

**SPECIFICATIONS**

**To Invitation to Tender DG ENV.G.4/ETU/2007/0070r**

*Study on hazardous substances in electrical and electronic equipment,  
not regulated by the RoHS Directive*

## **PART 1: TECHNICAL DESCRIPTION**

### **1. Background**

The RoHS Directive aims to contribute to the protection of human health and the environmentally sound recovery and disposal of waste electrical and electronic equipment by limiting the presence of certain hazardous substances throughout the life cycle of these products.

Article 6 of the RoHS Directive calls on the Commission to review the list of restricted substances on the basis of scientific facts and taking the precautionary principle into account. Particular attention shall be paid during the review to the impact on the environment and on human health of other hazardous substances and materials used in electrical and electronic equipment. The Commission shall examine the feasibility of replacing such substances and materials and shall present proposals to the European Parliament and to the Council in order to extend the scope of Article 4, as appropriate.

### **2. Objectives**

The study shall provide necessary technical support to the Commission services for fulfilling RoHS Article 6 requirements, including investigation on:

- Other hazardous substances or materials used in electrical and electronic equipment
- How are they managed currently
- Possible substitutes and the sustainability (environmental, economic, social) characteristics of these other hazardous substances and possible substitutes.

### **3. Content / Description of the tasks**

In order to achieve the objectives the contractor should accomplish the following tasks :

#### **Task 0: Contacts with stakeholders : Information sourcing and publicity**

The contractor shall ensure that all relevant stakeholders will receive all the necessary information about launching and progress of the project and the opportunity for a timely and appropriate contribution and participation, in particular:

- manufacturers of EEE (European federations, national associations and individual companies, as appropriate)
- retailers and distributors of EEE
- representatives of the WEEE management industry (including recyclers and treatment operators)
- EEE SMEs (organisations representing their interests and concerns)

- representative consumer and environment NGO's;
- employee associations
- organisations or individual experts having carried out/which are conducting simultaneously studies and/or projects with a related content, in particular if tendered by Commission services;
- any other relevant stakeholder proposed by the contractor and agreed to by the Commission.

The communication strategy should include the establishment of a project-specific website, where all the project-related publishable documents and information on events will be made available.

### **Task 1 : Inventory of other hazardous substances in EEE**

The following questions should be addressed :

a) Which other (non-regulated by RoHS) hazardous substances (meeting the criteria for classification as dangerous in accordance with Directive 67/548/EEC) are used in electrical and electronic equipment.

b) Their quantities, for each of the equipment categories of Annex IA of 2002/96/EC, which defines the scope of RoHS, including an estimation of future quantities.

When such data are collected the tonnage band <1 t; 1-10 t; 10-100 t used in chemical policy should be taken into account as well as the REACH thresholds for substances in articles (substances present in those articles  $\geq 1$  tonne per producer or importer of article per year, substance is released under normal or reasonably foreseeable conditions of use, substance is present in those articles above a concentration of 0.1% w/w).

c) Whether the use of certain hazardous substances not covered by RoHS is regulated by other pieces of legislation at EU or national level or in third countries and the reasons given for this regulation.

### **Task 2 : Link with REACH and risk evaluation**

For the substances identified in task 1 a):

a) their classification and intrinsic properties according to the chemicals' legislation (e.g. CMR, PBT etc...)

b) Whether the substance would be regarded as a substance of very high concern (SVHC) in the sense of REACH (Regulation 1907/2006); for this purpose the consultant should also make use of the Targeted Guidance Documents on risk assessment and the draft guidance of REACH Implementation Projects (RIP) 4.4 and 3.2.

### **Task 3: Risk management**

a) Based on extensive review of existing literature and data bases, examine, to the extent possible, indications about the risks for environment and human health arising from the use of the identified (in task 1a)) hazardous substances in EEE and how these risks are managed currently at the various stages of the life cycle of the product (and are likely to be managed in the future, under current legislation), in particular end of life management of the equipment in which they are contained.

b) In case additional substances have been identified as candidates for a potential inclusion in RoHS: Possible substitutes available today for the use in EEE and the advantages and disadvantages of these substitutes from a sustainability (environmental, economic, and social) angle; on this basis develop ideas/examine requests for possible exemptions.

### **Task 4 : Elaboration of policy options**

a) For each substance considered (under 1a)) the contractor should examine, to the extent possible, options (for example, do nothing, full restriction of the substance, targeted restriction to certain equipment categories, propose specific waste management options for minimising the risks) identified on the basis of available evidence.

b) When elaborating options the contractor should assess whether inclusion in RoHS, compared to potential waste management or other policy instruments, is likely in practice to be the most effective way to reduce the risk taking into account the guidelines on impact assessment [http://ec.europa.eu/governance/impact/docs/key\\_docs/sec\\_2005\\_0791\\_en.pdf](http://ec.europa.eu/governance/impact/docs/key_docs/sec_2005_0791_en.pdf), including aspects of administrative costs : [http://ec.europa.eu/governance/impact/docs/key\\_docs/sec\\_2005\\_0791\\_anx\\_en.pdf](http://ec.europa.eu/governance/impact/docs/key_docs/sec_2005_0791_anx_en.pdf)  
The impact of the presence of hazardous substances in future WEEE streams on the viability of their recycling should be considered.

## **4. Experience required of the Contractor**

When assessing the experience of the tenderers' core team, the following themes will be considered particularly relevant:

- EU decision making processes;
- EU environmental Community acquis, in particular on waste, products (Directive 2005/32/EC on eco-design : "EuP") and chemicals (in particular REACH);
- Knowledge of related RTD projects, in particular those financed by the EU RTD framework programmes;
- In-depth knowledge of the RoHS Directive and of related legal acts at EU, national (among Member States) and world level;

- Knowledge of the WEEE Directive and its implementation;
- Knowledge of the RoHS exemption process;
- Experience with the implementation of RoHS;
- Good knowledge of EEE industries and market structure and challenges (such as cost of substitution, competitiveness, innovation) for these products in EU and worldwide);
- Knowledge of and access to the scientific/technological literature regarding chemicals, WEEE management and environmental performance of products;
- Organisational skills (for example for the workshop);
- Competence, appropriate contacts and experience in adequate communication with the appropriate stakeholders;
- Preparation of comprehensive reports and similar documents in English.

The knowledge and experience will be evaluated on the basis of :

- duration (at least 3 years experience in each of the abovementioned domains);
- number of studies carried out in the abovementioned domains during the last 4 years and relevance for the present call for tenders;
- participation in EU, national or other projects related to the implementation or enforcement of the RoHS Directive.

It is also required that the tenderer is aware of the ongoing and finished studies in relationship to the WEEE and RoHS review (see [http://ec.europa.eu/environment/waste/weee/events\\_en.htm](http://ec.europa.eu/environment/waste/weee/events_en.htm)) as well as of the EuP-related studies (see [http://europa.eu.int/comm/energy/demand/legislation/eco\\_design\\_en.htm](http://europa.eu.int/comm/energy/demand/legislation/eco_design_en.htm)).

Adequate coordination so as to avoid overlaps and increase synergies with other related activities financed by the EU, including related projects financed by DG RTD, is considered a contractual obligation.

As regards toxicological and eco-toxicological data preference needs to be given to peer reviewed studies with a clear indication of the source.

Proof of high quality of the services provided as well as excellent team management and timeliness of deliverables should be presented.

Amongst the core team, there should also be the capability to work in a wide range of EU languages.

The Contractor should propose a Project Manager to have on his behalf the overall responsibility for the completion of the contract. The Project manager must have documented knowledge and experience relevant to managing this contract.

## **5. Deliverables**

- Inception report 2 weeks after the kick off meeting
- Interim report 4 months after signature of the contract
- Draft final report 6 months after signature of the contract
- Final report (electronic form, publishable in the internet and 3 paper copies) at the end of the project

## **6. Meetings**

- Kick off meeting : at the latest 2 weeks after signature of the contract
- Within one month following the preparation of the draft final report, a meeting with selected experts from Member States and other stakeholder groups (such as industry, NGOs, and academia) will be organised by the contractor so as to receive their input on this report; the Commission services will provide the meeting room.

## **7. Duration of the tasks**

The tasks should be completed within 8 months of the signature of the contract (see point 5). The execution of the tasks may not start before the contract has been signed.

## **8. Place of performance**

The place of performance of the tasks shall be the contractor's premises or any other place indicated in the tender, with the exception of the Commission's premises.

