

e-COMMONWEALTH

A NEWSLETTER OF THE COMMONWEALTH TELECOMMUNICATIONS ORGANISATION

//AUGUST 2016

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CHALLENGES AND OPPORTUNITIES
FOR GROWTH IN THE PUBLIC AND
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// CTO KICK-STARTS OTT STUDY

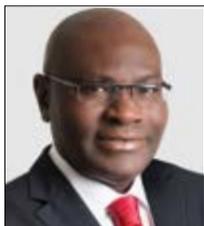
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FROM SUBSEA TO CYBERSPACE

//EDITORIAL



Shola Taylor
Secretary-General

Dear valued readers,

Welcome to your August issue of e-COMMONWEALTH. As many of you know, the CTO has made universal broadband a priority for Commonwealth countries, and I am pleased to say that we have released our first report on broadband, *Broadband Access in East Africa: Challenges and Opportunities for Growth in the Public and Private Sectors*. The report identifies factors that limit the impact of broadband in countries such as Kenya, Rwanda and Uganda, and also maps out applications expected to drive the increase in broadband usage in those countries over the next five years. The report can be downloaded for free from the CTO's website at www.cto.int.

Separately, the 2016 CTO's annual Forum which will take place in Fiji in just over two weeks will also address broadband issues, with discussions around the theme of ICTs for Inclusive Growth. I am particularly pleased to say that all the necessary arrangements are now in place, thanks to the Government of Fiji who will be hosting us this year, and so I hope to see as many of you there as possible.

Over-the-top services continue to divide policymakers among our member countries and beyond, and we are glad to announce that our study of the market dynamics as well as the policy and regulatory challenges of these services has now started. In this issue, we describe the objective of the study and the approach the research team has adopted.

Our work programme on cybersecurity and cybercrime is now extending to cyber standards with efforts to promote standards such as Cyber Essentials, the UK Government-backed cybersecurity standard, across the Commonwealth.

The private sector plays an critical role in shaping the work of the CTO, and we report on initiatives by our ICT Sector Members BT and SES in support of youth and e-health.

e-COMMONWEALTH is meant to be an informative newsletter about the CTO and ICTs in the Commonwealth, so as always, please do send us any feedback to improve it. //



BROADBAND ACCESS IN EAST AFRICA

Challenges and Opportunities for Growth in the Public and Private Sectors

Broadband is widely considered critical to the socio-economic development across the world. The World Bank's much-cited 2009 *"Information and Communication for Development: Extending Reach and Increasing Impact"* report concluded that a 10 per cent increase in broadband penetration accelerates growth in low and middle-income countries by 1.38 per cent.

Given the importance of broadband in accelerating socio-economic development, the CTO has carried out a research study into the level of broadband penetration in five East African countries – Burundi, Kenya, Rwanda, Tanzania and Uganda, and developed a set of recommendations to enhance broadband in those countries.

The CTO's broadband study set out to provide a holistic snapshot of the state of broadband within East Africa and identify challenges, opportunities and trends resulting from the changing broadband connectivity landscape, especially with respect to regulation, service provision, education, health and commerce.

The report found that national fibre backbones have been recognised by all five countries as key to promoting the

rapid adoption of broadband. These countries also recognise the significant positive impact a converged regulatory environment has on broadband. Broadband services in all five countries are provided through a mix of fixed and mobile technologies and the report highlights the complimentary role that satellite technology plays in broadband service provision.

Challenges that limit the use of broadband in health, education and e-commerce in these countries include the cost of access to broadband infrastructure, remoteness of schools and health centres, as well as infrastructure challenges such as limited electricity supply.

"Despite the significant progress observed in the ICT sector in those countries, much progress is still required, especially with respect to universal access to broadband," said Lasantha De Alwis, CTO's Director of ICT Development. *"We hope this study and the resulting recommendations will assist and enhance already ongoing efforts by governments across the East Africa region, as well as inform other comparable countries in sub-Saharan Africa and beyond."*

//RECENT DEVELOPMENTS

Fiji takes the lead on ICTs in the Pacific

Fiji's progress in ICTs shows the island nation's intention to lead in the region's use of technology in development.

Digital broadcasting

Fiji became the first Pacific island country to deploy digital terrestrial television. Prime Minister **Voreqe Bainimarama** launched the Walese Digital Platform on 29 July, allocating five digital channels to broadcasters.

Cybersecurity

Simultaneously, Fiji has made great strides by completing the final draft of their national cybersecurity strategy, developed in partnership with the CTO with participation from various government ministries, departments and agencies, the private sector, academia, non-governmental organisations and civil society within Fiji.

Hosting international fora

These developments come as Fiji prepares to host the 2016 CTO Forum on 12 - 14 September. Focusing on the theme of ICTs for Inclusive Growth, the Forum will examine Commonwealth-wide issues, including issues specific to small island developing states

(SIDS) and the Pacific region.

"The CTO is delighted that Fiji have agreed to host the CTO Forum 2016," said Mr Shola Taylor, CTO Secretary-General. "Fiji's position as an ICT leader in the Pacific region makes the country a natural host for this event and we look forward to sharing experiences, advances, obstacles and hospitality with our hosts and delegates."

The Forum will also examine connectivity,

Internet governance, ICT applications, cybersecurity and technology for inclusiveness, with speakers and delegates from the Commonwealth and beyond. Delegates will also hear regional updates from Africa, Asia, the Caribbean and Europe.

"Fiji's position as an ICT leader in the Pacific region makes the country a natural host for this event"

Shola Taylor, Secretary-General, CTO

ICTs and disaster management

The role of ICTs in disaster management will feature prominently in the discussion on SIDS, and is especially relevant to discussions taking place in Fiji and the region following the impact from Cyclone Winston, which caused landfalls in Fiji in February 2016. The Forum will also discuss the role of ICTs in measuring and combating climate change, an international issue that has a specific impact on SIDSs, especially low-lying islands in the Pacific. //

The report outlines five recommendations:

- Develop the digital literacy and ICT skills of the population, in particular those involved in the education, health and commerce sectors;
- Reduce the cost of access to broadband;
- Synchronise the planning of broadband projects with complimentary infrastructure, such as roads and electricity;
- Utilise satellite broadband to enhance rural access;
- Develop and implement national broadband strategies.

"There is still a need to develop and implement national broadband strategies or plans in the five countries studied," concluded Mr De Alwis. "Kenya and Rwanda launched their national broadband strategies in 2013, Tanzania is in the process of developing its own strategy while Uganda is in the process of getting its draft broadband strategy approved and adopted by the government. The CTO has a wealth of experience in this area, as evidenced by our work Dominica and Botswana, and we stand ready to assist other members in this area. The State of Broadband report produced by the Broadband Commission in 2013 observes that countries with broadband plans have a significant advantage with regards to broadband penetration and we commend all Commonwealth countries with such strategies for their work in this important area."

The full study report can be found at: www.cto.int/media/CTO_Broadband_Access_in_East_Africa.pdf //



Prime Minister Voreqe Bainimarama (centre) and Attorney-General Aiyaz Sayed-Khaiyum (right) at the launch of the trial run of the digital TV service in Fiji.

//EVENTS & CONFERENCES

Jamaican employers to play lead role in 2016 Commonwealth HR and ICT conference

The Jamaica Employer's Federation (JEF), the trade union representing employers' in Jamaica, will produce the Commonwealth HR for ICT, the CTO's flagship conference examining the role of ICTs in shaping human resource management.

JEF plays a pivotal role in creating a more productive, competitive and harmonious climate in which the country's business sector can achieve growth, and so it is well placed to produce this event



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HUMAN RESOURCES
FOR ICT 2016

21 - 22 NOVEMBER 2016, JAMAICA

which will discuss how human resource managers can use ICTs both in their own role recruiting and managing performance, and also to develop the skills base of their staff.

Commonwealth HR for ICT 2016, hosted by the Office of Utilities Regulation

(OUR) of Jamaica, will take place in Kingston, on 21 - 22 November.

"The CTO delighted that JEF has agreed to produce this year's conference,"

said Hilda Muchando,

Manager, Capacity Development at the CTO. *"Their experience as employers, coupled with that of OUR in the ICT sector will provide the event with vibrant discussions that examine the issues from both a Caribbean and an international perspective."* //

//CAPACITY DEVELOPMENT

Board members of Ghana NCA and Trinidad & Tobago TATT take part in high-level regulatory workshops

In August, the CTO produced two specially-commissioned workshops on ICT regulation for board members of regulatory agencies in Ghana and Trinidad & Tobago. The participants from the National Communications Authority of Ghana attended the event at the CTO's headquarters in London, while the course for the Telecommunications Authority of Trinidad & Tobago (TATT) was delivered in Port of Spain.

The workshops were designed for board members and other senior staff at these national regulating authorities. They also provide others who work in ICTs, such as

members of parliamentary committees on ICTs with an opportunity better understand ICT regulation. The bespoke programmes were based on the CTO's iRegulating ICTs series which provides high-level discussions on areas such as Internet governance, spectrum management and national broadband strategies with industry experts.

The events held in London also include industry visits to organisations including UK regulator, Ofcom, mobile industry, GSMA, Facebook and BT.

"Hearing the experiences of Ofcom in areas such as infrastructure sharing

is incredibly valuable to us at NCA as we examine how to regulate this area in Ghana," said Kofi Datsa, Director, Regulatory Administration at NCA. *"I am most grateful to the CTO for tailoring this course specifically for our organisation as I and my fellow delegates have learnt much that we can take back to apply in Ghana."*

The next Regulating ICTs round table will take place in London on 17 - 21 October. For further information, please see the event website at www.cto.int/events/upcoming-events/ or contact us at programmes@cto.int //



NCA delegates attending the CTO-hosted workshop on 15 - 17 August 2016, London, UK.

//CAPACITY DEVELOPMENT

Providing capacity development across the Commonwealth

The CTO's Programme for Development & Training (PDT) was created in 1985 as a mechanism to provide technical expertise in ICTs to stakeholders across the world by facilitating cooperation amongst members. Since then, the PDT has been one of the Commonwealth's largest capacity building programmes, with over 3,700 bilateral, technical cooperation projects delivered in over 30 countries.

The PDT provides specialised ICT capacity development training programmes to ministries, regulatory agencies and operators. Delivered in over 30 countries, the PDT provides bespoke professional training, consultancy and advisory services in policy and regulation, business development, management and technology.

The PDT's flagship course is the Diploma in Telecommunications Management Studies

PDT

(DTMS). A fast moving telecommunications industry, driven mainly by rapidly changing technologies, evolving services and increasingly complex consumer demands, constantly generates new business challenges and requires professionals in the industry to be keep up-to-date. The DTMS is a six-week course designed to provide participants with tools that enhance their ability to master changes in the business and the technical environment to assure operational and business success for their organisations.

The course examines the essential elements of technology evolution, the changing institutional/legal/ regulatory frameworks and the challenges of creating value through enterprise and effective management practices. Essential management theories and frameworks are adopted to suit the ICT sector.

August saw the start of a DTMS course in Johannesburg, South Africa, which will run until 23 September. A DTMS course for the Telecommunications Services of Trinidad & Tobago will also take place this year.

The DTMS is but one of the courses provided through the PDT scheme, many of which admit non-members. Other well-attended courses scheduled to run this year include Broadband Pricing and Licensing in a Converged Environment. For more information, please see the course schedule at www.cto.int //

//UPCOMING COURSES 2016

Diploma in Telecommunications Management Studies

15 August - 23 September 2016, Olifantsfontein, South Africa

Telecommunications Finance for Non-Finance Managers

3 - 8 October 2016, Trinidad & Tobago

Session Initiation Protocol

7 - 12 October 2016, Trinidad & Tobago

Regulating ICTs Roundtable

17 - 21 October 2016, London, UK

Spectrum Pricing and Auctions Workshop

31 October - 1 November 2016, Yaounde, Cameroon

Project Management and Appraisal

17 - 22 October 2016, Trinidad & Tobago

Session Initiation Protocol (SIP)

7 - 12 November 2016, Gaborone, Botswana

To register, or for more details visit www.cto.int



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//TECHNICAL SUPPORT & CONSULTANCY

CTO kick-starts OTT study



Following a mandate issued by Commonwealth ICT ministers at their biennial forum in London in June 2016, CTO kick-started a study to understand the market dynamics and policy and regulatory challenges of over-the-top (OTT) services, both in the context of their impact on traditional business models and of opportunities for innovation and stimulating economic growth.

The main objective of this study is to develop, based on consultations with relevant stakeholders, a better understanding of the dynamics of OTT for all stakeholders including service providers, policy makers, regulators and operators. It is expected that the output of the study will enable future deployment of OTT services to be conducted in a manner that addresses the concerns of all stakeholders, including consumers.

The first phase of the study will be

questionnaire-based and aimed at soliciting the key questions that should be addressed by the study. During the second phase the CTO will administer the survey, based on the questions developed in the first phase, to a wide sample of stakeholders. During this phase, the CTO plans to conduct regional consultations to discuss the key questions in detail and gather responses and views. The outcomes of these consultations and the survey will be utilised to develop the final published report.

"Regulators and operators have expressed concern regarding the increased use of OTT services in the last decade," said Dr Martin Koyabe, Manager, Technical Support & Consultancy. "On the other hand, these services are very popular. This study aims to produce a better understanding of these services and the impact they have on all stakeholders in this sector."

CTO completes development of Fiji's national cybersecurity strategy

In July 2016, the CTO completed the national cybersecurity strategy (NCS) for Fiji. Over 20 participants attended the various review meetings that were organised for each of the working groups. These working groups focused on various aspects of the NCS, including: policy, legal, regulatory and technical including incident response and R&D, capacity building, outreach and awareness as well as national security considerations were also taken into account.

The participants were drawn from relevant government ministries, departments and agencies, the private sector, academia, non-

governmental organisations and civil society within Fiji. Participants agreed to adopt the vision, mission and five main strategic goals of the strategy.

A comprehensive review of the main strategy draft, including the implementation log-frames, has been completed and agreed upon. Fiji's Ministry of Communications has completed the review of the final draft and it is currently being harmonised across relevant ministries.

The final document is expected to be submitted to the government before end of this year for adoption. //

Supporting national cybersecurity strategy projects

In the last four months the CTO has embarked on seven new national cybersecurity strategy (NCA) projects under the CTO's Development Assistance Programme (DAP). These projects involve the development of new NCAs for Malawi, Mozambique and Tanzania, based on the CTO's model for developing NCAs. The project will also extend support for the implementation of parts of the NCAs for Botswana, Cameroon and Uganda which were developed by the CTO in 2015-16.

In addition, this support has been extended to Rwanda which has already developed its strategy. The proposed approach by the CTO includes assisting the countries to develop implementation plans and delivering workshops on critical information infrastructure protection.

Cybercrime

Following the successful delivery of a national workshop on cybercrime in Nigeria in 2015, the CTO will conduct two similar projects in Bangladesh and Pakistan later this year. The implementation of Nigeria's national plan which was adopted in 2015 will also be assessed through the DAP.

Cyber standards

Recognising the importance of standards in cybersecurity, the CTO will conduct cyber standards project, jointly with Information Assurance for Small Medium Enterprise (IASME) Ltd, one of the four accreditation bodies appointed by the UK Government to grant *Cyber Essentials*, the UK Government's standard in cybersecurity: *Cyber Essentials*.

It is mandatory for any entity that wishes to transact business with the UK Government to attain a Cyber Essentials certification. The project calls for the promotion of Cyber Essentials across the CTO membership and to create a pool of local assessor organisations who would assess and grant Cyber Essentials in selected countries. This project is expected to create Pan-Commonwealth standards in cybersecurity which will lead to improving e-commerce and shared e-governance across the Commonwealth. //

//MEMBER NEWS

BT and London Sport host technology and innovation event in Rio de Janeiro



BT and London Sport jointly hosted Sport 2.0, an exclusive event in Rio de Janeiro on the 10 of August. 100% Sport, a global campaign supported by BT to inspire a more sustainable and environmentally aware world, was at the heart of an afternoon of lively debate during the 2016 Olympic Games.

The event was joined by a wealth of

inspirational panellists as well as special guest Michael Johnson, multi-Olympic gold medallist and founder of the Michael Johnson Foundation. This year saw the launch of Michael Johnson Young Leaders, an innovative programme supporting the sustainable development of talented young people who have overcome adversity to lead

in their community through sport.

BT is committed to helping our customers live and work more sustainably and has spearheaded the 100% Sport campaign since launching it in 2015. The company is urging sports fans to think and act sustainably on a local level and share how they will #go100percent to make a better world. //

SpeedCast acquires Eutelsat's WINS

Eutelsat Communications and SpeedCast International have signed an agreement through which SpeedCast will acquire Eutelsat's 70% stake in WINS for a consideration based on a total enterprise value of approximately €60 million.

Held through Skylogic, Eutelsat's wholly-

owned subsidiary, WINS is a provider of maritime connectivity services to passenger vessels in the Mediterranean region as well as, through its German subsidiary DH-Intercom, a provider of principally L-band connectivity and VSAT solutions to merchant vessels. The transaction will enable WINS

to benefit from the scale of a leading global network and satellite communications service provider.

The sale of Eutelsat's stake in WINS is consistent with its strategy of streamlining its asset portfolio in order to maximise free-cash-flow generation. //

SES's SATMED transforms lives in the Philippines

In the first week of August Glen Tintall had the pleasure to visit a hospital in a remote mountainous region in Mindanao, The Philippines.

This hospital is operated by an inspiring and wonderful team from the German Doctors NGO, and for 10 years has been providing free medical services for around 200,000 people, of which about 100,000 are the local indigenous population.

Until recently the hospital had very limited communications facilities, with slow and unreliable Internet services.

SES has recently installed a SATMED

facility at the hospital consisting of an e-health platform bundled with high-speed Internet connectivity. The medical staff can now access online cloud storage, manage medical imaging, staff training and related tools. In addition the SATMED suite allows referral of cases to specialist doctors anywhere in the world.

Working in the ICT industry people often take it for granted that everyone enjoys reliable communication services. This project was a great reminder about the power of satellite services to meaningfully transform the lives of the less fortunate.

See more at: <http://www.ses.com> //

Vacancy Notice

The Telecommunications Authority of Trinidad & Tobago is currently seeking to recruit a suitable individual to fill the position of Chief Executive Officer. The CEO is responsible for leading the development of the Authority's strategy and for overseeing the formulation and implementation of the required policies, plans, procedures, goals and objectives of the Authority to achieve consumer benefits and long term industry growth and development. For more information, please contact **Nievia Ramsundar**, Corporate Secretary at nramsundar@tatt.org.tt



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