

# **REPORT OF THE EGH SUBGROUP ON MEASURING E-WASTE**

**20<sup>th</sup> July 2023**

## **1.0. Introduction**

E-waste is a growing concern across many regions of the world; however, data availability of e-waste is still very scarce.

The 2017 EGH meeting agreed to explore and discuss how data from household surveys can help monitor E-waste and the recycling of E-waste. During the 2018 EGH meeting, an overview of various types of e-waste statistics as developed by the Global E-waste Statistics Partnership was presented, followed by a country experience. The 8th Meeting of the ITU Expert Group on ICT Household Indicators (EGH), which took place virtually on 14-18 September 2020, agreed to create a sub-group within EGH to address the measurement of electronic waste (e-waste) within the context of household surveys.

Against this background, at the 17th World Telecommunication/ICT Indicators Symposium (WTIS) in December 2020, presentations on the measurement of e-waste were contributed by Eurostat and UNUVie-SCYCLE, which provided relevant context to this work and shared their experiences on this topic.

At the 2021 EGH meeting, the ITU presented information on the East African Communications Organization (EACO) Regional E-waste Data Harmonization project. The project included the harmonization of surveys, training, and implementation of the surveys and will lead to a publication in early 2023.

The subgroup proposed two modules for discussion, on possession, disposal patterns, reasons to dispose, and awareness.

## **2.0. Objectives**

The sub-group discussed ways in which issues relevant to e-waste might be measured within the framework of household surveys. This was done by harmonizing survey questions developed by the EACO project, EUROSTAT, and the e-waste subgroup questionnaire.

## **3.0. Focus of the Work**

The sub-group focused on the harmonization of existing work done by Eurostat and EACO with the existing draft e-waste questionnaire developed by the EGH subgroup. The main issues for harmonization were as follows:

- Reference period
- In-scope equipment
- Disposal Route
- Awareness questions
- Unit of analysis

Following two meetings and further discussions by email, the sub-group agreed to the following:

- To use 12 months as a reference period as this provides a timeframe longer than 3 months where respondents will be less likely to have disposed of e-waste but do not extend past a point where respondents are less likely to recall the details of how they disposed of such equipment.

- The equipment list should follow the WEEE equipment categories and align directly with [E-Waste Statistics Guidelines On Classification, Reporting, And Indicators, Second Edition](#).
- Only general categories of disposal routes were considered as it is easier to harmonize at the international level; however, the categories can vary depending on country-specific needs.
- Questions on awareness are not to be included in the questionnaire to avoid the response burden of adding more questions to the survey. In addition, respondents may not be aware of what is meant by the term e-waste.
- Survey questions should be addressed to individuals where they are also asked to think of products shared within their household.

The sub-group also considered a variety of other issues when refining the recommended questions on e-waste. Notably, for the in-scope population, it was recommended that countries should not direct questions on e-waste to young children and that filtering questions on individuals' experience with ICT equipment should not be used. There was also consideration of including a question to identify individuals with products not in use, but not yet discarded. While there may be value in such a question, the sub-group noted that such products would still be discarded at some point in the future and therefore the focus should remain exclusively on products that have been discarded.

Another important discussion was on whether to include a question on the age of products discarded. While the sub-group recognized that the quality of such data in a survey may be low due to poor recall by respondents, there is no better way to capture such information at this time. Consequently, the sub-group recommended to include this question in the proposed e-waste module.

The sub-group, therefore, proposed five single-choice questions for each selected equipment to be included in the questionnaire.

| Question   | Response options  |
|--|---|
| Have you or someone in your household discarded or thrown away any [equipment category] that you owned or shared with others in your household in the last 12 months | <ul style="list-style-type: none"> <li>a. Yes</li> <li>b. No</li> </ul>   |
| Referring to the most recent [equipment category] discarded or thrown away, what was the mode of discard?  | <ul style="list-style-type: none"> <li>a. Discarded or thrown away in electronic waste collection/recycling.</li> <li>b. Returned to the company that sold me the product.</li> <li>c. Sold it or gave it away.</li> <li>d. Discarded or thrown away but not in electronic waste collection/recycling.</li> <li>e. Cannot remember</li> </ul> |
| Was the most recently discarded or thrown away [equipment category] purchased used or second-hand? That is, did it have a previous owner?                            | <ul style="list-style-type: none"> <li>a. Yes</li> <li>b. No</li> </ul>   |
| How many years did you own or possess this [equipment category] before it was discarded or thrown away?  | Number of years.  |
| What was the main reason you discarded it  | <ul style="list-style-type: none"> <li>a. It was broken.</li> </ul>   |

|                   |  |
|-------------------|--|
| or threw it away? | <ul style="list-style-type: none"> <li>b. It was no longer performing as well as desired.</li> <li>c. It lacked needed features.</li> <li>d. I no longer needed it.</li> <li>e. Other</li> </ul> |
|-------------------|--|

### E-waste questionnaire module

The sub-group agreed to the e-waste questionnaire below.

| Equipment <sup>1</sup>   | Have you or someone in your household discarded or thrown away any items in the last 12 months? | Referring to the most recent item discarded or thrown away, what was the mode of discard? | Was the most recently discarded or thrown away item purchased used or second-hand? That is, did it have a previous owner? | How many years did you own or possess this item before it was discarded or thrown away? | What was the main reason you discarded it or threw it away? |
|--|---|---|---|---|---|
| Televisions  |   |   |   |   |   |
| Laptops (including tablets/notebooks)                                    |   |   |   |   |   |
| Mobile phones (including smartphones, pagers)                            |   |   |   |   |   |
| Desktop personal computers (excluding monitors and accessories)          |   |   |   |   |   |
| Printers (e.g., scanners, multi-functionals, faxes)                      |   |   |   |   |   |
| Telecommunications equipment (e.g., cordless phones, answering machines) |   |   |   |   |   |

<sup>1</sup> Equipment list follows the [E-Waste Statistics Guidelines On Classification, Reporting And Indicators, Second Edition](#) which is itself based on the [WEEE equipment categories](#) (Annex IV). The list can be more or less expansive based on the scope of survey where questions are implemented.

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| Small IT equipment<br>(e.g., routers, mice,<br>keyboards, external<br>drives &<br>accessories) |  |  |  |  |  |
|--|--|--|--|--|--|