





9-10 November 2023

Kampala, Uganda

Website: www.itu.int/en/ITU-D/Regional-Presence/Africa/Pages/EVENTS/
2023/uganda-e-waste-workshop.aspx

Workshop Takeaways

1. Overview and background

The 2-day stakeholder consultation workshop on the Regulation of E-waste Management and Electronics Producers' Extended Producer Responsibility in Uganda, attended by close to 50 participants, was organized by ITU together with the Uganda Ministry of ICT and National Guidance (MoICT&NG), 9-10 November 2023, at Imperial Royale Hotel, Kampala, Uganda. The workshop was held within the framework of the **Technical Assistance and Training to Uganda on National ICT Development Strategy project** under **Component 1: Policy and Strategy Definition**, and the priority area of developing **Recommendations for Uganda's ICT industry development policies** and in line with the work foreseen under the Digital Uganda Vision. The expected outcomes of the workshop included a comprehensive set of recommendations for a stronger regulatory framework for the governance of e-waste management guided by the Extended Producer Responsibility (EPR) principle.

In response to the growing e-waste threat, Uganda has developed regulatory framework instruments such as the National E-Waste Management Policy, 2012, the Strategy for Electronic Waste Management, 2013, Guidelines for E-Waste Management in Uganda, 2016, Draft National E-waste policy 2023. Several laws, the have been revised to cater for e-waste. The National Environment Act, 2019 revised to include EPR and take back schemes, The National Environment (Waste Management) Regulations, 2020 No 49 include specific provisions on the management of e-waste separate from hazardous waste. Despites the tremendous work on the legal and regulatory front, there is limited awareness of e-waste in Uganda, and most e-waste handlers are informal entities, who lack requisite skills and training to handle e-waste properly.

The volume of e-waste in Uganda is already significant and will continue to increase with enhanced digital migration and adoption of 4IR technologies. In 2019, the estimated e-waste generation was 32kt (The Global E-Waste Monitor (GEM) 2020) with an important increment every year. E-waste management is largely dominated by the informal sector, lacking requisite skills and recycling facilities.

It is therefore necessary to enhance efforts towards proper and sustainable e-waste management to protect human life and the environment.

E-waste management can spur economic growth through creation of green jobs and promotes principles of a circular economy where resource efficiency is enhanced. In the circular economy model, waste electrical and electronic equipment should be seen as a major source of income by generating secondary raw materials and job creation by recycling waste electrical and electronic equipment.

The invited workshop participants represented a cross-section of Government Ministries, departments and agencies, regulatory and standards development authorities, academia, private sector stakeholders in the Uganda electrical and electronic industry, industry associations and civil society.

2. Workshop opening

Mr Michael Ocero, Ag. Commissioner for E-Services, Ministry of Information Communications Technology National Guidance (MoICT&NG) representing Dr. Aminah Zawedde, Permanent Secretary, MoICT&NG, sharing welcoming remarks stated that the purpose of the workshop was to consult stakeholders on the interventions to manage electronic waste, to mitigate the threats to health and environment arising from improper management of electronic waste and acknowledged challenges faced in implementing this EPR policy principle in e-waste management.

Hon. Kabbyanga Godfrey Baluku, Minister of State for National Guidance, Ministry of ICT and National Guidance, Uganda, officially opened the workshop. In his keynote address, he stressed the importance of recognizing that in the circular economy model, waste electrical equipment (WEE) should be seen as a major source of income by generating secondary raw materials and job creation through recycling. In the Ugandan context ensuring funding for and investment in specialized infrastructure for the set up and management of recycling facilities and acquiring modern management know-how were challenges. In this regard he noted a need for the workshop to help integrate the producers and distributors of electronic equipment into solutions for management of the problem, which is at the core of EPR.

3. Setting the stage for discussions on e-waste management and EPR in Uganda

Following the official opening and taking of group photographs, ITU project manager Dr. Christine Sund, set the scene with a presentation in which she introduced the Government of Uganda and ITU joint digital transformation project and ITU's programme on creating a circular economy for electronics. She noted that the joint project is supported by Global Development and South-South Cooperation Fund (GDF), People's Republic of China. The work under the project serves to contribute to implementing the Third National Development Plan (NDPIII) and Digital Uganda Vision (DUV) framework as it lays a foundation for ICT policy and planning with a focus on promoting the integration of ICT with other vertical industries in Uganda and driving the digital transformation of trade, government, education, health and other areas, and promoting employment and sustainable development. The e-waste/EPR related work servicing to contribute to the 'Review of national e-waste management guidelines' stream of work and comes under the project policy area: Uganda's ICT industry development policies together with dedicated capacity development, with focus on collection and sorting processes for e-waste in Uganda (public and private sector). Moreover, ITU's environment dedicated thematic work and it's workstream on 'Creating a circular economy for electronics and greening digital transformation further looks at supporting countries with their: 1) e-waste data, 2) e-waste policy and 3) how to green digital transformation. The workshop sought to advance discussions on e-waste policy, recalling the e-waste management system key principles and review extended producer responsibility system core pillars and their applicability in Uganda to cocreate a plan that meets the national aspirations.

Mr Michael Ocero, Ag. Commissioner for E-Services, shared a detailed presentation on E-waste management regulation in Uganda. He noted that Uganda Vision 2040 states Uganda's aspiration to protect the environment and natural resources from contamination by waste and NDPIII emphasizes ICTs as a major enabler for Uganda's socioeconomic development where ICT penetration has led to significant e-waste volumes and e-waste is hazardous to health and the environment. There is limited awareness of e-waste in Uganda and most e-waste handlers are informal entities, who lack requisite skills and training to handle e-waste properly. Observing the current state of e-waste in the country, he noted that recent surveys and studies have shown that e-waste is on the rise. The Global E-Waste Monitor (GEM) 2020 estimated e-waste generated in Uganda in 2019 to be 32 kt, a 28% increment compared to the 2016 estimate (in GEM 2017) and a recent Baseline Survey on E-waste (2022) estimated e-waste generated from selected ICT equipment in Uganda to be 14.9 kt. Urgency to action and awareness of the issue was expressed.

4. Workshop discussions and takeaways

With the objective of fostering intensive inter-stakeholder engagement and consultations, the workshop was structured around expert-moderated roundtable discussions after each subject matter presentation. After an overview presentation by the ITU Expert, Mr Hermenegilde Ntahomvukiye, on mapping the E-waste management legal and policy framework in relation to the EPR concept, the workshop went into a breakout session, in which groups were formed to discuss several thematic questions posed by the expert. Presentations were then shared from each group of participants.

Participants agreed on how the producer should be defined in the context of Uganda. Any person who places a product into the market should be considered as a producer; the product could be new or used; it could be introduced externally or internally, if it is introduced within the Ugandan market. The categories of producers are Importers, domestic manufacturers (refurbishing, re-assembling, primary manufacturer), network operators such as for telecommunications networks, distributors/retailers, businesses and industry, government institutions, branders, and individuals. Key observations were:

- 1) Nature of entity to manage the EPR scheme: A hybrid system is seen as the best route, provided that the role of each stakeholder is clearly defined in a PPP (Public-Private Partnership) model.
- 2) Nature of contributions: The existing legal framework provides for three (3) kinds of fees to be paid by the producers: Advanced Recycling fee (ARF), electronic equipment levy and EPR schemes. Participants agreed that the payment should be unique and should not go to the e-waste fund as provided in the current regulations. Furthermore, participants advised as follows:
 - a. WEEE should not be sold or auctioned to unlicensed recyclers. If a sale or auction occurs, it should only be to licensed facilities.
 - b. Incentives should be put in place but need not necessarily be in monetary exchange. For example, there can be an exchange with another product.

- c. In order not to duplicate efforts, equipment from security bodies should be included in the EPR scheme. However, equipment containing confidential information should be cleaned before being sent to recyclers.
- 3) Fees to be paid by producers: The fees to be paid by producers should be:
 - a. a percentage of initial cost, depreciation of product value and degree of recyclability, ii)Fee cannot be uniform, even for the same product because people have different values for the material in it that can be recycled/reused.
 - b. Percentage should not be too big compared to cost as this would cause an increase in the net cost of the product.
 - c. Penalties should be high enough to discourage fraud.

In terms of achievements against the objectives of the workshop, **Table 1** shared some insights.

Table 1: Workshop objectives and achievements

Item	Objective	Achievement
1	Raise stakeholder awareness about the issues surrounding e-waste and the process of developing a sound regulatory framework for managing this waste stream, in particular the application of the principle of extended producer responsibility (EPR) and to obtain stakeholders' opinions and recommendations on the subject.	The workshop saw the participation of more than fifty participants who all recognized the importance of sound e-waste management and the importance of the producer's responsibility in the value chain. Participants looked at all the questions surrounding the issue of a well-organized EPR system including a clear definition of the producer in the context of Uganda, the producer responsibility organization (PRO) ecosystem and financing mechanism.
2	Define the scope and key terms and definitions of the e-waste regulatory framework and EPR system for implementation in Uganda,	The scope was defined as to be applied to all producers inventoried through the country with no exception (manufacturers, importers, assemblers, remanufacturers and reconditioners), distributors, and consumers of Electrical and Electronic Equipment (EEE), as well as to all e-waste managers of different classes (collectors ,transporters, dismantlers, refurbishers, recyclers, etc.)
3	scope specific regulation on managing e-waste and scoping a potential institutional framework for implementing e-waste management through EPR,	Uganda has developed a number of legal documents and policy instruments for managing the e-waste stream. As highlighted during the workshop, Uganda has developed its national policy in 2012 with a national e-waste strategy in 2014. Guidelines to implement the strategy were developed in 2016. The National Environment Act (Act 5, 2019) was enacted in 2019 and National regulations in 2020(Environment Waste Management) Regulations, 2020. All those instruments are supportive of the EPR principle. The E-waste Management Policy is implemented through collaboration among stakeholder institutions from the public and private sectors. Actually, the implementing entity is the National Steering committee on e-waste management.
4	Facilitate a coordinated plan across Government, with input from the electronics Industry, to implement Extended Producer Responsibility;	A transparent legal regime shall be in place to allow an appropriately financed EPR system. After the legal framework is in place, there should be put in place administrative arrangements on how to collect and manage fees, through Producer Responsibility Organization.

		An implementation plan shall be put in place after adoption of the legal framework.
5	identify where the existing regulatory framework for e-waste management and EPR need(s) strengthening. Definition of the producer in the context of Uganda	The existing legal and regulatory framework have been reviewed and suggestions made notably the focus on viable and implementable solutions. It has been for example suggested that e-waste management shall be done through a standalone regulation which encompasses all provisions from key definitions, key principles, financial mechanisms, technical requirements for e-waste managers, licensing regime, sanctions for noncompliance,

The discussions also brought out several issues in the Uganda e-waste arena that falls outside the core focus of EPR. These are presented in **Table 2** below under the framework of general principles of e-waste for further follow up.

Table 2: Observations that go beyond EPR, organized according to the framework of general principles of e-waste.

No	Pillar	Pillar explanation	Issues brought by participants
1	Business and Finance	The most sustainable system is the one that is self-financing. This implies covering the cost of environmentally sound management, collection, logistics, dismantling, pre-treatment, value extraction and eventual disposal. The role of business and entrepreneurship is essential	 Shared responsibility but roles not clear and lack of coordination to the level desired and needed. Knowing how much e-waste in Uganda, future amounts, the value of this, and the cost-the business case for e-waste is not clear to all. Consider better use of existing structures, like the e-waste steering committee convened by the Ministry of ICT and NG.
2	Policy and Regulation	A policy is an important first step. It signals government's intent to engage in e-waste management. A successful system is governed by regulation. This should clearly specify the roles and responsibilities of stakeholders along the value chain. Regulation should be simple, yet clearly stipulate who covers the cost of collection and take back of e-waste. It should be enforceable.	 Implementation lacking! Why? Private sector led and business driven approach to be considered, supported by government moving forward. Consider a separate regulation focused on e-waste management. Current e-waste management framework does not strongly underpin the EPR system and needs to enable PRO (producer responsibility) to make this happen-standalone regulation on EPR and PRO to be considered. Need a collective understanding of who the 'producer' is in Uganda! (The one who brings the equipment into Uganda!) Finding a balance to ensure that the customer is not penalized with too expensive equipment. How to find the balance? Focus on incentive schemes. Build requirements into the licensing frame but have that need for balance in mind. Collaboration between institutions must be strengthened.
3	Technology and Skills	Appropriate technology and skills along the value chain is essential for successful implementation. It involves safe and environmentally sound waste management practices including recycling infrastructure. Skilled workers are	 Build skills across the e-waste value chain. Skill on the tools and technologies to be used. Can start small scale. Work together with universities. Make sure educational institutions work together with the industry in the country. Learn to dissemble, assemble, reuse, etc.

4	Monitoring and Control	needed so that hazardous materials are dealt with effectively, e-waste is separated with value retention in mind, and to ensure that logistics are improved, and enforcement remains effective. Monitoring and enforcement create a level playing field. If there is no enforcement, producers who comply with EPR could be at a disadvantage to those who do not. KPIs need to be developed, implemented, and tracked to measure system performance. E-waste collection and recycling targets set out in the policy documents should be frequently monitored, through transparent data collection	 Monitoring and enforcement must work hand in hand. When policies are put in place, we need to have monitoring and control. Review KPI and measurements for success and progress.
5.	Marketing and Awareness	Awareness of the part of consumers and commercial customers is key to e-waste management. The Waste Hierarchy should be adhered to so that anyone discarding equipment is aware of the options for better e-waste management, such as reduction, reuse, or repair	 Awareness raising is needed at all levels (safety issues, personal health, environment implications, process issues, incentives). Agree on what to communicate on if the collection system, sorting, and processing plant are not yet ready. Share information on what the Government has done to date, is doing and plans. A phased approach to change mindsets and raise awareness to change future mindsets then continue to build on this when the other parts of the cycle are in place, including the incentives. Do not delay.
6	Cross- cutting	E-waste management is a cross- cutting issue. In order to ensure synergy and complementarity of actions on the ground, all stakeholders need to join efforts.	The responsibilities of each structure or institution concerned will be clearly specified when it comes to the implementation process. All key stakeholders, public and private need to collaborate effectively on e-waste management activities and programmes

5. Conclusions and next steps

The expected outcomes of the workshop included input to a set of recommendations for a stronger regulatory framework for the governance of e-waste management within the Extended Producer Responsibility (EPR) principle. Participants have suggested several improvements to be made to the current legal and regulatory framework including with an emphasis to enforcement of the agreed changes.

The missing link being the lack of implementation and resource mobilization, participants recommended strongly to change the governance mode of the EPR schemes.

Participants agreed that the funds from EPR schemes should not go to the e-waste fund as provided in the current regulations.

The proposed e-waste regulation review program has been scheduled in 2 phases as follows:

Phase 1

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Step	Activities

Step One	Mapping out the existing Ugandan regulatory framework for the management of e-waste under the EPR principle, based on online research.
Step Two	To conduct stakeholder consultation aimed at gathering inputs from the stakeholders based on the mapping exercise and the general provision of e-waste regulation under the EPR principle in Uganda
Step Three	Report on the required revisions to the Ugandan e-waste regulatory framework based on inputs gathered during the mapping exercise and the stakeholder consultations.

Phase 2

Timeline	Activity
December 2023	Technical report on the required revisions submitted by project team and consultant to Government focal point
December 2023	Revised finalized technical report submitted to the government of Uganda
December 2023/ January 2024	Preparation of a possible phase two (recruitment and contracting of consultant)
March-April 2024	Preparation of the new regulation on EPR
May 2024	Submission of new regulation to Government focal point
June 2024	Submission of new regulation to the government of Uganda and submission to stakeholders
July 2024	Validation of the new regulation through webinar or in-person workshop

The detailed agenda of the workshop is shared in **Annex 1** and session-by -session record of the workshop proceedings is in **Annex 2**. **Annex 3** has the group photos and the list of participants. **Annex 4** contains links to reference material and training materials. Additional material is available on the event website: www.itu.int/en/ITU-D/Regional-Presence/Africa/Pages/EVENTS/2023/uganda-e-waste-workshop.aspx

6. Workshop closing

The workshop was officially closed by Mr Kenneth Bagarukayo, Commissioner, Data networks on behalf of the Permanent Secretary, MoICT&NG. The remarks emphasized the Ministry's commitment to spearheading initiatives that promote responsible E-waste management and foster a culture of awareness and responsibility among all stakeholders – from industry leaders to consumers. Commissioner Bagarukayo called upon the participants to become ambassadors for responsible E-waste practices and to integrate the principles discussed the organizations and communities they represented.

The workshop brought together 50 participants representing a cross-section of Government Ministries, departments and agencies, regulatory and standards development authorities, academia, private sector stakeholders in the Uganda electrical and electronic industry, industry associations and civil society. The organisations that sent participants included ITU, MoICT&NG, UMA, UNBS, MTIC, UICT, UETA, Kyambogo University, MUBS, ADREA, URA, Posta Uganda, Makerere University-CEDAT, Uganda Free Zone Authority, USSIA, NITA, D.K. Limited Consultants, AAIA, MWE, UCCA, Uganda Clean Production Center, PPDA, MUST, Airtel, Trade Uganda Limited mental fabrics, Mega Waste Solutions Uganda, ACCEC- Masaka City, UIRI, ISO, UAAU, MoES, NEC and MTN Uganda Foundation. The list of participants is shared in **Annex 3.**

Annex 1: Agenda

Stakeholder Consultation Workshop on the Regulation of E-waste Management and Electronics Producers' Extended Producer Responsibility in Uganda

9-10 November 2023 Kampala, Uganda

Nampala, Oganaa				
Day 1: Thursday, 9 November 2023				
Time	Activity	Speaker		
08:00 - 09:00	Registration of participants and audio testing	All participants		
SESSION 1 : OP	ENING			
09:00 - 09:15	Introductory remarks by the Permanent Secretary, Ministry of ICT and National Guidance (MoICT&NG)	Dr. Aminah Zawedde, Permanent Secretary, Ministry of ICT and National Guidance (MoICT&NG)		
09:15 - 09:30	Official opening of the workshop	Hon. Kabbyanga Godfrey Baluku, Minister of State NG, Ministry of ICT and National Guidance (MoICT&NG)		
09:30 - 09:45	Introduction to the project and to ITU's programme on Creating a circular economy for electronics	Dr. Christine Sund, ITU Regional Office for Africa		
SESSION 2 : INT	RODUCTION TO E-WASTE REGULATION AND THE EPI	R PRINCIPLES		
09:45 - 10:30	E-waste management regulation in Uganda	Mr Michael Ocero, Ag Commissioner, E-Services, MolCT&NG		
	Coffee/Tea break and Group Photo			
11:00 – 13:00	Presentation on mapping the E-waste management legal and policy framework in relation to the EPR concept	Mr Hermenegilde Ntahomvukiye, ITU Expert		
	Interactive discussion			
	Lunch break			
SESSION 3 : E-V	VASTE MANAGEMENT AND EPR CASE STUDIES AND C	GLOBAL TRENDS		
14:00 – 14:30	Presentation on Rwanda's experience on E-waste management and EPR Interactive discussion	ITU expert on behalf of Rwanda Utilities Regulatory Agency (RURA)		
CO-CREATION S				
14:30 – 15:30	Participants break into groups and discuss questions related to e-waste and ERP: - defining a producer in Uganda - organization of producers, and - financing mechanisms for e-waste management under EPR	All participants		
	Coffee/Tea break			
16:00 – 17:30	Reporting back from co-creation sessions: Rapporteurs from each breakout group presents the findings from their respective group for the questions asked in the co-creation sessions.	Rapporteurs, teams and participants		

	Facilitated discussion	
DAY 1 WRAP-U	P	
17:30 – 17:40	Wrap up and takeaways from the first day	All participants

Day 2: Friday, 10 November 2023		
Time	Activity	Speaker
08:00 - 09:00	Registration of participants and audio testing	All participants
RECAP OF DAY	1 TAKEAWAYS AND OPENING OF DAY	
09:00 - 09:15	Brief recap of the key points discussed and findings	Mr Hermenegilde
	from the first day	Ntahomvukiye, ITU Expert
SESSION 4: EFF	ECTIVE E-WASTE REGULATION UNDER THE EPR PRINC	CIPLE
09:15 - 10:15	Presentation on regulating E-waste management	Mr Hermenegilde
	under the framework of the Extended Producer	Ntahomvukiye, ITU Expert
	Responsibility Principle, with Typical Chapters,	
	Articles and Provisions of the regulation	
	Interactive discussion	
CO-CREATION S	SESSIONS	
10:15 - 11:15	Participants break into groups and debate	All participants
	questions related the contents (chapters, articles	
	and provisions) of e-waste and EPR regulations in	
	Uganda	
	Coffee/Tea break	
11:15 – 11:45	Reporting back from co-creation sessions:	Rapporteurs, teams and
	Rapporteurs from each breakout group presents	participants
	the findings from their respective group for the	
	chapters, articles and provisions.	
	Facilitated discussion	
SESSION 5: COI	NSULTATION PROCESS AND PROJECT NEXT STEPS	
11:45 – 12:45	Brief overview of the next steps of the project and	Dr Christine Sund, ITU Regional
	consultation process of the preparation of a	Office for Africa
	roadmap for the regulation of e-waste	
	management and EPR in Uganda	
	Facilitated discussion	
CLOSING OF EVENT		
12:45 – 13:00	Takeaways and official closing of the workshop	Mr Kenneth Bagarukayo,
		Commissioner, Data networks,
		MoICT&NG
Lunch break		

Annex 2: Session-by -Session Summary Record of the Workshop Proceedings

DAY 1

Day 1 Session: Introduction to E-Waste Regulation and the EPR Principles

This session served to set the stage on the event's theme "[placeholder." The session speakers to aid set the stage were:

- Mr Michael Ocero, Ag Commissioner, E-Services, MoICT&NG
- Dr Christine Sund, Senior Advisor, ITU Regional Office for Africa
- Mr Hermenegilde Ntahomvukiye, ITU Expert

Day 1 Session: E-waste management and EPR case studies and global trends

A presentation on mapping the e-waste management legal and policy framework in relation to the EPR concept was made by the ITU Expert and was followed by an interactive discussion. The presentation looked at the existing legal and regulatory frame on E-waste management especially the status of the implementation of the Extended Producer Responsibility. E-waste management is regulated under the following legal documents:

- the National Electronic Waste Management Policy of 2012,
- the National Environment Act (Act 5, 2019)
- The National E-waste Strategy, 2014,
- the Guidelines for E-waste Management, 2016
- The National Environment (Waste Management) Regulations, 2020

The finding is that all those instruments are supportive of the EPR principle whereby the implementation and practical actionability is the missing link. The lack of resources was seen by most participants as the main reason for poor implementation.

Day 1 Session: 1st Co-creation Session

Participants broke into groups and each group discussed a set of questions concerning e-waste and ERP (which were developed by the ITU expert). Thereafter the rapporteurs from each group presented the findings of his/her respective group. A facilitated discussion ensued.

Moderator: Mr Hermenegilde Ntahomvukiye, ITU Expert

Day 1 Session: Wrap Up

In this session, takeaways from the first day of the workshop were prepared.

Three thematic areas were analysed during the 1st co-creation session: (1) Defining a producer in Uganda, (2) Who, How, What, in terms of organization of producers-PRO(Producer Responsibility Organization); (3) Financing mechanisms for e-waste management under EPR.

The following are some of the questions submitted to participants: (i) Who should be considered as a producer in the context of Uganda? (ii) How do you think the EPR principle should be concretely applied in the context of Uganda? How should the fees related to EPR be collected and managed? (ii) The different legal documents have provided for Advanced Recycling fee (ARF), electronic equipment levy and EPR schemes. Do you think they should all exist, or should they be segregated under one roof?

The main takeaways from the session were:

1) Definition of the producer in the context of Uganda :participants agreed on how the producer

should be defined in the context of Uganda .Any person who places a product into the market should be considered as a producer; the product could be new or used; it could be introduced externally or internally, if it is introduced within the Ugandan market. This is the list of potential producers: Importers, domestic Manufacturers (refurbishing, re-assembling, primary manufacturer), Operators such as telecoms, distributors/ retailers, businesses and Industries, Government Institutions, branders, Individuals, distributors.

- 2) The nature of the entity to manage the EPR scheme: A hybrid system is seen as the best route provided that the role of each stakeholder is clearly defined in a PPP (Public-Private Partnership) model.
- 3) The nature of contributions: The existing legal framework provides for three types of fees to be paid by the producers: Advanced Recycling fee (ARF), electronic equipment levy and EPR schemes. Participants agreed that the payment should be unique and should not go to the e-waste fund as provided in the current regulations.

DAY 2

Day 2 Session: Recap of Day 1 takeaways and opening of day.

This session comprised of brief recap of the key points discussed and findings from the first day, under moderation of the ITU Expert. The presentation included the points of consensus during the working groups meeting as highlighted above.

Day 2 Session: Effective e-waste regulation under the EPR principle

In this session, the ITU Expert gave a presentation on regulating E-waste management under the framework of the Extended Producer Responsibility principle, with typical Chapters, Articles and Provisions of the regulation. This was followed by an interactive discussion. The presentation highlighted what an EPR regulation should contain.

1. The purpose of the regulations

The purpose of this Regulation is to establish and regulate the responsibilities of the actors involved in the comprehensive management of Waste Electrical and Electronic Equipment (WEEE), within the framework of the Extended Responsibility of the Producer and ensure producers play an effective and efficient role in the management of WEEE throughout its life cycle.

2. The scope

The Regulation applies throughout the national territory to producers (manufacturers, importers, assemblers, remanufacturers, and re- conditioners), distributors, marketers, and consumers of Electrical and Electronic Equipment (EEE), as well as to waste managers of different classes. No EEE should be excluded from the Regulation even those that come from security bodies.

- 3. The key principles in the E-waste management value chain based on the EPR concept:
 - a. The EPR principle:
 - b. Financial sustainability.
 - c. Shared responsibility.
 - d. Hierarchy of Waste Management.
 - e. Citizen participation.
 - f. Promotion of green markets.

- g. Circular economy
- h. Free competition
- i. Traceability E-waste
- j. Research, Development, and Innovation.
- 4. The licensing regime managers and technical requirements for WEEE Managers
- 5. Obligations and responsibilities for WEEE Managers
- 6. Applicable fees and penalties

Day 2 Session: 2nd Co-creation Session

Participants once again broke into groups, this time to debate questions related to the contents (chapters, articles, and provisions) of e-waste and EPR regulations in Uganda. This was followed by presentation of groups' finding by the respective group rapporteurs.

The following topics were submitted to participants for discussions.

- WEEE shall not be sold or auctioned or exchanged or donated except to a licensed facility (the question to be analyzed vs the issue of incentives)
- 2. Looking at the structure of the market, what should be the level of fees to be paid by the producer?
- 3. Penalties should be high enough to discourage fraud. What should be the level?
- 4. Do you think equipment from security bodies should be excluded from the scheme?

This was the consensus on the questions:

- a) Participants agreed that WEEE shall not be sold or auctioned to unlicensed recyclers. If a sale or auction occurs, it should only be to licensed facilities.
- b) Incentive should be there but not necessarily in monetary exchange .It can be an exchange with another product.
- c) In order not to duplicate efforts, equipment from security bodies should be included in the EPR scheme. However, equipment containing confidential information should be cleaned before being sent to recyclers.
- d) Fees to be paid by producers should be:
 - i) a percentage of initial cost, depreciation of product value and degree of recyclability, ii) Fee cannot be uniform, even for the same product people have different values for the material in it that can be recycled/reused.
 - ii) Percentage shouldn't be too big compared to cost -> would cause an increase in the net cost of the product?
- e) Penalties should be high enough to discourage fraud.

Moderator: Mr Hermenegilde Ntahomvukiye, ITU Expert

Day 2 Session: Consultation process and project next steps

A brief overview of the next steps of the project and consultation process of the preparation of a roadmap for the regulation of e-waste management and EPR in Uganda, led by Dr Christine Sund, ITU Regional Office for Africa, was made in this session.

The workshop was thereafter closed by Mr Kenneth Bagarukayo, Commissioner, Data networks, MoICT&NG

Annex 3 : Group Photo and List of Participants

Group photo



List of participants

Participant name	Organization
Hon. Kabbyanga Godfrey Baluku	Hon. Kabbyanga Godfrey Baluku, Minister of State for
	National Guidance, Ministry of ICT and National Guidance,
	Uganda
Henry Ssebunya	Uganda Institute of Information and Communications
	Technology
Lwasa Umar	Uganda Electronics Technicians Association
Mukasa Paul Henry	Kyambogo University
Nyeko Sonny (Prof)	Makerere University Business School
Victoria Ssuubi	Uganda Electronics Technicians Association
John Kyobe	ADREA
Othieno Andrew	Uganda National Bureau of Standards
Ronard Murungi	Uganda Revenue Authority
Sadat Kyeyune	Posta Uganda
Frank Ssemakula	Makerere University
Eng. Dennis Adrole	Uganda Free Zone Authority
Aisha Nantume	ACCEC- Masaka city
Emily Missner	Uganda Small Scale Industries Association
Henry Oryema Langalanga	Uganda Electronics Technicians Association
Peter Odong	Ministry of Trade, Industry and Cooperatives
Arthur Munanura	National Information Technology Authority Uganda
Wabulembo Robin	D.K. Limited Consultants
Mutunzi Saul	Uganda Manufacturers Association
Thomasmore Ki	Uganda Small Scale Industries Association
Timmothy Wamale	Ministry of ICT and National Guidance
Gloria Nassuna	Ministry of ICT and National Guidance
Samantha Naiwumbwe	Uganda Small Scale Industries Association
Baireete Jennipher	AAIA
Innocent Kayiza	MWE
Adeeda Dominic	Uganda Consortium on Corporate Accountability.

Twinomujuni Edson	Uganda Clean Production Center
Ssebuufu Eric	Ministry of ICT and National Guidance
Wokuri Anne Simiyu	Public Procurement and Disposal of Public Assets Authority
Tumwine Simon	Mbara University of Science and Technology
Christopher Kwesiga	Airtel Uganda
Patricia Nsubuga	Airtel Uganda
Otai James	Trade Uganda Limited metal fabrics
Muhumuza Ivan	Mega Waste Solutions Uganda
Andrew Jjungo	ACCEC- Masaka city
Bagarukayo Kenneth	Ministry of ICT and National Guidance
Kananura Stephen	Ministry of ICT and National Guidance
Kaduli Eria	Uganda Revenue Authority
Daniel Mwaje	Uganda Industrial Research Institute (UIRI)
Doreen Gift Bujjingo	Ministry of ICT and National Guidance
Okello Joseph	ISO
Mary Amumpaire	Ministry of Trade, Industry and Cooperatives
Nambatya Hanifa	Ministry of ICT and National Guidance
Aisha Lubega	Ministry of ICT and National Guidance
Mbabali James	UAAU
Emmanuel Kakooza	Ministry of ICT and National Guidance
Peter Ogule	Ministry of ICT and National Guidance
Christopher Yiki	Ministry of ICT and National Guidance
Mukoyo H	Ministry of Education and Sports
Helen Nakiguli	Uganda Communications Commission
Denis Kato	Uganda Manufacturers Association
Denis Suubi	Ministry of ICT and National Guidance
Stanely Ndyabahika	National Enterprise Corporation
Nelson Munyanda	MTN Uganda Foundation
Andrew Kintu	Uganda Small Scale Industries Association
Edward Kasule Musisi	ITU Consultant
Christine Sund	ITU
Hermenegilde Ntahomvukiye	ITU Expert

Annex 4: ITU Learning Resource

Policy practices for e-waste management. Tools for fair and economically viable extended producer responsibility. Examples from African countries: https://www.itu.int/en/ITU-D/Environment/Documents/Publications/2021/Toolkit_Africa_final.pdf?csf=1&e=ivTocK

ITU Academy training course - An introduction to e-waste policy:

https://academy.itu.int/training-courses/full-catalogue/introduction-e-waste-policy-1
ITU Academy training course - Deep dive into the Extended Producer Responsibility (EPR)
principle for e-waste management: https://academy.itu.int/training-courses/full-catalogue/deep-dive-extended-producer-responsibility-epr-principle-e-waste-management