

THE **Regulator**

CREATING A LEVEL PLAYING FIELD

OCTOBER-DECEMBER 2011

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Special Report

50 YEARS OF COMMUNICATIONS IN TANZANIA



Tanzania National ICT Broadband Backbone



MWONGOZO WA KUWASILISHA MALALAMIKO



**Wasilisha Malalamiko kwa Mtoa Huduma
(Kampuni ya simu, Posta, Wasafirisha
vifurushi, Televisheni, Redio, n.k)**

Endapo hujaridhika



**Wasilisha Malalamiko kwa
Mamlaka ya Mawasiliano Tanzania
(TCRA)**

Endapo hakuna suluhu katika hatua ya pili



**Kata Rufaa katika Kamati ya Malalamiko
ya Mamlaka ya Mawasiliano Tanzania**

Endapo hujaridhika na maamuzi ya Kamati ya Malalamiko



**Kata Rufaa katika Baraza la Uamuzi wa Haki
(Fair Competition Tribunal)**

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⇒ From Cover Page

Map of Tanzania showing the National Fiber Optic Cable Backbone

The Editor welcomes contributions mainly on postal, telecommunications and broadcasting issues. Contributions can be posted or transmitted by telefax to the TCRA address on page 3. E-mailed articles should be addressed to: dg@tcra.go.tz

The views expressed in the magazine are not necessarily those of the editorial board, and do not represent the official position of Tanzania Communications Regulatory Authority. The reproduction of material used in this publication is permitted as long as the source is acknowledged.

TCRA PROFILE

Background

The Tanzania Communications Regulatory Authority (TCRA) is a quasi independent Government body responsible for regulating the communications and broadcasting sectors in Tanzania. It was established under the Tanzania Communications Regulatory Act No.12 of 2003 which merged the Tanzania Communications Commission (TCC) and the Tanzania Broadcasting Commission (TBC). The Authority became operational on 1st November 2003 and effectively took over the functions of the defunct two commissions.

Vision

To be a world- class regulator creating a level playing field among communication service providers and promoting accessible and affordable services to consumers

Mission

To develop an effective and efficient communications regulatory framework, promote efficiency among the communications services providers, and protect consumer interests with an objective of contributing to socio-economic and technological development in the United Republic of Tanzania.

Core Values

Professionalism: We maintain the highest degree of professionalism and ethical standards, building value-added relationships with customers and stakeholders to deliver quality services

Respect: We are an organisation that values its employees and respects its customers

Empowerment: We believe in empowerment and effective delegation enabling employees to make decisions and take challenges commensurate with their own levels of responsibility.

Innovation: We encourage creativity and innovation leading to enhancement of our capacity in handling regulatory issues.

Integrity: We believe in integrity and we are determined to treat customers and each other with trust, confidentiality and honesty.

Accountability: We are accountable, undertaking our duties fairly, with care and transparency.

Teamwork: We benefit from teamwork, putting together diverse expertise to achieve success.

Objectivity: We undertake our activities objectively and we are result oriented

Functions of TCRA

- 1) To issue, renew and cancel licenses;
- 2) To establish standards for regulated goods and services;
- 3) To establish standards for the terms and conditions of supply of the regulated goods and services;
- 4) To regulate rates and charges;
- 5) To monitor the performance of the regulated sectors in relation to:-
 - a) Levels of investment;
 - b) Availability, quality and standards of service
 - c) The cost of services;

- 6) To facilitate the resolutions of complaints and disputes between operator vs operator and consumer vs operator;
- 7) To disseminate information about matters relevant to the functions of the Authority.

Duties of TCRA

In carrying out its functions, the Authority strives to enhance the welfare of the Tanzanian society by:-

1. Promoting effective competition and economic efficiency;
2. Protecting the interests of consumers;
3. Protecting financial viability of efficient suppliers;
4. Promoting the availability of regulated services to all consumers including low income rural and disadvantaged consumers;
5. Enhancing public knowledge, awareness and understanding of the regulated sectors including:-
 - a) The rights and obligations of consumers;
 - b) The way in which complaints may be initiated and resolved;
 - c) The duties, functions and activities of the Authority

Regulated Sectors

- 1) Telecommunications
- 2) Postal and courier services
- 3) Broadcasting

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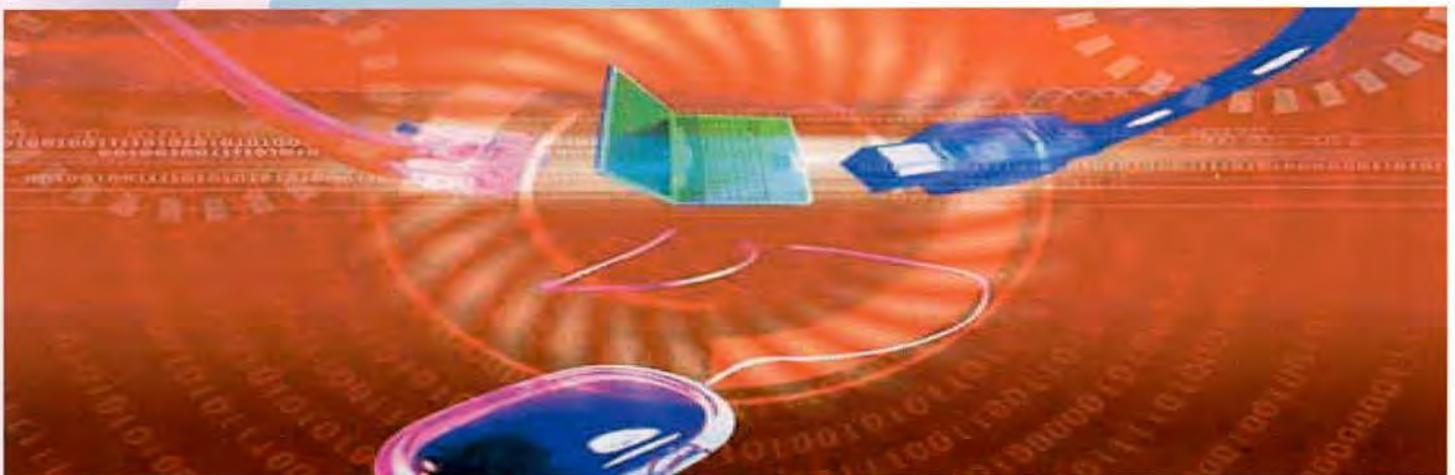
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Have We Delivered?

This edition of the Regulator is dedicated to the commemoration of 50 years of the Independence of Tanzania Mainland in 1961. A review of the growth of information and communications technologies (ICT) and their applications in Tanzania and developments in the sector in the past five decades shows exponential growth in the number of users and service providers in telecommunications, broadcasting and postal services.

Telephone service providers have increased from one in 1961 to seven in 2011. We have seen an increase in the number of radio stations from one at independence to 73 in 2011, postal service providers from one to 54 in 2011. There are 27 television stations compared to none in 1961.

Tanzania has introduced a new addresses and post code system; initially in Arusha and Dodoma where pilot projects are in place. This will not only transform the delivery of postal articles but will promote national security and the national identity system as well.

The last 50 years have witnessed the introduction of communications services that were non-existent not only in Tanzania in 1961 but elsewhere in the world. These include mobile telephony, the internet and other applications. Rapid advances in technology and Tanzania's readiness to adapt to these changes have transformed the communications landscape in Tanzania.

To take advantage of these developments, fibre optic cables have been laid to connect the country globally and within. The submarine systems known as SEACOM and EASSY landed in 2009 and 2010 respectively. The National ICT broadband backbone is currently under construction and will increase connectivity to Tanzania's eight neighbouring countries, six of which are land locked and depend on satellite connectivity.

While statistics may indicate qualitative development, they are nevertheless a pointer to the levels of usage of particular services. For example, when we report the increase of communications services providers, we re-



fect a matched increase in the users of these services.

The establishment of the sector regulator – first the Tanzania Communications Commission (TCC) and the Tanzania Broadcasting Commission (TBC) respectively in 1993, and, from 2003 – the Tanzania Communications Regulatory Authority (TCRA) is among notable achievements. Through its licensing and enforcing functions, the Authority has been able to balance the interests of the main stakeholders in the communications sector – the Government, service providers and consumers.

By enforcing rules and regulations, TCRA has been able to promote investments in the sector and to protect the rights of consumers; who now have a wider choice.

In year 2012, there are a number of challenges ahead; one being the migration from analogue to digital broadcasting, with 31st December being the switch off date. A communication campaign is underway to raise the awareness of consumers and the general public on the advantages of digital television broadcasting.

Another challenge is the implementation of the post-code system which aims at physical delivery of mail and parcels. The postcode is based on a numerical system with five digits; beginning with one to seven, corresponding to seven zones in Tanzania. For example, Karimjee Hall in Dar Es Salaam has postcode 11701.

The question is: have we delivered? We believe, we have; but shall not rest on our laurels and shall always strive to improve so as to meet our strategic goal of universal access to communications for every Tanzanian.



Prince Charles signing the visitor's book at Karimjee Hall in Dar Es Salaam when he launched the national addresses and post-code programme. Others in the picture are the Duchess of Cornwall, Camilla (seated); the Minister for Communications, Science and Technology, Professor Makame Mbarawa (standing left), the Deputy Minister Hon. Charles Kitwanga (standing right) and the Mayor of Dar Es Salaam Dr. Didas Masaburi (standing behind the high table). The Karimjee Hall post code is 11701.

50 Years of Communications Sector growth in Tanzania

TANZANIA celebrates 50 years of the Independence of Tanzania Mainland on 9 December 2011 with a record of progress and achievements in the communications sector in terms of infrastructure, services, applications and robust regulatory framework. A foundation has been laid to witness further progress, especially in internet utilization and broadband, digital broadcasting and postcode. INNOCENT MUNGY reports.

AS Tanzania marks 50 years anniversary of its independence on 9th December 2011, the communications sector has been growing fast, leading to the growth of the economy of the country. A major milestone on the road to communications development was the establishment of the Tanzania Communications Regulatory Authority (TCRA) in 2003.

The Authority is an autonomous government agency established by the Act No. 12 of 2003 as an independent authority for regulating and licensing of postal, broadcasting and electronic communications in the country. This Act led to the merging of the Tanzania Communications Commission (TCC), with the then

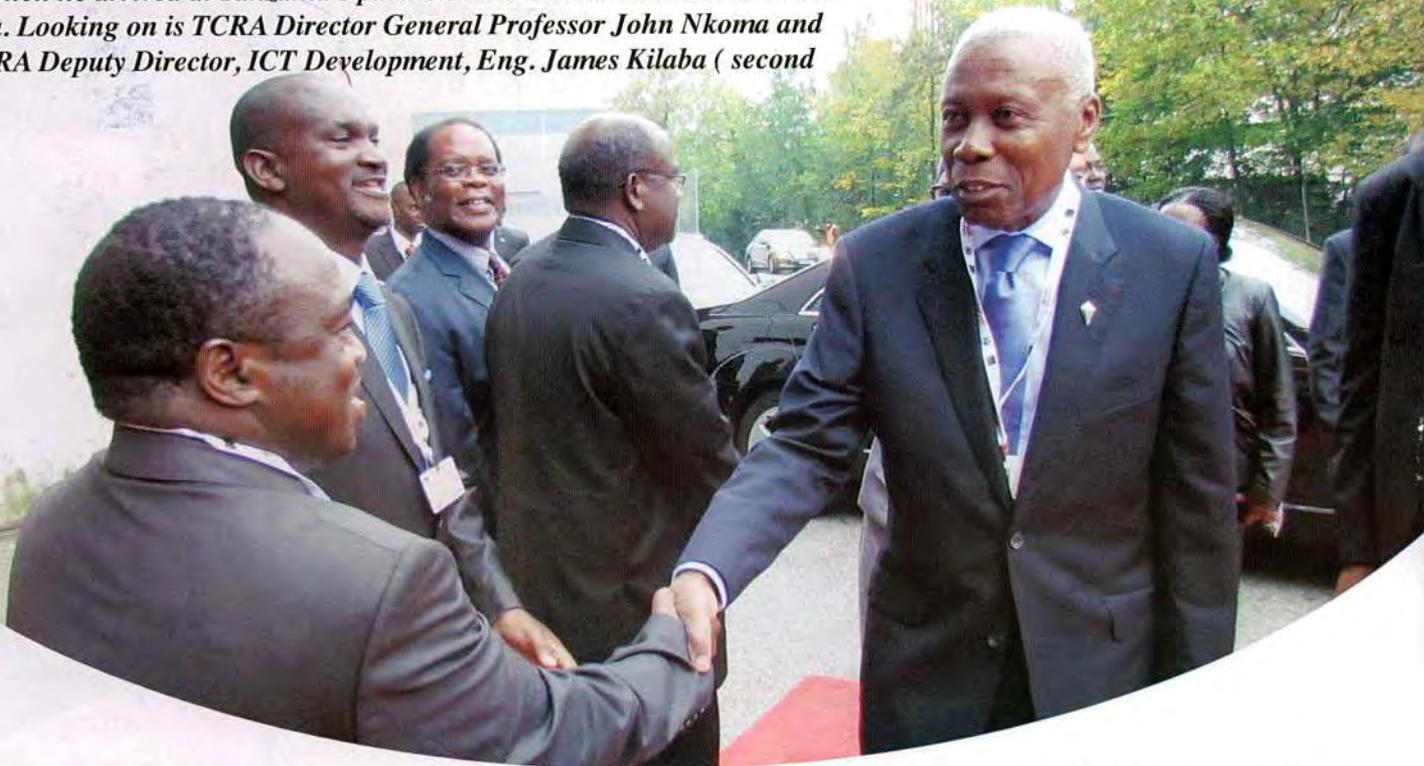
Tanzania Broadcasting Commission (TBC) to form TCRA.

The establishment of TCRA marked a new era for the communications sector in Tanzania that has been characterized by growth in investments and operations. TCRA is mandated to promote effective competition and electronic efficiency, protect consumer interests, grant and enforce license conditions, regulate tariffs and monitor performance.

The Authority is mandated to create awareness and understanding of the regulated sectors, the rights and obligations of consumers and regulated suppliers, the way in which complaints and disputes may be initiated and resolved, the duties, functions and activities of the authority; taking into account the need to protect and preserve the environment.

TCRA's vision is **"to be a world-class communications regulator creating a level playing field among communication service providers, and promoting environmentally friendly, accessible and affordable services to consumers"**. The mission is

The Vice President, Dr. Mohammed Gharib Bilal shaking hands with the TCRA Director of Consumer and Industry Affairs, Dr. Raynold Mfungahema when he arrived at Tanzania's pavilion in ITU telecom World 2011 in Geneva. Looking on is TCRA Director General Professor John Nkoma and the TCRA Deputy Director, ICT Development, Eng. James Kilaba (second left).



“to develop an effective and efficient communications regulatory framework, promote efficiency among the communications services providers and protect consumer interests with an objective of contributing to socio-economic and technological development in the United Republic of Tanzania”.

TCRA’s strategic goal is “To enhance the welfare of Tanzanians through effective and efficient regulatory framework that ensures universal communications”

The Telecommunication sector has grown from a single telephone company between 1961 and 1993 to seven mobile operators with a total subscriber base of 22,000,000 as of June 2011 compared to 230,000 in 1993. Apart from this growth, the penetration has also been demonstrated by the combined efforts between the government and other stakeholders including TCRA to continue facilitation in opening up telecentres in Tanzania.

One of TCRA’s major achievements is the introduction of the Converged Licensing Framework (CLF) in 2005 immediately after the end of the exclusivity of TTCL in February 2005. The CLF consists of four licenses: Network Facilities Licence (NFL), network service licence (NSL), Applications Services Licence (ASL) and Content Service Licence. The CLF is characterized by Technology Neutrality and service Neutrality.

TCRA has managed to increase the overall number of licensed communications operators from 5 in 2003 to 62 in 2009. Most of these were issued under the CLF.

The penetration of Information Communication Technology in Tanzania is demonstrated by the phenomenon increase in tele-density (number of line per 100 persons) from 15% in May 2006 to 50% in 2011.

The fixed line subscriber base has been eroded by the mobile market. Fixed line subscriber number increased from 151,644

in 2005 to 174,511 in 2011. The number of mobile cellular increased from 5.6 million to 20.9 million. There are two fixed line operators (TTCL and Zantel) and seven mobile operators (Airtel, Tigo, Vodacom, Zantel, TTCL, Sasatel and BOI).

With all these developments, it was inevitable to repeal the Broadcasting Services Act of 1993 and Tanzania Communications Act of 1993; to have one comprehensive legislation, the Electronic and Postal Communications Act (EPOCA). It was passed by Parliament in January 2010, assented by the President in April 2010 and operationalized by the Minister responsible for communications on 18th June 2010.

The new Act composed amendments and new areas, issues that were carried forth with amendments on licensing, interconnection and access, postal communications, content regulation, anti-competitive practices and content numbering resources and technical standards.

Other areas of EPOCA include, postal code, digital broadcasting, and central equipment identification register (CEIR), Computer Emergence Response Team (CERT) and SIM registration.

There are also other sections covering enforcement, offenses and penalties, miscellaneous provisions, transition provisions, regulatory forbearance and consequential amendments.

There have been a number of other significant achievements in the ICT sector in Tanzania. These include the growing internet connectivity and establishment of the internet exchange points (IXPs) in Dar es Salaam, Arusha, Mwanza and Dodoma. Alongside IXPs is the establishment of the Tanzania Network Information Centre (tzNIC) to manage the country’s top level domain (dot-tzcc TLD).

All these efforts address the connectivity targets set in the plan of action adopted at the World Summit on Information Society (WSIS) in 2003 and 2005. Tanzania was recently awarded by the International Telecommunication Union (ITU) for achieving WSIS goals.



The Minister for Communications, Science and Technology, Professor Makame Mbarawa (standing centre) briefs the Vice President, Dr. Mohammed Gharib Bilal at Tanzania's pavilion in ITU telecom World 2011 in Geneva.

TCRA Participates in Independence Exhibitions

(Eng. Oscar A. Mwanjesa)

AS a prelude to the culmination of nationwide celebrations to mark 50 years of the independence of Tanzania Mainland, the Tanzania Communications Regulatory Authority participated in a weeklong public exhibition at Mnazimmoja Grounds in Dar Es Salaam.

The exhibition, under the umbrella of the Ministry of Communications, Science and Technology was intended to showcase to the public the fruits and overall achievements in the ICT and postal sectors from 1961 to 2011.

Being the communications regulator, TCRA exhibited, among others, briefing documents outlining its role and functions, the Converged Licencing Framework (CLF), Licencing Procedurers for various licence categories, licence applications, the migration from Analogue to Digital Terrestrial Television Broadcasting (DVB-T), the Electronic and Postal Communications Act (EPOCA) of 2010 and overall legislation applied by the authority.

Information was also provided on the Management of radio frequency spectrum resource, Radio frequency al-

locations and assignment, Radio/Television broadcasting stations, postal codes, quality of service, mitigation of radio frequency interference and electromagnetic radiation, consumer rights and obligations, complaint handling mechanisms and overall dispute resolution.

Visitors interacted directly with TCRA pavillion staff and were enlightened on the positive development so far achieve in various areas of the sector. They were able to learn how the legal and regulatory framework adopted by the government in 1993 works.

This, coupled with the availability of a transparent and investor friendly environment has made it possible for Tanzania to leapfrog in the current age of modern infocommunication technologies, thereby facilitating the penetration of affordable and reliable services to rural and remote areas.

TCRA also participated in a simillar event held at the Mwalimu Nyerere International Trade Fair Grounds, Mtoni Dar es Salaam from 1st December to 10th December 2011.

THE postal sector plays a great role in connecting people through the physical postal network. Postal Services are an important part of the information society as they help not only to provide links to the less densely populated areas but their networks and logistics can be utilized for the introduction of new information and communications technologies (ICT's) applications.

Postal services have been a vehicle for the transmission and exchange of written documents and parcels throughout history bringing together innovative ideas among Tanzanians, linking them to other nations of the world.

World Post Day is celebrated on 9th October every year to commemorate the establishment of the Universal Postal Union (UPU) on 9th October, 1874 in Bern, Switzerland.

With 192 members, the UPU has the responsibility of coordinating the provision of postal services in the world. This year, Tanzania joined other countries in the world to commemorate the world post day under the theme "The Post, an invaluable service worldwide", and as part of celebrating 50 years of the provision of postal services in Tanzania (1921–2011). The celebrations commenced on 6th October and climaxed on 9th October at the Mlimani conference center in Dar es Salaam.

Local celebrations included an exhibition by postal services providers and a workshop. In his welcoming remarks to the workshop, TCRA Director General, Prof. John Nkoma expressed the need for providers of postal products and services to increase awareness to users. He underscored the importance of postal services to the economic development of the Tanzania.

He said that the Government depended much on postal services for transmission of important documents and parcels. Without the post, the functioning of various institutions like, for example, banks; courts and others would be very difficult. He reminded the participants to consider the past, present and future of postal services with great importance.

The workshop was opened by the Minister for Education and Vocational Training, Dr. Shukuru Kawambwa who emphasized the interest of the government to ensure universal services were available to all and at affordable prices as this was in line with the Millennium Development Goals and Tanzania's Vision 2025.

He recalled the legal and policy reforms that took place in the postal sector after the collapse of East Africa Community in 1977 and later communications sector reform in 1993, which transformed Tanzania Posts and Telecommunications Corporation (TP&TC) into Tanzania Posts Corporation and the Tanzania Telecommunications Company Limited. The reforms led to the establishment of the Tanzania Communication Commission.

Dr Kawambwa recalled that the objectives of communication sector reforms included regulation of the sector, equal opportunity in employment, liberalization, provision of universal postal services by TPC. The Postal Policy was issued in 2003; one of its objectives being establishment of a post code and addressing system. A project has been initiated by the Ministry of Communications, Science and Technology and is coordinated by TCRA



A letter box in Pemba

in consultation with other stakeholders, TPC and other government institutions.

Among workshop participants were the Secretary General of Pan African Postal Union Madam Rodah Masaviru, former UPU Director of Technology Mr. Suleiman Msofe and former Postmaster General Mr. Lucian Minde.

A total of 78 participants who attended the workshop were from Government departments and Institutions, TPC and Courier operators. Presentations made based on the theme highlighted postal sector development since independence in 1961.

The exhibitions which ran parallel to the workshop were designed to raise public awareness on the postal sector and services and products offered by the Regulator and licenced postal operators.

Postal stakeholders who exhibited their services included TCRA, TPC, DHL Tanzania Ltd, Sangare Ltd (an agent of UPS), Diamond Express Ltd (an agent of TNT World Wide Express), City Delivery Services Ltd (CDS), Your Way Courier Ltd, Next Courier and Gateway Global Freight Co. Ltd.

Every year, TPC organizes a letter writing competition and winners are awarded on World Post Day. During the event, Venus Ridhwani a student from Al Muntazir Girls Primary School in Dar es Salaam was awarded for being the first winner of the competition.

The competition was conceived in 1969 and started in 1971. Since then about 15 million youth under the age of 18 have been participating worldwide.

Each country is required to organize a local competition and the letter of the first winner in the respective countries is forwarded to Bern, Switzerland to compete with other students around the world in order to get the first three winners internationally.

Kiswahili Supplement

Miaka 50 ya Mawasiliano Tanzania

MAWASILIANO WAKATI WA UKOLONI 1893-1961

POSTA NA SIMU

Wakati wa ukoloni shughuli za posta na za simu zilikuwa zikisimamiwa, kuratibiwa na kudhibitiwa kama sekta.

Huduma ya Posta na telegrafu zilianzishwa 1893 wakati huo Tanganyika ikiwa koloni la Wajerumani la Afrika Mashariki lililolijumuisha Tanganyika, Rwanda na Burundi. Ni kipindi hiki pia Zanzibar ilikuwa koloni la Kiingereza na huduma za posta zilianzishwa.

Baada ya Vita vya kwanza vya dunia, huduma za Posta na Simu zilikuwa chini ya Idara ya Posta na Simu ya serikali ya kikoloni ya Kiingereza nchini Tanganyika. Wakati huo, Rwanda na Burundi ziliwekwa chini ya Serikali ya ukoloni wa Ubelgiji.

Benki ya Posta iliundwa 1927 na kuwekwa chini ya uendeshaji wa Mkurugenzi wa Posta na Simu kwa niaba ya Hazina ya Serikali Kuu. Ilipofika 1933 Idara za Posta na Simu za nchi tatu (Kenya, Uganda na Tanganyika) ziliungana na kuwa idara moja chini ya mamlaka ya Postamasta Mkuu ambayo iliitwa East Africa Telecommunications Administration chini ya East Africa High Commission (EAHC), makao yake makuu yakiwa Nairobi, Kenya. Wakati huohuo, kila nchi ilikuwa na Mkurugenzi wake aliyewajibika kwa Postamasta Mkuu, kupitia kwa Katibu Mkuu (Chief Secretary) wa nchi husika.

Kipindi cha mwishoni mwa miaka ya 1940 posta na simu ilikuwa ni chombo kikuu cha mawasiliano na ilikuwa na ofisi 145 ambazo zilikuwa zinatoa huduma sehemu kubwa ya nchi. Miongoni mwa hizo, kulikuwa na ofisi za Posta za treni (Train Post Office-TPO) ambazo ni Dar es Salaam – TPO, Tabora – Kigoma – TPO, Tabora – Mwanza – TPO na Kilimanjaro (Tanga-Moshi-Arusha)

Huduma hizi za TPO zilikuwa zinatolewa na wafanyakazi wa posta ambao walikuwa wamepata mafunzo muhimu kwa kutoa huduma kwa raia kwenye vituo vya treni, yaani stesheni. Lakini huduma hii ilisitishwa miaka ya 1950 hivi kwa sababu za kiuchumi.

UTANGAZAJI

Utangazaji ulianza Tanganyika mwanzoni mwa mwaka 1951, kama mradi wa stesheni ya majaribio ya redio ya masafa mafupi (shortwave) ambayo ilikuwa inasikika Dar es Salaam pekee. Stesheni hii ilijulikana kama, “Sauti ya Dar es Salaam”.

MAWASILIANO BAADA YA UHURU 1961-1993

POSTA NA SIMU

Baada ya Tanganyika kupata uhuru 9 Desemba 1961, E.A.H.C ikabadilishwa na kuwa E.A Common Services Organisation (EACO), ambapo huduma za Posta zilikuwa chini ya E.A. Posts & Telecoms Administration. Hata hivyo huduma za posta hazikubadilika. Ilipofika 1967 baada ya nchi zote za Afrika mashariki kupata uhuru kukaundwa Umoja wa nchi hizi. Ndipo ikaanzishwa E.A. Posts & Telecoms Corporation, ambayo shughuli zake zilikuwa ni zile zile na ilikuwa inajitegemea kifedha; na hivyo huduma za posta zikawa kibiashara zaidi badala ya kutoa huduma kwa jamii. Makao makuu ya E.A. P&T Corp. yaliamishiwa Kampala, Uganda. Pia huduma za posta za Tanganyika na Zanzibar ziliungana.

Tarehe 27.10.1977 Shirika la Posta na Simu Tanzania (Tanzania Posts and Telecommunication Corporation-TPTC) liliundwa ili kuchukua nafasi ya East African Posts&Telecommunications Corporation ambayo ilivunjika kwa sababu ya kuvunjika kwa Umoja wa nchi za Africa Mashariki.

UTANGAZAJI

Kwa upande wa Sekta ya Utangazaji, Tanzania imepitia historia ndefu baada ya kujipatia uhuru 1961.

Mwaka 1961 Shirika la Utangazaji Tanganyika (Tanganyika Broadcasting Corporation-TBC) lilianzishwa. Julai 1, 1965 Shirika hili lilibadilishwa jina na kuwa Radio Tanzania Dar es Salaam (RTD) ikiwa ni Idara ya Serikali na kuwajibika moja kwa moja kwa Wizara ya Habari, Utangazaji na Utalii. RTD ilihusika kikamilifu katika kusaidia harakati za ukombozi Kusini mwa Afrika, kupasha habari wananchi wa Zimbabwe, Msumbiji, Namibia, Angola, na Afrika Kusini wakati wa harakati zao za ukombozi. Wakati wa Vita

vya Kagera, RTD ilitoa mchango mkubwa kuhamasisha wananchi.

INTANET NA KOMPYUTA

Kompyuta ya kwanza kabisa Tanzania (ikijulikana kama ICL 1500) ilimilikiwa na Wizara ya Fedha mnamo 1965. Idadi ya kompyuta iliongezeka taratibu ambapo hadi kufikia 1974 kulikuwa na jumla ya kompyuta saba (7) nchini. Kompyuta hizi ni zile za kwanza kabisa katika historia ya kompyuta (first generation computers). Wakati huo, mwaka 1974, Wizara ya Fedha ilikuwa imeshaongeza kompyuta nyingine mpya ikiwa ni aina ya ICL 1900. Lengo kuu la mwanzo la kuingizwa kwa kompyuta nchini ni ili kurahisisha baadhi ya huduma ya ki-serikali hasa zile zinazohusu maswala ya kifedha.

Ni vyema kutambua kwamba kuingia huku kwa kompyuta kulizongwa na matatizo, ambapo kila komputa iliyoingizwa haikuweza kutimiza malengo yaliyokuwa yanatazamiwa na serikali. Matatizo haya kwa kiasi kikubwa yalisababishwa na ukosefu wa wataalamu wa kitanzania pamoja na ukosefu wa mipango bora. Sababu hizi zilifanya mradi huo wa serikali kushindwa kuendelea.

Idadi ya kompyuta ilianza tena kukua baada ya uvumbuzi na kuanza kutumika kwa kompyuta za kisasa aina ya "microcomputers" kati ya miaka ya 1974 na 1980. Hadi kufikia mwaka 1980 ni makampuni mawili tu yaliyokuwa yanaingiza na kuuza kompyuta na vifaa vya kompyuta nchini. Makampuni hayo yalikuwa ni NCR na ICL.

Intaneti

Huduma za intaneti nchini zilianza mwanzoni mwa miaka ya 1990. Intaneti ilianza kwa kutolewa kwa huduma za mwanzo za msingi za kutunza na kupeleka barua pepe (basic store and forward electronic mail facility) kupitia miunganiko ya kwenye mtandao uliojulikana kama "Healthnet". Taasisi za mwanzo kabisa kuunganishwa kwenye huduma hizi za intaneti zilikuwa ni Chuo Kikuu cha Sayansi Tiba (Muhimbili), Tume ya Sayansi na Technolojia (COSTECH) na Chuo Kikuu cha Dar es salaam.

Makampuni ya mwanzo kutoa huduma za intaneti za kibiashara (Commercial Internet Service Providers – ISPs) yalikuwa mawili, nayo ni Tanzania Online na Cyber Twiga mwaka 1997. Makampuni haya yaliweza kutoa huduma zao kupitia kuunganishwa na mtandao wa SITA (Society Internationale de Telecommunications Aeronautique). Hadi kufikia mwaka 2000, huduma za intaneti zilipatikana kutoka kwa makampuni 14. Ukuaji huu wa makampuni ya kutoa huduma za intaneti ulisababishwa na mabadiliko ya kisera katika sekta ya mawasiliano, ambapo 1993, bunge la Tanzania lilipitisha sheria ya kuanzishwa kwa Tume ya Mawasiliano Tanzania (TCC). Sheria hiyo ilijulikana kama "Tanzania Communications Act No. 18, 1993". Mara baada ya kuanzishwa kwa Tume ya Mawasiliano, kulitolewa leseni kwa makampuni mapya ili kuongeza upatikanaji wa huduma ya intaneti kwa urahisi na kwa gharama nafuu; vile vile kuwezesha upatikanaji wa huduma mpya za kiushindani ili kuweza kushindana na Kampuni ya Simu (TTCL) ambayo kwa muda huo ilikuwa na ukiritimba (monopoly) nchini.

Katika huduma za data (Data services), kampuni ya Datel ilipewa leseni. Datel ilikuwa ni kampuni ya Ushirika kati ya Kampuni ya Simu Tanzania (TTCL) na kampuni ya kifaransa iliyokuwa ikijulikana kama Nexus. Makampuni mengine yaliyopewa leseni za data ni pamoja na SITA na Wilken Afsat. Haya makampuni yalitarajiwa kurahisisha uunganishwaji kwenye mtandao wa kompyuta kwa eneo kubwa nchini Tanzania (wide area computer networking).

Utoaji wa huduma za intaneti katika miaka ya 1993 hadi 1996

ulionekana kama ni huduma za ongezeko la thamani (Value Added Services). Kwa maana hiyo, makampuni ya utoaji wa huduma za intaneti (ISPs) yalikuwa yanaweza kuuza huduma hizi za intaneti ili mradi tu zilikuwa zimepata kuunganishwa kwenye mitandao ya makampuni matatu (3) ya data, yaani Datel, SITA na Wilken Afsat.

Mwaka 1996, Datel iliwezesha huduma za intaneti kupatikana kupitia mitandao ya setelaiti (satellite) itumiayo teknolojia ya V-SAT (Very Small Aperture Satellite Terminal) kupitia Ufaransa. Hadi kufikia 1997, kulikuwa na idadi kubwa ya taasisi ya serikali na zisizo za kiserikali (NGOs), pamoja na taasisi na makampuni binafsi (zikiwemo "Internet Cafes") zilizokuwa zimeunganishwa kwenye intaneti hasa jijini Dar es salaam. Chuo kikuu cha Dar es salaam, kwa mfano, mnamo mwaka 1997, kilikuwa na "V-SAT link" ambayo ilikuwa na madhumuni ya matumizi ya taasisi pekee, ingawa idadi ndogo ya huduma za kibiashara ilitolewa.

Ingawa kulikuwa na ongezeko la watoa huduma za intaneti wa kibiashara na za umma (Commercial & Public ISPs), matumizi ya intaneti yalikuwa si makubwa katika jamii ya watanzania ikilinganishwa nchi za jirani kama Kenya na Uganda. Pengine hii ilichangiwa na uelewa mdogo wa watu juu ya intaneti na vile vile gharama zilizokuwa zinaambatana na upatikanaji wa huduma yenyewe.

Hata hivyo, serikali kupitia Mamlaka ya Mawasiliano Tanzania (TCRA), imekuwa ikiboresha mazingira kisera na kiudhibiti (Policy and Regulatory Reforms) ili kuwezesha ukuaji zaidi wa huduma kwa wananchi. Kwa mfano, ili kuendana na mabadiliko ya ki-teknolojia ulimwenguni, TCRA ilibadilisha mfumo wa utoaji wa leseni kutoka mfumo wa zamani na kuleta mfumo mpya ujulikanao kama "Converged Licensing Framework" mwaka 2005.

Mabadiliko haya yamefanya kutolewa kwa leseni nyingi kwa watoa huduma za intaneti na kupanua wigo wa huduma zinazotolewa na watoa huduma hawa usiofungamana na teknolojia maalum (technology and service neutrality).

Leo hii huduma za intaneti zimekuwa kwa kiasi cha kuridhisha na idadi ya watumiaji wa intaneti imeongezeka kwa kasi. Kumekuwa na watoa huduma ya intaneti wengi na hata makampuni ya simu za mikononi nayo yamekuwa yakitoka huduma hizi baada ya TCRA kubadilisha mfumo wa leseni.

Hii leo kuna jumla ya ISPs (Application Service Licensees) wapatao 81. Vile vile ili kujenga mazingira bora ya upatikanaji wa huduma hizi TCRA imeweza kujenga vituo vya kujiunga kwenye intaneti nchini (Internet Exchange points) katika miji ya Dar es salaam, Mbeya, Mwanza, Dodoma na Arusha. Vile vile kimeundwa chombo cha kusimamia "Domain name management" kijulikanacho kama tz-NIC (Tanzania Network Information Centre).

MABADILIKO KATIKA MUUNDO WA UDHIBITI WA MAWASILIANO 1961-2011

Wakati wa ukoloni

Udhibiti wa masuala ya Mawasiliano wakati wa ukoloni ulifanywa na Ujerumani na wa Uingereza, nchi ambazo zilikuwa zikitawala Tanganyika na Zanzibar. Wakati huo Posta na Simu zilikuwa zikiendeshwa kama idara za serikali. Sera, udhibiti na utoaji wa huduma vyote vilifanywa na Serikali kuu.

Baada ya Uhuru (1961-1993)

Baada ya Uhuru, udhibiti wa huduma za posta na simu uliendelea kuendeshwa kama idara ya serikali hadi mwaka 1967, ambapo shirika la Posta na Simu la Afrika Mashariki (East Africa Posts and Telecommunications Corporation) liliundwa. Kuanzia hapo Posta

na Simu zilianza kuendeshwa kibiashara zaidi na bila kutegemea fedha kutoka hazina. Shirika hilo lilivunjika mwaka 1977 baada ya kuvunjika kwa umoja wa nchi za Afrika Mashariki.

Mwaka 1977 shirika la Posta na Simu Tanzania likaundwa ambapo udhibiti wa masuala ya posta na simu ulifanywa na wizara mbalimbali zilizohusika na masuala ya Posta na Simu.

Udhibiti katika sekta ya utangazaji wakati Tanzania inapata uhuru uliendelea kuwa chini ya idara za serikali na kituo cha radio kiliendelea kuwa idara ya serikali. Sekta ya Utangazaji ilikuwa ikisimamiwa na maelekezo ya serikali moja kwa moja hadi mwaka 1993.

Mabadiliko ya sera za kiuchumi

Kama ilivyokuwa ulimwenguni kote mabadiliko mengi ya sera za kiuchumi yalitokea mwishoni mwa miaka ya 1980 na mwanzoni mwa miaka ya 1990.

Mabadiliko haya kimsingi yalitenganisha majukumu na namna ya kusimamia, kuratibu, kudhibiti na kuendesha shughuli za sekta mbalimbali zikiwemo sekta za Posta, Simu na Utangazaji. Shughuli hizo zilitakiwa kuendeshwa kibiashara, sekta binafsi iliruhusiwa kutoa huduma hizo kwa ushindani ili kuwanufaisha watumiaji. Taasisi maalum za kudhibiti sekta mbalimbali zilianzishwa.

Kuanzishwa Kwa Mamlaka ya Mawasiliano Tanzania

Mamlaka ya Mawasiliano Tanzania (Tanzania Communications Regulatory Authority) ilianzishwa na Sheria ya Mamlaka ya Mawasiliano (the Tanzania Communications Regulatory Authority Act, Cap. 172) ya mwaka 2003. Mamlaka hiyo imeanza rasmi mnamo tarehe 1 Novemba 2003.

Mamlaka hii ilianzishwa kwa kuunganisha iliyokuwa Tume ya Utangazaji (Tanzania Broadcasting Commission – TBC) na iliyokuwa Tume ya Mawasiliano (Tanzania Communications Commission – TCC). Mamlaka ilirithi na inaendeleza kazi zote za TBC na TCC.

MAJUKUMU NA MALENGO YA MAMLAKA

Majukumu ya Mamlaka ya Mawasiliano yanaainishwa katika Sheria iliyoanzisha Mamlaka hiyo. Vifungu vya 5 na 6 vya Sheria ya Mamlaka ya Mawasiliano (Tanzania Communications Regulatory Authority Act, Cap. 306) vinaainisha majukumu hayo kuwa ni:-

- Kusimamia ushindani wa haki katika utoaji wa huduma za mawasiliano
- Kulinda/kuwianisha maslahi ya watoa na watumiaji wa huduma za mawasiliano
- Kuhakikisha uwepo wa huduma bora za mawasiliano na upatikanaji wake kwa gharama nafuu
- Kuhamasisha uelewa wa haki na wajibu kwa watumiaji wa huduma za mawasiliano ikiwa ni pamoja na:
 - Haki na wajibu wa watoa na watumiaji wa huduma za mawasiliano;
 - Namna ya kuwasilisha na kutatua migogoro baina ya watoa na watumiaji wa huduma za mawasiliano na;
 - Kazi za Mamlaka ya Mawasiliano;
 - Kutoa na/au kufuta leseni za watoa huduma za mawasiliano;
 - Kuweka viwango (Standards) na masharti ya kutekelezwa na watoa huduma za mawasiliano;
 - Kutengeneza na kusimamia taratibu za utoaji wa huduma za mawasiliano;
 - Kusimamia ubora, gharama, ugawaji na upatikanaji wa huduma za mawasiliano;
 - Kutatua migogoro ya watoa na watumiaji wa huduma za mawasiliano, na;

Kusimamia utekelezaji wa Sheria ya Mamlaka ya Mawasiliano.

UONGOZI NA UTAWALA 1961-2011

Wafanyakazi Waasisi wa Mamlaka ya Mawasiliano

Utekelezaji wa majukumu ya Mamlaka ya Mawasiliano unasimamiwa na Bodi ya Wakurugenzi yenye Wajumbe saba (7) inayoundwa chini ya kifungu cha saba (Section 7) cha sheria iliyounda Mamlaka hiyo.

Mwaka 2003 Serikali ilianzisha Mamlaka ya Mawasiliano Tanzania (TCRA) kwa kuunganisha Tume ya Mawasiliano na Tume ya Utangazaji. Mamlaka hii pamoja na mambo mengine ilichukua majukumu ya tume hizi mbili na inasimamiwa na Bodi ya Wakurugenzi inayoongozwa na mwenyekiti na makamu mwenyekiti wanaoteuliwa na Rais na wajumbe wengine watano wanaoteuliwa na waziri mwenyedhamana ya mawasiliano. Bodi ya kwanza ya Mamlaka ya Mawasiliano iliundwa na wajumbe wafuatao:

- Balozi Richard Mariki, Mwenyekiti
- Hajjat Amina Said Mrisho, Makamu Mwenyekiti
- Professor, John Nkoma (Mkurugenzi Mkuu), Mjumbe
- Eng. Baruan Luhanga, Mjumbe
- Dr. Suleiman Omar (marehemu), Mjumbe
- Dr. Batilda Burian, Mjumbe
- Ms. Anita Ngowi (marehemu), mjumbe

Balozi Mariki alioongoza bodi hii kuanzia Novemba 2003 mpaka **Aprili 2008**. Kuanzia mwezi **Juni 2008** shughuli za Mamlaka zina simamiwa na bodi yenye wajumbe wafuatao kwa sasa:

- Judge (Rtd) Buxton Chipeta, Mwenyekiti
- Dr. Vuai Iddi Lila, Mjumbe, Makamu mwenyekiti
- Professor John Nkoma (Mkurugenzi Mkuu), Mjumbe
- Eng. Baruan Luhanga, Mjumbe
- Dr. Justinian Anatory, Mjumbe
- Mh. Peter Serukamba, Mjumbe (amemaliza muda wake)

Utendaji wa kila siku (day to day activities) wa Mamlaka uko chini ya Menejimenti ya Mamlaka ikiongozwa na Mkurugenzi Mkuu na Wakuu wa Idara na Wafanyakazi wengine (kwa mujibu wa kifungu cha 13) cha sheria iliyounda Mamlaka)

Wafanyakazi Waasisi wa Mamlaka ya Mawasiliano walikuwa ni wale waliokuwa wafanyakazi wa Tume ya Utangazaji na Tume ya Mawasiliano. Kwa mujibu wa Sheria iliyoanzisha Mamlaka ya Mawasiliano (Vifungu vya 14 na 58), Mamlaka ya Mawasiliano iliwachukua waliokuwa wafanyakazi wa Tume ya Utangazaji na Tume ya Mawasiliano kwa utaratibu wa ushindani.

Uwezo wa taasisi yo yote kutekeleza majukumu yake ipasavyo hutegemea ubora wa rasilimali watu iliyo nao. Mamlaka ya Mawasiliano Tanzania pamoja watangulizi wake kwa kutambua umuhimu huo imekuwa ikiajiri na kuwaendeleza wafanyakazi wake kungeza ubora na uwezo wawafanyakazi kitaaluma na hivyo kumudu kutekeleza wajibu wa usimamizi wa sekta ya mawasiliano vilivyo.

Uwezo huo umefanya Mamlaka kuwa mmoja kati ya wadhibiti bora Mashariki na Kusini mwa Afrika. Kwa sasa mamlaka ina jumla ya wafanyakazi 140.

MAFANIKIO YA SEKTA YA MAWASILIANO

SIMU NA INTANETI

Mamlaka ya Mawasiliano Tanzania imefanikiwa kuleta ushindani katika sekta ya mawasiliano kupitia mfumo wa leseni wa mwingiliano (Converged Licensing Framework) hivyo

kuongeza huduma za mawasiliano kama ifuatavyo:

- Kampuni zenye mitandao inayotoa huduma za simu zimeongezeka kutoka kampuni moja (1) katika miaka ya 1990 na kufikia makampuni 9 kufikia mwaka 2011;
- Makampuni mengine yanayotoa huduma ya mawasiliano kwa njia ya data (zikiwemo huduma za interneti) yameongezeka kutoka makampuni 11 mwaka 2000 na kufikia idadi ya makampuni 68 mwaka 2010;
- Laini za simu zimeongezeka kutoka laini 284,109 mwaka 2000 na kufikia laini 22 milioni mwaka 2011;
- Gharama za kupiga simu za mikononi (mobile to mobile) zimepungua kwa zaidi ya nusu, kutoka wastani wa US\$ 0.33 (sawa na Shilingi 495) mnamo mwaka 2000 hadi kufikia wastani wa US\$ 0.18 (sawa na shilingi 270) mwaka 2006;

Mamlaka ya Mawasiliano Tanzania imefaulu kununua mitambo sita (6) ya kisasa, ili kujiimarisha na kujiongezea uwezo wake wa kupanga na kuthibiti matumizi ya masafa nchini. Kuwepo kwa mitambo hiyo kumepunguza muda wa kuchunguza na kumpangia muombaji masafa na kutambua kwa urahisi watumiaji haramu wa masafa na kuelewa mahali walipo; pia kuzuia muingiliano (harmful interference) baina ya watumiaji wa masafa hivyo kuongeza ubora wa mawasiliano nchini.

Mamlaka imesimamia kikamilifu utekelezaji wa Mpango wa Namba wa Taifa (National Telecommunication Numbering Plan) uliopitishwa mwaka 2005/06 ili kukidhi ongezeko la wateja wa simu za mkononi. Hadi kufikia Novemba 2006 makampuni yote yalikuwa yametekeleza agizo lililowataka kubadilisha namba za mitandao yao. Namba za simu ni moja kati ya rasilimali adimu za taifa inayotambulisha watumiaji wa simu na kuwezesha maunganisho ya simu za wateja ndani na nje ya nchi katika mitandao mbalimbali.

- 2008/2010 - Mamlaka ilitenga jumla ya Shs.522 milioni kwa ajili ya kusaidia Jeshi la Polisi kujenga kituo cha kisasa cha mawasiliano ya dharura (Emergency Call Centre). Madhumuni ya kituo hiki ni kuwezesha wananchi kutumia namba za dharura kama 111 na 112 kikamilifu. Kituo hicho kimekamili na kina mitambo ya kisasa yenye uwezo wa kupokea simu na kutunza kumbukumbu ya simu zilizoingia hata kama hazikupokelewa, vile vile hutoa taarifa ya matatizo yaliyojitokeza;
- Mamlaka inaendelea kuimarisha utumiaji wa intaneti ili kuhamasisha watanzania kuwa sehemu ya "Jamii habari" (information society), yaani kuwa na mfumo wa maisha ambao jamii ina fursa, haki na uwezo wa kuwasiliana, kujifunza, kupashana habari bila vikwazo kupitia "Internet";
- Mamlaka imepanua upatikanaji wa huduma za internet (Internet services) kwa kutoa leseni (Application service licences) zaidi kwa watoa huduma;
- Hadi 2000 kulikuwa na makampuni yanayopewa leseni kutoa huduma za internet yapatayo 11 tu. Watoa huduma hizo waliopelewa leseni ni zaidi ya makampuni 68 hii leo.
- Mwaka 1999, kulikuwa na watumiaji (subscribers) wa intaneti (wavuti) wapatao 25,000 tu; hivi sasa (2011), kwa mujibu wa takwimu za utafiti uliofanywa na TCRA kuna watumiaji wa intaneti (wavuti) wapatao milioni 4.8;
- Mwaka 2008 Mamlaka ilichukua hatua za makusudi na kuanzisha kituo maalum Tanzania National Information Centre (tzNIC) kwa ajili ya kusajili majina ya mitandao na anwani pepe zinazotumia jina la nchi yetu (.tz ccTLD). Matumizi ya kituo hicho yataboresha huduma hiyo na kukuza utaiwa wetu;
- Mamlaka ikishirikiana na jumuiya ya watoa huduma ya intaneti (TISPA – Tanzania Internet service Providers Association) imenunua swichi za intaneti (IXPs –

Internet Exchange Points) zilizowekwa kwenye miji ya Dar es Salaam, Arusha, Mwanza na Dodoma, na baadae Mbeya. Madhumuni ya kuwekwa kwa swichi hizi ni kuwafanya watumiaji huduma za internet na hususani e-mail kuwasiliana kwa urahisi zaidi bila kulazimika e-mail zao kwenda katika mitambo nje ya nchi, na hivyo kupunguza gharama na kuongeza kasi ya intaneti;

- Kuoanisha (Harmonization) matumizi ya masafa katika nchi za Afrika Mashariki na SADC ili kuondoa miingiliano ya mawasiliano na kuongeza nguvu la soko la bidhaa za mawasiliano.

UTANGAZAJI

- Mamlaka imetoa leseni kwa makampuni ya TV na Radio mengi zaidi ikilinganishwa na redio moja (1) wakati wa Uhuru. Tanzania Bara haikuwahi kuwa na TV hadi baada ya miaka ya 1993 Hadi leo Mamlaka imetoa leseni kwa makampuni 73 ya Radio na vituo vya televisheni 26;
- Mamlaka imeweza kutekeleza maamuzi ya Umoja wa Mawasiliano Duniani (ITU) ya kubadilisha mfumo wa utangazaji kutoka analojia kwenda digitali;
- Mamlaka imetoa leseni kwa makampuni matatu (3) kwa ajili ya kurusha matangazo ya Televisheni katika mfumo wa digitali;
- Mamlaka imehamasisha makampuni ya TV na Redio kuwekeza katika mikoa ya kusini na pembezoni mwa mipaka ya Tanzania;
- Kamati ya Maudhui ya mamlaka inasimamia maudhui katika vyombo vya utangazaji, kusikiliza mashauri na malalamiko yanayojitokeza kutokana na vituo kutangaza mambo kinyume na kanuni;
- Kuongezeka TV na Redio kumechangia kukua kwa ajira kwa Watanzania;
- Mtambo wa kufuatilia na kurekodi vipindi vya Redio na Televisheni wa mamlaka utaendelea kuimarishwa ili kusaidia kazi za kamati ya maudhui;
- Mamlaka imefanikiwa kuhamasisha makampuni ya TV na Redio kuwa na vipindi vinavyoendeshwa kwa kutumia lugha ya taifa na vipindi vya maudhui ya kitanzania;
- Mamlaka inaendelea kuhimiza wazalendo kuwekeza katika sekta ya utangazaji.

POSTA

● Utoaji wa huduma za msingi za posta

Katika kipindi hiki kumefanyika mabadiliko mengi katika kuwezesha watanzania wengi kupata huduma za msingi za barua, vipeto na vifurushi. Urekebishaji wa Shirika la Posta kupitia Sera ya Taifa ya Posta (2003), sheria ya Posta (1993) na sheria ya Mawasiliano (1993) umewezesha Shirika kupunguza kutegemea ruzuku ya Serikali kuendesha huduma zake za msingi. Uwingi wa huduma na ufanisi wa Shirika umeongezeka. Kwa mfano utumaji wa fedha kutumia teknolojia za kisasa, Usafirishaji wa barua umekuwa wa kasi zaidi na wateja wamekuwa wanatatuliwa matatizo yao kwa ufanishi.

● Kuongezeka kwa watoa huduma za posta

Mamlaka ya Mawasiliano Tanzania imeweka utaratibu mpana wa utoaji wa leseni za kuendesha biashara na huduma za posta nchini. Aidha Mamlaka ya Mawasiliano Tanzania imeweza kutoa leseni kwa watoa huduma za posta toka mtoa huduma mmoja (TPC) hadi watoa huduma wa vipeto, barua na vifurushi zaidi ya hamsini (50) kwa mwaka 2011.

● Uanzishwaji wa mfumo wa anuani mpya za kitaifa na simbo za Posta.

Wizara ya Mawasiliano Sayansi na Teknolojia kwa kushirikiana na Mamlaka ya Mawasiliano Tanzania na

wadau Mbalimbali imeanzisha mradi wa anuani mpya za makazi na simbo za Posta ili kurahisisha utoaji wa huduma mbalimbali za kiuchumi na kijamii zikiwamo za kiposta. Huu mradi ni utekelezaji wa sera ya posta ya mwaka 2003. Anuani hizi zitawezesha watoa huduma wa posta kufikisha huduma hizo mpaka mlangoni hivyo kuongeza ufanisi katika sekta hiyo.

● **Mwenyeji wa Umoja wa Posta Africa**

Tanzania imekuwa mwenyeji wa Umoja wa Posta Afrika kwa miaka 30 katika Jiji la Arusha. Kupitia Umoja huu Tanzania imejulikana kimataifa na hivyo kuwezesha mashirikiano mema katika jumuiya ya kimataifa.

● **Upimaji wa ubora wa huduma za posta**

Mamlaka imekuwa ikisimamia ubora wa utoaji wa huduma za posta ili kuhakikisha wananchi wanapata huduma bora na kwa wakati muafaka, kwa kufanikisha hili, Mamlaka imenunua mitambo miwili inayohamishika (Mobile units) maalumu ya kupimia ubora wa huduma za posta.

CHANGAMOTO ZA SEKTA YA MAWASILIANO

SIMU NA INTANETI

- Kuongeza uwekezaji katika maswala ya utafiti na maendeleo (Research and Development) ndani ya sekta ya mawasiliano.
- Kuongeza miundombinu na mitandao ya mawasiliano ya kutosha ya kusaidia kuenea kwa huduma za teknohama nchini hasa vijijini.
- Kupunguza matukio ya mara kwa mara ya uhalifu kutumia mitandao ya internet (cyber security incidents).
- Kuondoa tatizo la uingizaji wa vifaa vya mawasiliano visivyo na ubora katika nchi.
- Kuongeza usambazaji wa huduma za ICT nchini.

UTANGAZAJI

- Kufanikisha mabadiliko kutoka mfumo wa utangazaji wa analogia kwenda dijitali
- Kuhamasisha wawekezaji wa sekta ya utangazaji kuwekeza vijijini
- Kuhakikisha vituo vinatoa ajira kwa wafanyakazi wenye taaluma ya utangazaji kutoka vyuo vinavyotambulika
- Kupunguza malalamiko yanayotokana na vituo vingi kutofuata Sheria, Kanuni na Maadili au Miiko ya Utangazaji
- Kuhakikisha kwamba vituo vya utangazani havitumiki kwa manufaa binafsi ya mmiliki au mtendaji bali kwa maslahi ya umma

POSTA

Katika kufanikisha shughuli za usimamizi wa mawasiliano ya posta, Mamlaka inakumbana na changamoto mbalimbali kama ifuatavyo:

- Mipango Miji: makazi holela, nyumba bila namba zilizopangiliwa, barabara na mitaa bila majina yanatatiza uwekaji wa anuani za makazi kwa wananchi wote.
- Kuzuia uendeleaji wa biashara ya chuma chakavu ambao unahujumu anuani za makazi.
- Kuhakikisha wafanyabiashara wa huduma za posta wote wana leseni kutoka Mamlaka.
- Utoaji wa elimu kwa umma kuhusu majukumu ya Mamlaka ya Mawasiliano

MATARAJIO YA SEKTA YA MAWASILIANO MIAKA 50 IJAYO

SIMU NA INTANETI

- Fedha ya kutosha itatengwa ili kujenga uwezo wa kufanya tafiti katika sekta ya mawasiliano zitakazoletea maendeleo taifa.
- Mkongo wa taifa unafika kwenye vijiji vyote na kuwezesha serikali mtandao (e-government), elimu mtandao (e-education) na Afya mtandao (e-Health) kutumika kikamilifu na kuwaletia wananchi maisha bora.
- Kuanzishwa kwa sheria na kanuni zitazosaidia kusimimia maswala ya uhalifu mtandao (cyber security incidents)
- Kujenga uwezo wa wataanzania katika kusimamia maswala ya kutambua uhalifu mitandao na uanzishwaji wa vituo (Computer Emergency Response Team) vya kusaidia kubaini na kukinga mashambulizi ya uhalifu ndani ya mitandao na kurejesha mitandao katika hali kawaida pindi inaposhambuliwa.
- Uanzishwaji wa maabara za type approval na sheria itakayosimamia swala hilo.
- Kuona kwamba watoa huduma za mawasiliano wanashikiana katika kutumia miundombinu ya mawasiliano ili kupunguza gharama za uwekezaji, uendeshaji na athari za kimazingira.

UTANGAZAJI

- Kuweka utaratibu wa kuwatambua na kuwaendeleza waandishi wa habari
- Kuhakikisha kuwa maudhui ya vituo vya utangazaji yanaimarisha amani, umoja, na usalama na utamaduni wa Taifa
- Kuratibu masuala yote ya mabadiliko ya mfumo wa utangazaji kutoka analogia kwenda dijitali hapa nchini
- Kuhakikisha kuwa vyombo vya utangazaji vitatimiza wajibu wao wa kutoa habari, elimu na burudani kwa maslahi ya jamii
- Kuhakikisha kuwa taasisi za mafunzo ya taaluma utangazaji na habari zinakuwa na mtaala mmoja unaokubalika kwa wadau
- Kuhamasisha raia wa Kitanzania kuwekeza katika sekta ya utangazaji hususani katika maeneo ambayo bado kufikiwa na vituo vya televisheni na radio nchini
- Kuwa na mawasiliano ya mara kwa mara na mahakama, Baraza la Habari Tanzania (MCT) na taasisi zenye lengo la kuboresha sekta ya utangazaji
- Kufuatilia maudhui ya taarifa au matangazo ya vituo vya radio na televisheni na kuishauri serikali ipasavyo

POSTA

Matarajio na Malengo Kwa Miaka Hamsini Ijayo (2011 – 2061) ni kama yafuatayo:

- Ukamilishaji wa mradi wa anuani za makazi na simbo za posta kuwezesha Wataanzania kuwa na anuani za uhakika hivyo watoa huduma za posta kuweza kufikisha huduma hizo mpaka majumbani na wananchi kufaidika na huduma nyingine za kijamii ikiwa ni pamoja na huduma uokoaji, biashara kupitia mtandao, kupata mikopo nk.
- Sekta ya Posta kuongeza mchango wake katika ukuaji wa uchumi wa taifa
- Kukua kwa huduma Muhimu za posta kwa kwa wote.



Haki za Mtumiaji wa Mawasiliano

Mtumiaji wa huduma za mawasiliano ana haki hizi:

- Kupata huduma bora
- Kupewa taarifa kuhusu huduma au bidhaa
- Kutobaguliwa
- Kulalamika
- Kutatuliwa matatizo yake
- Kuhakikishiwa usalama wa bidhaa au huduma
- Kuwa na faragha na usiri katika matumizi yake
- Kuelimishwa
- Kupewa taarifa kabla ya kusimamisha au kukatisha huduma
- Kuwakilishwa
- Kupewa taarifa sahihi ya ankara
- Kukata rufaa endapo haridhishwi na uamuzi

Wajibu wa Mtumiaji wa Mawasiliano

- Kulipia huduma
- Kutunza mazingira kwa kutotupa hovyoo makasha na kadi au vifaa vya simu vilivyotumika
- Kutambua kasoro katika utoaji wa huduma
- Kuunga mkono uthibiti kwa kutoa taarifa
- Kutunza nyenzo na miundombinu ya mawasiliano
- Kutumia huduma kihalali
- Kuheshimu uhuru wa watumiaji wengine kwa kutowabughudhi
- Kuzingatia sheria na kanuni

Kwa mawasiliano zaidi wasiliana na:

Mawasiliano Towers, Kiwanja na. 2005/5/1, Kitalu C, barabara ya Sam Nujoma, S.L.P 474 Dar es Salaam

Simu + 255 784 558270/1, + 255 22 2412011/12, + 255 22 2199706 – 9

Nukushi: + 255 22 2412009/2412010

Barua pepe: dg@tcra.go.tz, malalamiko@tcra.go.tz, complaints@tcra.go.tz

Tovuti: www.tcra.go.tz.



Left: The Director General of the Tanzania Atomic and Energy Commission (TAEC) Prof. Iddi Mkilaha and TCRA Director General Prof. John Nkoma signing a Memorandum of Understanding on radiation safety in Tanzania. Standing from left, Dr. Nyaruba of TAEC, Eng. Lawi Odiero of TCRA, Mr. Innocent Mapendo of TAEC and Mr. Modestus Ndunguru who are members of a joint committee involved in the drawing of the memorandum of understanding. Below: Prof. Nkoma and Prof. Mkilaha exchanging documents after the signing.



TCRA and TAEC sign a memorandum of understanding

By Innocent Mungu

THE Tanzania Communications Regulatory Authority, (TCRA) and The Tanzania Atomic and Energy Commission (TAEC) made history on 11th November 2011 by signing a Memorandum of Understanding to work on a special assignment together, in a mission to ensure radiation safety in Tanzania to workers, the environment and the public in general.

The Memorandum of Understanding was signed by Prof. Iddi Mkilaha, The Director General of TAEC and Prof. John Nkoma, TCRA Director General at Mawasiliano Towers.

TCRA is a regulatory body, established under the Tanzania Communications Regulatory Authority Act of 2003. TCRA is mandated to, among other things; authorize/license electronic communication equipment which generates Electromagnetic Fields (EMF) radiation.

The Tanzania Atomic Energy Commission (TAEC) is also a regulatory body, established under the Atomic Energy Act, No. 7, 2003. It has expertise in radiation issues.

The signing of the Memorandum of Understanding follows a joint Committee which was formed by the two Regulatory Authorities on 8th October, 2010 to look into the Principal Legislations establishing the two regulatory bodies, other related Legislations (Sector Legislations) and any Subsidiary Legislations to identify areas of commonality in the powers,

functions, duties and responsibilities of the two Institutions. The ultimate goal under the Terms of Reference of the Committee was a Memorandum of Understanding for cooperation between TCRA and TAEC on matters falling within the intersection of their regulatory mandates.

The Joint Committee reviewed the Tanzania Communications Regulatory Authority Act of 2003, the Electronic and Postal Communications Act (EPOCA) of 2010 the Atomic Energy Act of 2003 and Subsidiary Legislations made under these Principal Legislations. Areas of commonality were identified. Such areas of commonality are the subject matter of the Memorandum of Understanding inaugurated today.

Under the Memorandum of Understanding, TCRA and TAEC will enhance cooperation in the areas of Regulatory Controls, inspections, technical standards, enforcement, research, and training/workshops/seminars. Public awareness campaigns, complaints handling, public and environmental protection studies and consultancies relating to the effect of electronic communication equipment which generate RF and microwave radiation, are other areas of interest to the two Authorities.

TAEC DG Prof. Iddi Mkilaha and TCRA Director General Prof. John Nkoma signing a Memorandum of Understanding on radiation safety in Tanzania. Standing from left, Dr. Nyaruba of TAEC, Eng. Lawi Odiero of TCRA, Mr. Innocent Mapendo of TAEC and Mr. Modestus Ndunguru who are members of a Joint Committee involved in the drawing of the memorandum of Understanding.

Tanzania Showcases ICT achievements in Geneva



TCRA Deputy Director, Zonal Coordination, Mr Victor Nkya briefing the Vice President, Dr. Mohammed Gharib Bilal on TCRA functions at Tanzania's pavilion in ITU telecom World 2011, Geneva. Right is TCRA Director General Prof. John Nkoma.

By Innocent Mungu

TANZANIA successfully participated in the international exhibition on information and communications technologies (ICT) organized by the International Telecommunication Union (ITU) in October 2011. The objectives were to show case to the world, the country's technological developments, applications and innovations in ICT including promotion of available services; and securing opportunities for networking and collaboration at a globe level.

Tanzania's organizations which showcased the country's ICT projects were the Ministry of Communications, Science and Technology (MCST); Tanzania Communications Regulatory Authority (TCRA); Ministry of Education and Vocational Training (MEVT); Tanzania Youth Alliance (TAYOA); Tanzania Network Information Centre (tzNIC) and Uhuru one.

ITU exhibitions, known as ITU Telecom World are normally held every three years. However, ITU Telecom World 2011 came a year ahead coincide with the 40th Anniversary of the ITU Telecom World event that was first held in 1971.

The theme of the ITU Telecom Word 2011 "Talk, Take action, Collaborate, Connect".

Tanzania made its debut in ITU events by having a country pavilion in the 2009 exhibition in Geneva.

Tanzania's Pavillion had seven booths including the front desk manned by TCRA. Its booth provided information about investment opportunities in the ICT sector in Tanzania.

The Ministry of Communications Science and Technology teamed up with the Tanzania Telecommunications Company (TTCL) and displayed the National ICT Back Bone Project, the Ministry of Education and Vocational Training exhibited the Tanzania beyond Tomorrow (TBT) project that is designed to provide E-education. The TBT is a framework for maximum coordination and harmonization to synergize initiatives from the multitude key partners/stakeholders.

TAYOA demonstrated ICT applications for youth in rural and remote areas focusing on information access while tzNIC exhibited its services including securing the dot tz Registry and integrating it with PSTN. The centre is itself a result of initiatives made by Tanzania in Tunis during phase two of WSIS in 2005.

Uhuru-One deployed Wi-Fi Broadband focusing on e-learning, storage and networking in Tanzania.

Tanzania was awarded a certificate of recognition by the International Telecommunications Union (ITU) on 26th October in recognition by the ITU of the country's commitment towards strengthening the WSIS related activities and by contributing to the ITU's WSIS Fund Trust.



Burundi President Pierre Nkurunziza signing the visitors' book at Tanzania's pavilion in ITU telecom World 2011, Geneva.

Talk, Take action, Collaborate, Connect

EVERY three years, the International Telecommunication Union (ITU) organizes a global event in which countries and industry leaders showcase the achievements in the information and communications technologies sector. The event, known as ITU Telecom World comprises an exhibition and a series of workshops. This is a summary of discussions held in Geneva during the ITU Telecom World forum in October 2011 in which Tanzania participated.

Broadband Leadership Summit 2011

The Summit convened in Geneva just before the official opening of ITU Telecom World 2011. Proceedings got underway with ITU Secretary General Dr. Hamadoun Touré welcoming Heads of State and Government and business leaders from around the world. Tanzania was represented by the Vice president, Dr Mohammed Gharib Bilal, who was one of the panelists.

The summit underscored that Broadband is not a luxury. Developing countries cannot afford to miss out on the development, growth and trade opportunities offered by broadband infrastructure. This was the overarching message of the Broadband Leadership Summit&

The networked world

The ratio of connected devices is set to outstrip the ratio of connected individuals by 10:1 over the next decade but challenges lie ahead in this hyper connected future. Industry experts speaking at the Broadband Leadership Summit Plenary Smartening up Society concluded that while data will be the new currency of our networked future, we are threatened with being overwhelmed by a data deluge. ITU Fueled Global debate with New Stats.

ITU took the occasion of the first day of ITU Telecom World 2011 to unveil its latest statistics report, the World in 2011: ICT Facts and figures, which revealed impressive growth in a number of areas such as global internet use, particularly in developing countries.

As handheld devices grow ever more sophisticated and demand for content-rich services such as mobile video increases, mobile data traffic is likely to continue growing at an explosive rate. This represents good news for the industry, but next-generation wireless technologies will need to be ready to meet the challenge and be able to cope with these increased demands on bandwidth.

The TD-LTE spectrum workshop

The TD-LTE spectrum workshop looked at the potential of TD-LTE technology to take us on to the next stage of wireless communication.

Seven Billion Day call to action

The Telecom world 2011 was informed that the world population will hit the seven billion mark on October 31st 2011 and to mark the event the United Nations Population Fund (UNFPA) was raising awareness at ITU Telecom World 2011 of the issues and challenges that the population explosion brings and asking ICT leaders how technology can help.

Global CTOs called for faster progress on e-health standards.

A meeting of 21 CTOs from leading companies [1] in the information and communication technology (ICT) industry has urged ITU to accelerate technical standardization work in the field of e-health. CTOs stressed that reliable, interoperable standards are key to providing patients and health professionals with the means to utilize remote consultation services, advanced ICT-based diagnostic procedures and electronic health information services.

Digital Cities: digital dreams?

Opening a day of intense collaborative debate on how connected technologies can and should shape the future of urban living for the good of city-dwellers the world over, the Digital Cities conference began by examining what is meant by a smart city.

Social media and the perfect storm

For many consumers, particularly those in the developed markets

of the west, social media is viewed as a trivial distraction. However, recent events such as political uprisings in Egypt and the Middle East and natural disasters such as the catastrophic earthquake in Japan earlier this year, prove that social media channels can be a genuine and powerful force for good.

Ministerial roundtable on ICTs and climate change

ICTs and climate change was the subject of the second Ministerial Roundtable at ITU Telecom World 2011 which brought together Ministers from countries across the world including Tanzania's Minister of Communications Science and Technology, Professor Makame Mbarawa.

The Spectrum Edge

Radio frequency spectrum is a precious and vital resource. Every wireless technology depends on it and regulators continue to allocate this valuable commodity in response to the competing needs of different user but space in the airwaves is getting increasingly scarce.

Changing Ecosystems; a virtuous circle

In the long history of humankind (and animal kind, too), those who learned to collaborate and improvise most effectively have prevailed; is the Charles Darwin quote that AT & amp; VP International External Affairs, Eric Loeb, used in summing up developments in the evolution of ICT eco-systems while speaking at Forum Changing Ecosystems. It was a sentiment that came up time and again at ITU Telecom World 2011.

Moving towards e government at the Technical Symposium

There is no doubt that e-government, the provision of advanced government solutions and services electronically, is strategically desirable for governments throughout the world. The challenges inherent in implementing the concepts and frameworks of e-government formed the topic for one of the key Technical Symposium sessions that took place during the ITU Telecom World 2011.

Child protection: a priority

Of the many issues discussed at ITU Telecom World 2011 few if any can be as universally emotive as child protection. A group of World 2011 delegates took part in a workshop to discuss how best the ICT community can join together for this vital cause.

Technical Symposium: Security Issues in Future Networks

The symposium concluded that Innovative approaches to identity

related mechanisms and platforms are required to ensure security and privacy in future networks and to add an identity layer to the internet. But there can be no privacy where there is no data security. What are the major security challenges in future networks and how can proactive protocol testing methods be used to make future networks more secure? Who will take the lead in securing cyberspace?

Targeted marketing is not new, but the scale is now vast

Privacy and money are two of the more highly prized assets in society, although not always in equal measure. Many people in celebrity-obsessed societies world are happy to sacrifice the former if it led to more of the latter. Financial wealth, though, is nothing without individual personal freedom. There are a number of paradoxes at work in the world of social networking, explored during the Social Networks-Privacy & Money session on day three of ITU Telecom World 2011.

Privacy is highly prized, yet people are willing to supply and post intimate details, and broadcast their views to often wide audiences without serious consideration for those actions. But concerns are building among consumers that they are giving away more than they think when sign up to 'free' social networks. Since monetizing social networks relies almost exclusively on advertising it would appear you must sacrifice one thing to gain access to another.

It was observed that consumers do not have a problem with data being collected, but they do feel social networks are changing the rules of the game, "consumers are very concerned about data control, who is collecting it and sharing it, what happens to it and how is it used. It was pointed that brands using individual personal data for targeted marketing is not new. Consumers knowingly sign up for social media sites and supply personal data freely. In the background though, targeted marketing has been around for a long time, but consumers are only just realizing."

Governments have a civic duty to protect citizens and many people throughout the world place the importance of privacy as a low priority concern. "This also raises the issue about who is complaining, different people have different levels of privacy. When people complain about social media, we should ask who and why complain?" In the world of social media, everything comes at a cost. Perhaps people are waking up to the fact that they are not the customer, they are the product.



Communications towers along a major road in Southern Tanzania

Ministerial Roundtable on Cyber security

The exponential growth of internet user numbers and mobile cellular subscriptions is expected to continue over the next 10 years. ICTs are becoming increasingly important to a whole range of industry sectors, as they increasingly rely on pervasive, networked systems to control, monitor, manage and deliver services and products. Converging devices and mobile connectivity mean network security is becoming vastly more complex, with many more potential attack vectors.

Recent incidents like cyber-attacks on Sony, the G20, the IMF and several governments, have raised fresh concerns over the security requirements of both existing and emerging ICT paradigms. Evolving malware mean cyber-attacks can specifically target vulnerabilities that could lead to increasingly serious failures of the networked economy.

As National frameworks struggle to cope with attacks, common understandings and global principles become increasingly important. This Ministerial Round Table offered the opportunity to listen to the informed views and insights of leading policy-makers from a number of countries. It presented an opportunity to share some of the experience gained from formulating domestic policy, and brought Ministers' experience to bear on the best ways forward for designing policy frameworks and principles agreed at the global level.

Key Questions considered:

What are the main challenges that governments face in ensuring safe use of ICTs to fully exploit the potential of the digital economy?

What is the role of governments, industry and other relevant stakeholders in the Cyber security arena and how they can cooperate to more effectively fight cyber threats and cybercrimes?

How the establishment of an international framework of principles, norms, technical standards and legislation can contribute to the achievement of a global culture of Cyber security?

How your government addresses the financial impact of cybercrime and what are the measures taken?

How could national facilities such as Computer Incident

Response Teams (CIRTs) contribute to reduce the risks posed by cyber-attacks and to enhance the international response?

The key issue of how to build a safe and secure cyber world was debated at the Ministerial Roundtable on Cyber security at ITU Telecom World 2011. The session brought together Ministers from around the world, including from Algeria, Azerbaijan, Costa Rica, India, Ivory Coast, Mali, South Africa, Tanzania, Uganda and Italy, with representatives of key industry players Microsoft and Symantec, ITU Secretary General, Dr Hamadoun Touré, IMPACT and AICTO (Arab Information and Communication Technology Organization).

Drawing on the experience of their own countries in tackling the problem of cybercrime, Ministers outlined core issues such as the importance of cooperation. This means starting right from a national level upwards, regionally and also internationally. They stressed on the need for cooperation, citing the key role of organizations such as ITU and IMPACT, which all have a vital role in the fight against cybercrime as an issue that must be tackled "on a global scale.

Ministers also shared best practices and experiences on how they were tackling specific cybercrime threats in core areas such as child online protection, economic fraud and cyber terrorism. The need for laws to enforce user identification in cyber cafes and over mobile networks, called for legislation to defend against terrorism and stop unauthorized use of ICTs. Outlined how cybercrime is "basically a monetary crime, which endangers the image of a country, so the fight has become a priority issue for governments."

Developing the right legislation to deal with cybercrime can be a major challenge, as the criminal code does not have sufficient provisions for "intangible cross border cybercrime." Assistance from global and regional bodies in developing the right legislation would be critical in order to prevent some countries becoming a haven for cybercrime.

Participants praised ITU's cyber security agenda and the work it undertakes in fighting cybercrime. IMPACT, the executing arm of ITU in the area of cyber security, noted how their role is to "translate ideas into action," highlighting areas of focus over

TCRA Eastern Zone Manager, Eng. Oscar Mwanjesa (second left) during an inspection of communications facilities in Mtwara region





The internet is a good source of educational material; but children need to be protected from unsuitable content

the last 12 months such as developing mechanisms and tools to help mitigate threats, and promoting collaboration amongst all stakeholders.

The future's cloudy

Attempting to define and imagine the future of cloud computing session, a panel of industry experts had their Heads - and those of an audience participating onsite in Geneva, online through the live webcasts, via the met conference and a very lively twitter feed - firmly in the Clouds.

Acknowledging that the very definition of cloud computing is contentious, Joe Baguey, Chief Cloud Technologist in EMEA, VMWare pointed out that applying the general term "hybrid cloud" to all services would leave aside individual combinations of public, private or shared models or on- or off-site hosting to focus instead on the "scale of efficiency and agility" which is the principle advantage of cloud computing in whatever variable.

Cloud computing and broadband access enable an unprecedented "democratization of access", where new applications and services that we cannot yet imagine will allow "the world's digital knowledge base to be projected into the palm of anyone's hand by virtue of the scale and access to cloud computing". The Panelists, the audience and tweeters alike, agreed that the next generation will be key to shaping the near future uses of next-generation networks, with Mr Reed reminding us that "each of us has in our hand more computing than nations had a relatively few years ago" - reflecting the scale and accelerating pace of change which cloud computing supports and enables.

The elasticity inherent in cloud models allows it to expand to meet demand and to reallocate otherwise redundant resources efficiently. The downsides to sharing infrastructure, and to ubiquitous access over any web-enabled device, were touched on. Issues of data privacy and security, uncertainties over legal

jurisdiction and the question of establishing multi-platform, multi-device interoperability remain as yet unanswered. But the panel was unanimous in warning that implementing standards too early in such a rapidly-developing and relatively young market may risk limiting innovation, stifling creativity and strangling some of the very agility and ability to support the diverse needs and capabilities of customers that characterizes cloud computing.

The results of the simultaneous online and on-site poll into the main perceived benefits for organisations of migrating to the cloud were evenly balanced between agility and innovation, and cost savings, scalability and flexibility. The cloud is already with us, panelists agreed, in whatever form we choose to define it; and it is through cloud computing models that we - and the decision makers of the next generation - will be able to benefit from "the huge rise of data and its truly transformative effect."

The Internet of Things (IOT)

Machine to machine and embedded devices provide for a future with an almost limitless number of interconnections. Indeed, Ericsson has stated that by the year 2020 they will have 50 billion connected devices rising ever faster thereafter. But this ultra-connected vision of the future is still some time away and much of the vendor comment could be considered hype noted panelists speaking at the Internet of Things session during ITU Telecom World 2011.

A number of hurdles exist before the Internet of Things. Key to the success of Internet of Things (IOT) will be interoperability. IOT crosses every vertical industry from current new consumer-facing applications in the automotive industry to automated monitoring of remote or inaccessible devices such as off shore wind turbines and the number of applications is limited to the imagination of developers.

The IOT will enable forms of collaboration and communication

between people and things and between objects hitherto unknown or unimagined. With the benefit of integrated information processing capacity, industrial products will take on smart capabilities.

Making innovation matter

The role of ICTs in helping the people of developing countries meets their aspirations for a better life.

Topics ranged from mobile health solutions to rural connectivity, from the need to retain ownership of innovative thinking within developing markets by investing in local research and development to the importance of innovation being both values-based and adding value - but came back time and again to education as the single key enabler for ICTs to move forward in emerging markets.

Education and literacy were the top themes selected by the delegates in small break-out groups as they responded to the challenge to imagine a successful outcome in 20 years' time and work back through the factors that would be necessary to bring it about. One group focused on establishing interactive distance learning classrooms in rural and remote areas, enabling interaction with fellow students online and physically present to improve learning outcomes. Incentives for education, such as free meals or highly vocational courses and content, were important, as were affordable terminals, innovative applications and identifying social entrepreneurs as enablers of education centres or classrooms that could serve a dual purpose as local community or business centres.

Other groups of delegates examined what must be done to reach a knowledge society where innovation could flourish universally, reducing the digital divide, disparity and poverty; and equitable access to education from primary to tertiary levels across rural and urban areas in developing countries. Identifying key enablers

of as locally relevant digital content, inspirational, committed leadership and a mixture of government and private (in the form of social entrepreneurs) investment, the workshop summed up the defining themes of Telecom World 2011.

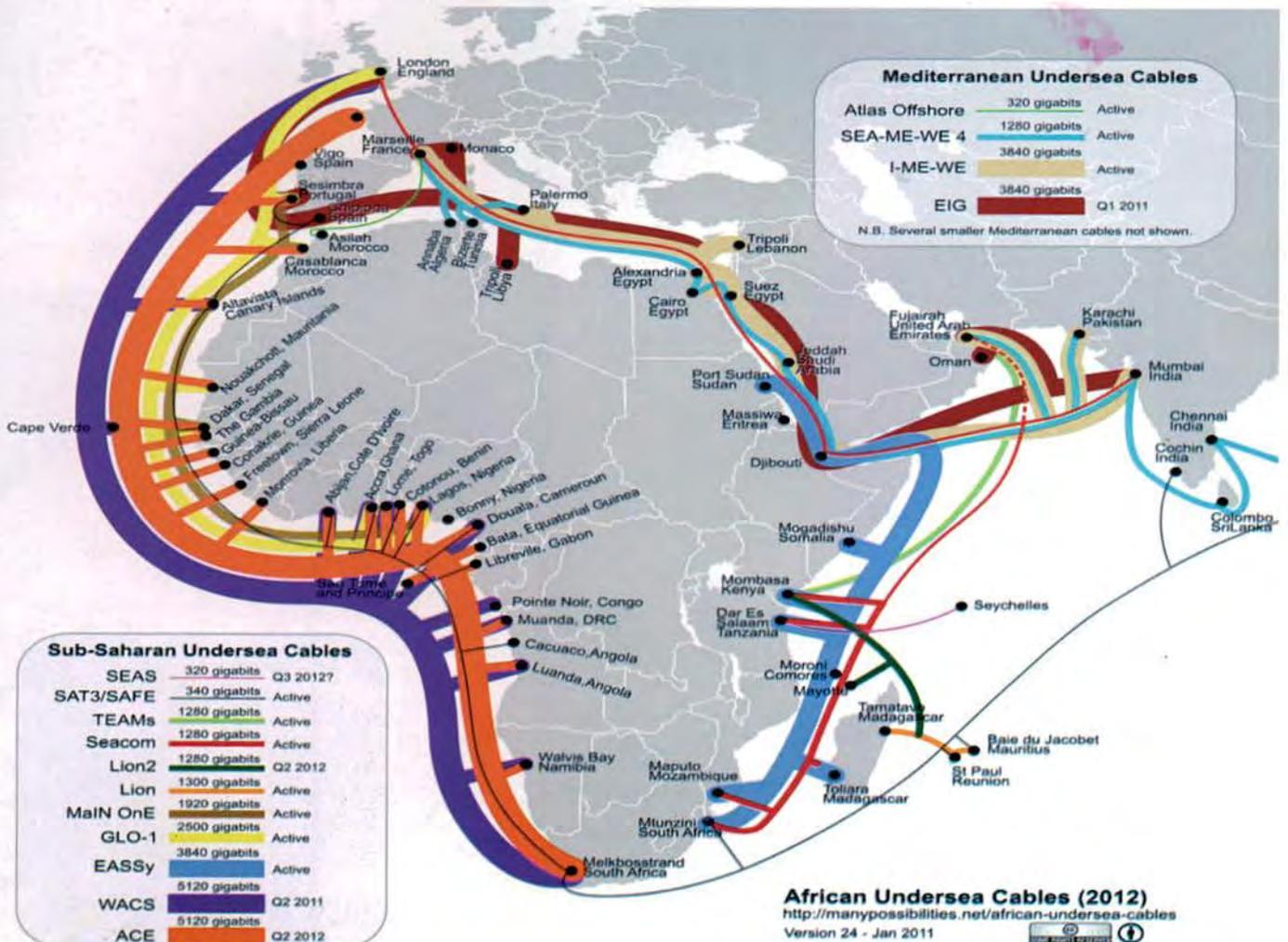
The Tanzania network information centre (tzNIC) Manager, Eng. Abibu Ntahigiye attended a forum on Innovation where he shared the importance of the industry to be close to the academic institution so that researches and projects done are relevant to the prevailing issues in the society or industry.

He briefed the participants to the forum that tzNIC was playing a big role in providing internship and practical training to students and graduates as part of providing opportunities of turning theories learnt at universities into practice.

Girls in ICT

Job opportunities in the ICT sector continue to grow, and many countries and regions are predicting a shortage of qualified staff with mathematics, science, engineering and computing skills to meet the growing demand. At the same time, many companies are looking to increase the numbers of women in the sector.

This means that highly qualified women in technical fields have significant opportunities available to them. Unfortunately teenage girls and young women often never even consider a career in ICTs. There is a lack of awareness among students, teachers and parents on the opportunities presented by a career in ICT. Different ways to encourage young women to enter the ICT sector were shared during the Girls in ICT Session at ITU Telecom World 2011.



The session also saw the unveiling of the girls in ICT portal with links to scholarships, training, internships, contests and awards, tech camps, online networks and, of course, Girls in ICT Day activities.

Supporting the education of women and girls in the ICT sector is also in line with United Nations Millennium Development Goal 3 to promote gender equality and the empowerment of women. Not only are jobs in the ICT sector lifting women out of poverty, a more gender-balanced sector offers fulfilling mid and high-level careers, and enables highly talented women to springboard to the top of the career ladder. This is good for everyone.

As UN Secretary General Ban Ki-moon has said, "Equality for women and girls is not only a basic human right it is a social and economic imperative. Where women are educated and empowered, economies are more productive and strong. Where women are fully represented, societies are more peaceful and stable."

Celebrating 40 years

The world has changed dramatically over the past four decades,

and in perhaps no other area has it changed so spectacularly, so rapidly and with such tremendous effects for society as a whole as in the ICT sector. Looking ahead to the next ten years, the only certainty is that the pace of change will accelerate, driven by the next generation developing as yet unimaginable services and applications for next-generation networks

ITU Telecom World 2011 set new paradigm for top-level networking, knowledge-sharing: high-level dialogue on broadband culminated in 'Manifesto for Change.' The 40th anniversary edition of ITU Telecom World closed its doors after three intensive days of high-level networking, knowledge exchange and deal-making. Some 300 world leaders, including Heads of State, Heads of Government, Ministers, national ambassadors, heads of regulatory agencies, and CEOs from around the world, came together for the event, which saw debate and interaction on a broad-reaching global agenda spanning everything from broadband to connecting cities, harnessing innovation and next-generation wireless advances, and featured live.

House Journal

TCRA Staff Events

Right: TCRA Principal Public Relations Officer, Semu Mwakyanjala receiving an award in London for his entry in an essay writing competition organized by the Germany Embassy in London on "Germany Vision 2051".

Below: A section of sports lovers warming up as part of the family day organized by the TCRA Northern Zone in Arusha recently.



Regulating for ICT Development

IN this second instalment of a three-part series on information and communications(ICT) regulation in Tanzania, LOKILA MOSSO outlines some of the new areas of regulation in Tanzania.

WITH her two-year old son strapped to her back and a bucket full of water on her head, Anjela Salongo slowly climbs the steep footpath from Kisanja river to her home, about 600 metres up hill. Then her mobile phone rings. Her mother asks her to hurry up as the village nurse, on her regular weekly rounds, was ready to administer an important vaccination to the child.

Anjela is among the numerous villagers who have found the mobile phone an inseparable companion. At times it exerts financial pressures, as constant use means regular air time topping up. Some of the villagers receive donations transferred by working relatives.

Mobile phone services are provided by eight mobile phone companies. They are Vodacom, Airtel, MIC Tanzania which trades as Tigo, Zanzibar Telecoms- ZANTEL, Dovetel with the Sasatel brand, Benson Online (BOL) and the Tanzania Telecommunications Company Limited (TTCL).

The use of mobile phones in Tanzania has seen an upswing from less than 100,000 in 2000 to 22,000,000 in 2011, according to the Director General of the Tanzania Communications Regulatory Authority, Professor John Nkoma. The figure is based on SIM cards sold.

Internet users have increased from 25,000 in 1999 to about five million in 2011. Radio stations have increased from 1 in 1993 to 79 in 2011. There are now 26 television stations in Tanzania, a 100 per cent increase from 1993 when there was none.

As a regulator, TCRA has successfully handled many challenges, one being the issue of interconnection rates among mobile telephone companies.

National strategies to promote the use of information and communications technologies (ICTs) have won Tanzania international respect. The United Nations agency for the development of ICTs, the International Telecommunication Union (ITU) recently awarded Tanzania for its efforts.

For networks to function seamlessly, a system must be put in place to manage the two important resources in communications – the frequency spectrum and numbering.

In simple terms, when two equipments connect wirelessly, spectrum is used, whether at very low or high frequency. For example, spectrum is involved when you use your mobile phone or your remote to manipulate your electronic instruments or to open your car door. It is therefore allocated for a variety of uses and has to be regulated to ensure efficient use and to prevent interference.

The numbers that we use are a resource which is managed to ensure seamless communication. For example, through the national numbering plan introduced by TCRA, subscribers in any mobile network may access call centres, make balance inquiries, and top up airtime using the same number for all networks.



There are countries where each network has its own number for these services.

But perhaps one of the most challenging undertaking in the ICT sector in Tanzania is the migration from analogue to digital broadcasting, with December this year being the switch off date. Terrestrial broadcasting services, especially free on air, the world over have been largely operating on analogue technology since 1920's.

In 1996 the UN agency responsible for ICTs, the International Telecommunication Union (ITU) set up a Task Group which recommended the adoption of digital technology for broadcasting. The digital plan was adopted in 2006 and the deadline for countries to migrate from analogue to digital broadcasting was set for June 2015.

Tanzania as part of the ITU family had no choice but to resolve to change its broadcasting system from analogue to digital broadcasting. As part of preparing the country to enter into this new phase of broadcasting, TCRA developed two consultation documents which were submitted to stakeholders in 2005 and 2006 respectively for discussion.

The Authority has launched an awareness campaign to educate the public on the advantages and implications of the migration to digital broadcasting. President Jakaya Kikwete launched the campaign, known as Digital Tanzania in August 2011. Digital technology is more efficient as it allows broadcast stations to offer improved picture and sound quality. It offers more programming options for consumers through multiple broadcast streams.

Analogue transmissions tie up more frequencies than digital; hence some of the freed up frequencies will be used for advanced commercial wireless services and public safety communications such as the police, fire and emergency rescue services.

Digital television offers better pictures and sound. It allows for new enhanced and interactive services, offering a richer and more active viewing experience. Quality is another hallmark of digital television. It offers a wide range of high quality channels and services, some free-to-view, some subscription.

Digital television can also provide households with interactive services and the possibility of access to the Internet using their television sets. It will also be possible to access digital services, banking services and other electronic applications through television sets.

The TCRA public awareness programme will address consumer concerns. For example owners of analogue television sets will not have to worry about this migration since they will receive digital signals by connecting a set top box to their sets.



Frequently asked questions on digital broadcasting

December 31 this year is the switch off date for analogue television broadcasts. We answer some of the likely questions associated with the migration to digital broadcasting.

What is DTT?

DTT stands for Digital Terrestrial Television (or digital terrestrial transmission). It refers to the terrestrial broadcasting of television in a digital format. Currently, terrestrial broadcasting in most African countries is in an analogue format. But more and more countries (Including Tanzania) are in the process of planning and implementing migration from analogue to digital broadcasting.

What is the difference between terrestrial television and satellite television?

Terrestrial television uses a network of transmission towers to relay the signal across the country. Each transmission tower has a specific area of coverage, and it is the network of coverage that provides television signals across the country.

The broadcast signal is sent to the various towers and if you are within the area covered by a tower, then you will be able to receive the broadcast services via a terrestrial aerial which is usually placed on your roof or on your television set (depending on how strong the signal that you are receiving is).

Satellite television broadcasts uses a satellite in the sky. The broadcast signal is sent to the satellite and the signal is received via a satellite dish. A single satellite usually covers a large area (for example the Eutelsat W7, Intelsat satellite covers most of Africa).

What is the difference between analogue TV and digital TV?

In analogue, the signal is transmitted in the form of electromagnetic waves. This is not the most efficient way of transmitting TV signals. In digital, the signal is encoded and can be compressed – this will therefore allow for more channels to be broadcast. Up to 21 channels to be broadcast in the same bandwidth as one current analogue channel uses. The diagram below illustrates the difference.

Why are we migrating from analogue to digital?

The main reason for the migration is to release valuable spectrum which can be used for other services. Spectrum is scarce, and hence making more efficient use of the spectrum available is necessary if more telecommunications and broadcasting services are to be made available on a terrestrial basis.

Has this been done elsewhere around the world?

Yes - all countries around the world will do the migration to ensure ongoing coordination and protection from interference. Examples of countries that are advanced in their migration process include Tanzania, Republic of South Africa, Rwanda, Kenya, United Kingdom, New Zealand, Sweden, United States, Ghana, France, Mauritius etc.

Will I need a satellite dish to receive DTT?

No, you will not need a satellite dish to receive DTT. The satellite signal is not the same as the terrestrial signal which is received using a terrestrial TV aerial.

Will I need a new aerial to receive DTT?

Yes, existing aerials may be used, some viewers may need new aerials, or may need to upgrade existing aerials. In some instances aerials may have to be adjusted. At this stage it is unclear who will be affected by such adjustments, but the majority of viewers will not require any changes to their aerial installations.

Will I need any other additional equipment to receive DTT?

You will need to have a DTT Set-Top Box (also referred to as a decoder). This DTT Set-Top Box is not the same as the DSTV or any other satellite decoder.

What is a Set-Top Box (STB)?

The Set-Top Box is a receiver that will decode the digital signal to enable the channels to be displayed on your analogue television set. This Set-Top Box will plug into your TV set.

Why do I need a Set-Top Box?

You need a device that decodes the digital signal received via a standard aerial antenna and supplies the TV set with a video signal. Without the Set-Top Box you will be unable to view the digital television services on your television set.

Will I need to pay a subscription fee every month like DSTV?

Yes. However, selected local free-to-air channels (Like TBC1) will also be offered on the DTT network.

King'amuzi (Set-Top-Box)



What will the Set-Top Box cost?

With the level of functionality proposed by the Tanzania Communications Regulatory Authority (TCRA), it is estimated that the retail cost of the free-to-air Set-Top Box is in the region of Tsh 50,000 to Tsh.100,000. The cost will fall to lower margins as the digital take up advances. Another driver for cost is liberalization of the STB market and mass production hence economies of scale. The trend will be similar to evolution of mobile phones and sharp drop in retail prices.

Do you need a Set-Top Box to receive the DTT services if you have DStv or any other Satellite decoder?

DStv is a satellite service. The satellite signal is different from the DTT signal and the two systems are not compatible. The customer using satellite dish will continue to receive the existing and some future free-to-air channels. However, if you wish to receive all the DTT free-to-air services you will have to purchase a DTT Set-Top Box.

Where can the Set-Top Box be bought?

The Free to Air DTT set top boxes will be available to most of retail shops. But for those who would wish to watch subscription service they will have to purchase the DTT set top box from service providers.

How is the Set-Top Box installed?

The Set-Top Box can be installed by a professional installer or one can connect the cable from the TV aerial to the Set-Top Box (normally RF IN at the back) and then follow the Set-Top Box installation menu using the supplied manual.

If I have five TV sets in the house, will I need five Set-Top Boxes?

YES, if you want each individual TV set to view a different channel. Other models of Set-Top Boxes with functionality that allows you to connect more than one TV to a single Set-Top Box may be developed and made available at a later stage. This STB will however be more expensive.

Will I need to buy a new television set to receive DTT?

No, most current analogue television sets will be able to receive DTT. The main consideration is that your TV must have an A/V input to ensure your Set-Top-Box can be plugged into your TV.

If you have this, you should be able to use your current TV set. You do not need a high definition (HF) TV, LCD TV or Plasma TV to receive DTT.

There are also TVs with an integrated Set-Top Box (that means a Set-Top Box already built in with the TV). These are usually called idTVs. However, these are not likely to be available in Tanzania for some time.

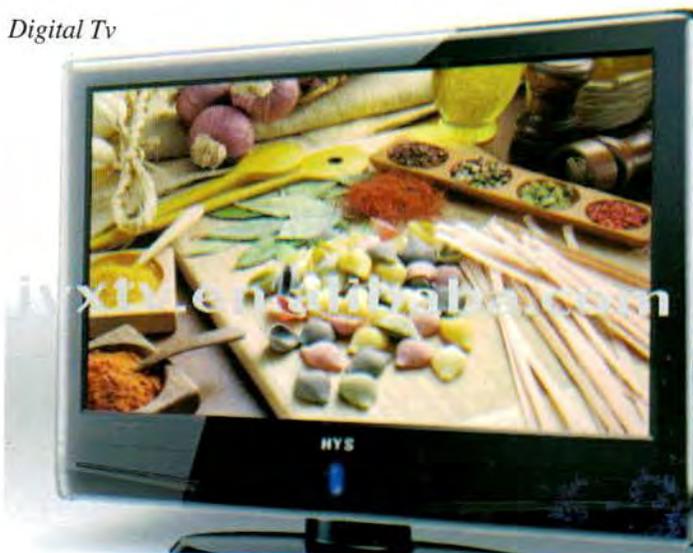
How do I establish if my TV will be compatible to the Set-Top Box?

The TV set must have audio and video inputs or alternatively must have RF input.

When will my current analogue TV stop working?

The analogue switch for Tanzania is 31st December, 2012. After that date all analogue transmissions will not be allowed in Tanzania.

Digital Tv



Mwanza internet stakeholders to host and activate own exchange point

Mwanza stakeholders have identified suitable premises for their internet exchange point (IXP). After an IXP stakeholders' consultative meeting held in Mwanza on 7th – 8th December 2011 under the coordination of TCRA, the stakeholders finally decided to host their IXP at the Tanzania Telecommunications Company (TTCL) offices, writes JAMES KILABA, Deputy Director ICTs Development, TCRA.

THE Tanzania Communications Regulatory Authority (TCRA) has been providing facilities on the ground to make internet communication in the country the cheapest ever. This has been done through deployment of Internet Exchange Points (IXPs) in Dar Es Salaam, Arusha, Dodoma and Mwanza; the objective being to reduce latencies through localising Internet traffic that leads to reduction in operational costs and increasing the reliability, traffic volume and quality of the internet connections.

However, the objective has been challenged by various basic issues like few peers, facilities management and ownership. Further, it has been experienced that building different IXPs in different cities/sites without interconnecting them reduces latencies and costs within the country.

The major problem with operationalization of the Mwanza Internet Exchange Point (MIXP) has been securing a suitable premise to house the equipment which was provided by TCRA and the overall management of the facility once installed.

To address the problem, the internet community in Mwanza participated in an IXP stakeholders' consultative meeting held in Mwanza on 7th and 8th December 2011 under TCRA's the coordination.

The Meeting was attended by more than 30 participants representing TCRA, TISPA, all Internet Service Providers (ISPs), network operators, higher learning and research institutions as well as other key stakeholders operational in Mwanza and members of the press.

The agenda of the meeting was to consult on a suitable location for hosting the Mwanza IXP and to instal the Mwanza IXP (MIX) equipment, to make it operational and sensitize the Mwanza stakeholders to peer in the Exchange.

Six presentations were made by experienced resource persons from TCRA, Tanzania Internet Service Providers' Association (TISPA), National ICT Back Bone (NICTBB/TTCL), Arusha IXP and TTCL.

A paper on TCRA's role in ICT development: Case of implementation of IXPs was presented by Ms. Connie Francis of TCRA. She noted that the initiative of having IXPs was a global agenda. During the World Summits for Information Society (WSIS) held in Geneva in 2003 and in Tunis in 2005 heads of state and government-made commitments to support the WSIS Declaration and Plan of Action. It was further noted that TCRA's initiative was to implement both the WSIS commitments and the Authority's strategic objective.



From left: Frank Goyayi (Secretary General - TISPA), Mr. Habby Bugalama Longo (Interim Treasurer - TISPA Mwanza), Mr. Benard Mruma (Interim Manager - MIXP), Mr. Yokayazi Henjeweje (Interim Secretary - TISPA Mwanza), Mr. George Mgullu (Interim Chairman - TISPA Mwanza).

There are plans to deploy two more IXPs to cover the whole country. She emphasized that together with other benefits, IXPs facilitated reduction of latency, localization of Internet traffic, increase reliability and lower internet costs.

She said that the Authority recognized that interconnecting the four exchange points was crucial.

Mr. Frank Goyayi, Secretary General of TISPA discussed internet Exchange Points and Peering Aspects. He recalled that TISPA was registered as a Trust Fund in August 2002 and later re-registered as an Association in April 2005. It was noted that in 2003 TISPA received funds from DFID for establishment of TIX. TIX started operations under management of TISPA in October 2003 with three peers, the objective being to keep local traffic local. There are currently more than 20 peers, he said.

Mr. Goyayi further discussed the benefits of routing internet traffic using IXPs compared with the scenario without IXPs.

The status of the National Fibre Backbone was discussed by Mr. Adin Mgendi from NICTBB/TTCL. He explained that the construction of NICTBB, which is owned by the Government of the United Republic of Tanzania and operated/managed by TTCL, started in July 2009. It aims at establishing Points of presence (PoPs) in all country's administrative districts and will provide access to international submarine cables for Cross-border communications. It has been implemented in two phases; with phase one covering a total of 2,100 kilometres. Phase two will cover a total of 3000 kilometres on completion.

He explained that the benefits acquired so far can be evidenced on the reduction of wholesale leased line prices by 84%, reduction in internet bandwidth prices by 23%, and significant improvement on quality and speed.



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Almost all major operators have been connected to the NICTBB. They include TTCL, Tigo, Airtel, Zantel, Vodacom and Simbanet. On cross-boarder connection, operators from Rwanda, Burundi, Malawi and Zambia have already been connected. It was further noted that among the challenges facing the NICTBB are last mile connectivity, infrastructure vandalism such as fiber cuts due to ignorance and Human Activities; and the readiness of Cross-border countries to connect via NICTBB.

Mr. Adam Mwaipungu from TTCL presented a paper on the status of interconnecting IXPs in Tanzania. He gave an update of the ongoing project of interconnecting the TIX, MIX, DIX and

AIX points. He noted that TTCL's symmetrical link of 100Mbps at TIX which is upgradable to 1Gbps has been cited as appropriate and thus considered for the project.

It was noted that activation of the link was subject to TTCL being informed on who to pay the monthly recurrent cost.

A presentation on 'Hosting of IXPs, the case of Arusha' was made by Mr. Ismail Settenda, the AIXP Co-Technical Manager. He said the Arusha IXP had been operational since its inception in June 2006. It started with three members to five in 2009. He also added that the exchange was set up and had been maintained to date by the joint efforts of the ISP's in Arusha with support from TISPA and TCRA. Arusha internet users now enjoy faster loading time and better security.

Sample statistics presented clearly indicated the growth of local traffic and thus confirmed the success of their goal and idea of having an IX in Arusha. However, after analysis of the traffic, it was noted that there was a need of cache to reduce unnecessary traffic due to repetitive downloads. It was also noted that the landing of fiber at Tanzania's coast and the progress in the construction of the National back bone assured an increase of traffic and this calls for innovative ideas and the growth of local content.

For smooth implementation of the agreed issues, the team further resolved and agreed to form a TISPA - Mwanza Chapter to facilitate formal communication to TTCL Mwanza office as a process to acquire the premises to enable collocation of the MIXP equipment and an office room of about 20 square metres.

To facilitate the process, team of twelve different personalities was formed to serve as an interim leadership for the TISPA - Mwanza Chapter in order to champion the MIXP take off.

From left in the picture are: Frank Goyayi (Secretary General-TISPA), Mr. Habby Bugalama Longo (Interim Treasurer - TISPA Mwanza), Mr. Benard Mruma (Interim Manager - MIXP), Mr. Yokayazi Henjewe (Interim Secretary - TISPA Mwanza), Mr. George Mgullu (Interim Chairman - TISPA Mwanza)

EBA AWARDS TCRA AN INTERNATIONAL RECOGNITION IN COMMUNICATIONS REGULATION

THE European Business Assembly (EBA), based and registered in Oxford, UK, has awarded the Tanzania Communications Regulatory Authority (TCRA) the international prize in the field of regulation of telecommunications, broadcasting, electronic communication and postal services. TCRA was awarded a "Diploma,

Best Enterprises" on 20th June 2011 at the Sheldonian Theatre, University of Oxford, Oxford, UK.

The EBA is an independent international project development and management organization which runs multinational business events in Europe, whose Director Gener-

al is John W. A. Netting.

The Diploma awarded by EBA reads: Tanzania Communications Regulatory Authority has been recognized as one of the Best Enterprises in the field of regulation of telecommunications, broadcasting, electronic communication and postal services in Tanzania.

ITU AWARDS TANZANIA FOR WSIS GOALS IMPLEMENTATION

By Innocent Mungy

Tanzania was awarded a certificate of recognition by the International Telecommunications Union (ITU) on 26th October 2011 during the ITU Telecom World 2011 held in Geneva from 24th – 27th October 2011. The ITU recognized the commitment of Tanzania towards strengthening the Implementation of the World Summit on the Information Society (WSIS) Related Activities and by contributing to the ITUs WSIS Fund Trust.

WSIS emerged as a result of the UN system endorsement for a global summit on ICT issues. Led by the ITU, several other agencies were involved such as UNDP, UNESCO, UNICEF, WHO, the World bank and others. The first phase of WSIS was held in Geneva during 10 – 12 December 2003, and the second phase held in Tunis during 16 – 18 November 2005. WSIS Plan of Action includes the following eleven action lines:

- The role of public governance authorities and all stakeholders in the promotion of ICTs for development.
- Information and communication infrastructure
- Access to Information and Knowledge
- Capacity Building
- Building Confidence and Security in the use of ICTs
- Enabling Environment
- ICT Applications, namely E- Government, E-Business, E-Learning, E-Health, E- Employment, E- Environment, E- Agriculture, E-Science
- Cultural diversity and identity, linguistic diversity and local content
- Media
- Ethical dimensions of the information society
- International and regional Cooperation

Some of Tanzania's achievements in relation to implementation

of the WSIS Action Lines include:

- Availability of appropriate Policies, Legislations and Regulations in the Communications sector
 - Management of Interconnection rates through Determination No. 1 of 2004 and Determination No. 2 of 2007
 - The Converged Licensing Framework introduced in 2005
 - Management of competition in the communications sector
 - Mobile Networks and growth of SIM Cards from less than 100,000 in 2000 to 22 million in 2011
 - Introduction of Mobile applications such as internet availability, money transfer, electronic payments and many others
 - Spectrum management
 - Introduction of inclusive National Numbering Plan
 - Landing of submarine cables, SEACOM in July 2009 and EASSY in 2010.
 - Construction of the terrestrial national optical fibre cable linking Tanzania with neighbouring countries: Kenya, Uganda, Rwanda, Burundi, Zambia, Malawi and Mozambique
 - Deployment of strategically distributed Internet Exchange Points (IXPs)
 - Establishment of tzNIC, the country's registry for .tz domain names
 - Management of Analogue to Digital Broadcasting
 - Introduction of Postcode system
 - Establishment of Universal Communications Access Fund (UCAF) to promote rural connectivity
- Tanzania, through TCRA, acknowledges the recognition by the ITU. TCRA shall therefore continue facilitating and playing its coordination role on the implementation of WSIS Action Lines, through its strategic goal, which is to enhance the welfare of Tanzanians through effective and efficient regulatory framework that ensures universal access to communications.

ABOUT WSIS

A summit dedicated to ICT

An initiative to bridge the digital divide

Held in two phases - Geneva 2003 and Tunis 2005

Adopted a Plan of Action with connectivity goals to be attained by 2015



TCRA Director General Prof. John Nkoma receiving the award from the ITU secretary general, Mr Houlin Zhao. TCRA represents Tanzania in the ITU.

MASUALA MUHIMU YA KUZINGATIA KABLA NA WAKATI WA KUTUMIA HUDUMA ZA MAWASILIANO

Kuwa makini wakati unachagua mtoa huduma

Kabla ya kuamua kujiunga na huduma fanya utafiti wa taarifa linganishi kuhusu bei, ubora wa huduma na upatikanaji huduma hiyo mahali unapoishi.

Unaweza kufanya utafiti kwa kupata taarifa linganishi, kutembelea ofisi za mtoa huduma, kusoma machapisho ya watoa huduma, kutembelea wavuti wa mtoa huduma au kuuliza wanaotumia huduma hizo kwa wakati huo.

Soma mkataba na maelezo ya utoaji wa huduma

Mteja wa huduma yoyote ya mawasiliano, ni vema akasoma maelezo ya masharti na taratibu za utoaji wa huduma zikiwemo gharama na wakati wa kulipia. Maelezo haya mara nyingi yanaambatanishwa na kifaa au fomu ya kujisajili.

Pale ambapo vipeperushi vinasema "*Vigezo na masharti kuzingatiwa,*" ulizia kwa kina upewe hivyo vigezo na masharti yenyewe kabla ya kujiunga na huduma.

Kuwa makini unaponunua vifaa vya mawasiliano

Mteja anashauriwa kuwa makini sana wakati wa kununua vifaa vya mawasiliano kama redio, televisheni, simu, vingamuzi n.k, kwa kuzingatia sheria ya masuala ya ki-elektroniki na posta (EPOCA) ya mwaka 2010 ambayo inataka wauzaji kufanya yafuatayo kwa wateja wao:

1. Kutoa risiti halali
2. Kutoa gerentii ya miezi 12 kwa maandishi
3. Kuuza kifaa kikiwa ndani ya kasha lake pamoja na kijitabu cha maelezo (manual) angalau kwa lugha ya kiingereza

Wakati wa kutumia

- (i) Mtumiaji anashauriwa kuhakikisha kuwa huduma anayotumia inaendana na maelezo aliyoyapata awali wakati wa kununua; kwa mfano bei, utoaji wa taarifa muhimu, n.k.
- (ii) Mtumiaji ahakikishe anatunza kumbukumbu za mkataba/maelekezo ya awali zikiwemo nyaraka kama risiti, fomu ya usajili, kijitabu cha maelezo na karatasi ya gerentii.



CREATING A LEVEL PLAYING FIELD

The Tanzania Communications Regulatory Authority (TCRA) is a quasi independent Government body responsible for regulating the communications and broadcasting sectors in Tanzania. It was established under the Tanzania Communications Regulatory Authority Act NO.12 of 2003 which merged the Tanzania Communications Commission and the Tanzania Broadcasting Commission .The Authority became operational on 1 st November 2003 and effectively took over the functions of the defunct two Commissions.The Authority is a statutory body established as part of the Government Policy reforms in the communications sector with the aim to improve the availability of the info-communications services to the public as well as allow new players into the market.

VISION

To be a world- class regulator; creating a level playing field among communication service providers and promoting accessible and affordable services to consumers in Tanzania.

MISSION

To develop an effective and efficient communications regulatory framework, promote efficiency among the communications services providers, and protect consumer interests with an objective of contributing to socio-economic and technological development in the United Republic of Tanzania.



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