flight-critical requirements and operate in extreme environments which push the performance limits of the existing materials. Replacement materials often require extensive testing and evaluation programs before substitution can be permitted. Since the cover letter from the Öko-Institut addresses discussion of alternatives including their disadvantages, it's apparent that such concerns will be considered.

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A number of the selected high-priority substances are of significant concern to Rockwell Collins. A precursory assessment of the following selected high-priority substances is documented below. Additional stakeholder consultation input could be provided if an extended review period is permitted.

- Rosin
  - Rosin is a major constituent of flux materials used in soldering operations. The aviation electronics market segment is currently undergoing an evolution of flux materials due to the effects of the WEEE / RoHS Directives. The addition of Rosin to the current RoHS prohibited materials list would require fundamental flux material changes that require an evaluation period to determine if a substitute material exists.
- Nickel
  - Nickel is widely used as substitution material for current RoHS prohibited materials: Cadmium and Hexavalent Chromium. Nickel has extensive applications in electronic component construction, plating, and as metal alloy constituent. The addition of Nickel to the current RoHS prohibited materials list would result in the requalification of another substitute material for Cadmium and Hexavalent Chromium, provided a substitute material exists.
- Gallium Arsenide
  - Gallium Arsenide has extensive applications in high performance semiconductor devices. Sufficient investigation actions are necessary to determine if a substitute material exists.
- Cobalt
  - Cobalt has extensive applications in electronic component construction, plating additions, and as metal alloy constituent. Sufficient investigation actions are necessary to determine if a substitute material exists.
- Beryllium
  - Beryllium is a highly regulated and controlled material within aviation electronics market segment. Beryllium has extensive applications in electronic component construction and as metal alloy constituent. Metal alloys utilizing Beryllium as an alloy constituent have unique performance characteristics for which a substitute material may not exist.

Rockwell Collins products are either exempt (Military Products) or excluded (Avionics) from the WEEE / RoHS Directives. However, the global electronics industry supply base is required to comply with these directives. Rockwell Collins is significantly impacted due to the supply base compliance to the WEEE / RoHS Directives. Rockwell Collins continues to work toward solutions to eliminate or minimize to the maximum extent possible each of the selected high-priority substances consistent with our continuing firm commitment to the safety, reliability and integrity of all products sold by our Company.

Rockwell Collins requests an extended review period be permitted, allowing for a more detailed response to the Öko-Institut stakeholder consultation request. Rockwell Collins would be able to respond to the stakeholder consultation request by May 30, 2008.