

***Communications for all in East Africa***

**REPORT OF** **THE 6TH EACO E-WASTE WORKSHOP ON SUSTAINABLE E-WASTE MANAGEMENT IN THE EAST AFRICA REGION 11TH – 13TH MARCH 2024 AT IMPERIAL PLAZA HOTEL; JUBA – REPUBLIC OF SOUTH SUDAN**

1. **PREAMBLE**

In an effort to enhance awareness on sustainable E-waste management in the East African region, the East African Communications Organization (EACO) has held six (6) regional workshops. The 1st workshop was held in March 2015 in Nairobi, Kenya; the 2nd in July 2017 in Kampala, Uganda; the 3rd in May 2018 in Kigali, Rwanda; the 4th in March 2019 in Bujumbura, Burundi, then the 5th Workshop held in March 2023 in Dar es salaam, Tanzania; and now the 6th in March 2024 in Juba South Sudan.

The 6th regional workshop for sustainable E-waste management was held from **11th – 13th March 2024** in **Juba, Republic of South Sudan.** The theme of the workshop was: **“Sustainable Strategies for E-Waste Management in South Sudan and EAC Region: A Holistic Approach.”**

1. **OBJECTIVES OF THE WORKSHOP**

The following were the Objectives of the awareness workshop:

1. Validate the Regional E-waste Management Strategy (2022-2027) within the EACO member states.
2. Promote the adoption by various stakeholders of other sustainable e-waste management practices.
3. Provide a synopsis on the global trends in e-waste management including best practices and successful case studies from around the world.
4. Discuss how Extended Producer Responsibility (EPR) is a solution to sustainable e-waste management.
5. Devise mechanisms of enhancing collaboration among governments, industry, and civil society in addressing e-waste management challenges.
6. Identifying and addressing barriers to sustainable e-waste management

To achieve the above objectives, the annexed programme in ***Appendix I*** was executed in the workshop***.***

1. **PARTICIPATION**

This workshop was attended by 130 participants physically (109) and virtually (21) from the EACO Member States, Africa and Europe. presenters were done both physically and virtually. The 6th EACO Regional E-Waste workshop was attended by stakeholders, as follows: -

1. EACO Member States and partners;
2. Law makers;
3. Policy makers in relevant Government Ministries, Departments and Agencies, Local Government/Country Governments, Environmental & ICT Regulators;
4. National Standards Bodies;
5. ICT Service Providers;
6. Private Sector Players/Recyclers;
7. Academia/Training Institutions;
8. Consumer Organizations and the public/consumers of ICT services.

**(*The list of participants is annexed as Appendix II)***

1. **OPENING SESSION (SESSION 1) - REMARKS BY GUESTS**
2. Welcome Remarks by the Master of Ceremony, Mr. Paul Demetry of Ministry of Environment and Forestry (MoEF) in South Sudan. The Master of Ceremony welcomed delegates to South Sudan and to the workshop; and wished them fruitful deliberations during the three-day workshop.
3. Introductory Remarks by EACO Executive Secretary, Dr. Ally Yahaya Simba, who welcomed the invited guests and delegates, thanked the chief guest, Permanent Secretary and other high-level dignitaries present for honouring the invitation to the workshop. He also appreciated the organizing committee for the workshop on the 6th EACO regional e-waste workshop on sustainable e-waste management in the East Africa Region; South Sudan. He updated the meeting on the various Steering Committees established and thanked South Sudan and other EAC Partner States for the steps taken to regulate E-waste so far. He encouraged parties to benchmark and attain a formidable regional approach to E-waste. The remarks of the ES are annexed as ***Appendix III.***
4. Opening Remarks by National Communication Authority (NCA) South Sudan - Director General, Eng. Napoleon Adok Gai: He welcomed the invited guests, delegates more especially government institutions from Uganda, Kenya, Tanzania, South Sudan, Burundi, Rwanda and Host Country Republic of South Sudan, plus all participants present physically and those who were participating virtually. He reminded the participants that. South Sudan having only recently emerged from the war has a lot to learn and also share on the influx of electronics (NGOs and Government institutions) as well as on matters of E-waste handling.
5. Opening Remarks by the Under Secretary for Environment, Ministry of Environment and Forestry (MoEF) of South Sudan; Hon Joseph Africano Bartel: He welcomed the participants and thanked the members for attending the workshop. He stated that there was need to come up with regional strategies to cater for plastics pollution and E-waste Management in the region. This is exacerbated by the ever increasing population for instance in cities such as Juba. He stated that the workshop was a learning opportunity for South Sudan, as a Country.
6. Opening Address/Chief Guest of Honour, Minister for Information, Communication Technology and Postal Services of South Sudan, Hon. Michael Makuei Lueth, who was represented by Dr. Lado Wani Kayi, the Under Secretary Ministry of ICT and Postal Services. He welcomed the participants of the workshop and thanked the organisers for always bringing on board MoEF of South Sudan which is a major stakeholder, and most relevant entity, in addressing the issues of E-waste in the country. Further he mentioned the importance of the e-waste workshop, which had brought together Policy makers, Academia, researchers, stakeholders, students etc. He further hinted on the 2022-2027 E- waste Management Strategy, by highlighting the importance of regional initiatives that can be the basis for solving individual State problems on e-waste. Since South Sudan had less regulation on e-waste, this was the right time to develop these synergies with the knowledge shared in the workshop.
7. Keynote speech:The Keynote speech entitled “Sustainable Waste Management,” was delivered by Dr. Thomas Musili (PhD) of WEEC. He described what e-waste is and explained the need to have sustainable waste management practices. He also adds that e-waste is the fastest growing waste stream. Reports show that 67 million metric tons of electrical and electronic equipment were put on the global market in 2013, and about 53.6 million metric tons of e-waste are disposed of worldwide, in every year. He reduced these to embracing the principles of a circular economy, i.e. Reducing, Re-using and Re-cycling e-waste. He spoke of the need for massive sensitisation for people to understand the need for e-waste management. The need for extended producer responsibility, technological tracking and set up of automated facilities to undertake e-waste management. Above all, he called for brotherliness and collaboration at regional and bilateral level to enable progress in addressing the challenge of e-waste in the EAC region. The keynote presentation is annexed as ***Appendix IV.***
8. **PRESENTATIONS**

During the three-day workshop, presentations were made by experts from the East African region and outside the region including Government Ministries, Bureaus and Agencies, Private Sector, Formal and informal recyclers in the e-waste management sector, Academia and Research institutions. There were also panel discussions and comments from the participants. The link to the presentations is found in ***(Appendix V).*** Below is a summary of the deliberations:

**DAY 1** **(11TH MARCH 2024)**

| **SESSION** | **PRESENTER** | **DISCUSSANTS**  | **HIGHLIGHTS FROM THE PRESENTATION/DISCUSSIONS** |
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| **Session 2:**Presentation on activities of EACO WG 07: E-waste Management and Green ICTs. | Ms. Anita Hodari (Chairperson EACO WG 07) | **N/A**  | Highlights from the presentation were as follows:* Though a lot has been done by WG:07, the highlights were for the FY 2023/2024.
* EACO WG07 has a framework on e-waste management for the region.
* The working group has terms of reference on e-waste Management and Green ICTs
* WG7 organizes regional workshops and capacity building programs as part of awareness creation on e-Waste in the region; It has held 5 online meetings, and a physical meeting was to be held on 14-15 March 2024.
* EACO is currently implementing the Regional e-Waste Management strategy 2022-2027 which replaced the first Regional strategy 2017-2022.
* The Regional e-Waste Management strategy 2022-2027 has all solutions about e-waste which are incorporated in the five pillars.
* The WG:07 has a model framework that gives guidelines to individual States.
* The implementation of the Regional e-Waste Management Strategy is at different stages of implementation in the member states.
* There are various steps undertaken by the individual Member States together with the projects (individual or jointly) undertaken to Harmonise and develop e-waste management strategies.
* On Green ICTs, WG:07 is in the process of formulating a comprehensive information paper on Green ICTs to be recommended for adoption by Member States.
* The Challenges experienced are as follows: Inadequate funding for e-waste management, Inadequate awareness, limited expertise in the field of e-waste and green ICT, Inadequate government support especially on legal framework, slow pace of reviewing laws on e-waste and inadequate representation of relevant stakeholders.
* The future focus of the WG7 is ; fully implementation of the e-waste Strategy; concerted efforts between Public and Private sector; Regional e-waste facility; E-waste fund; working towards Zero negative impact of e-waste.
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| **Session 3:**Milestones in the implementation of EACO Regional E-waste Management Strategy 2017- 2022 – Country Status | **Presenter:** **Olivier Mbera** - Chairperson – EACO WG 07 Regional Steering Committee (RSC) | **Moderator:****Nehemia Mwenisongole**- Tanzania Communication Regulatory Authority (TCRA) (online) **Discussants****Abdul Hamid Makame,** Vice President Office (VPO) Tanzania **Julienne Niyonsaba –** ARCT, Burundi**Dr. Ayub Macharia –**National Environment Management Authority (Kenya)**Paul Demetry**, Ministry of Environment and Forestry (MoEF), South Sudan**Olivier Mbera** – Chairperson – EACO WG 07 Regional Steering Committee (RSC)**Michael Ocero** – Ministry of ICT (Uganda) | Highlights from the presentation and discussions* Visions and goal on implementation of the Regional e-waste Management strategy 2017- 2022.
* Status of Implementations of the strategy in the Member states noting that members are at different levels of implementations. Agreed that since the Scope is wide the implementation will continue at different pace while improving and sharing the success stories
* Legislation in countries like Kenya is taking shape. Some counties like Machakos has EPR laws. The producer/manufacturer and the importer are the key duty bearers. However, there is need to avoid over legislating.
* Discussion on challenges regarding slow pace of formulation of laws, policy, regulation; Lack of the expertise; lack of regional recycling facility and little material to feed the facility; and shortcomings of the Basel convention on transboundary movement of e-Waste
* Governments should consider allocating a budget for e-waste management in order to conduct more awareness and funding the projects.
* Collaboration of stakeholders to facilitate timely statistical Data preparation to ensure quality output. It is hard to identify who the manufacturer is.
* There are few e-waste collectors. They are not encouraged financially to invest. Licensing should therefore not be burdensome.
* Lack of infrastructure to support e-waste management. There are no facilities, while some are only proposed. There is no regional facility for e-waste management.

Proposed solutions were as follows **:*** There is a need to formulate a Regional Framework for data collection to strengthen the statistical systems for dissemination of statistics on e-waste.
* There is need of inclusion of e-waste management curriculum from low to higher levels of learning.
* Provide for standards instead of an outright ban on electronic products.
* Require a multi-agency and multi-stakeholder approach. Bring on board regulators, investors, waste handlers and producers.
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| **Session 4:**Presentation of Current Regional E-waste Management Strategy (2022– 2027) | **Olivier Mbera** - Chairperson – EACO WG 07 Regional Steering Committee (RSC) | **N/A** | Highlights from the presentation were as follows:* The strategy is for 5 years 2022-2027. The EACO Regional e-Waste Strategy has five pillars i.e.
1. Policy, Legal and Regulatory Framework;
2. Infrastructure for E-Waste Management;
3. Resource Mobilization;
4. Coordination and Institutional Alignment;
5. Capacity building, Research, Monitoring and Evaluation
* The pillars are implemented concurrently by each member states depending on the country status in regard to availability of resources.
* Challenges such as limited resources/funding for e-waste management, inadequate awareness, Limited expertise in the field of e-waste and green ICT, inadequate government support especially on legal framework, slow pace of reviewing laws on e-waste and inadequate representation of relevant stakeholders.
* Recommendations include; heightened resource mobilisation, increase budget allocations; allow for free movement of e-waste in EAC as under the precepts of the Basel Convention, and continue implementing the 2022-2027 strategy.
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| **Session 5:**Building knowledge on Legal, Policy and Regulatory Framework | **Moderator: Juma Ooro,** Communications Authority of Kenya  |  **Presenters:**1. **Abdul Hamid Makame,** Vice President Office (VPO) Tanzania

**Topic:** *The electronic waste management policy, legal, regulatory framework, and enforcement in Tanzania*1. **Dr. Anthony Mabele,** Member of Bungoma County Assembly (Kenya)

**Topic:** *Experiences in Legislation Status Implementation of Bungoma County E-Waste Management Bill 2019**in Kenya****.***1. **Derrick Khamali,** Communications Authority of Kenya

**Topic:** *Enforcing compliance to e-waste management practices*. 1. **Nasra Yusuf Hussein,** Tanzania Bureau of Standards (TBS)

**Topic:** *Standards: Tool to manage e-waste* | Highlights from the presentation were as follows:* Tanzania status of Legal, Policy and Regulatory Framework has progressed. The policy exists, the Act is also in place. But the EPR Guidelines are yet to be signed into law by the Vice President’s Office. Tanzania has enacted the Control and management if Electrical and Electronic Guidelines 2021.
* Tanzania Achievements including Improved compliance to the legal requirements; Increased number of certified e-waste dealers to 30 compared to 3 in 2016; Continuous collaboration with local and international institutions in e-waste management.
* Challenges in Tanzania includes low awareness of e-waste value and threats; Low number of certified e-waste dealers compared to the e-waste volume; and Inadequate infrastructures for e-waste management (sorting to disposal)
* Tanzania e-waste standards provides general and specific requirements on e-waste management, handling, recycling, disposal, transportation etc. The standards also provides responsibilities for different stakeholders in the e-waste value chain.
* Machakos county managed to initiate an e-waste Management law and is a great sign of progress.

 * There should be clear roles for players/stakeholders. Must provide for the role of users, role of recyclers, role of importers, role of public private partnerships, role of academia as well as role of technology in waste management.
* The law and desires of compliance with waste management are only as good as the enforcement mechanisms in place including; encouraging report of non-compliance, penalties, notice of violation, revocation of license, and prosecution.
* E-waste management regulations and challenges;
* producer do not take responsibility for their obsolete EEE
* Less attention by Learning Institutions
* EPR Gap
* Huge volumes of e-waste
* Hardship in tracing the origin of e-waste
* Recommendations to achieve effectiveness of regulations: County Governments to allocate funds and establish e-waste information hubs; National Government to establish EEE learning institutions and develop curriculum for e-waste management; Everybody has a role; Everybody assumes his/her responsibility; Operationalize the EPR
* Strategies for ensuring compliance to e-waste management by adhering to the international conventions on e-waste.
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| **Session 5**E-waste Statistics/Data, Opportunities, Challenges, and resource Mobilisation for E-waste Management  | **Moderato**r: **Sarah Njau**, Landbell Green Forest Solutions, Kenya  | 1. **Bel Garam** –- ITU

**Topic**: *Opportunity Electronic Waste Regulation*(Online) 1. **Federico Magalini**

DSS**Topic***: Is WEEE management really a challenge?Or are WE(EE) making it a challenge?*1. **Dr. Balde Kees**

UNITAR-SCYCLE **Topic:** *E-waste management in East Africa*(online) 1. **Sebastian Frisch**

Black Forest Solutions.**Topic:** *E-waste management in East Africa* (Online)  | Highlights from the presentations were as follows:* Using of Technologies and innovative solutions to support e-waste management initiatives.
* Mobilizing funds through Public Private Partnership Model which will be used to fund e-waste projects. Certain projects can be funded by ITU.
* Foreign direct investment as a source of funding management of e-waste
* Benefits of adapting PPP Models which includes enough feasibility studies conducted before implementation of the project, hence sustainability is achieved.
* Embracing and implementing Extended Producer Responsibility where by funds can be obtained to facilitate e-waste management.
* Considering the opportunities from Banking sectors for funding innovative projects which can be used in e-waste management.
* Need to instil behavioural change for the new generation in waste management from the house hold level.
* E-waste must be managed from the family level, where domestic collection and disposal is done. Development of centres for drop and pick up of e-waste
* E-waste statistics and survey: What has been done so far, there is need to handle the issue of statistics holistically; regional overview of data on e-waste management; Responsible Institutions should produce the statistics in time and have collaboration to facilitate consolidation of the data as a region.
* Feasibility study be done to e-waste projects for guaranteed sustainability.
* Use statistics to influence/facilitate policy changes, formulate legislation, to build capacity and to make a business case for e-waste handling.
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**DAY 2 (12TH MARCH 2024)**

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| **SESSION** | **PRESENTER** | **DISCUSSANTS**  | **HIGHLIGHTS FROM THE DISCUSSION** |
| **Session 6:** Extended Producer Responsibility (EPR) and circular electronics | **Moderator: Paul Demetry** Ministry of Environment and Forestry (MoEF), South Sudan | **Presenters**1. **Sarah Njau,**

(Landbell Green Forest Solutions East Africa)**Topic:** Extended Producer Responsibility and its role in WEEE management. *Does it matter*? A Case of Kenya, East Africa. **2**. **Eng.** **Phillip Apiu Majok** Ass. Director Spectrum Monitoring and Planning CA \_ S.Sudan  **Topic:** *E-waste Survey; the case of Juba South Sudan 2023*1. **Ms. Anita Hodari** (Chairperson EACO WG 07)

**Topic:** *EPR Implementation on-going project in Rwanda.* | * Kenya Sustainable Waste Management Act 2022 defines EPR.
* EPR Stakeholders include, importers and producers, users, waste handlers, PROs: Secondary stakeholders, environmental NGOs, Industry Associations, local communities.
* Mapping of the stakeholders roles (mechanism of tracking through identification of generators, type, collectors, transporters, storage and recyclers of e-waste).
* Success factors for EPR are to set clear SMART goals, provide level playing field, empower and sensitize consumers,
* Benefits to stakeholders including the country with economic benefits; regulators such as clear controllable framework; to users by reducing cost of repair; manufacturers with preferred position due to recycling potential and more incentives.

**E-waste Survey Report - South Sudan** * Objective of the Survey Report was to; obtain data on E-waste, begin with Juba and then go further with the studies, benchmark with other countries,
* Key respondents included government institutions, International NGOs, NGOs, Private Companies,
* Disposal of E-waste is majorly irresponsible. Placed in dustbins, give it to waste handlers, donate it, sell it, five it to family but majority keep them in stores or cupboards.
* Key findings include; a lot of e-waste is kept in store in the hands of the owners, there is a great risk of e-waste on human health due to irresponsible disposal; people would prefer NCA and government stakeholders to handle e-waste.
* Recommendations were; NCA to develop guidelines and policy on e-waste management; raise awareness and set up education campaigns; initiate assembly points for e-waste; and establish PPP to facilitate responsible disposal of E-waste.

**Rwanda EPR on-going project** * The EPR in Rwanda is done collaborative way where government institutions (RURA, MoE, RICA, REMA, RRA, RISA) in partnership with private sectors and focuses on three pillars i.e. legal, financial (financing models) and administrative aspects of the project.
* The stakeholders include Rwanda Utilities Regulatory Authority, RICA, Private Sector Federation, Producers, E-waste managers,
* PROs have reporting obligations to RRA and RURA; the waste handlers were encouraged to give people incentives to bring their e-waste; campaign to boost collection of e-waste; socio-community work (Muganda) for e-waste specifically;
* Effective Extended Producer Responsibility needs collaboration, active participation among stakeholders and qualified producers, and have in place multi-level collection center.
* Consider hybrid EPR model that fits the country; model has various stake holders including PRO & RICA.

*Benefits of EPR* * Producers would also start designing products that are easier to recycle, which reduces the cost and complexity of managing WEEE.
* EPR create employment opportunities in the waste management sector, particularly in the collection and recycling of WEEE
* EPR encourages:-
* Eco-design in electrical appliances that are cost-effective and minimize pollution.
* Responsible use of electronics.
* Reuse and refurbishment of electronic products
* The use of non-toxic materials and manufacturing processes.
* Challenges include: Lack of awareness among consumers about the importance of responsible e-waste management, Lack of infrastructure and capacity for e-waste management in many countries, lack of mechanisms to ensure that producers comply with the EPR regulations.

 * The key steps for effective implementation of EPR are in full coordination among environment and ICT experts, work on policies, initiatives, public awareness and innovation.
* Since learning institutions are generators of e-waste, it is recommended that there should be collaboration between them and e-waste management bodies so that there is review of the curriculum, training of trainers, become free collection centres, and encourage research and innovation in e-waste management field.
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| **Session 7:** E-waste collection/ recycling systems/ New Technology and handling techniques | **Moderator: Sarah Njau,** (Landbell Green Forest Solutions East Africa) | **Presenters**1. **Collin Craig,** (Online)

**Topic***Addressing e-waste from a criminal perspective.* 1. **Sebastian** **Frisch**

Black Forest Solution**Topic:** *Connection between e-waste and hazardous waste* 1. **Olivier Mbera**

Chairperson, EACO Regional Steering Committee**Topic:**  *E-waste Management: The case of EnviroServe Green Pack facility in Rwanda*  | **Highlights of the discussion****Addressing e-waste from a criminal perspective** * It is important to utilise international instruments in developing any law on crime. Such as the Basel Convention. Kyoto Protocol on Substances that Deplete Ozone, UN Convention against Transnational Organized Crime among others.
* The criminal aspect should also have a human rights approach to developing the criminal laws governing e-waste.
* Certain works have been done in regard to; Crimes that affect the environment, Passengers and cargo, Maritime crime, Criminal network disruption, Organized crime, Corruption, Money laundering and addressing waste trafficking.
* Criminal justice approaches help to; provide a holistic policy response to e-waste; addresses involvement of organized criminal groups; enables sanctions and general & specific deterrence; targets profitability of waste crime; seizure and confiscation; criminalization of money laundering; prevents crime and not just combating.
* Offences including waste offences, ancillary offences; issues of investigation, international cooperation, while the chapters deal with prosecution in penalties to consider; protection and assistance of witness

**E-waste and Hazardous waste** * Proposed a material flow model that can be used in African nations. It includes assessing the current recycling chain and the proposing amendments in line with legal and technical parameters.
* Must have a clear infrastructural planning to ensure that there is no harm to human health and the environment.
* Hazardous waste management includes a process chain, that allows for depollution, treatment, storage, transportation, recycling and disposal which consider Basel convention documentation/information/process to provide knowledge on how to handle different types of e-waste.
* Types of Hazardous wastes encountered in the E-waste facilities includes Mercury residues from Mining Industry, Cytotoxic waste from Hospitals etc.
* Member states are encouraged to develop homegrown solutions in tackling e-waste problems through innovation on how to extract valuable materials.

**E-waste Management: The case of EnviroServe Green Pack facility in Rwanda** * Need of facilities for repair and refurbishment; some computers were taken back to schools; as well as recycling and responsible disposal of e-waste; data protection for previous users; get data eraser licenses.
* In in a 2015 study, it is projected that currently Rwanda generates over 25,000 metric tonnes of e-waste.
* The process of collecting e-waste is through collection points in all districts of the country; Drive throughs and storage centres.
* In undertaking e-waste management, collaboration is key. Collaboration with UNEP, with international companies such as AC manufacturers; financial incentives e.g Rwf 200 for 1kg of plastic waste.
* Industry awaits implementation of the EPR which is set to start and support a streamlined process.
* Training and capacity building to comply with international conventions like Basel convention be conducted with relevant stakeholders including students, academia, and other waste handlers.
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| **Session 8**: Examining the WEEEC Centre of South Sudan/The policy, legal and institutional framework of e-waste management in South Sudan.  | **Moderator** **Derrick Khamali,** Communications Authority of Kenya | 1. **Prof. Dr. John Leju Celestino Ladu (**University of Juba, School of Environmental Studies, Managing Partner- WEEE Centre)

**Topic:** *WEEE Centre Initiative in South Sudan* 1. **David Batali**

(Ministry of Environment and Forestry).**Topic:** *Legal, Policy and Institutional Framework for Environmental Protection in South Sudan***.**Electronic Waste Management  | **Highlights of the presentations** **Case study of WEEE Centre – South Sudan** * WEEE Centre is licensed by NEMA, in agreement with Basel Convention and certified and working in collaboration with WEEEC Nairobi and ISO certified. It was legally registered in 2023.
* Implements the Best Management Practices for handling of E-waste.
* Have a zero-dumping policy. The objective is to promote development and implementation of national policies for e-waste handling; to collaborate with relevant stake holders on e-waste management; providing awareness and promoting entrepreneurship in e-waste management.
* It provides recovery, secure data destruction, recycling, and training on e-waste.
* WEEEC has various facilities including workshops, main facility, CRT Machine and stores. In certain instances, e-waste is exported to premises in Kenya for better disposal.

**Legal, Policy and Institutional Framework for Environmental Protection in South Sudan.*** The legal framework involves the Transitional Constitution of South Sudan; R-ACRSS, National Environment Policy 2015, Draft National Environment Protection Bill,
* South Sudan provides for a fundamental right to a clean and healthy environment. Provides for legal and institutional framework for policy implementation.
* Institutional; Environment Management is a decentralised role between central government, state government and local government. There is need for technical and financial support to state and local governments on matters of e-waste handling.
* Policy regulates and ensures management of waste in South Sudan, encourages private sector development in waste management, develop a holistic approach, management of electronic and hazardous waste, encourage community participation and sensitisation and public awareness.
* Challenges include lack of awareness on e-waste handling, inadequate resources, inadequate policy and legal framework to enable management, lack of data to inform policy; as well as informal waste management disposal mechanisms.
* Opportunities include job creation, awareness raising campaigns, strong coordination and collaboration and development of well-structured legal and policy framework.
* Dr. Ally Yahaya (Executive Secretary EACO) stated that South Sudan should be encouraged in its efforts. They are on the right track and the strategies proposed take time. It is good that the law is still in draft form and can be further amended to include e-waste. South Sudan should expect as much support from the other EAC Partner States.
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**DAY 3 (13TH MARCH 2024)**

| **SESSION** | **PRESENTER** | **DISCUSSANTS**  | **HIGHLIGHTS FROM THE PRESENTATION/DISCUSSIONS** |
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| **Session 10/11:** The role, opportunities, and challenges of the informal sector in e-waste managementGlobal trends in E-waste Management around the world | **Moderator**Michael Ocero (Ministry of ICT – Uganda)  | **Presenter** **Hon. Deng Akuek Kak** (Executive Director, Public Procurement and Disposal of Assets Authority- South Sudan) Ramathan Muhinga (Technical Advisor to the PPDAA) **Topic:** *The role of PPDA in E-waste management.*  | * PPDAA is a new organization that is set to start in the coming year. The PPDA was formulated and is to take shape in the FY 2024/2025.
* It was set up by the PPDA Act 2018. There are draft Regulations set to be enacted in 2024.
* There is a decentralized procurement system in the law.
* The role of PPDAA shall be undertaken in conjunction with relevant stakeholders including Ministry of Finance and Planning,
* Key decisions on handling e-waste start during the planning of the procurement process. There is need to purchase items that are going to be sustainable.
* Consider benefits to the organization and society while considering the impact on the environment.
* Procurement should look further than the lowest price. It should consider the end use or shelf life. Should opt for whole life cost instead of total cost of ownership.
* There is need for political will within the stakeholders to move towards handling e-waste sustainably.

*Challenges* * Limited budgets/resource constraints in the purchase.
* Decentralized handling of e-waste by procurement entities. The complex nature of e-waste handling may not allow for this model and instead opt for centralized handling.

*Recommendations*  * The survey on e-waste should clearly state the percentage of e-waste that is currently stored by the government entities. This shall help in ascertaining the strategy for handling of e-waste in a centralized manner.
* There should be consideration of whole life cycle for the product before procuring. This shall help in the disposal.
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| **Session 11/12**Global Trends and Their Impact on E-waste Management Around the World  | **Moderator**Michael Ocero (Ministry of ICT – Uganda) | **Presenters****Liazzat Rabbiosi** (Ozone secretariat) **Topic:** *How does the Montreal Protocol treat the e-waste issue*? **Sarah Njau,** (Landbell Green Forest Solutions East Africa)**Topic:** *E-waste management as a tool for achieving SDGs***Juma Ooro,** Communications Authority of Kenya**Topic:** *E-waste Management: Best practices**and successful case studies from around the world***Derrick Khamali,** Communications Authority of Kenya**Topic:** *Scope and Highlights on ITU-D Study Group 5* | * A lot of ozone depleting substances are used in the domestic’s appliance such as refrigerators and air conditions. They have a major impact on Ozone layer.
* There is need to protect human health by controlling the emission of gases from the said equipment.
* The RACHP (Refrigeration, air- conditioning and heat pumps) equipment.
* There is joint collaboration between importing and exporting countries. Africa is mostly an importer and therefore should make laws in line with the Kigali Amendment Guideline to facilitate phase out of high GWP refrigerants.
* Re-use, recovery, and recycling of substances should be controlled and done professionally and there after reports made.
* Destruction of e-waste is not mandated by the Montreal Protocol but is reported in the Protocol showing that it is concerned with responsible disposal.

 *Recommendations/Lessons learned* * Improve and ramp-up awareness,
* Need for regulatory measures on EPR, market quotas, institutional support and policies;
* Set up a sustainable business model for the country that shall allow business to operate while environment is protected.
* co-financing such as carbon finance and carbon credits;
* need for international cooperation

**Sustainable Development Goals and E-waste** **E-waste** interfaces with many of the SDGs and as such there is need to address SDG 3 - Good Health and Wellbeing Ending all preventable deaths under 5 yearsReduce illness and death from hazardous chemicals. A lot of these are under electronic and electrical equipment. (Ozone Depleting Substances). There is need to manage e-waste to prevent emissions harmful to human health. SDG 6 - Clean water and sanitation Dumping of e-waste (computers, phones and etc in stream); also using refrigerants that are beyond shelf life SDG 8 - Decent work and Economic Growth E-waste management promotes green jobs Support proper working mechanismsSDG 11 - Sustainable Cities & Communities. Calls for reducing the pollution in cities. Provides for green parks SGD 12 – Responsible consumption and production. This speaks to over purchasing items that are not essential. Consumption should be limited t enable less waste. One charger policy of EU; right to repair which provides for spare parts at an affordable price. SDG 13, Climate Action; SDG 14 Life Below Water; SDG 15 Life on Land all represent the essence of e-waste management which ends up in such environments to the detriment of human health and the surroundings.SDG 17- Partnerships for the goals. Looks to the international collaboration and equally collaboration between government and private entities to achieve the goals including E-waste management. **E-waste Management: Best practices and successful case studies from around the world** Provided for comparisons between EU and in Africa. These helped to provide context for how we can manage e-waste.These include high labour costs, presence of various e-waste handlers, allows for competition among the players; competition allows for innovations. Government also limit themselves to regulations, enforcement, and monitoring and do not interfere with waste handling business models. There are good e-waste handling practices. These include-pre-processing which involves manual depollution, mechanical dismantling, and separation, incineration among others. In Africa, most e-waste handling is not documented, it is made up of an informal sector. *Way forward* * Allocate funds to establish e-waste information hubs and modern management facilities.
* Establish EEE learning institutions and develop curriculum for e-waste management.
* Everyone has a role to manage e-waste
* Let everybody assume their responsibility at personal and institutional level.

**ITU -T Study Group 5** The presenter revealed the structure of ITU Study Group 5. It arises from the EACO, which consolidates the regional position. Then to ATU (Africa Telecommunications Union) which provides a Continental perspective. Thereafter comes the ITU (International Telecommunications Union) where regions can coalesce to come up with the position. All these are important to determine the direction of the telecommunication industry.  Study Group 5 is at the level of ITU and with its mandate laid out as Environment, Climate Change and Circular Economy, where E-waste falls. It includes Member States, sector members, academia and associates in ITU. This informs the strategy at EACO. The group develops standards of operation. *Purpose of developing standards* There is need for standards that are developed at the regional level. They help to drive competition at international standards; lower cost for services, reduces technical barriers, fosters interoperability; allows for manufacturers and operators to network and mostly reduce negative effects to the environment.  *Weaknesses and challenges* * No common definition of e-waste
* Illegal trafficking of e-waste
* Heterogeneous reporting requirements (differing requirements in different countries and not homogeneous)
* Speculation on compliance costs
* Lack of data more internationally comparable data
* Developing country specific criticalities
* Lack of funding
* Lack of transparent management

*Next Steps* Raise awareness; promote Public-Private-Partnerships, improve production that is eco-friendly; implement international standards; make laws to facilitate e-waste management. There is an upcoming meeting ITU Study group 5 in Poland in June 2024. Regional Group for Africa will meet in Ouagadougou Burkina Faso in May 2024.  |

1. **OBSERVATIONS AND KEY TAKE AWAYS**

The observations and key takeaways from the workshops have been summarized from the discussions and interactions on different topics on e-waste management. These are-

1. The meeting was guided by the Regional E-waste management strategy 2022 – 2027, and Member States shared the status of implementation of the document. It was evident that the document is a very crucial reference in shaping Member States in addressing the e-waste challenge through appropriate customization.
2. We explored the volumes of e-waste within our national borders and learnt that each member state has tens of tonnes of e-waste that requires appropriate disposal. The volumes are expanding exponentially as a result of rapid technological changes, increase in population, increased automation of services, change of appetite among users of electronic equipment, importation of obsolete technologies and rudimentary e-waste collection, recycling and disposal technologies.
3. We learnt that Member States have identified e-waste pollution as a major challenge and have put in place different types of legislation to address the menace. The policy and legislative framework was however felt to have many gaps and need to be strengthened. In addition, Member States agreed to embrace the e-waste Guidelines in place to help the players/actors in the area of e-waste.
4. On infrastructure to manage e-waste, all Member States reported differing levels of inadequacy. Collection systems were poor as well as inadequate recycling and poor final disposal. This is an area that requires immediate intervention to enhance e-waste reduction and recycling. It was noted that Member States **may not have adequate finances** to invest in e-waste management and hence the need to explore other innovative sustainable resource mobilization approaches.
5. Members were taken through use of **Extended Producer Responsibility models by different** Countries and noted that if embraced in the region could help inject more resources and technologies for e-waste management. Countries agreed to mainstream EPR in their legislation and require producers to take care of their products and waste arising therefrom beyond their end of life.
6. **On coordination**, members appreciated the role of EACO in bringing together member states to reflect on ways to address e-waste management. This was noted as a crucial platform to share experiences between Member States on addressing e-waste as a region. **It was resolved that these regional initiatives and collaboration among Member States should** be strengthened as the basis for solving individual Country problems on e-waste by developing synergies and knowledge sharing.
7. **Public awareness** leading to behavior change among the consumers was noted to be inadequate. It was agreed that **sensitization and awareness should be enhanced to** both private and public players to understand the importance of e-waste management to avoid pollution and degradation of the environment. The EPR schemes should be compelled to undertake awareness to inform the public on dangers of handling e-waste and appropriate collection sites and disposal methods.
8. To upscale public awareness, Member States also noted that we have not harnessed all the platforms for public awareness. The Member States agreed on the urgency to develop a Communication Strategy to aid in spreading the conversation about e-waste management e.g. via social media, local radio and TV.
9. It was also noted that there was **inadequate capacity on e-waste management** among all the value chain actors. It was agreed that the EACO should consider having a capacity building programme for players in the e-waste value chain. The EPR schemes should take up capacity building as a key component in their programmes to enhance appropriate e-waste management.
10. The meeting noted that some Member States have undertaken some basic/preliminary survey on the status of e-waste within their boundaries. The surveys were however **felt insufficient and had not yielded credible data to enhanc**e decision making. Members agreed that we cannot make meaningful progress if we do not have meaningful baseline data upon which to monitor progress of ongoing interventions. Member States agreed that baseline surveys should be enhanced and development partners should come in and assist in this priority need.
11. **CLOSING SESSION - REMARKS BY GUESTS**

**Closing Remarks by EACO Executive Secretary, Dr. Ally Yahaya Simba**

He stated that at the previous e-waste Workshop, the team had urged South Sudan to set the ground rolling. He stated that he was delighted to see that South Sudan superseded the level that was expected. They had created a National Steering Committee, had a draft National Environment Act in the offing, and had undertaken an e-waste survey. For this, he congratulated South Sudan and guaranteed that they are on the best route to curbing e-waste. He applauded the role of private sector in dealing with the e-waste.

**Closing Remarks by the Director General - National Communication Authority (NCA) South Sudan, Eng. Napoleon Adok Gai**

He thanked the participants and also appreciated his team for the work done. He expressed the need for all partners to join and support in the management of e-waste. For this, he expressed gratitude that WEEEC had begun operations in South Sudan as it had done well in Kenya.

He explained that the survey was the beginning point in the entire cycle. It was only undertaken in Juba to provide a baseline from which to start, otherwise the NCA was to conduct deeper and more comprehensive studies. He welcomed the role of the students and academia in management of e-waste as these are essential to sensitise the masses and undertake relevant public awareness campaign and capacity building sessions. The youth are the backbone of the economy and were encouraged to take up spaces in this industry.

**Closing Remarks by Under-secretary for Environment, Ministry of Environment and Forestry (MoEF) of South Sudan; Hon Joseph Africana Bartel**

He thanked the organisers of the workshop that was crucial in forming the landscape of waste handling in South Sudan. He stated that since the National Environment Bill was in the process of enactment, the views expressed shall make good basis for Regulations, Guidelines and directives to be issued by the regulatory authority to be set up by the law. The discussion provided the strategies, policies and plans to put into action.

He expressed his dismay that South Sudan had become a dumping ground for e-waste and there is a need for collaboration first with other nations and also with stakeholders such as private entities to ensure that this menace is curbed. He reminded the participants that South Sudan has a lot of resources including oil and gas, largest wetland in Africa, and also wild life, and these are areas that need to be protected from the effects of poor waste handling.

He pledged to support the national steering committee on e-waste to undertake their work in collaboration with NCA as well as international players such as EACO. The work has just begun!

1. **CONCLUSION**

The venue and dates for the next EACO e-waste awareness Workshop is proposed to be held and hosted by Kenya, March 2025

1. **APPENDICES**

Kindly, note that all appendices can be accessed from EACO’s website under workshop reports (www.eaco.int )

 **Appendix I –** Workshop Program

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**Appendix II –** List of Participants

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**Appendix III –** Opening Remarks by the Executive Secretary, EACO, Dr. Ally Yahaya Simba

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**Appendix IV** – Keynote presentation

 

**Appendix V** - Link to the presentations. <https://eaco.int/6thE-Waste/Home.html>