IEEE Experts in Technology (ETAP) Forum

30 May 2017, Windhoek, Namibia
Cybersecurity: Combatting cybercrime while advancing internet inclusion for all

What is happening?

The IEEE Experts in Technology and Policy (ETAP) Forum takes place on 30 May at the Safari Hotel Conference Centre in Windhoek, Namibia, as part of the 12th-annual IST-Africa Week 2017 (30 May - 02 June).

Organized by the IEEE Internet Initiative in cooperation with IST-Africa, this participatory workshop is focused on current and future internet governance, cybersecurity and privacy issues across the African continent.

This forum provides an opportunity for technology developers, policy makers and other representatives from the public, private, education and research, societal and funding sectors to share experiences and good practices. Participants will discuss issues, barriers and opportunities associated with achieving "a safe, secure, trusted, affordable internet for all." This objective is a key enabler of the United Nations (UN) Sustainable Development Goals (SDGs).

IST-Africa Week 2017 (30 May - 02 June) is hosted by the Government of Namibia, supported by the European Commission and African Union Commission and Technical Co-Sponsored by IEEE Society on Social Implications of Technology, IEEE Region 8 and IEEE South Africa Section. Confirmed keynote speakers include: His Excellency Dr. Nickey Iyambo, Vice President, Republic of Namibia; Hon. Dr. Itah Kandjii-Murangi, Minister of Higher Education, Training and Innovation, Namibia; Hon. Tjekero Tweya, Minister of Information and Communication Technology, Namibia; H.E. Ambassador Jana Hybaskova, European Union Delegation to Namibia; Festus K. Mbandeka, CEO, Communications Regulatory Authority of Namibia, and Dr. Eino Mvula, CEO, National Commission on Research, Science and Technology (IST-Africa Partner for Namibia).

IST-Africa Week brings together senior representatives from leading public, private, education and research, societal, funding and international donor organizations from around the world to discuss innovation, science and technology-related policy, showcase research results and share knowledge and good practices related to sustainable development. A summary of the preliminary outputs from the IEEE ETAP Forum will be reported during the Closing Plenary on 2 June. Please visit www.IST-Africa.org and follow @ISTAfricaNews on Twitter to learn more about the IST-Africa Initiative.

What would "A Safe, Secure, Trusted Affordable Internet for All" look like, and how would it benefit humanity?

International research has demonstrated how societal challenges in fields as diverse as agriculture, education and healthcare delivery can be successfully addressed through wider internet adoption. The World Economic Forum (2016) notes that expanding "*internet adoption and use is consistent with, and in multiple instances, supportive of many of the United Nations (UN) global goals for sustainable development – not least those related to education, gender equality, jobs and economic growth, innovation and infrastructure, and*

sustainable cities and communities." The World Bank and ITU have both concluded that increasing broadband penetration has a direct correlation with economic growth. ITU (2012) found that a 10% increase in penetration resulted in a 1.19% increase in gross domestic product (GDP) in developed countries, while the economic impact in developing countries was even higher at 1.35%.

However, the World Economic Forum has also highlighted that there are known risks associated with increasing the digital divide "*until internet penetration in a particular market researches a minimum threshold of about 20 – 25%.*" They also highlight the risks associated with internet for all, including "threats to consumer privacy and trust, data security, piracy, fraud, cyberhacking and cybercrime." According to the Broadband Commission for Digital Development, ITU (2015), "*growth in global mobile cellular subscriptions and growth in internet usage have slowed sharply. We have reached a transition point in the growth of the internet.*"

All 17 of the 2030 SDGs, to which all UN member countries committed to in late 2015, rely on extending stable, secure and open access to broadband internet in underdeveloped and underserved communities and regions. At an IEEE Internet Initiative event in Delhi, India, on 15 September 2016, the U.S. ambassador to India, Richard R. Verma, said, "*(T)he fact remains that three out of every five people in the world are still without internet access. This is unacceptable, because in today's digital economy, to be unconnected is to fall behind … To put it simply, we view internet connectivity as essential infrastructure, the same as roads, bridges and ports.*"

While significant progress has been achieved across Africa in increasing available bandwidth, reducing costs associated with internet access and educating the public about opportunities and threats associated with internet adoption, much is left to do. This event will share insight and good practices from Namibia, Africa, and the rest of the world with the objective of increasing public awareness and stakeholder coordination while supporting policy formulation.

How could the event in Namibia help the vision become reality?

The IEEE event can create wider public awareness through those contributing during this event well as the media about what can be done to achieve these objectives. Our common objective is to operationalize greater stakeholder coordination after IST-Africa Week 2017. IEEE will help facilitate exchange of valuable information to inform policy and sensitize the public to achieve greater internet inclusion without unanticipated consequences. The IEEE ETAP Forum will help foster interaction among stakeholder communities, help participants arrive at an even better understanding of local, national and pan-African priorities, raise awareness of the work of the IEEE Internet Initiative and illuminate actionable next steps for the initiative.

It's crucial that multi-stakeholder events such as this IEEE ETAP Forum take place where innovation is occurring, so that connections are made between developers of global technologies with experts in the local policy and development landscapes. Nowhere is the need for localized understanding of innovation capacity and needs greater than across Africa, which has demonstrated leadership in adoption of mobile technologies, mobile money and internet enabled health and agriculture solutions for example, while

simultaneously facing challenges associated with affordable internet access and supporting sustainable entrepreneurial growth, particularly in the digital economy.

Topics to be addressed in keynote remarks, panel discussions and workshops at the IEEE ETAP Forum include:

- Combating cybercrime while maximizing internet inclusion for all
- Balancing privacy concerns while combating cybercrime
- Multi-stakeholder internet governance
- Public awareness and education on internet safety and cybercrime
- Developing/operationalizing legal frameworks and strategies related to national cybersecurity, cybercrime and internet governance
- Trends in cyberattacks and cybercrime
- Data protection and privacy in the era of internet of things (IoT)
- National computer incident response team (CIRT) development
- Developing critical information infrastructure protection frameworks
- Security audits of information systems in public administration
- National public key infrastructure (PKI) development

What is the IEEE Internet Initiative, and why is it involved?

IEEE is the largest technical professional organization dedicated to advancing technology for the benefit of humanity. The IEEE Internet Initiative promotes thought leadership and innovation and advances solutions for a trustworthy and inclusive internet by contributing technology expertise and resources to the policy ecosystem and providing a collaborative development platform and community to produce action-oriented and implementable outputs.

Similar IEEE Internet Initiative events have been convened in China, India, Israel and the United States. The IEEE ETAP Forum series provides a unique, neutral platform for collaboration among engineers, scientists, industry leaders, and others engaged in an array of technology, policy, and industry domains around the world—to the collective benefit of all stakeholders. The events help both to boost knowledge about technology and its implications and impact on internet governance issues and to improve awareness of public policy issues and processes in the global technical community.

Please visit http://internetinitiative.ieee.org and follow @IEEENetPolicy on Twitter to learn more about the IEEE Internet Initiative.

References

Broadband Commission for Digital Development, ITU, UNESCO (2015) The State of Broadband 2015 ITU (2012) Impact of Broadband on the Economy

IEEE (2016) Internet Inclusion: Advancing Solutions, New Delhi, India, 15 September 2016

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