

e-COMMONWEALTH

A NEWSLETTER OF THE COMMONWEALTH TELECOMMUNICATIONS ORGANISATION

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CTO ICTForum'17

11 - 13 SEPTEMBER 2017, MAPUTO, MOZAMBIQUE

// CTO FORUM: THE DIGITAL FUTURE IS WITHIN REACH, BUT URGENT INVESTMENT IS NEEDED NOW

// TELECOM WORLD
CTO CALLS FOR MORE PARTNERSHIPS FOR SAFE DIGITAL FUTURE



Forum'17
11-13 SEPTEMBER 2017, MAPUTO, MOZAMBIQUE

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//EDITORIAL



Shola Taylor
Secretary-General

Dear Readers,

I write this at the end of a busy and successful time for the CTO where we have made much progress in coordinating ICT development across the Commonwealth.

The CTO ICT Forum held earlier this month in Maputo was very productive in its discussions around the digital future, reaching consensus on a number of important issues for policymakers and regulators to implement within their countries. I am particularly grateful to Mozambique for the wonderful hosting arrangements.

Held also in Maputo immediately after the Forum, the CTO Council agreed the CTO's plans for more effective coordination at global ICT fora, including ITU's WTDC-17 and Plenipotentiary Conference 2018. In addition, Council also approved a draft resolution on cybersecurity to be submitted to next year's CHOGM.

Our vision for a digital future through partnerships for sustainable development was delivered to the international ICT community at ITU Telecom World, where I was sure to emphasise the importance of coordination and collaboration in managing spectrum, ensuring a safe and secure cyberspace, bringing communications technology to remote rural communities and generally delivering an inclusive and resilient digital future.

Our partnerships in training and consultancy have continued this month as our capacity development partners have delivered training courses to our members and our technical support team works to assist national governments in the Commonwealth and beyond develop robust cybersecurity strategies and critical information infrastructure protection.

I am energised by the successes of this month and excited about working with my team and members to deliver on the plans for the coming year. I hope to take you all in this journey with us.//

CTO ICTForum'17

11 - 13 SEPTEMBER 2017, MAPUTO, MOZAMBIQUE

The digital future is within reach, but urgent investment is needed now

CTO, ITU and ITSO engage national ICT policymakers on preparedness for IoT, Big Data, AI and augmented reality at Commonwealth ICT Forum'17 in Maputo.

The CTO ICT Forum '17 agreed that the digital future promised by the emergence of IoT, virtual environments, artificial intelligence and augmented reality applications offers enormous prospects for greater social inclusion and economic growth. But CTO Secretary-General, Shola Taylor, warned delegates that investment in broadband and ICT services is urgently needed to prevent member countries from missing out on this potential.

"With the Internet of Things, we have a new environment conducive of opportunities for new forms of digital entrepreneurship or public service delivery," he said. But he reminded that "there are still far too many without access to the Internet, who are unable to take advantage of the opportunities and benefits digital technologies have to offer."

Mr Taylor was speaking alongside

Carlos Mesquita, Mozambique's Minister of Transport and Communications; **Dr Ema Chicoco**, Chair of the Board of Mozambique's Autoridade Reguladora das Comunicações; **Patrick Masambu**, Director-General, International Telecommunications Satellite Organisation; **Malcolm Johnson**, Deputy Secretary-General, International Telecommunication Union.

The event, which was opened by His Excellency **Carlos Agostinho do Rosário**, Mozambique's Prime Minister, was attended by ministers, regulators, national ICT agencies, industry executives, non-profit organisations and academia from the Caribbean, Europe, Africa, South Asia and the Pacific.

"We need to investigate new options to provide broadband, including low-orbit space solutions. To achieve this, more investment is essential. Of course, universal service funds must continue to invest and deliver on increasing access. Countries must invest in services for their citizens, and in the infrastructure to support the delivery of these services, or they will miss out on the benefits of IoT, Big Data and augmented reality technologies," Mr Taylor warned.



Carlos Agostinho do Rosário, Prime Minister of Mozambique.



Carlos Mesquita, Minister of Transport and Communications, Mozambique.



Dr Ema Chicoco, Chair of the Board, Autoridade Reguladora das Comunicações, INCM, Mozambique



Participants at the CTO ICT Forum 2017, Maputo, Mozambique.

"It's important for us to continue developing infrastructures as well as information and communication technology services in order to ensure greater availability and coverage of online services," said Prime Minister Agostinho do Rosário.

"Access is front and centre; it is the first step towards a digital nation," said Mr Johnson. "Big Data, Cloud computing, artificial intelligence, the Internet of Things and 5G will all shape our digital future. They are important steps on the journey towards a digital nation. We need to bring together technologists, regulators and policy makers, not only from the ICT sector, but all the sectors that will increasingly depend on the technology, in order to address these challenges," he added.

The theme of this year's Forum was Digital Nations, Digital Wealth, with discussions focused on the prospects for socio-economic growth in a digital future comprising virtual environments, IoT, artificial intelligence, machine-to-machine communications and augmented reality applications. The event included participation from other organisations such as ICANN, Facebook and Huawei who actively contributed to various sessions on universal broadband, regulation of virtual environments, the digital economy, security and privacy.



High-level officials at the CTO Forum 2017.



“The event’s theme is extremely relevant today, as we all strive to provide broadband to all the world’s citizens and contribute towards achieving the UN’s Sustainable Development Agenda for 2030,” said Mr Masambu.

Consensus emerged from the discussions throughout the event, including:

- The journey to the digital future is both individual and collective.
- Public investment is a necessity to connect the unconnected, as although 3G covers 85% of the world, only half of the world population is connected to the Internet.
- Countries must develop coordinated multisectoral strategies for ICTs, to include broadband infrastructure, health, education, agriculture and other areas.
- IoT and augmented reality may require less, but more flexible regulation.
- The need to balance open data with privacy is becoming more critical.
- Government to lead by example in deploying e-government services.
- Competitive digital economies require government to create the enabling conditions, laws and frameworks, including for machine-to-machine communications.
- Governments must make cybersecurity a priority.

CTO ICT Forum is the annual ICT conference of the Commonwealth. Hosted this year by INCM, attendees included ICT ministers and regulators, national information technology agencies, universal service agencies, civil society leaders, technology solution providers, telecoms companies, consulting firms, social media companies and financial and investment institutions from 26 countries.//

Mozambique youth focus on opportunity and safety

At a special session at the CTO ICT Forum '17, young people from Mozambique’s universities and technical colleges were offered the chance to discuss their engagement in the ICT policy development in the information technology sector.

Youth leaders expressed the desire to see governments provide opportunities for

them to express themselves through ICTs, taking advantage of the opportunities offered by entrepreneurship, research and innovation in the sector. Delegates were able to offer their advice, but also advised of the need for young people to think about safety and security while online.//



CTO Council approve plans for a louder Commonwealth voice

The annual meeting of the CTO Council took place on 14 September following the CTO Forum.

Key among the CTO’s upcoming plans are the organisation’s contributions to important international fora. The Council approved the CTO’s plans to contribute member views to the ITU’s World Telecommunication Development Conference 2017 and to the ITU Plenipotentiary Conference 2018, where the organisation will also support Commonwealth members standing for election to the ITU, and to bring the issue of cybersecurity to the Commonwealth Heads of Government meeting taking place in

London next year.

“The CTO is mandated to coordinate the Commonwealth’s contributions to global ICT events,” said CTO Secretary-General, Shola Taylor. “The work that we plan in this arena over the coming year will ensure

that the needs of the Commonwealth are presented to these fora, and also that our members are well placed to contribute their views. I thank the Council for recognising the valuable role we play in this arena by approving our plans.” //



Participants at the 2017 CTO Council meeting.



ITU Telecom World 2017

Building on multistakeholder participation to deliver effective national cybersecurity strategies

Shola Taylor, the secretary-general of the Commonwealth Telecommunications Organisation (CTO), has called on countries to address cybercrime and cyber threats through effective and harmonised national cybersecurity strategies with strong multistakeholder participation.

Mr Taylor was among industry leaders during the Leadership Summit discussion on “Building a resilient digital future” as part of the conference programme of the International Telecommunications Union’s Telecom World 2017 held in Busan, and which examined the potential risks in the global smart future and how best to counter them.

“Cyberspace contributes significantly to achieving countries’ national development goals, and so international organisations, national security services, operators, intelligence and data protection agencies, as well as citizens all have a role to play in making cyberspace safer and more resilient,” Mr Taylor said as he shared the CTO’s experience in developing national cybersecurity strategies for Commonwealth member countries as well as

other countries, including Senegal.

Shola Taylor (far right), secretary-general of the CTO participating on the Leadership Summit discussion.

Mr Taylor’s message was articulated around three key points:

- The digital future promised by smart cities, IoT, augmented reality applications and virtual environments offers enormous prospects for social and economic growth, with potential for more rapid impact on developing economies.
- New forms of cyber threats will inevitably emerge, and to realise the full potential of a smart future, citizens must be able to use these technologies and services securely, and governments must ensure critical information infrastructure, e.g. power and health services, are immune from cyber attacks.
- Comprehensive multistakeholder national cybersecurity strategies are needed to mitigate the risks, and this must be the basis of every nation’s digital ambitions. Speaking also at a side event organised

by the World Economic Forum (WEF) on “Financing models for ICT connectivity infrastructure”, Mr Taylor said that there is a need for a shift in the role governments should play in infrastructure investment.

According to WEF, lack of viable financing options for infrastructure remains a significant obstacle to achieving universal connectivity, and that whilst core networks have attracted a great deal of investment, they lack reach and capacity in regions characterised by low per-capita incomes and/or low population density.

“The growth of Internet penetration is showing signs of slowing down, so it is time to accept that relying on private-sector investment alone has shown its limits,” Mr Taylor said.

Taking part in the session on “Enabling and shaping the wireless ecosystem: Celebrating the 90th anniversary of CCIR/ITU-R Study Groups”, Mr Taylor also argued that good spectrum management will be critical to the digital future.//

See more at: <https://telecomworld.itu.int/blog/spectrum-digital-future-spectrum-basic-broadband-access/>.

//EVENTS

Commonwealth Spectrum Management Forum’17

The Allocation and utilisation of spectrum for basic broadband access and IoT

As we look to a digital future with the potential for social and economic growth offered by new technologies, it is essential to ensure universal access to the Internet to enable an inclusive digital future for all.

For the 3.5 billion people yet to access the Internet, wireless access will be the most likely solution, and mobile broadband that is both affordable and fast will be the key to connecting hard-to-reach communities. To achieve this, effective spectrum allocation

and use will play a vital role in connecting such communities and other marginalised groups.

The already heavy demand for spectrum is set to increase further with the advent of IoT. Innovations such as machine-to-machine communications will compete with more traditional services for this finite resource and current users of spectrum are likely to be obliged to utilise spectrum more efficiently. Commonwealth Spectrum Management

Forum’17, taking place in London on 25 - 27 October, will address the competing demands for spectrum, including how to utilise spectrum efficiently and how to maximise the economic value of spectrum, providing guidance to policymakers and regulators across the Commonwealth and beyond.

For the latest agenda, or to register, please visit the event website at: www.cto.int/events/upcoming-events/the-commonwealth-spectrum-management-forum.//

//TECHNICAL SUPPORT & CONSULTANCY

Promoting cybersecurity beyond the Commonwealth

Following the development of the Commonwealth Approach to Developing National Cybersecurity Strategies, the CTO has assisted countries across the Commonwealth to develop their national cybersecurity strategies based on the model strategy and using the array of skills and competencies of the CTO in the field of cybersecurity.

The CTO's expertise in this area has been recognised beyond the Commonwealth as the organisation has begun work with Senegal on its national

cybersecurity strategy with a visit to Senegal taking place in August. The CTO team



Opening ceremony of the cybersecurity workshop in Senegal.

led by Marcel Belingue, Senior Manager, Membership & Communications met with

officials from the Ministry of Post and Telecommunications, along with other stakeholders, including the ministries for defence and justice, the Prime Minister's office, the national telecoms regulator, the government's IT agency ADIE, the state owned operator SONATEL and the National Commission for Cryptography. A three-day workshop was convened with these stakeholders in order to

develop the key strategic objectives for the cybersecurity strategy.//

Mozambique takes steps to protect critical information infrastructure

An essential component of a national cybersecurity strategy is the development of a critical information infrastructure protection (CIIP) plan. Critical infrastructure includes health services, defence and power. Following the CIIP workshops delivered last month in Tanzania and Uganda, the CTO held a CIIP workshop in Mozambique on 18 - 20

September 2017.

Chaired by the CTO Secretary-General, this workshop was addressed by the UK High Commissioner to Mozambique, recognising the role played by the UK in international cybersecurity cooperation.

"The Internet offers enormous potential for countries to develop their economies, engage their citizens in government and

services, and develop health, education and farming facilities," said Dr Martin Koyabe, the CTO's manager for Technical Support & Consultancy. *"In order to gain these benefits cyberspace must be secure and protected, and it is important for the international community that all countries have plans to secure cyberspace for their citizens."/>*

//CAPACITY DEVELOPMENT

Mauritius Telecom trains staff on IMS and multiplexing

The CTO held two workshops to train officers from Mauritius Telecom on IP multimedia subsystem fundamentals on 13 - 15 September and optical multiplexing on 4 - 9 September in Port Louis, Mauritius.

The IP multimedia subsystem fundamentals course was designed for participants to understand the IP multimedia subsystem (IMS) concepts, IMS architecture and various protocols and services offered with quality of service. The course taught delegates an overview of the IMS and the details

behind the IMS and the architecture of IP multimedia subsystems. The five-day course looked at the latest concepts in IMS



Delegates attending the course on optical multiplexing.

as well as delivering value added services enabled by the system. On completion of

the IP multimedia subsystem fundamentals course, delegates were able to understand service creation and delivery, IMS resource and media control elements as well as policies and securities in IMS.

The course on optical multiplexing focused on the various multiplexing techniques used to combine a number of channels to send over mediums to make the best use of transmission mediums. After the completion of the optical course delegates were able to understand optical networking and data transmission over fibre, and the advantages of fibre optic systems.//

//MEMBER NEWS

ASIA

Pakistan's \$130 million USF budget gives priority to broadband

The Policy Committee of Pakistan's USF chaired by Minister of State for IT & Telecommunications Anusha Rahman has approved a \$130 million budget for the fund for 2017-18. The budget makes broadband its main priority, targeting underserved areas in the provinces of Federally Administered Tribal Areas, Khyber Pakhtun Khwa and Baluchistan. Mrs Rahman's ministry

said it is on course to meet the target of covering all villages and 100 per cent of the population by 2018.

The USF budget also included allocation for other programmes including ICTs for Girls and the promotion and enhancement of the demand side, specially e-commerce for micro, small and medium enterprises across Pakistan. //



CREDIT: WWW.MOFT.GOV.PK

EUROPE

UK Government strengthens data protection law to protect citizens

People in the UK will have more control over their personal data and be better protected in the digital age under new measures announced by Digital Minister Matt Hancock.

In a statement of intent the Government has committed to updating and strengthening data protection laws through a new Data Protection Bill which provide UK residents with the confidence that their data will be managed securely and safely. Research shows that more than 80 per cent of people feel they do not have complete control over their data online.

Under the plans individuals will have the right to be forgotten and ask for their personal data to be erased.

Businesses will also be supported to ensure they are able to manage and secure data properly with this act.

"Our measures are designed to support businesses in their use of data, and give consumers the confidence that their data is protected and those who misuse it will be held to account", said Matt Hancock, Minister of State for Digital.

He further stated that, *"the new Data Protection Bill will give us one of the most robust, yet dynamic, set of data laws in the world. The Bill will give people more control over their data, require more consent for its use, and prepare Britain for Brexit. We have some of the best data science in the world and this new law will help it to thrive."/>*

CentralNic joins CTO Membership

The CTO is pleased to announce that CentralNic, one of the world's leading

domain name registry service providers, has joined the CTO.//

Huawei in major Cloud partnership aimed at media sector

Huawei joined hands with T-Systems to showcase their partnerships with Sony, Harmonic, and IRT by announcing the commercial availability of media processing platforms on T-Systems Open Telekom Cloud.

Open Telekom Cloud provides a full range of on-demand and secure Cloud services enabling European companies to address rapidly changing market conditions.

"Together with partners like T-Systems, Sony, and Harmonic, Huawei will provide reliable, stable and affordable cloud services to help media customers quickly adapt to Cloud transformation and better use cloud services," said Jiao Yuchong, Huawei Chief Solution Architect for Open Telekom Cloud

"Since film production demands large computing capacities, the high-performance, flexible, scalable resources from the Open Telekom Cloud are the perfect answer to these challenges," said Ralf Hülsmann, Head of Cloud Partner Ecosystem at T-Systems.//

AFRICA

New broadband offering to support in-country network applications



According to the latest ITU figures, by the end of 2017, 48 per cent of the global population will be online, though some 3.9 billion people will still not have access to the Internet—with the digital gap growing between developed and developing countries.

In relation to the UN meeting to improve broadband access, satellite provider Intelsat announced a new service named RUN, an in-country service with a Cloud-based network management system that works with enterprises, telcos and government users to enhance broadband data solutions. RUN routers provide an easy-to-operate platform that will be available in remote areas of Africa, the Middle East, and Central and South Asia.//

commonwealth Spectrum Management

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