

The 2nd Regional African Conference of the International Telecommunications Society

Communications and Applications for All - The ICT Thrust Transforming Business, Competition, Policy, and Regulation

March 15 – 16, 2018 Intercontinental Hotel, Lusaka, Zambia



University of Zambia



Ministry of Transport and Communications



International
Telecommu
nications

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WELCOME

Welcome Message from the Minister of Transport and Communications, Hon. Eng. Brian C. Mushimba, MP

Dear Conference Participants,

It is an honor and privilege for me to welcome you, on behalf of the Zambian Government, to the 2nd African Regional Conference of the International Telecommunication Society (ITS) taking place in Lusaka, Zambia from March 15 to March 16, 2018. The conference under the theme, **“Communications and Application for All- the ICT Thrust Transforming Business”** is co-hosted by the University of Zambia and the Ministry of Transport and Communications in conjunction with the International Telecommunication and Society (ITS).



In 2012, the African Union Heads of State and Government adopted the a multi sector Programme for Infrastructure Development in Africa (PIDA). PIDA includes four key areas and these are transport, energy, transboundary water and telecommunication/ICT. African governments through PIDA are facilitating continental integration in Africa through improved regional infrastructure. PIDA is a joint initiative of the African Union, NPCA and AfDB.

The Zambian government, therefore, has an important role to play, in creating an enabling environment and in acting as a role model in adopting new innovations and technologies. My Government`s role is to create a vibrant environment where useful information is readily available to help entrepreneurs, farmers, health workers and environmentalists, for instance, make better decisions in their daily activities. The key supporting pillars for such an environment includes adequate ICT infrastructure, digital literacy and nurturing an ICT-skilled workforce that would propel emerging efforts to leverage ICTs to the next level to be able to achieve sustainability and replicability towards transforming all land locked countries into land-linked economically active countries. To achieve this goal, my ministry is putting in place measures to enhance competition by review existing ICT Policies and Regulations. We hope to fulfil Zambia`s agenda to be a communication hub in the Southern Africa region by 2030.

Over the next two days, more than 150 experts, academicians, policy makers and sector regulators from over 10 countries will converge in our beautiful, vibrant and peaceful City of Lusaka to reengage on key issues central to the society. The Conference builds on the 1st African Regional Conference of the International Telecommunication Society which took place in Accra, Ghana from March 10 to March 11, 2016 and whose focus was *ICT Infrastructures, Applications and Policies*. It is my hope that the Conference will unpack and discuss the priority ICT infrastructure and other ICT projects with the view to accelerate investment in the ICT sector. My Ministry, whose responsibility it is to guide and develop the ICT sector in the country, is excited at the prospect of learning from you and the unique opportunity the Conference presents us in order to share our own experiences.

It is indeed my hope that through the deliberations and exchange of knowledge across the sector, you will find the conference immensely beneficial to you as individuals, as organizations or indeed as a country. We are here to support and encourage dialogue amongst decision makers and the relevant authorities with the view to demonstrating the interconnectedness of the ICT infrastructure development.

We would like to extend our thanks and appreciation to our conference co-host, the University of Zambia and the International Telecommunication Society, our various national partners for making this conference possible. We believe that this event will open great opportunities for domestic and foreign businesses to meet, discuss, set up and strengthen trade and investment in Zambia.

I look forward to meeting as many of you as possible as the conference time can allow and to

engaging in our collective discussion of issues of pressing importance to the ICT industry in particular and the region in general.

Sincerely,

Hon. Eng Brian C. Mushimba, MP
Minister of Transport and Communications

WELCOME

Welcome Message from the University of Zambia`s Vice Chancellor Prof. Luke E. Mumba

Dear Conference Participants,

I am sincerely honored to welcome you to Zambia and to the 2nd African Regional Conference of the International Telecommunication Society (ITS) here in Lusaka.

The University of Zambia is the nation's leading provider of higher education. Set up in 1966, the University of Zambia today graduates, on average, 5,000 students per annum. Our graduates are helping both the profit and the not for profit sector to create sustainable success.



Guided by the Strategic Plan 2018 – 2022, the University of Zambia shall strengthen its partnerships with industry and other stakeholders. Thus, we welcome opportunities for input by industry into the re-alignment of our curricular. We also look forward to collaborative research leveraging on information technology to support high value product and service innovation.

The 2018 ITS conference is important for us. It will provide a platform for dialogue among regulators in the ICT sector, policy makers, business leaders in ICT, researchers and indeed students on how the sector is positioning itself to contribute to the national development agenda.

I extend sincere congratulations to the Organisers of the 2018 ITS conference for their outstanding work.

May this event be filled with numerous successes.

Sincerely,

Prof. Luke E. Mumba
Vice Chancellor, University of Zambia

WELCOME

Welcome Message from ITS Board Chairman, Mr. Stephen Schmidt

Dear Conference Participants,

It is my great pleasure to welcome all of you to Lusaka, Zambia for the 2nd African Conference of the International Telecommunications Society (ITS), organized in cooperation with the University of Zambia.



This conference brings together scholars, regulators and practitioners from 4 continents and 10+ countries to discuss issues of pressing importance in communications. Areas of focus include mobile banking, e-health, education and competition in mobile telephony. These are matters of acute interest within Zambia and, indeed, in Africa more generally.

It is significant that these very same issues resonate on a global scale because countries around the world are grappling with questions about how communications can improve societal outcomes across a broad range of areas including health, education, government and the economy overall. In a very real sense, then, we have come to Lusaka to learn about the *broader world* and to share perspectives, expertise and solutions to challenges faced by citizens, government, and countries all around the world.

It is a great privilege for ITS to be involved in the dialogue – *both regional and global* – fostered by this conference. We are very grateful to Dr. Simon Tembo for his vision and persistence as Chair of the Conference Organizing Committee. We likewise acknowledge the crucial and energetic contributions of Dr. Anders Henten, Chair of the Program Committee. We extend our sincere thanks to the University of Zambia, the Government of Zambia and the conference sponsors. Without the generous resource commitments of these organizations, this conference would not have been possible. Finally, we extend our deep thanks to the many other individuals (organizers, presenters, participants) that have helped make this conference a success.

The International Telecommunications Society (ITS) is an association of professionals in the information, communications, and technology sectors. ITS is an independent, non-aligned and not-for-profit organization with a worldwide network of about 300 members. ITS provides a forum where academic, private sector, and government communities can meet to identify pressing new problems and issues, share research results, and form new relationships and approaches to address outstanding issues. ITS focuses on the evolving applications, services, technology, and infrastructure of the communications, computing, Internet, information content, and related industries. The goal of ITS is to research and analyze issues related to the emergence of a global information society. The organization places particular emphasis on the interrelationships among socioeconomic, technological, legal, regulatory, competitive, organizational, policy, and ethical dimensions of the issues it addresses.

I look forward to meeting as many of you as possible at the conference and to engaging in our collective discussion of issues of pressing importance.

A handwritten signature in black ink, appearing to be 'S. Schmidt'.

Stephen Schmidt

ITS Board Chairman

WELCOME

Message from Chairman of the Conference Organizing Committee Dr. Simon Tembo

Dear Conference Participants,

It is an honour and privilege for me to welcome you to the *ITS Lusaka 2018* conference entitled the 2nd African Regional Conference of the International Telecommunication Society (ITS). The conference provides us good opportunities to exchange knowledge and information on the latest researches, and an opportunity to advance dialogue between academia, industry and government; and a chance to create new friendships and strengthening existing relationships; and a perfect time to enjoy the entertaining environment of Lusaka.



In recent years, the world has witnessed an increase in broadband smart digital technologies on the devices, sensors, networks, data centers, and millions of applications. These smart technologies spun from computing, broadcasting and multimedia platforms, applications and contents, big data & data-mining, advertising and social media. According to the theme "*Communications and Applications for All - The ICT Thrust Transforming Business, Competition, Policy, and Regulation*", the *ITS Lusaka 2018* provides a good opportunity for participants to discuss these advancements.

The 21st century, the information age so to speak, information and data are extremely important for social and economic development. To the effect that the ICT industry has remained one of the most vibrant and dynamic global markets with more and more people getting connected, new applications and services being developed and users' online experiences expanding throughout the world. Whilst these developmental changes are very much welcome they have caused several business disruptions in the telecommunications and media industries. Today, regulators in the ICT industry stand at a crossroads in this era of transition. The digital convergence has caused the boundary between traditionally distinct regulatory realms, between communications and media services, and between communications and information services, to become blurred. This has not only fundamentally changed how we communicate, and how we consume (digital) goods, but also fundamental changes on how these markets should be regulated. Similarly, new business models and regulation associated with digital convergence has brought about several opportunities and challenges, e.g., how to deal with the issues of a "level playing field" between traditional telecommunications services and new Over-The-Top (OTT) players; how to design a smarter world (e.g., smart societies, smart communities, smart cities and smart grids); how to deal with closing the digital divide; or how to deal with empowering and protecting consumers (e.g., consumer privacy). In this increasingly digital environment, some key questions need to be addressed, as how to assess the readiness of countries' legal and regulatory frameworks and assist policy-makers and regulators in pushing forward their national digital agendas within the context of a globalized and connected world.

The *ITS Lusaka 2018* conference addresses these and related issues, from a regulatory point of view to a consumer's and Telco's perspective, as well as their implications for Africa's dynamic information and telecommunications market.

On behalf of the Organizing Committee, I wish to thank the sponsors for supporting the conference. Without these companies' support, we would not have achieved the conference's success.

For participants visiting Zambia, we welcome you to Zambia and we do hope that you enjoy your stay here in Lusaka.

Sincerely,

Dr. Simon Tembo
Chairman - Conference Organizing Committee

WELCOME

Welcome Message from Chairman of the Programme Committee Prof. Anders Henten

Dear Conference Participants,

It is with great joy that I welcome you to this 2nd African ITS conference in Lusaka, Zambia, organized by the International Telecommunication Society in cooperation with University of Zambia.

The 1st African ITS conference was held in Accra, Ghana, and it is the intension of the International Telecommunication Society to organize more conferences and seminars in Africa in the years to come. The major reason is that telecommunications and information and communication technology developments in general have experienced a steeply increasing importance during the past two decades in African countries, and that research and education in the field have equally grown.



The International Telecommunication Society is highly interested in learning from the experiences and developments in African countries and is eager to engage in dialogue and discussions on experiences in different parts of the world. The more we meet and engage with one another, the better will be our understanding of development trends around the world and our possibility for contributing to positive and enriching outcomes of the implementation and use of the new technological potentials afforded by information and communication technologies.

I would like to take this opportunity to sincerely thank all members of the conference Programme Committee who have contributed to this conference by providing ideas and guidance and by reviewing papers presented at the conference. I especially want to thank Dr. Simon Tembo who has not only been the main organizer of the conference but has also served on the Programme Committee. Without his deep commitment it would not have been possible to make this conference a success.

I would also like to extend the gratitude of the Programme Committee to the University of Zambia and its Vice-Chancellor, Professor Luke Evuta Mumba, and to the Government of Zambia for hosting the conference. We feel privileged that the Government of Zambia takes part in the vital dialogue on the future of ICT developments and its many social, industrial and governmental applications.

Furthermore, I would like to deeply thank the public and private sponsors of this conference. Their support is an important asset for the conference, not only in the form of economic sponsorship and sponsorship in form of kind but also because it shows an interest in the topics dealt with at this conference.

Last but not least, I would like, on behalf of the Programme Committee, to thank all contributors to the conference whether they are paper authors and presenters or panelists on the three panels of the conference. With the energetic enthusiasm of the local organizers it has been possible to put together 3 very interesting panel sessions with highly distinguished speakers. The Programme Committee is grateful to the local organizers for arranging these panels.

Hoping that you will have an intellectually enriching and challenging conference

A handwritten signature in blue ink that reads "Anders Henten". The signature is fluid and cursive.

Anders Henten

Chair of the Progamme Committee

MEMBERS OF THE CONFERENCE ORGANISING COMMITTEE

1. Dr. Simon Tembo (Chairman Conference Organizing Committee)
2. Prof. Anders Henten (Chairman Programme Committee)
3. Mr. Yese Bwalya
4. Mr. Khumbuzo Nkunika
5. Dr. Erastus Mwanaumo
6. Mr. Austine Sichinga
7. Mr. Norman Kamanga
8. Mr. Shuller Habeenzu
9. Mrs. Marjorie Sikasote
10. Ms. Annie Malambo
11. Mr. Joseph Siwo
12. Mrs. Margarete Nalumino
13. Mr. Damaseke Chibale
14. Mr. Eugene Mwila
15. Mr. Aaron Banda
16. Dr. Jackson Phiri
17. Mr. Habeenzu Bubala
18. Mr. Friday Chazanga
19. Mr. Ngenda Mbindawina
20. Mrs. Fredah Nkhandaani
21. Ms. Mercy Zulu
22. Mr. Jerry Muwamba
23. Mr. Louis Mumba
24. Mr. George Ziba
25. Mr. Boyd Mukombwe

ITS GLOBAL MEMBERS

AT&T



NERA



Deutsche Telekom



Nippon Telegraph and Telephone Corporation (NTT Corporation)



KDDI Research, Inc.



Orange



National Broadcasting and Telecommunications Commission of Thailand (NBTC)



TELUS Communications



TIM Celular S.A. (TIM Brasil)



ITS NON-PROFIT / GOVERNMENTAL MEMBERS

BAKOM



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Kommunikation BAKOM
Office fédéral de la communication OFCOM
Ufficio federale della comunicazione UFCOM
Uffiz federal da communicaziun UFCOM

Center for Communication, Media, and
Information Technologies (CMI)



Columbia Institute for Tele-Information (CITI)



Columbia Institute
for Tele-Information

Department of Information and Communication Traffic,
Faculty of Transport and Traffic Sciences, University of Zagreb



Department of
Information and Communication Traffic

University of Zagreb Faculty of Transport and Traffic Sciences

IDATE



IDATE
DIGIWORLD



InfoCom Research, Inc.

InfoCom Research, Inc.

National Communications Commission, R.O.C. (Taiwan)



Pacific Telecommunications Council (PTC)



Taiwan Communications Society (TCS)



ZBW - Leibniz Information Centre for Economics



Leibniz-Informationszentrum
Wirtschaft
Leibniz Information Centre
for Economics

For complete details about ITS Corporate membership including membership categories, benefits, annual fees and how to become a member at the Corporate level, please visit the ITS website at www.itsworld.org or contact the ITS Secretariat at secretariat@itsworld.org

INVITED SPEAKERS

KEYNOTE: *“Future research areas in a rapidly changing telecommunications industry”*

Friday, 16th March 2018, 09:00 - 09:25hrs
Plenary Session, Ballroom

Professor Jason Whalley

Newcastle Business School
Northumbria University,
Newcastle

UK

Dr Jason Whalley is Professor of Digital Economy at Newcastle Business School, Northumbria University, Newcastle, UK. He has a MA in Geography from the University of Cambridge, MA in Modern International Studies from the University of Leeds and PhD in Management Science from the University of Strathclyde, all in the UK. There are four themes to Jason’s research. The first theme is that of the structure of telecommunications markets. The research here, often with Professor Peter Curwen, has largely focused on mobile operators and, more recently, on broadband access markets. The diffusion and adoption of broadband is the second research theme, examining the availability and adoption of broadband in rural and remote areas as well as pricing and the factors that determine the speed that is delivered to users. The third area of research examines the development of ICT in Himalayan countries such as Bhutan and Nepal, while the fourth focuses on the Internet of Things. This latter area is increasingly concerned with the strategies that companies are adopting as they embrace the Internet of Things. Jason is also an Associate Editor of Telecommunications Policy, the leading journal in its field.



KEYNOTE: “Developing Critical Infrastructure – Data-Centric, Next-Generation Communications Networks”

Friday, 16th March 2018, 09:25 - 09:50hrs
Plenary Session, Ballroom

Dr. Daniel Foty,
President of Gilgamesh Associates, LLC,
USA

Dr. Daniel Foty has more than two decades of engineering and management experience in the mainstream of the technology industry – specifically in integrated circuits and wireless communications. After six years at the microelectronics unit of a large technology company, he founded his own consulting firm, Gilgamesh Associates, LLC, which works in very demanding areas of design and development – such as signal processing, wired/wireless communications, ultra-low-power design, and intellectual property. A serial entrepreneur, he is currently beginning to organize a new start-up company for the development of new technologies for ubiquitous ultra-high-speed, low-power, low-cost wireless interconnectivity.



Dr. Foty is also the author of the best-selling book, *MOSFET Modeling with SPICE: Principles and Practice*, which was published in 1997 by Prentice-Hall and is now in its third printing (a Vietnamese language edition was published in early 2006), and more recently of *Moore’s Law: The Untold Story* (2017) and *The Rise and Fall of Classical Athens: A Short History* (2018). In addition, he has authored or co-authored some 100 journal articles and conference presentations and is a frequent plenary (keynote) speaker at major international conferences throughout the world. He is also a licensed pilot, holding both an instrument rating and a seaplane rating.

Dr. Foty holds the B.S. degrees in Physics and Chemistry from Bates College, the M.S. degree in Electrical Engineering from the University of Illinois, and the Ph.D. degree in Materials Science from the University of Vermont.

KEYNOTE: *“Challenges and opportunities of regional integration in the light of ICT policies in Africa”*

Friday, 16th March 2018, 09:50 - 10:15hrs
Plenary Session, Ballroom

Mr. Jean-Francois Labihan,

Public Policy Director for Sub-Saharan Africa,
GSMA

KENYA

Mr. Jean-Francois's career in ICT spans almost 20 years mostly in international roles with a focus on public policies and regulatory affairs. Before joining GSMA as Public Policy Director for Sub-Saharan Africa in November 2017, Jean-Francois was Regulatory Affairs Director for Africa at Millicom supporting all its Tigo operations across the continent since 2015. He was during this time a CPROG SSA member and chaired M4D Connected Society PLG. Previously Jean-Francois was for four years Managing Director and lead consultant at EuroReg, a boutique consultancy he founded in Luxembourg. Between 2008 and 2011 he worked for the International Telecommunication Union (ITU), a United Nations specialized agency. Prior to ITU, he was in charge of cost modeling, universal service and overseas mobile termination at ARCEP,



the French regulator for telecoms and posts. During the first part of his career he held technical roles in Luxembourg with America Online (AOL), in Germany at a wireless local loop operator and in France for 3G rollouts. He graduated from Telecom Sud Paris engineering school and holds a Master in European Studies from Sciences Po Paris and another in International Governance from St. Gallen University in Switzerland.

KEYNOTE: “”

Friday, 16th March 2018, 10:15 - 10:30hrs
Plenary Session, Ballroom

Mr. Lars Stork,
CEO Vodafone
ZAMBIA

Mr. Lars Stork is a Danish Executive who has lived and worked in 15 countries around the world with a proven track record of starting up launching, growing and transforming businesses. He holds significant management experience, from FMCG (Unilever) and Telecoms businesses (Celtel). His most recent telecoms experience was with an Indian start up, building an organization for implementation of LTE 4G services. Lars has won a global award, for the best innovative approach in terms of penetrating rural areas in Africa. He was also named in the GTB top 100 list of the most influential people in the telecoms industry.



PANEL MODERATORS

Moderator for Ministers Panel - Topic: “Use of e-Agriculture to Scale Up Agriculture in Africa. What are the African Governments doing to make Agriculture sector more attractive to invest? Where are the opportunities? How can investors in the Agriculture’s supply chain succeeds in their markets?”

Thursday, 15th March 2018, 11:00 - 12:30hrs
Plenary Session, Ballroom

Prof. Patricia Longstaff,
Newhouse School of Public Communications
Syracuse University
215 University Place
Syracuse, NY 13244-4100
USA

Prof. Patricia Longstaff has spent the last 10 years investigating the concept of resilience in many systems because of her firm belief that no system stands alone, and it is important to know how the resilience of one system affects the others it touches, especially when those systems are complex. Resilience is one of several possible goals in systems that must deal with high uncertainty.

She has earned an international reputation in this field and has been invited to present her ideas all over the world. Her first resilience paper, *Security, Resilience, and Communication in Unpredictable Environments Such as Terrorism, Natural Disasters, and Complex Technology*¹ has more than 100 citations. She has consulted with various U.S. government agencies interested in the concept of resilience and was invited to spend a year exploring these ideas at Oxford University in the interdisciplinary Oxford Martin School.



Related interests include the role of communication in the resilience of communities and organizations, the role of improvisation in systems with high uncertainty, and the effect the Blame Game has on learning in organizations.

She has experience in interdisciplinary research (e.g., NSF Grant) and knows it is hard work but among the most rewarding endeavors she has ever undertaken because it can have immediate application in a world that does not organize itself into neat boxes. Her CV (available on request) demonstrates that she is curious, adaptive, and works well with people from many backgrounds.

She has earned Master of Public Administration from Harvard University as well as a law degree (Juris Doctor) and a Master of Communication from the University of Iowa.

Moderator for Banks CEOs Panel - Topic: *“Investing in Financial Technology in Africa - how? New technologies changing the Banking sector’s landscape? How will blockchain change how we do business in Africa?”*

Thursday, 15th March 2018, 14:50 - 16:20hrs
Plenary Session, Ballroom

Professor Anders Henten

Center for Communication, Media and Information Technologies (CMI)
Aalborg University
AC Meyers Vaenge 15
2450 Copenhagen
DENMARK

Prof. Anders Henten is Professor at the Department of Electronic Systems at Aalborg University in Copenhagen. He is a graduate in communications and international development studies from Roskilde University in Denmark (1989) and holds a Ph.D. from the Technical University of Denmark (1995). He has worked professionally in the area of communications economy and policy for more than 25 years. He has published nationally and internationally – more than 250 academic publications in international journals, books, conference proceedings, etc.



Moderator for Telcos CEOs Panel - Topic: *“How are Telco’s making successful investments in Africa? What are the lessons learnt? The MNO-Led Mobile Money Transfer model.”*

Thursday, 16th March 2018, 14:00 - 15:40hrs
Plenary Session, Ballroom

Prof. Masatsugu Tsuji,
Faculty of Economics
Kobe International University
9-1-6 Koyochonaka, Higashinada-ku
Kobe, Hyogo 658-0032
JAPAN

Prof. Masatsugu Tsuji received Ph.D. in Economics from Stanford University in 1976. He is currently professor at Kobe International University. He is a visiting professor of Carnegie Mellon University, USA and National Cheng Kung University, Taiwan. He is a member of the Board of Directors of the International Telecommunications Society; Editorial Board, Journal of International Society of Telemedicine and eHealth, and Smart Homecare Technology and TeleHealth; coordinator of e-Health Economics, ISfTeH. His current research focuses on economic evaluation of telemedicine and e-Health. He has been consulting the Japanese Government and local governments for implementing telemedicine projects.



MEMBERS OF THE PROGRAMME COMMITTEE

| | | |
|----------------|------------|---|
| Agiakloglou | Christos | University of Pireaus |
| Bohlin | Erik | Chalmers University |
| Briglauer | Wolfgang | ZEW |
| Cherry | Barbara | Indiana University |
| Curwen | Peter | Northumbria University |
| Feijoo | Claudio | Universidad Politecnica de Madrid |
| Fennell | Shailaja | University of Cambridge |
| Garcia-Murillo | Martha | Syracuse University |
| Gijon | Covadonga | Universidad Carlos III de Madrid |
| Götz | Georg | Justus-Liebig-University Giessen |
| Gomez Barroso | Jose Luis | UNED |
| Helberger | Natali | University of Amsterdam |
| Henten | Anders | CMI |
| Hoernig | Steffen | Nova School of Business and Economics |
| Howell | Bronwyn | Victoria University of Wellington |
| Knieps | Günter | University of Freiburg |
| Krämer | Jan | University of Passau |
| Kretschmer | Tobias | Ludwig-Maxillians University |
| Kubasik | Jerzy | Poznan University of Technology |
| Loebbecke | Claudia | University of Cologne |
| Longstaff | Pat | Syracuse University |
| Madden | Gary | Curtin University |
| Marcus | Scott | Bruguel |
| Mitomo | Hitoshi | Waseda University |
| Navio | Julio | UNED |
| Neumann | Karl-Heinz | WIK |
| Nucciarelli | Alberto | University of Trento |
| Perez-Amaral | Teodosio | Universidad Complutense de Madrid |
| Preissl | Brigitte | ZBW |
| Pupillo | Lorenzo | CEPS |
| Renda | Andrea | CEPS |
| Rendon | Juan | Deutsche Telekom |
| Sadowski | Bert | TU Eindhoven |
| Sallai | Gyula | BME |
| Schmidt | Stephen | TELUS |
| Schnurr | Daniel | University of Passau |
| Tsuji | Masatsugu | Kobe International University |
| Whalley | Jason | Northumbria University |
| Wiewiorra | Lukas | Goethe-University Frankfurt |
| Yan | Xu | HK University of Science & Technology |
| de Reuver | Mark | Technical University of Delft |
| van Eijk | Nico | Institute for Information Law |
| van Gorp | Annemijn | The Hague University of Applied Science |
| Tembo | Simon | University of Zambia |
| Phiri | Jackson | University of Zambia |
| Banda | Dani | University of Zambia |
| Lubobya | Charles | University of Zambia |
| Musonda | Evaristo | University of Zambia |

| WEDNESDAY, MARCH 14, 2018 | |
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| 14:30–16:30 | Conference Registration |
| 17:00–19:00 | Networking Opportunity & Welcome Cocktail (Ballroom) |
| THURSDAY, MARCH 15, 2018 | |
| 08:30–09:00 | Conference Registration |
| | Official Opening and Keynote speeches (Ballroom) |
| 09:00-10:30 | Prof. Luke E. Mumba - Vice Chancellor (University of Zambia) Mr. Stephen Schmidt - Chairman (International Telecommunication Society) Hon. Prof. Nkandu Luo, MP – Minister of Higher Education Hon. Eng. Brian Mushimba, MP – Minister of Transport and Communications Official Opening by President of the Republic of Zambia, H.E. Mr. Edgar Chagwa Lungu |
| 10:30-11:00 | Coffee break |
| 11:00-12:30 | Panel Session I: Ministers Panel discussion (Ballroom) Theme: Use of e-Agriculture to Scale Up Agriculture in Africa. What are the African Governments doing to make Agriculture sector more attractive to invest? Where are the opportunities? How can investors in the Agriculture's supply chain succeeds in their markets? Panelists: a. Hon. Micheal Katambo, MP - Minister of Agriculture b. Hon. Margaret Mwanakatwe, MP - Minister of Finance c. Hon. Brian Mushimba, MP - Minister of Transport and Communication d. Hon. Christopher Yaluma, MP - Minister of Commerce, Trade and Industry e. Hon. Prof. Nkandu Luo, MP - Minister of Higher Education f. Mr. Sindiso Ngwenya - COMESA Secretary General (Representing African Region) g. Prof. Heather Hudson - University of Alaska, USA (International Representative) Moderator: Prof. Patricia Hill Longstaff, Syracuse University, USA. |
| 12:30-13:30 | Lunch break |
| Technical Sessions | |
| | Parallel Session 1 (Siavonga Room) Moderator: Prof. Morten Falch Theme: ICT4D |
| | Parallel Session 2 (Nsumbu Room) Moderator: Prof. Anders Henten Theme: Application areas I |
| 13:30-13:50 | Musonda Kapatamoyo: Big data applications: A case for Zambia's public service delivery. |
| | Heather Hudson, Mark Leclair, Kkaren Hampson, Caroline Montpetit, Pascal Mweruka and Bernard Pelletier: Her Voice on Air: Use of Radio and ICTs to Support Women Small-Scale Farmers in Africa. |
| 13:50-14:10 | Malunga Gregory and Simon Tembo: E-health implementation strategy. |
| | D. E. Banda and M. M. Nkoya: Human Health and Environmental Concerns of Waste of Electrical and Electronic Equipment including Nanotechnologies and Manufactured Nanomaterials in ICT for Developing Countries: the case of Zambia. |
| 14:10-14:30 | Brenda Bukowa, Sam Sichilalu and Alefa Banda: Penetration of ICT resources: A comparative analysis of Kalingalinga and Kabulonga Residential areas of Lusaka. |
| | Abraham Masamba and Simon Tembo: The key challenges and opportunities in implementing ICT for education at primary and secondary schools in Zambia. |
| 14:50-16:20 | Panel Session II: Banks CEOs Panel discussion (Ballroom) Theme: Investing in Financial Technology in Africa - how? New technologies changing the Banking sector's landscape? How will blockchain change how we do business in Africa? Panelists: a. Dr. Denny Kalyalya, Bank Governor, Bank of Zambia b. Ms. Mizinga Melu - CEO Barclays Bank Zambia c. Mr. Herman Kasekende - CEO Standard Chartered Bank Zambia d. Mr Henk Gezienus Mulder - CEO Zanaco Bank Plc e. Mr. Maheshkumar M. Bansal - CEO Indo Zambia Bank f. Mr. James Koni - CEO Atlas Mara Bank g. Mr. Kola Adeleke - CEO EcoBank h. Mr. Leina Gabaraane - CEO Stanbic Bank i. Ms. Joana Bannerman CEO – Access Bank Moderator: Prof. Anders Henten, Aalborg University, Denmark. |
| 16:20-17:00 | Coffee break |
| | Parallel Session 3 (Siavonga Room) Moderator: Dr. Mupanga Mwanakatwe Theme: Mobile money |
| | Parallel Session 4 (Nsumbu Room) Moderator: Dr. Collins C. Kachaka Theme: Diffusion |
| 17:00-17:20 | Ernest Lesa and Simon Tembo: Most significant factor affecting mobile payment diffusion in Zambia – An empirical analysis. |
| | Sobee Shinohara: A study of diffusion innovation in mobile broadband. |

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| 17:20-17:40 | Justine Burns, Sha'ista Goga, Ryan Hawthorne, Jason Blechman and Rory Macmillan: Can text messages prompt users to search and switch in mobile banking? An experimental analysis from Kenya. | Martha Onyeajuwa: Internet inclusion: How viable are community networks and community centres in Nigeria? |
| 17:40-18:00 | Anthea Paelo: Regulating for the growth of mobile financial services – A comparison of the sectors in Kenya and Zambia. | Shuller Habeezu: An investigation into factors influencing adoption of cloud computing in the public sector in Zambia. |
| 19:00–21:00 | Conference dinner – Guest of Honour: Hon. Brian Mushimba MP, Minister of Transport and Communication | |
| FRIDAY, MARCH 16, 2018 | | |
| Keynote Speeches (Ballroom) | | |
| 09:00-10:30 | Professor Jason Whalley, Professor of Digital Economy, Newcastle Business School Northumbria University, Newcastle UK Dr. Daniel Foty, President of Gilgamesh Associates, LLC Mr. Jean-Francois Le Bihan, Public Policy Director for Sub-Sahara Africa, GSMA Mr. Lars Stork - CEO Vodafone Zambia | |
| 10:30-11:00 | Coffee break | |
| | Parallel Session 5 (Siavonga Room) Moderator: Dr. Simon Tembo Theme: Internet Developments | Parallel Session 6 (Nsumbu Room) Moderator: Dr. Jackson Phiri Theme: Application areas II |
| 11:00-11:20 | Masatsugu Tsuji and Sobee Shinohara: How can telecom regulations cope with traffic explosion on the Internet? | Joseph Chipeta and Luka Ngoyi: Understanding e-government opportunities and challenges in developing countries. |
| 11:20-11:40 | Aude Schoentgen, Onkokame Mthobi and Alison Gillwald: An adoption of micro-work in Sub-Saharan Africa. | Sandra Barteit, Annel Bowa, Geoffrey Chileshe, Gregory Malunga, Henry Barigye and Florian Neuhaan: E-learning for medical education: How Tablets and E-Learning Improve Medical Education and Healthcare in Rural Zambia. |
| 11:40-12:00 | Enrico Calandro, Josiah Chavula and Amreesh Phokeer: Internet development in Africa: A content use, hosting and distribution perspective. | Kenneth Azumah, Reza Tadayoni and Lene Sørensen: Hybrid cloud service selection strategies: A qualitative meta-analysis. |
| Technical Sessions | | |
| | Parallel Session 7: (Siavonga Room) Moderator: Dr. Charles Lubobya Theme: Technology developments | Parallel Session 8: (Nsumbu Room) Moderator: Prof. Patricia Hill Longstaff Theme: Telecom policies |
| 12:00-12:20 | Chigozirim Ajaegbu and Owodele Oludele: A multi-mode home node-b air interface protocol stack. | Emmanuel Arakpogun, Roseline Wanjiru and Jason Whalley: Improving the implementation of universal service funds in Africa: A multi-stakeholder approach. |
| 12:20-12:40 | Baruch Bwalya and Simon Tembo: Buffer sizing in first generation optical networks. | Morten Falch and Emerson Iaskio: National broadband strategies – the case of Brazil. |
| 12:40-13:00 | Sebastian Sebastian Namukolo, Ackim Zulu and Changala Nswana: Unlocking and extending possibilities of the integrated grid-fiber-SCADA infrastructure of ZESCO. | Ryan Hawthorne: The effects of lower mobile termination rates in South Africa. |
| 13:00-14:00 | Lunch break | |
| 14:00-15:40 | Panel Session III: Telcos CEOs Panel discussion (Ballroom) Theme: How are Telco's making successful investments in Africa? What are the lessons learnt? The MNO-Led Mobile Money Transfer model. Panelists: a. a. Mr. Lars Stork - CEO Vodafone b. Mr. Sydney Mupeta - CEO Zambia Telecommunications Company Limited c. Mr. Andrew Kapula - CEO CEC Liquid Telecom d. Mr. Charles Molapisi - CEO MTN Zambia e. Mr. Peter Correia - CEO Airtel Zambia f. Mr. Stephen Schmidt - Vice-President, Telecom Policy & Chief Regulatory Legal Counsel TELUS (Canadian Telco) g. Dr. Sobee Shinohara - Director of Telecommunications Regulatory Affairs KDDI, Japan h. Dr. Martine G. Mtonga – National Coordinator, E-Government Division, Smart Zambia i. Mr. Jean-Francois Le Bihan, Public Policy Director for Sub-Sahara Africa, GSMA Moderator: Prof. Masatsugu Tsuji, Faculty of Economics, Kobe International University, Japan. | |
| Technical Sessions | | |
| | Parallel Session 9 (Siavonga Room) Moderator: Prof. Musonda Kapatamoyo Theme: Media | Parallel Session 10 (Nsumbu Room) Moderator: Dr. Evaristo Musonda Theme: Telecom developments |

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| 16:00-16:20 | Parkie Mbozi: Readership of Zambia online newspapers: An analysis of the extent of reach, reader demographics and motivations for reading. | Ryan Hawthorne and Lukasz Grzybowski: Distribution of benefits from competition in a high-inequality economy: the case of mobile telecommunications in South Africa. |
| 16:20-16:40 | Chanda Tembo: Intercepting electronic communications on the Internet and social media: Accessing the intersection between the rights to privacy and investigatory powers of law enforcement and officers in Zambia. | Reza Tadayoni, Anders Henten and Morten Falch: Internet of things – the battle of standards. |
| 16:40-17:10 | Coffee break | |
| 17:10-17:30 | Parkie Mbozi: Credibility and ethical standards of Zambia online newspapers and options for regulation. | Dingani Banda: Transforming of revenue administration through ICT. |
| 17:30– 18:30 | Closing of Conference: Hon. Brian Mushimba MP, Minister of Transport and Communication (Ballroom) | |

SOCIAL PROGRAMME

Welcome Reception, March 14, 2018 at 5:00 p.m.

The Welcome Reception is proudly sponsored by ZAMTEL. The ITS Lusaka 2018 Welcome Reception will start at 5:00 p.m. on Wednesday, 14th of March 2018, in the Ballroom at Intercontinental Hotel, Lusaka.

Dress code: Come as You Are /Casual

Conference Dinner, March 15, 2018, 7:00 p.m.

The Conference Dinner is proudly sponsored by ZICTA. The ITS Lusaka 2018 Conference Dinner will start at 7:00 p.m. on Thursday, 15th of March 2018, in the Ballroom at Intercontinental Hotel, Lusaka. The Chief Guest at the dinner is the Honourable Minister of Transport and Communications, Hon. Eng. Brian Mushimba, MP.

Dress code: Formal / Semiformal
