



CHHATTISGARH ENVIRONMENT CONSERVATION BOARD

Commercial Complex, C.G. Housing Board Colony,
Kabir Nagar, Raipur (C.G.) 492 099

No. 200 /CECB/2016

Raipur, dated: 11/4/2016

To,

General Manager,
M/s IRG Systems South Asia Pvt. Ltd.,
E-16, 3rd Floor, Main Market,
Hauz Khas, **New Delhi - 110 016.**

Sub: - Work order for inventorization of E-Waste in Raipur, Bilaspur, Durg, Bastar and Sarguja Divisions of Chhattisgarh.

Ref: - 1. This office Advt. no. 02/HO/CECB/E-Waste/2016, Raipur dated 02/03/2016 regarding invitation for RFP.

2. Your offer received in this office on 21/03/2016.

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This has reference to above offer submitted by you for the above mentioned work. In this connection, Chhattisgarh Environment Conservation Board had invited Request for Proposal (RFP) vide Head Office letter no. 02/HO/CECB/E-Waste/2016, Raipur dated 02/03/2016 for hiring technical consultants & consultancy firms for inventorization of e-waste as mandated for CECB in the Rules through advertisement published in some National News Papers on 05/03/2016. The RFP offers received within due time were opened, evaluated and examined by a committee comprising of officials of the Board on dated 28/03/2016. The Board is pleased to award the work of inventorization of E-Waste in Raipur, Bilaspur, Durg, Bastar and Sarguja Divisions of Chhattisgarh. The total fee to be paid for the above work is Rs. 23.19 Lacs (including service tax). Chhattisgarh Environment Conservation Board is pleased to award the above project work as per the criteria described in the request for RFP. Details are as below:

1. Project Name:

E-Waste Inventorization in Raipur, Bilaspur, Durg, Bastar and Sarguja Divisions of Chhattisgarh State.

2. Summary of Proposal:

It is proposed to prepare an Inventory of E-Waste & related components in all the five divisions of Chhattisgarh viz. Raipur, Bilaspur, Durg, Bastar and Sarguja. The overall aim of this initiative is to assess the generators, quantity and present practices for handling of E-Waste in all divisions of Chhattisgarh in accordance with the E-Waste (Management and Handling) Rules, 2011.

3. Introduction:

Electronics industry is the world's largest and fastest growing industry. Rapid growth, combined with rapid innovations in the field has resulted in obsolescence of electronic gadgets at very high pace. Thus waste stream comprising huge amount of discarded electronics has gone up many folds. Many industrialized countries across the world are trying to establish tools so as to address e-wastes being generated in these countries. Despite of enactment of law for handling e-waste this particular waste is being disposed off unaudited, in absence of appropriate inventory of e-waste in most of the states/cities. So the inventorization of e-waste and related components is the need of the hour.

4. Need for study:

Waste from Electrical and Electronic Equipments (WEEE) is being stored, processed, recycled, reused and finally disposed in a manner, which may be detrimental to environment. Chhattisgarh state also generates appreciable amount of WEEE in India. Raipur besides being Capital of the state is also a hub for industrial activities as well as commercial. All the selected five divisions are fast growing regions especially after the creation of the new State.

In the light of above justification, there is an urgent need to prepare an inventory of e-waste generated in the State so that an action plan for WEEE (Waste Electrical and Electronic Equipments) can be formulated and the legislations framed in this context may be implemented effectively.

Accordingly, a rapid WEEE assessment study has been planned by Chhattisgarh Environment Conservation Board for the State whereby, the five divisions of the state viz. Raipur, Bilaspur, Durg, Bastar and Sarguja have been included in the study. The items to be covered in this

assessment include personal computers, mobiles phones, televisions, washing machines and refrigerators etc. as mentioned in E-Waste (Management & Handling) Rules, 2011.

5. Key Partners:

M/s IRG Systems South Asia Pvt. Ltd., New Delhi shall involve 07 Regional Officers of CECB as the nodal officer in this study. The 07 Regional Offices are located at Raipur, Bilaspur, Durg-Bhilai, Raigarh, Korba, Jagdalpur and Ambikapur.

6. Objective of the study:

The objective of this study is to identify and quantify of WEEE generation for reuse, recycle and final disposal in the study area by adopting uniform approach and methodology. The main objectives of this study are as follows:

- a. To assess, identify and quantify the WEEE generation.
- b. To examine the existing WEEE recycling system.
- c. To study the problems/risks posed by the recycling system at present/ future.
- d. To estimate the existing and future quantity of WEEE in the study area.
- e. To evaluate the capacities/capabilities of existing stakeholders and infrastructure for reuse, recycle and disposal of e-wastes.
- f. To analyze the environmental and social sustainability of present system.
- g. To determine scope of e-trade economics for WEEE.
- h. Preparation of directory of the stakeholders.
- i. Conduct minimum one Sensitizing workshops in each division.

7. Scope of Work:

In order to execute this assignment, it is essential to establish the WEEE business chain linking different stakeholders to understand the trade economics and associated environmental impacts. The study shall identify and describe the following:

- The stakeholders,
- Their respective geographical distribution in the study area and
- WEEE generation cycle.

The study should include the identification of stakeholders, classification of organization as organized/unorganized sector, further their geographical location should be determined in terms of their operating base coverage.

Some of the major stakeholders whom this study should include are:

1st group:

- The Importers, Manufacturers
- The distributors, traders, retailers, dealers
- The consumers – Individual households, Business sector, IT sector, BPO, teaching institutions, Railways, Airlines, Defence establishments, Transport Corporations, PUCs etc

2nd group:

- The Collectors – Scrap dealers, Big Bazaars or malls who are buying the e-waste
- The Recyclers – disassemblers, dismantlers, material recoveries,
- The Road side vendors/
- The authorized/unauthorized Auctioneers, the sellers of the used electronic goods on the footpaths.

The study should also aim at establishing WEEE trade chain using conceptual input output analysis. This idea has been developed based on “WEEE material flows” through a region and on its way its disintegration and processing in numerous steps until it rejoins the raw streams or ends in a final disposal.

8. Inventorization:

Inventory of obsolescence rate of each electronic product (viz. Personal computer/ TV/Mobile phones as mentioned in the e-waste rules and guidelines issued by CPCB) using scenario analysis from secondary/market research data. Confirm obsolescence rate from data of primary survey using “tracer technique”. Identify a tracer from each product and follow it from the start of dismantling process till its final disposal.

The inventorization other than households (whereas sample basis at least 500 no's in rural and urban area of each district) should be on actual basis.

9. Analysis of existing WEEE recycling system & quantification of WEEE:

This will include description & documentation of each process used in dismantling of an e-product, the location details. Carry out photo documentation and geographical setting of each step. Estimate the quantity of material dismantled at each step. Estimate the quantity of e-waste for a particular year based on market projections & obsolescence rate.

10. Study area and duration of Study:

The study area shall include all the districts of five divisions of Chhattisgarh viz. Raipur, Bilaspur, Durg, Bastar and Sarguja. This study would be carried out in the time frame of six months starting from the date of submission of acceptance of Work Order or 25th April 2016 whichever is earlier.

11. Outputs:

The following outputs to be submitted to CECB by October 2016 on completion of the work:

1. Final reports on all WEEE types & quantitative database of the components including various maps/graphics/pictures- 06 sets (hard copy and digital data) incorporating all the objectives of this study (Please refer point no. 6).
2. A report on the existing WEEE management system in these areas.
3. A directory containing names & contact details of e-waste generators in these areas except household.
4. Recommendations on suggested improvements.

The quality of the output must meet the requirements of CPCB guidelines, which will be explained to the coordinating/executing officer from the executing agencies from the time to time. The outputs in draft form should be presented before the coordinator and may be submitted in advance to seek acceptance by CECB.

12. Time Frame:

The project shall be completed by September 2016.

Completion of survey & Inventorization	July 2016
Draft report preparation and submission to CECB	August 2016
Final report submission to CECB	October 2016
Workshops (one in each division)	During the study period

13. Payment Terms:

Payment shall be made by CECB in the following stages:

- (i) 25% of the total ordered cost shall be released after acceptance of work order and on submission of Bank Guarantee equivalent to 5% cost of work order.
- (ii) 25% of the total ordered cost shall be released after satisfactory progress report submitted by the consultant on initiation of the work.
- (iii) 25% of the payment shall be released only after submission of draft report.
- (iv) The balance 25% of the payment shall be released only after submission of final Project Report and completion of workshops.

14. Important Conditions:

- I. Presentation should be made at CECB, Raipur on the progress of work periodically and after completion of the work.
- II. No expenses other than those in the sanctioned budget for traveling, collection of data, analysis of data and any other expenses including those of trips to divisions will be paid by this Board.
- III. Separate accounts should be maintained for the expenditure incurred. Expenditure details should be submitted to the Board periodically.
- IV. Bimonthly physical and financial progress of the project should be submitted to HO, CECB, Raipur.
- V. During study, the concerned Regional Officers/Nodal Officers should be appraised time to time.

15. Other terms and conditions:

1. Acceptance on the Work order should be given within 15 days from the date of issue of this order.
2. The work shall be completed within the stipulated time period. In case of any anticipated delay in services due to reasons beyond the control of conditions, prior permission from the under-singed has to be obtained; else a penalty @ 2% per month of the work order value shall be charged and shall be deducted from the final payable amount.

3. The consultant has to submit the performance guarantee in the form of Bank Guarantee to the tune of 5% of the total ordered value immediately before the initiation of the work. The validity period of the bank guarantee shall be 12 months from the date of initiation of the work.
4. Any accidents/damage caused during the study will be the responsibility of the consultant.
5. In case of non/unsatisfactory services of the work bank guarantee will be forfeited.
6. The bills in triplicate copy shall be submitted addressing to the Member Secretary, to the Board for verification.
7. Apart from above, the other term and conditions may be incorporated as and when needed during the execution of the study by the Board.
8. In case of any dispute, the decision of the Chairman, Chhattisgarh Environment Conservation Board will be final & binding.



Member Secretary

Chhattisgarh Environment Conservation Board
Raipur (C.G.)

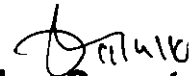
s/c

Endt.No. 201 ICECB/2016

Raipur, dated: 11/4/2016

Copy to :-

1. Regional Officer, Regional Office, Chhattisgarh Environment Conservation Board, Raipur/Durg-Bhilai/Bilaspur/Korba/Raigarh/Ambikapur/Jagdalpur for information and necessary action.
2. Shri Rahul Soni, Programmer, Chhattisgarh Environment Conservation Board for uploading in Board's website.
3. Account Section, Head Office, Chhattisgarh Environment Conservation Board, Raipur for information and necessary action.



Member Secretary

Chhattisgarh Environment Conservation Board
Raipur (C.G.)

to

s/c