



**U.S.-AFRICA  
INFORMATION &  
COMMUNICATIONS  
TECHNOLOGY  
STANDARDS PROGRAM**

# **PUBLIC MARKET REPORT:**

## **SOUTH AFRICA CONNECTIVITY STANDARDS WORKSHOP**

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## PUBLIC MARKET REPORT

### South Africa Connectivity Standards Workshop

October 8, 2019

11:00 am – 5:15 pm

Sandton Convention Center

Johannesburg, South Africa

### BACKGROUND

As the first activity under the U.S.-Africa ICTSP, the South Africa Connectivity Standards Workshop focused on connectivity standards in the most advanced telecommunications market in Sub-Saharan Africa – South Africa. South Africa currently has the highest rate of internet penetration in the region, with an average of 54<sup>1</sup> percent of the population or approximately 31 million internet users. Furthermore, mobile phone penetration is much more extensive in South Africa than internet penetration with approximately 60%<sup>2</sup> of internet users accessing the internet via their mobile devices. In 2018, the country added over 360,000 users, increasing total users by 1.2 percent. Of South Africa's approximately 17 million households, about 7.5 million of them connect to the internet via mobile phones, which is expensive, particularly when data is purchased in small allotments. Only about 1.5 million households in South Africa have connectivity via more affordable mechanisms such as fiber or fixed wireless.

Despite having overall internet penetration statistics that are positive by regional standards, South Africans living in rural parts of the country are often faced with expensive and slow connectivity options, resulting in a divide of internet usage between urban and rural areas. The provinces of Gauteng and the Western Cape, which contain the two largest urban areas in South Africa, Johannesburg, and Cape Town, have internet penetration rates of 55 and 75 percent, respectively. Comparatively, in more rural provinces like Eastern Cape, Mpumalanga, and North West, internet access rates are much lower, at 25 percent, 27 percent, and 32 percent, respectively. The high cost of internet access remains a primary obstacle, as a majority of users spend a greater proportion of their income on data compared to voice or SMS services.<sup>3</sup>

The goals of this workshop were to assess the current state of wired and wireless technologies and to discuss the near future of connectivity, including 5G, Wi-Fi 6, High Altitude Platforms, TV White Space, amongst other topics. The workshop led to further discussions on the opportunities and challenges in the South African market, as well as cross-cutting issues affecting spectrum allocation and connectivity in Sub-Saharan Africa and beyond. This workshop brought together leading experts from the U.S. and South African private sector and features presentations and discussions, which included key regulators from the South African government. Participants

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<sup>1</sup> [Measuring Digital Development Facts and Figures, 2019](#), ITU

<sup>2</sup> [General Household Survey, 2017](#), Statistics South Africa

<sup>3</sup> [The Cost of Communication in South Africa](#), ResearchICT Africa

engaged in robust conversations that touched on the challenges and opportunities for connectivity in South Africa, including spectrum allocation.

## WORKSHOP SUMMARY

On October 8, 2019, the [American National Standards Institute](#) (ANSI), through the [United States Trade and Development Agency \(USTDA\)](#) sponsored, [U.S.-Africa Information and Connectivity Standards Program](#) (ICTSP), held the South Africa Connectivity Standards Workshop in Johannesburg, South Africa (SA).

The workshop was attended by roughly 43 participants from various U.S. and South African businesses, government and non-government entities. The event provided a neutral forum for both the public and private sectors in South Africa and the U.S. to collaborate and exchange cutting-edge information on the latest developments and issues on connectivity standards and regulations in the South African market.

The workshop featured several U.S. private sector speakers from [Microsoft](#), [International Data Corporation](#), [Adaptrum](#), [Cisco](#), [Motorola](#), [Miro](#), and [Regent Square Group](#). Representatives from South African government entities, including the [Independent Communications Authority of South Africa \(ICASA\)](#) and [the South African Bureau of Standards](#) (SABS). South African private sector participation included speakers from the [Wireless Access Providers Association](#) (WAPA), [Telkom](#), [Liquid Telecom](#), and the [IoT Council of South Africa](#). U.S. companies have unique technology and expertise to help South Africa harness the power of ICT and ensure internet access for both urban and rural populations.

Links to a flyer, photos, the final agenda and presentations from the workshop are available for on the ICTSP website: [U.S.-Africa Information and Connectivity Standards Program](#)

## MARKET OPPORTUNITY

South Africa is the second-largest mobile market in terms of subscriptions in Africa with 99 million subscriptions recorded in 2018. The South African ICT market is expected to grow to over \$23.4 billion by 2021. According to ICASA's 2019 Report on the State of ICT Sector in South Africa, the ICT sector contributed USD 17 billion (R229 billion) in revenue in 2018. Over a 4-year period (2015-2018), the combined revenue for the three sectors (telecommunications, broadcasting and postal) increased by 6.5%. Over the same period, telecommunication services revenue increased by 6.4%, broadcasting services revenue increased by 8.8% and postal services revenue continued to show a declining trend, decreasing by 3.4%.<sup>4</sup> According to [exports.gov](#), information technology is the best prospect industry for South Africa, with the government and the financial sector contributing the most in IT spending.<sup>5</sup>

Growth in internet connection will have several positive impacts on the country and increase access to information for education, employment opportunities and improved trade and commerce, amongst other services. Recognizing the critical role that the development of ICT infrastructure and broadband access can have in providing equal opportunities to South

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<sup>4</sup> [2019 Report on the State of ICT Sector in South Africa](#), ICASA

<sup>5</sup> [South Africa Country Commercial Guide](#), [Export.gov](#)

Africans, the South African government adopted the National Infrastructure Plan in 2012, which aims to achieve broadband coverage for at least 90 percent of the population by 2020, with nationwide coverage by 2030, and established an objective of reaching nationwide average broadband speeds of 100 megabits per second by 2030.

In 2017, the South African government partnered with the World Economic Forum (WEF) to launch an initiative called "[internet for all](#)", which aims to make the internet more accessible for every South African by 2020. The initiative focuses on extending ICT infrastructure to underserved areas, lowering costs of browsing and technology devices, digitizing local content and providing ICT and digital skills. This initiative offers an opportunity for the private sector to invest in preparing South Africans for the future of connectivity i.e. 5G, Artificial Intelligence (AI), Internet of Things (IoT), Cloud Computing, etc.

According to the [2018 ICT Skills Survey](#), skills in information security and cybersecurity remain a critical need in the industry and there is a growing list of new priorities for emerging skill sets including AI, IoT and payment systems.<sup>6</sup> Effective implementation of these various plans and initiatives will help narrow the skills gap, boost broadband connectivity among poor rural households and drive wider uptake of digital commerce and other services.

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<sup>6</sup> [Five Opportunities for Growth Within the ICT Sector](#), 06 May 2019, Internet Solutions