

SPECIFICATIONS

To Invitation to Tender DG ENV.G.4/ETU/2006/xxxx

2008 Review of Directive 2002/96/EC on

Waste Electrical and Electronic Equipment (WEEE)

These specifications follow the publication of

**- the prior information notice in OJEU 2005/S 246-241948 of
22/12/2005**

- the contract notice in OJEU 2006/S xxx of xx/xx/2006

PART 1: TECHNICAL DESCRIPTION

PART 2: ADMINISTRATIVE DETAILS

PART 3: ASSESSMENT AND AWARD OF A CONTRACT

Annex 1: Financial offer template

Annex 2: Legal entity Form (can be downloaded from
http://europa.eu.int/comm/budget/execution/legal_entities_fr.htm)

Annex 3: Declaration of the candidate's eligibility regarding exclusion criteria

Annex 4: Acknowledgement form

Annex 5: Draft contract

PART 1: TECHNICAL DESCRIPTION

1. Background

The Directive 2002/96/EC on waste electrical and electronic equipment (WEEE) is a key element of EU's environmental policy on waste. It addresses a particularly complex waste flow in terms of variety of products, association of different materials and components, contents in hazardous substances and growth pattern. It also seeks to induce design modifications that make WEEE easier to dismantle, recycle and recover. Finally, it plays an important role in reducing the dispersion of hazardous substances in shredder residues which are problematic waste streams if they are contaminated by such substances.

The WEEE Directive is currently being implemented by the Member States and a review of the Directive and of the targets it contains is planned for 2008. This review should include an assessment of a number of issues that have been presented to the Commission as problematic, an appraisal of the environmental benefits of the Directive and how to amplify these. It should also assess the improvement potential of the Directive from a better regulation perspective, i.e. by clarifying and simplifying it as much as possible while maintaining the high level of protection of the environment guaranteed by the Directive.

This review will also assess options that contribute to the Thematic Strategy on the prevention and recycling of waste contained in Commission Communication 2005(666) Final¹.

Objective of the Policy

The objective of Directive 2002/96/EC on waste electrical and electronic equipment (WEEE) is, as a first priority, the prevention of waste and in addition, the reuse, recycling and other forms of recovery of such wastes so as to reduce the disposal of waste.

Article 5(5) requires Member States to ensure that by 31 December 2006 at the latest a rate of separate collection of at least four kilograms on average per inhabitant per year of WEEE from private households is achieved.

Regarding WEEE sent for treatment in accordance with Article 6 (treatment), article 7(2) requires Member States to ensure that, by 31 December 2006, producers meet the following targets:

- (a) for WEEE falling under categories 1 and 10 of Annex IA,
 - the rate of recovery shall be increased to a minimum of 80 % by an average weight per appliance, and
 - component, material and substance reuse and recycling shall be increased to a minimum of 75 % by an average weight per appliance;
- (b) for WEEE falling under categories 3 and 4 of Annex IA,
 - the rate of recovery shall be increased to a minimum of 75 % by an average weight per appliance, and

¹ <http://europa.eu.int/comm/environment/waste/strategy.htm>

- component, material and substance reuse and recycling shall be increased to a minimum of 65 % by an average weight per appliance;
- (c) for WEEE falling under categories 2, 5, 6, 7 and 9 of Annex IA,
 - the rate of recovery shall be increased to a minimum of 70 % by an average weight per appliance, and
 - component, material and substance reuse and recycling shall be increased to a minimum of 50 % by an average weight per appliance;
- (d) for gas discharge lamps, the rate of component, material and substance reuse and recycling shall reach a minimum of 80 % by weight of the lamps.

Revision of Targets

Article 5(5) provides that “The European Parliament and the Council, acting on a proposal from the Commission and taking account of technical and economic experience in the Member States, shall establish a new mandatory target by 31 December 2008. This may take the form of a percentage of the quantities of electrical and electronic equipment sold to private households in the preceding years.”

Article 7(4) provides that “The European Parliament and the Council, acting on a proposal from the Commission, shall establish new targets for recovery and reuse/recycling, including for the reuse of whole appliances as appropriate, and for the products falling under category 8 of Annex IA, by 31 December 2008. This shall be done with account being taken of the environmental benefits of electrical and electronic equipment in use, such as improved resource efficiency resulting from developments in the areas of materials and technology. Technical progress in reuse, recovery and recycling, products and materials, and the experience gained by the Member States and the industry, shall also be taken into account.”

Review of Directive Provisions

In its Communication² of 25 October 2005 to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – implementing the Community Lisbon programme “A strategy for the simplification of the regulatory environment”, the Commission foresees a review of the WEEE Directive based on the experience of the application of the Directive and based on the development of the state of technology, experience gained, environmental requirements and the functioning of the internal market. The review shall, as appropriate, be accompanied by proposals for the revision of the relevant provisions of the Directive and be in line with the Community environmental policy³.

To inform the review, the Commission has carried out a research study into the implementation of the Directive by the Member States and will take a number of steps to gather and analyse further information. It will: 1) launch a formal information gathering exercise to collect all readily available information relevant to the review, whether existing studies or data on implementation of WEEE, involving Member States, national collection schemes and industry;

² http://europa.eu.int/comm/enterprise/regulation/better_regulation/simplification.htm

³ <http://europa.eu.int/comm/environment/waste/strategy.htm> and
<http://europa.eu.int/comm/environment/natres/index.htm>

2) review and extract information from all relevant existing data sources of which it is aware (a list of studies of which the Commission is currently aware is provided as Appendix I) and identifying data gaps; 3) launch two research studies analysing the impact and implementation of the WEEE Directive and potential changes (of which this is one study) and 4) plan an impact assessment in 2007 drawing on previously gathered information and analysis that examines the costs and benefits of different options for revision of the WEEE Directive.

In carrying out this contract, the contractor will have the benefit of the information provided and reviewed from the mentioned and other existing readily available information sources, with that information being provided at the inception meeting.

2. Objectives

The objective of the two research studies launched by the Commission is to complete the information needed to inform an analysis of options for review of the Directive and to provide that analysis. The information and analysis will be used as the main content of a future impact appraisal of options for review of the Directive.

The objective of this study is to give a thorough evaluation of the impacts, efficacy and efficiency of the Directive from an environmental and economic, and as far as possible, a social perspective, by analysing the collection and treatment of different categories of WEEE. The other study will analyse the operation of the Directive's provisions relating to producer responsibility obligations of WEEE.

In particular, this study shall:

- (1) provide any additional data for the EU25, the acceding and candidate countries required to assess the current and future amounts of waste electrical and electronic equipment, its composition (materials and substances), its economic cost for collection, sorting, disassembly, treatment, recovery and environmentally sound disposal per type of equipment and on capacities of the (EU) market for these operations and their outlets.
- (2) evaluate the Directive's treatment requirements for WEEE in the light of actual and future technologies and assess options to reduce the environmental and health impacts for each of the substances of concern.
- (3) suggest recommendations to improve the achievement of the objectives of the Community environmental policy (in particular the Directive itself) on WEEE, particularly the development and simplification of the Directive in line with the Communication on better regulation.

3. Content / Description of the tasks

TASK 1 – Evaluation of the implementation of the WEEE Directive and prospective data

(a) Evaluation of the implementation of the WEEE Directive

The contractor shall give a review, collect and analyse information on the current implementation of the WEEE Directive, in order to provide a thorough overall evaluation of the environmental,

economic and social impacts. This must include consideration of its efficiency and efficacy in achieving its environmental objectives.

The contractor will (a) use available information and, (b) fill data gaps with primary data, and (c) make appropriately reasoned extrapolations. Critical questions should be verified on the basis of additional work. It is understood that available studies and information on social aspects will be much more limited than for environmental and economic issues. Therefore, it will be acceptable to restrict the work on social aspects to a screening and summary of issues and available information.

The contractor will produce a methodology for analysis of the impacts of different treatments of different WEEE categories or products across the EU, accession and candidate countries. This methodology must provide the information which will be required to form the content of an Impact Assessment of a review of the WEEE Directive that is in line with the Commission's Impact Assessment Guidelines, published in June 2005 as amended⁴. In particular the analytical framework shall be able to identify all relevant costs related to the collection, sorting, disassembly, treatment, recovery and environmental sound disposal of WEEE, to identify possible revenues from the sale of secondary materials and to calculate the avoided costs e.g. of municipal waste management as a result of the obligatory separate collection. The assessment of administrative burden should be in line with the methodology outlined in these guidelines.

(b) Providing prospective qualitative and quantitative data

As the first reporting of data under Commission Decision 2005/369/EC⁵ has to be submitted by the Member States 18 months after the period covered, basic data as on the number of products put on the market and on quantities collected and treated are not available via this source before 2008. Therefore the contractor will have to use other sources to provide actual and prospective data per product category up to 2020 on:

- the quantities of electrical and electronic equipment put on the market for the EU25 and the acceding and candidate countries and
- the quantities of waste electrical and electronic equipment generation

taking into account the life time of the equipment, the consumption patterns and the evolution in patterns in the different Member States and the demographic parameters (population size and density).

The contractor shall provide a detailed description of how the data have been compiled and an explanation of estimates and the methodology used.

The contractor must assess impacts per category of WEEE and must assess the actual and future capacities of the European market for dismantling and treatment operations, recycle and reuse markets and identify the bottlenecks for the outlets of these operations. Therefore he will have to ensure that in addition to the readily available information that will be provided, other relevant potential technologies and techniques have been identified and described as necessary to assess the options for further development /simplification.

It is likely that there will be significant primary data gaps identified by the earlier Commission studies, particularly in the assessment of the outputs and environmental performance of treatment

⁴ http://europa.eu.int/comm/secretariat_general/impact/index_en.htm

⁵ OJ L 119, 11.5.2005, p.13

technologies and the environmental benefits or costs of different treatments of materials (eg. specific polymers). This is the kind of data which the contractor will be required to produce under the study.

TASK 2 – Analysis of potential options for improvement, further development and simplification of the Directive

The contractor is to analyse potential options for change to the Directive and suggest recommendations to improve the achievement of the objectives of the Community environmental policy (in particular the Directive itself) on WEEE, particularly the development and simplification of the Directive in line with the Communication on better regulation.

The contractor has to analyse the existing information and fill data gaps where necessary to assess these options on their environmental, economic and social impacts. The associated change of environmental impacts according to the various options (in particular: climate change, acidification, tropospheric ozone, eutrophication, toxic substances dispersion, disposal of final solid waste and the amounts of primary raw materials that can be saved through the re-use of components, materials and substances, the reuse of whole appliances, the recycling and recovery of WEEE) shall be quantified as far as possible in monetary terms of avoided externalities. In the absence of monetary figures, quantitative values of avoided pollution shall be given.

The contractor shall, in particular, provide options for the further development and information on their expected impacts regarding:

(a) changes to the scope

The contractor shall investigate changes to the scope of the Directive. Therefore the contractor shall need to evaluate the implementation of the scope by the Member States and in particular the exclusion clauses in article 2.1 (part of another equipment), article 2.3 (military equipment), category 6 (the large scale stationary industrial tools) and category 8 (implanted and infected products). He will analyse the width of the scope from a qualitative perspective (amount of hazardous substances that can be taken out of the waste stream) and from a quantitative perspective (link with the targets). In case of a non-harmonised scope, the contractor will analyse the effects and present proposals to mitigate negative effects.

The contractor shall then as a minimum look at options for change which:

- use of criteria to determine whether the products fall in the scope or not
- use of a fixed list of products falling under the scope
- use of reference lists (codes or terms specified/indicated in global or European nomenclature)

and at:

- the inclusion of (other) types of products/product categories in the scope, e.g. the equipment for the generation of electric currents or electromagnetic fields, or the products actually been excluded from the scope as mentioned above
- the exclusion of types of products/product categories out of the scope, in particular the business to business equipment and the category of toys.

The contractor is expected to use his analysis of implementation of the Directive to suggest additional options for changes to the scope that will increase the environmental benefit of the

Directive, increase the efficiency of achievement of environmental benefits, or both. The assessment of the current implementation of the Directive should form the baseline for assessment of the impacts of changes.

(b) targets for collection

The contractor shall investigate and identify options for variation of the minimum collection target as set by article 5(5), by benchmarking of the collection achievements in at least Norway, Switzerland and Japan, by benchmarking collection systems of these countries, of the EU25 and of the acceding and candidate countries and by developing other measurable indicators than the amounts put on the market the previous year upon which collection targets could be based. Possibilities to be looked at should include both the Community and national levels, and measures might include, in particular, legislative and voluntary initiatives, innovation incentives etc.

(c) targets for recovery, component, material and substance reuse and recycling

In relation to the targets for recovery and component, material and substance reuse and recycling, the contractor shall analyse the variations per product category (including new targets for category 8 – medical devices). Therefore the contractor shall:

- evaluate the appropriate nature of targets, whether based on environmental benefit or on weight, with a particular attention on plastics
- evaluate the situation in the different Member States, acceding and candidate countries, assessing if the targets foreseen will be met and describe possible positive or negative variations;
- benchmark achievements of similar targets by non-EU take-back schemes;
- take into account the (future) development of recycling/recovery technology and BAT;

Based on the above considerations the contractor shall propose targets to be achieved. He shall assess on the example of these targets how factors such as different interpretation of the definitions of recycling and recovery, the monitoring systems used, etc. are taken into account in the options proposed.

(d) targets for reuse of whole appliances

In relation to targets for the reuse of whole appliances, the contractor shall provide information on experience gained by Member States on reuse systems and shall describe and make an evaluation of the technical feasibility, the environmental benefits and the social aspects of these systems. The contractor shall investigate if and under which conditions the market can auto regulate the reuse of whole appliances and use in his options the possible measures at Community or national level, including in particular legislative and voluntary initiatives, to reinforce reuse where appropriate. This includes the development of reuse targets in function of a measurable indicator and the methodology for the calculation and monitoring of these targets and the development of criteria and/or standards (e.g. on small repair, refurbishment) to determine what equipment is capable of being reused.

(e) treatment requirements (art.6 and Annex II)

The contractor shall need to evaluate the treatment requirements in the light of actual and future technologies and assess options to reduce the environmental and health impacts for each of the substances of concern. This includes an overview of the best practices in the EU25 and an evaluation of how these can be further supported and developed. The contractor shall as a

minimum look on options as a) the possibility to include technologies in the Annex as the provisions in article 6 foresee the use of Best Available Techniques, b) the inclusion of a set of criteria to determine if a technology is the best and c) the inclusion of criteria on the outlets of the treatment processes.

The contractor shall evaluate in particular whether the entries are to be amended, in particular on printed circuit boards for mobile phones, on liquid crystal displays and on the recovery of hydrocarbons with a global warming potential below 15.

The contractor shall appraise the impacts of the introduction of criteria to determine when environmental-sound reuse and recycling of components or whole appliances are hindered (see Annex II.3).

Information support

The contractor will be provided with existing readily available information in relation to the tasks described above. This information comes from a formal information gathering exercise by the Commission as well as from relevant existing studies of which the Commission is currently aware (a list is provided in annex). This information/these studies will be reviewed and provided in an extract format by the Commission with reference to the complete body of data. The contractor will need to cover only any significant gaps in information. This will allow more time for analysis and provision of primary data rather than on gathering information. The information will be provided at the inception meeting.

Methods to be used by the contractor

Contractors should provide suggestions for the methodology to address the above tasks in their offer. Final details of the methodology will be agreed with the Commission during the inception meeting.

Distribution of tasks and time allocation

Tenders shall indicate the distribution of tasks and time allocation between the various team members as well as on the coordination.

4. Experience required of the Contractor

The contractor shall demonstrate that the team is technically capable of carrying out the works in all areas as described in this technical part and show that the core team has

- technical and legal experience and expertise as regards assessment of implementation of (preferably waste-related) Directives;
- expertise and experience in prospectively assessing the economic, social and environmental impacts, the efficiency and efficacy of legislative and non-legislative proposals and options;
- sufficient technological expertise to analyse inputs and outputs of different technological and industrial processes;
- expertise in detailed assessment of likely environmental impacts of different waste treatment methods applied to different materials and products;
- expertise in analysis of recycle and materials markets.

In addition, the contractor shall ensure that the team has the necessary linguistic skills to be able to perform the abovementioned tasks in a way that produces a representative output for the EU as a whole.

5. Deliverables

The contractor shall start work immediately after signature of the contract.

The methodology identified by the contractor for performance of the contract shall be presented for approval by the Commission Services at a contract inception meeting, in which the contractor will also present his ideas for additional potential areas of review of aspects of the WEEE Directive. This inception meeting will be organised in Brussels between the contractor and the Commission Services within **2 weeks** after signature of the contract. The working language at this and subsequent contract meetings, as well as in the contract reports, shall be English.

The contractor shall prepare an inception report recording discussions and conclusions of the methodology and work plan, taking account of comments at the meeting. This shall be provided to the Commission Services within **2 weeks of the inception meeting** and will be subject to the approval by the Commission services. This report shall clearly identify milestones for the performance of the contract.

The contractor shall present a concise progress report, which also indicates any major difficulties with the project anticipated at the time, not later than **2,5** months from the date of signature of the contract at a meeting with the Commission Services in Brussels. At this meeting any problems identified with the performance of the contract will be identified and solutions proposed by the contractor. The contractor shall submit a note of the meeting to the Commission Services within two weeks of the meeting taking place.

4 months after signature of the contract, the contractor shall provide a shortlist of 30 experts which may form the basis for invitation to an expert workshop on revision of the WEEE Directive. The contractor shall also provide a draft proposal for the agenda.

The contractor shall produce an interim report, containing the main findings and recommendations of the contractor not later than **5** months from the date of the signature of the contract. This report shall provide information to the Commission Services which indicates the likely topics for discussion at the expert workshop. At the same time, the contractor shall provide a short draft paper to introduce the experts to the issues to be discussed.

An expert workshop will take place not later than **6** months from the date of signature of the contract. The workshop will be organised by the Commission Services. The contractor will present the results of the study at that date.

At the latest **two weeks after the workshop**, the contractor shall submit its draft recommendations for options for change of the Directive to the Commission, drawing on the contractor's analysis and the discussions in the expert workshop. Within **3 weeks of the**

workshop, the contractor will meet with the Commission to discuss options for revision of the Directive.

Final report

The contractor shall produce a written report in English giving detailed information about the methodology used, the work undertaken and the outcome of the work. The report shall cover, in particular:

- An evaluation of the costs and benefits of the WEEE Directive
- Details of current and future flows of WEEE categories, their composition and options for treatment
- The possible amendments and options (including specific parameters) assessed;
- The problem and objective that each amendment would address;
- The views of Member States and stakeholders towards these amendments and options;
- The availability and relevance of the data for the assessment;
- The economic, social and environmental impacts of the options.

The contractor shall submit a first draft of the report to the Commission Services within **8.5** months of contract signature, and shall present the main findings of the draft report to the Commission Services in Brussels. This is anticipated to take place within **9** months of contract signature. The precise date will need to be arranged. The contractor shall submit a note of the meeting to the Commission Services within two weeks of the meeting taking place.

It is to be expected that review of this first draft will provoke significant discussions. The contractor shall prepare a final report, taking account of the comments received from the Commission Services, within **10.5** months from contract signature. The final report must be provided in 5 hard copies, as well as 5 compact disks containing a Microsoft Word for Windows file, and a Portable Document Format (PDF) file readable by Adobe Acrobat Reader for Windows. Together with the final report, the contractor shall provide a presentation in electronic format that can be used to present the final report at a broad stakeholder consultation meeting.

Possible additional meetings

In addition to the meetings detailed above, the contractor shall be available, upon request of the Commission Services, to attend at least 1 meeting in Brussels to discuss the progress made and the various reports. The contractor shall submit notes of any such meeting within 2 weeks of their having taken place.

6. Duration of the tasks

The tasks should be completed within **10,5** months of the signature of the contract (see point 5). The execution of the tasks may not start before the contract has been signed.

7. 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.

