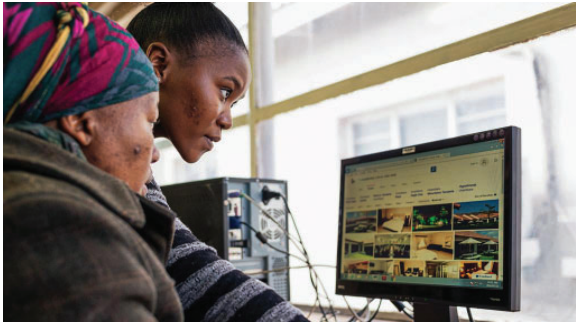


MARKET Briefs

Executive Summaries of Market Trends and Opportunities in Key Market Segments and Regions Worldwide



African Satellite Market Update

by Virgil Labrador



See us at

Africa Com

November 2019, 14-12
South Africa
Stand # E46

Our beams cover billions of viewers. Our focus is only on you.

More Coverage. More Throughput. More Services. Across Africa, Europe, the Middle East & Asia.

Spacecom's AMOS satellite constellation, consisting of AMOS-3 & AMOS-7 co-located at 4°W, AMOS-4 at 65°E and recently launched AMOS-17 at 17°E, provides high-quality broadcast and communications services across Africa, Europe, Asia and the Middle East. With AMOS-17 Spacecom is further expanding its reach, reinforcing its position as a leading satellite operator.

AMOS17 - was
Successfully Launched

AMOS by Spacecom
MAKING SPACE FEEL CLOSER
www.amos-spacecom.com

The African continent is one of the fastest growing regions in the world. Since 2000 Africa's GDP has grown by 5.1% per year on average, nearly three times the rate of growth of the Organization for Economic Cooperation and Development (OECD) industrialized countries during the same period. In spite of recent country-specific challenges and headwinds from the global economy, growth is set to remain strong, according to the OECD.

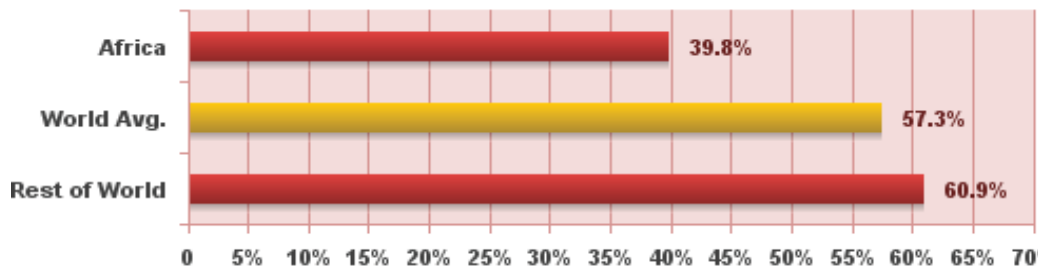
This year's African Economic Outlook from the African Development Bank (AfDB) shows that the continent's general economic performance continues to improve. Gross domestic product reached an estimated 3.5 percent in 2018, about the same as in 2017 and up from 2.1 percent in 2016. Africa's GDP growth is projected to accelerate to 4.0 percent in 2019 and 4.1 percent in 2020.

What is driving growth in Africa is a very young population hungry for broadband access. With 200 million people aged between 15 and 24, Africa has the youngest population in the world. The current trend indicates that this will double by 2045, according to the African Economic Outlook report prepared by experts from the AfDB, the UN Development Program (UNDP) and the UN Economic Commission for Africa (ECA), among others.

With so much economic po-

tential, Africa is still underserved when it comes to communications technology and infrastructure—key requirements for sustained economic growth. Africa still lags in reliable Internet access, mobile services and global positioning system (GPS) use. Internet penetration in Africa at 39.8 % of the population lags behind the world averages according to Internet World Stats. This figure represents roughly 453 million of its 1.25 billion population with internet access.

While there has been some growth in undersea cable and fiber optic technologies connections to cities near coastal areas, Africa presents a unique geographical challenges that has so far limited the reach of telecommunication services in rural areas and even in parts of major cities according



Internet penetration in Africa at 39.8 % of the population lags behind the world averages and the rest of the world. Source: Internet World Stats.

to Professor Nana Osei Darkwa, President of the African Virtual Campus.

Satellite technology provides the best driver for fueling Africa's economic development and bridging the digital divide. Today, more than fifteen established satellite operators serve the African continent. There are also Africa-based operators such as Nilesat, Rascom-Star QAF and NigComSat. It's a very competitive environment where operators vie for innovative

solutions to meet the changing requirements and insatiable demand for services in the region.

"Africa is still a growing market. We see opportunities in broadband connectivity, cellular backhaul, mobility and even in broadcasting services," said Jacob Jeret, Senior VP of Amos Spacecom.

A New Star in Africa

On August 6, 2019, AMOS-17 was successfully launched by a SpaceX Falcon 9 rocket from Cape Canaveral, Florida. The satellite is located at 17 degrees East where it covers the African continent, along with Europe, the Middle East and Asia. It is positioned right over central Africa, to optimize service in the region.

Scheduled to be operational this month, AMOS-17 is the most advanced high-throughput satellite (HTS) to date, providing satellite communication services to Africa.

Manufactured by Boeing Satellite Systems International, AMOS-17 is 6.5-ton high-power, high through-

View the video of the Amos-17 launch at:

www.satellitemarkets.com/amos-17-launch



put satellite designed specifically to meet Africa's fast-growing communication demands. AMOS-17's advanced digital payload will operate in the C, Ku and Ka bands with a digital channelizer to provide fixed HTS C-band coverage to Africa, steerable HTS Ka-band coverage to anywhere from China to Brazil, and extensive Ku-band coverage throughout Africa with additional coverage in Europe, the Middle East, China, and India.

"AMOS-17 offers a lot of flexibility for customers. It has a digital processor which allows for the interconnectivity of the various bands, for example, we can uplink in C-Band and downlink in Ku-Band," said Jacob Keret, Senior Vice-President for Sales of Spacecom, the operator of the AMOS satellites. "The satellite also has 12 HTS C-Band beams, each covering a major country in Africa, so you don't need to go to two or three different beams to cover one country like other HTS satellites," Keret added. He said the high-powered C-Band beams allows for smaller dishes to downlink the signal--a key consideration for broadband and broadcast solutions for the African market.

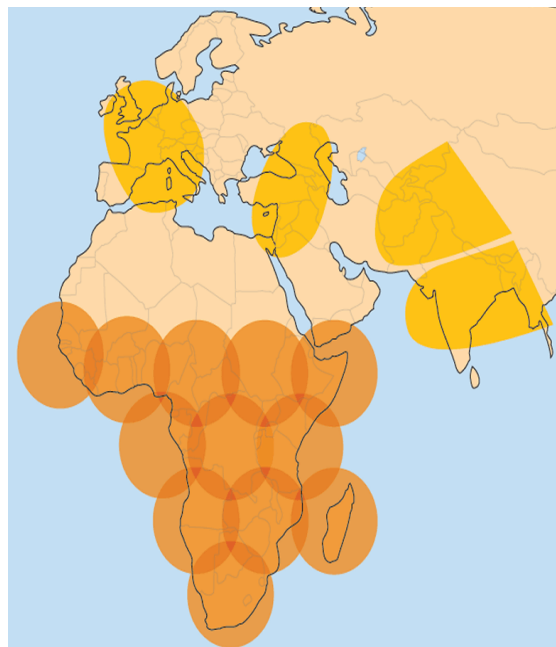
The satellite's digital processing capabilities provide connectivity between all of AMOS-17's beams in all available bands in any combination. These capabilities also support suppression of interference, flexible capacity allocation, and other digital processing features for improved service. Additionally, all command and control channels, as well as telemetry, are encrypted for maximum security. AMOS-17 is planned to be in operation for a minimum of 20 years, enabling long-lasting and stable service.

"The combination of the inherent flexibility of the digital platform with the mix of fixed and steerable beams ensures fast response to changing customers' needs," said Keret.

With its extensive capabilities, flexibility, and reliability, AMOS-17 is poised to support growth in a variety of broadcast, broadband, mobility and data services throughout the African continent.


Spacecom CEO David Pollack said, "AMOS-17 places us directly into the exciting growth of Africa's Sub-Saharan vibrant markets. As a leading multi-regional satellite operator, Spacecom is introducing the most technologically advanced satellite with HTS beams to service Africa where AMOS-17 will deliver a large selection of services to a variety of broadcast, broadband and telecom clients."

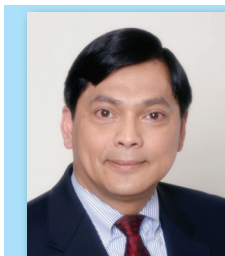
Spacecom operates the AMOS-3 and AMOS-7 satellites co-located at 4°W, and AMOS-4 at 65°E, provides high-quality broadcast and communication services to Europe, the Middle East, Africa, and Asia via direct-to-home (DTH) and



AMOS-17's advanced digital technology provides a lot of flexibility for customers in Africa. Pictured here are the 12 high throughput C-Band beams each covering a major country in Africa.

direct broadcast satellite (DBS) operators, Internet service providers (ISPs), telecom operators, network integrators and government agencies.

"The AMOS-17 satellite will provide a great fit for Spacecom's expansion strategy, offering an innovative design with capabilities that provide flexible service offerings to meet the growing demands of our customers," said Keret. 



Virgil Labrador is the Editor-in-Chief of Los Angeles, California-based Satellite Markets and Research which publishes a web portal on the satellite industry www.satellitemarkets.com, the monthly Satellite Executive Briefing magazine and occasional industry reports called MarketBriefs. Virgil is one of the few trade journalists who has a proven track record working in the commercial satellite industry. He worked as a senior executive for a teleport in Singapore, the Asia Broadcast Center, then-owned by the US broadcasting company CBS. He has co-authored two books on the history of satellite communications and satellite technology. He holds a Master's in Communications Management from the University of Southern California (USC). He can be reached at virgil@satellitemarkets.com



AMOS-17 was
Successfully Launched

See us at

Africa Com

November 12-14, 2019

South Africa

Stand # E46

Our beams cover billions of viewers.
Our focus is only on you.

**More Coverage. More Throughput.
More Services. Across Africa, Europe,
the Middle East & Asia.**

Spacecom's AMOS satellite constellation, consisting of **AMOS-3** & **AMOS-7** co-located at 4°W, **AMOS-4** at 65°E and recently launched **AMOS-17** at 17°E, provides high-quality broadcast and communications services across Africa, Europe, Asia and the Middle East. With **AMOS-17** Spacecom is further expanding its reach, reinforcing its position as a leading satellite operator.

AMOS by Spacecom

MAKING SPACE FEEL CLOSER

www.amos-spacecom.com