



The UNITED REPUBLIC OF TANZANIA
Tanzania Communications Regulatory Authority - TCRA

E-Waste Management: *Tanzania's Experience*

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EACO Meetings, 23rd – 27th May 2011

Serena Hotels in Kigali



Presentation Outline

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1.0 Introduction

- The use of ICT`s in Tanzania has been growing very fast.
- The statistics below show the rate of growth in three communications sectors namely telecommunications, broadcasting and internet service.

Table 1: Trend of growth of voice subscription in Tanzania

Measure \ Year	2000	2005	2010
Number of Fixed Network subscribers	173,591	154,420	174,511
Number of Mobile Network Subscribers	110,518	2,942,000	20,983,853



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Table 2: Growth in number of licensed Radio and Television

Measure \ Year	2000	2005	2010
Number of Licensed Radio Stations	14	41	60
Number of Licensed TV Stations	10	25	27
Estimated number of Radio Listeners	1.6 million	4 million	10-15 Millions
Estimated Number of TV Listeners	640,000	1.6 Million	4 Million



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Table 3: Number of Internet Service Licensees

Measure \ Year	2000	2005	2010
Number of Licensed Internet Service Providers (ISP`s)	11	23	68

Table 4: Number of Internet Service Subscribers

Measure \ Year	2008	2009	2010
Number of Internet subscribers	251,838	397,522	487,256

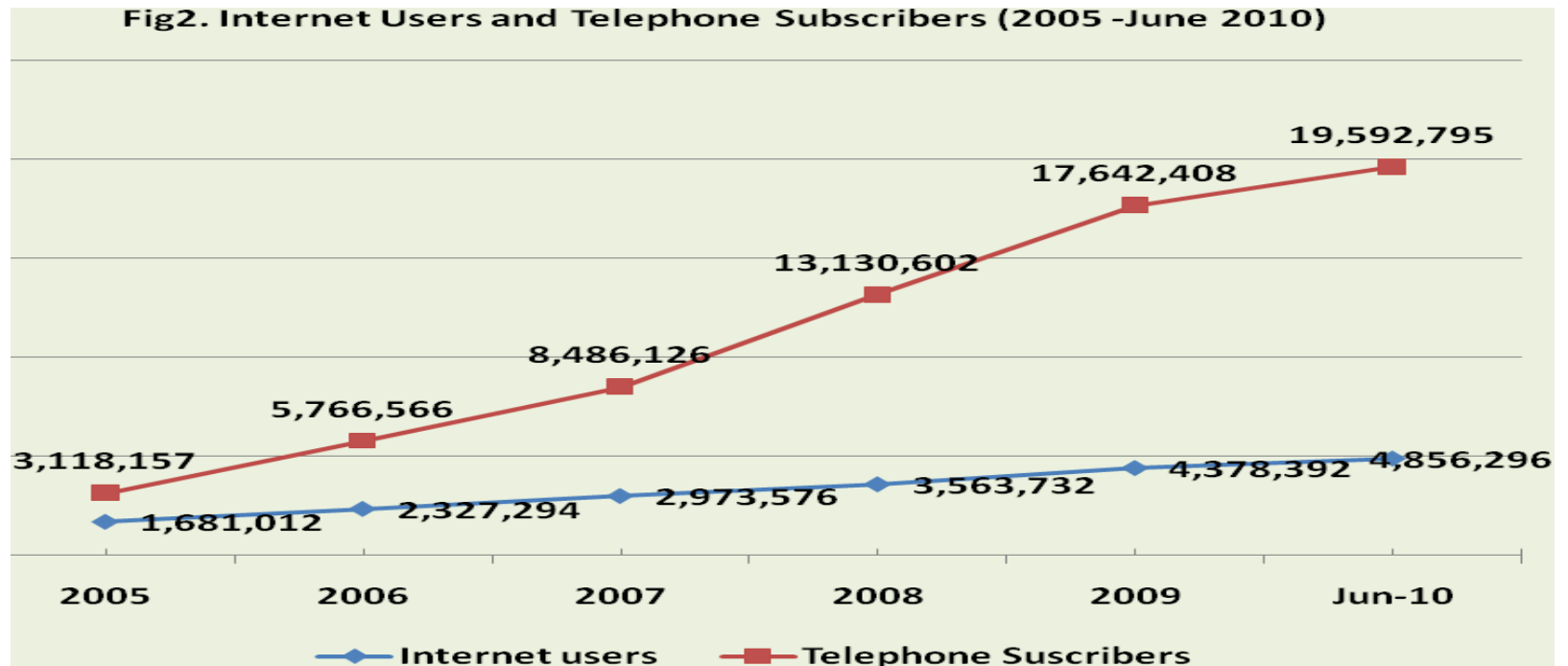
Table 5: Number of Internet users

Measure \ Year	2008	2009	2010
Number of Internet Users	3,563,732	4,378,392	4,856,296



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- Tanzania recently did a national survey on the Internet usage which resulted in the above statistics (**Tables 4 & 5**) but the full report can be accessed through the link herein below: <http://www.tcra.go.tz/publications/InternetDataSurveyScd.pdf>
- The trend in ICT usage growth in Tanzania and the region in general has been exponential as can be confirmed in Fig. 2 herein below:



27/03/2012



2. Estimates of ICT Waste in Tanzania

- The statistics presented suggest that there is massive ICT waste produced in Tanzania;
- There is no study so far to establish the amount of ICT waste produced in Tanzania but globally it is estimated that 20-50 tones of electronics waste are produced annually.
- Apart from increase of usage of ICT equipment, **e-waste** in Tanzania is partly contributed by importation of sub-standard electronics equipment.
- Lack of type approval laboratory in the country has partly contributed to this problem.



3.0 E-Waste Vs other hazardous waste

- **E-Waste** is different from other types of waste because it contains hazardous but valuable and scarce materials.
- Up to 60 elements from the periodic table of chemical elements can be found in complex electronics, e.g. a normal Cathode Ray Tube (CRT), a computer Monitor or other electronic devices contains many valuable but toxic substances such as cadmium which is used in rechargeable computer batteries and Switches in older CRT Monitors. Cadmium can bio-accumulates in environment and is extremely toxic to human in particular kidney and bones.
- This is why in our opinion it is important for the regulations to treat e-waste different from other hazardous wastes.



4.0 Available Policies and Regulations on e-waste

- The National ICT Policy 2003 does not provide for any clause on **e-waste**.
- The e-waste management in Tanzania is provided in the National Environment Act 2004 and the Environmental Management (Hazardous Waste Control and Management) Regulations of 2009 in which hazardous waste is defined as:

“any liquid, solid, gaseous or sludge wasted which by reason of its chemical reactivity, environmental or human hazardousness, its infectiousness, toxicity, explosiveness and corrosiveness is harmful to human health, life or environment”.



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- The regulations have only one clause which stipulates that electrical or electronics tools, accessories or equipment are to be separated from other type of wastes and deposited separately into receptacles.
- Finally the regulations provide the responsibility of handling hazardous waste to the local authorities.



5.0 Challenges and gaps in the Policies/Regulations

- The first gap is the way regulations have put ***e-waste*** in the same group as other hazardous non electronics waste.
- Another gap is the mandate provided to the Local Authorities to manage the waste in cities including ***e-waste*** without proper technical expertise or guidance and sometimes lack of financial capabilities.



6.0 Conclusions

- The statistics shown in **Tables 1-5** confirm that all sectors in communications service which use electronics equipment has been growing at a very high rate.
- The reasons include adoption of Converged Licensing Framework (CLF), improvement in infrastructure such as rural energy and increased awareness of the ICT's benefits in social and economical development.
- The ICT growth goes hand in hand with the increase in amount of **e-waste** produced;
- Digital Migration and fast changing in technologies pose a great threat of huge number of electronic waste to be disposed off from the users;
- Considering the common market in East Africa, the **e-waste** should be a regional agenda that needs to be tackled jointly.



7.0 Recommendations

Considering the importance of **e-waste** in the East African region it is recommended that an EACO Task Force is formed to look into **e-waste** issues with the following Terms of Reference (TORs):

- i. To study and identify drawbacks in the existing Policies and regulations in the region;*
- ii. To propose remedies of the identified gaps;*
- iii. To recommend harmonisation plan by benchmarking with **e-waste** policies and regulations within SADC, COMESA and other similar organisations;*
- iv. To report to the next EACO Regulators Assembly.*



Thank you for listening

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