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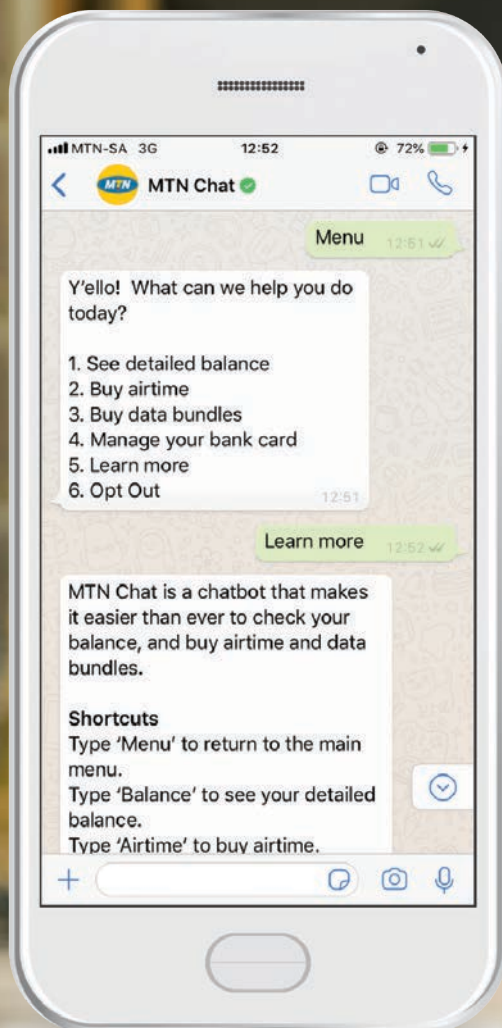
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CONTENTS

5 NEWS

18 WIRELESS SOLUTIONS

21 FEATURE

27 INDUSTRY VIEW

30 WORLD NEWS

SUBSCRIPTIONS:
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KADIUM

Eutelsat Konnect payload successfully mates with platform

Eutelsat Communications took a major step toward providing 75gb/s of capacity covering Africa and western Europe after it successfully mated the platform and payload of the Konnect satellite.

Konnect is a next-generation, all-electric High-throughput satellite (HTS) and is the first to use Thales Alenia Space's new Spacebus Neo

platform. Eutelsat described it as a "major pillar" of its strategy of return to growth, enabling the company to bolster its presence in the fast-growing broadband market.

According to Eutelsat, the operation was an important milestone in the construction of the satellite in preparation for its launch by the end of 2019.

The Konnect satellite program supports the group's ambition to contribute to reducing the digital divide with a view to building a more inclusive digital society.

"This mating operation represents a key step in this significant satellite programme," said Yohann Leroy, deputy chief executive officer and chief technical officer, Eutelsat.

"One that will enable to deliver high-speed broadband services at affordable prices, with a view to complementing terrestrial networks in western Europe but also in Africa where the drive to increase Internet penetration is a key priority."

Eutelsat successfully mated the platform and payload of the Konnect satellite in Cannes, France.

Expresso Telecom loses licence to operate in Ghana

Kasapa Telecoms, operator of 028 numbers under the Expresso Telecom brand, has had its mobile cellular licence revoked, Ghana's regulator the National Communications Authority (NCA) said.

The NCA, which revoked the licence March 15th 2018, is advising customers with an 028 prefix to port to other networks if they want to keep their current numbers.

Expresso was first given notice of the NCA's intention to terminate

the licence before the act was subsequently carried out last year. The NCA said the revocation was carried out pursuant to Section 13 of the Electronic Communications Act, 2008 (Act 775) and cited a number of reasons for its decision.

They include a default of payment of annual regulatory fees since 2014, inability to offer licensed services and coverage obligations since 2014, and engagement in anticompetitive practices by

terminating/transiting international traffic as domestic traffic on other networks (SIMBOX fraud).

The NCA also said the operator failed to settle fees for usage of microwave frequencies and did not meet financial obligations to both fellow operators and to Porting XS, the mobile number portability (MNP) service provider.

It was further claimed that Expresso also switched off its network without due notice to the

regulator, so as far as the NCA was concerned, Expresso did not have any subscription since the network was no longer in operation.

"Due to the existence of MNP, Kasapa subscribers have the choice to port their 028 numbers to networks of their choice," it said.

The NCA disclosed that a portion of the spectrum of Kasapa, which is good for 4G LTE, will be re-allocated for use considering economic and broader social value.
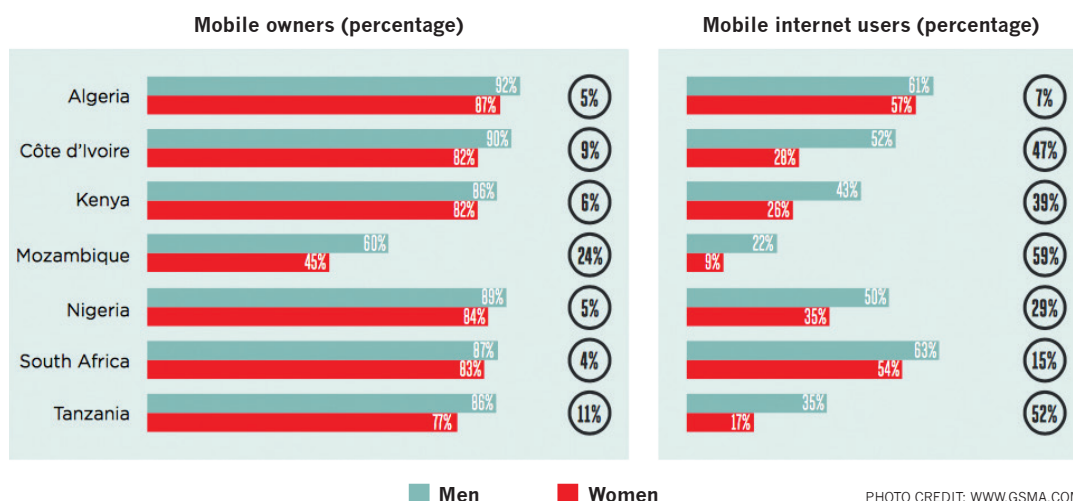
Mobile gender gap evident in Sub-Saharan Africa

Sub-Saharan Africa is the second worst global region when it comes to the mobile gender gap, according to the *Mobile Gender Gap Report 2019*, conducted by GSMA Connected Women.

It found that in that region, women were 15 per cent less likely than men to own a mobile device. The report further found that women in the region were also 41 per cent less likely to use mobile internet, with 86 million in Sub-Saharan Africa still unconnected.

"Mobile access and use has grown dramatically in LMICs [low-and middle-income countries] in recent years, but not equally," the report said. "A gender gap in both mobile ownership and mobile Internet use persists across these markets, and is significantly wider in certain regions, particularly South Asia (where the widest gender gap exists) and Sub-Saharan Africa."

Although the report said the gap is not closing, it did find that women's

Mobile owners (percentage)

	Men	Women	Gap
Algeria	92%	87%	5%
Côte d'Ivoire	90%	82%	9%
Kenya	86%	82%	6%
Mozambique	60%	45%	24%
Nigeria	89%	84%	5%
South Africa	87%	83%	4%
Tanzania	86%	77%	11%

Mobile internet users (percentage)

	Men	Women	Gap
Algeria	61%	57%	7%
Côte d'Ivoire	52%	28%	47%
Kenya	43%	26%	39%
Mozambique	22%	9%	59%
Nigeria	50%	35%	29%
South Africa	63%	54%	15%
Tanzania	35%	17%	52%

🟩 **Men** 🟥 **Women**

PHOTO CREDIT: WWW.GSMA.COM

ownership had increased since 2014 and the number of who owned a mobile phone rose by over 250 million.

Mobile phones remain the primary source of internet access in LMICs, particularly for women and 48 per cent of them in these countries now use mobile internet. Nevertheless,

women in LMICs were 10 per cent less likely to own a mobile phone, which equated to 197 million fewer women than men owning a device.

The findings were based on the results of over 20,000 face-to-face surveys commissioned by GSMA Intelligence across 18 LMICs.

GSMA's Connected Women programme works with mobile operators and their partners worldwide to address the barriers to women accessing and using mobile internet and mobile money services. The report said south Asia had the widest gender gap.

Egyptian mobile market shows signs of recovery, according to IDC report

Egypt's mobile phone market saw shipments of 14.4 million units in 2018, according to the latest figures released by the International Data Corporation (IDC).

The IDC's *Quarterly Mobile Phone Tracker* found that shipments were up 7.5 per cent year-on-year, compared with a 20.6 per cent decline seen in 2017, when performance was hampered by limited foreign currency reserves and the central bank's decision to float the Egyptian pound.

While smartphones accounted for 63.8 per cent of the market's units in 2018, shipments of these devices increased by just 3.4 per cent year-on-year, according to IDC.

The overall market's growth was driven by the feature phone category, where shipments were up 15.4 per cent over the same period. In terms of vendors, Huawei, Oppo, and Xiaomi saw the fastest growth in 2018, while Samsung was in front in terms of total shipments for 2018 as a whole. Huawei ranked first when looking at the second half of 2018 – the first time Samsung has been knocked off top spot in six years. At the other end of the scale, local brand SICO started production in Q1 2018, achieving two per cent share of the smartphone market's volume for the year.

IDC said the market would remain on a path to recovery, with total mobile phone shipments forecast to increase 0.8 per cent year-on-year in 2019.

The overall market growth was driven by the feature phone category

Gambian firms restructuring

The Gambian government has agreed that state-owned Gamtel and its mobile subsidiary Gamcel will be restructured in a move to re-jig government supply side participation in the country's telecoms market.

A decision was made following the joint recommendations of the IT and finance ministers Ebrima Sillah and Mambury Njie, which were published in a recent report.

Under current reorganisation plans, the mobile branch of incumbent operator Gamtel will be reorganised and state-owned shares divested.

The rationale behind the move is to guarantee an independent management of the mobile telephony department, to make it more competitive and offer both innovative and quality services.

Gamtel will also be reorganised to make it more efficient and profitable. The ministers also recommended acceleration of the international telecom gateway's liberalisation thanks to a monitoring system managed by the Public Utilities Regulatory Authority (PURA).

Africell is the largest operator in country, while Comium and QCell are also competitors.

Serius enters new market

Virtual mobile network operator Serius Telecoms Africa has launched in Senegal, a market dominated by French giant Orange.

Owned by businessman Mbackiyou Faye, the telecom firm was awarded its operating licence in June 2017 after the public call for applications launched on April 12th 2017, by the telecommunications regulator.

Nine firms submitted applications for this permit, which was awarded to three companies. Serius Telecoms, one of the those selected, invested XOF300 million to use the Tigo network.

However, it was nearly unable to launch in the Senegalese market after the regulator stopped the acquisition of the licence following a contentious appeal submitted in June 2017 by Starlog, which was not selected.

Nevertheless, the regulator finally concluded that "no substantial violation has been noticed" during the operation.

The Senegalese government said that it wanted to diversify telecom offers and foster competition for better service quality and beneficial costs.

Orange launches 'Sanza' smartphone across Africa

Orange said it has democratised access to the internet for a large number of Africans with the launch of a USD20 voice recognition smartphone called "Sanza".

The device will be made available in 15 African countries from April this year – as well as in the Middle East.

Alioune Ndiaye, managing director of Orange MENA, said the launch of Sanza was a major step toward giving a larger number of Africans access to the internet because the smartphone was affordable.

"Sanza is concrete proof of the capacity of Orange to be a key player of digital inclusion in Africa and the Middle-East" he said. "With its access to internet with the voice (recognition) and its attractive price around USD20 I have the conviction that this 3G phone and soon 4G is a powerful lever to develop access to internet for all Africa."

The smartphone penetration rate in Africa is low because of price, which has made the devices unaffordable for the low-income earners that make up the majority of the continent's population.

Gérard Lokossou, chief executive officer, Orange Democratic Republic of Congo said penetration in the country was 30 per cent versus the average of 50 per cent for the continent. "The established mobile payment services via Orange Money, the launch of 4G+ in 2018 and our engagement to extend 3G coverage to the whole country are all contributing to boost the smartphone penetration rate in DRC," he added. "The next commercialisation of the Sanza phone at an affordable price demonstrates our strategy for the democratisation of Internet access in the country."

The new device will be commercialised with a dedicated offer (voice/text/data) starting around USD20 – depending in which country the user is based - that will help customers work to their budget.

In addition, the Google Assistant feature will help users overcome language and literacy challenges and understands multiple French and English accents. The phone menu is available in Arabic, Swahili, Portuguese, English and French.

Sanza will also provide apps for OTT services, as well as Orange Money (the flagship mobile-based money transfer and financial service) and My Orange - the application to monitor your mobile consumption, among other things.

The new smartphone from Orange comes with the UNISOC SC7731EF processor and is powered by the KaiOS operating system

The phone comes with the UNISOC SC7731EF processor, manufactured by UNISOC and is powered by the KaiOS operating system from KaiOS Technologies.

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MTN launches affordable smartphone in Nigeria

MTN Nigeria has launched its new Smart S 3G phone – an affordable new smart feature device that runs on the Kai Operating System (KaiOS) in Nigeria.

The MTN Smart feature phone is said to come with almost all of the features of the high-end smartphones and allows customers to upgrade from a typical feature phone with just voice and capabilities, to a fully connected device with a fast 3G connection, Wi-Fi, bluetooth, GPS and dual SIM 3G capabilities.

It also comes with two cameras, a 2-day battery life with 2,000mAh battery, the SC7731EF processor, 2.4-inch screen, 256MB RAM and 512MB of storage. The MTN Smart is available in all MTN stores across Nigeria for USD22.14 and comes with 500MB monthly data free for the first six months.

MTN Nigeria, chief marketing officer (CMO), Rahul De described the development as the first African smart feature phone.

"We want to bring connectivity to everybody," he said. "We believe that connectivity leads to growth in the nation's economy. With connectivity, the growth of the economy becomes faster." He added that affordability of smartphones remained a challenge, "hence the reason for a smartphone with so many features selling at USD22.14".

NCC & ONSA join forces to tackle mobile cybercrime

The Nigerian Communications Commission (NCC) has joined forces with the Office of the National Security Adviser (ONSA) and other government agencies to address a surge in cybercrime, by tackling fake, counterfeit and shoddy mobile devices.

A Project Steering Committee made up of the Infrastructure Concession Regulatory Commission (ICRC), the Federal Ministry of Communications and the NCC; as well as the Project Delivery Team (PDT) (representing the Federal Ministry of Communications, the ICRC, the Federal Ministry of Finance and the NCC) wants to implement a mobile device management system (DMS) to address the problem.

The minister of communications, Adebayo Shittu, urged encouragement of local production of mobile devices as a means of tackling the growing problem.

Shittu said Nigeria's most popular mobile phone market, the Computer Village in Lagos, has a daily turnover of about NGN2bn. He said if 10 per cent of the devices being sold were fake, the country's formal mobile phone market was losing about NGN200m daily.

"Substandard and fake mobile phones are a bad omen, and an economic sabotage for Nigeria," he said. "We need urgent attention to address this issue."

The Association of Telecommunications Companies of Nigeria (ATCON) added that more than 20 mobile phone brands that are being sold in Nigeria have not been approved by the NCC. ATCON also described the fake phones as significant contributors to poor quality of service challenge that operators in Nigeria struggle with.

"The principal objective of the DMS project is to establish a secure and comprehensive single-window solution that will enable the Commission to implement a proven solution in the Nigerian environment…that is sustainable and demonstrate value for money in addition helping to address the various concerns that have been raised with the NCC from the Office of the National Security Adviser (ONSA), in our regular interactions on security matters as it concerns the telecommunications industry," said NCC executive vice chairman Umar Garba Danbatta.

Maroc Telecom acquires Millicom subsidiary

Maroc Telecom has acquired Swedish-listed Millicom's subsidiary Tigo Chad, the leading provider of digital services in the African nation, for an undisclosed sum.

The acquisition is part of Morocco's largest operator's plan to step up operations in the region. For Millicom, it is part of its strategy to gradually exit Africa and increase its focus on Latin America. However, the deal is not expected to have a material impact on the group as a whole.

Controlled by the United Arab Emirates' Etisalat Group and the Moroccan government, Maroc Telecom already has a presence in more than 10 African countries, including Chad's neighbours Niger and Central African Republic.

The completion of the deal is subject to approval by Chadian authorities. Once the sale goes through, Millicom's only remaining market in Africa will be Tanzania.

Maroc Telecom offices in Marrakech, Morocco
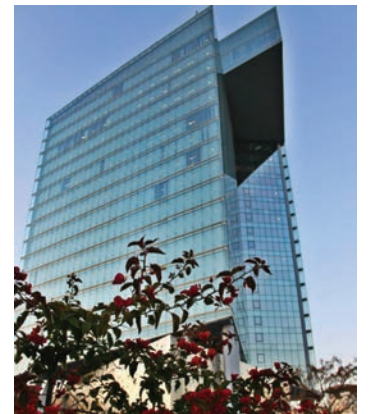
Côte d'Ivoire operators in mobile money tax row

The Telecommunications/ICT Regulatory Authority of Côte d'Ivoire (ARTCI) has issued a stark warning to the country's mobile operators to stop passing the additional cost of mobile money transactions onto the end user.

In a statement, the regulator accused operators of ignoring the law on telecommunications and telecommunications technologies, which requires them to communicate the tariffs and T&Cs of the service offered, one month before making them public.

"The new rates on mobile money transfer services have not been subject to prior notification to the ARTCI," the regulator said. "Therefore, ARTCI requires all mobile operators to immediately stop their application."

Operators in Côte d'Ivoire have increased the rate charged for mobile money transfers to 7.2 per cent, which they argue is in line with a government increase in mobile money tax.

The warning from ARTCI followed complaints from consumer association Confederation des Consommateurs de Cote d'Ivoire, which was angered by taxes on mobile money transactions in the country and demanded the complete removal of the levies.

In a statement to the media, the federation, which represents 10 different consumer groups across the west African nation, stated that less than a fifth of consumers in the country have access to bank accounts.

It noted that the traditionally low cost of transactions using mobile money services had led to a "dynamic" industry, but the increase in government levies made it "more expensive for consumers to use an accessible service that has started to enter our habits".

ARTCI was created through the merger of the Telecommunications Council of Côte d'Ivoire (SITC) and the Telecommunications Agency of the Côte d'Ivoire (ATCI).

Nokia and Telecom Egypt sign memorandum of understanding

Nokia and Telecom Egypt have inked a memorandum of understanding (MoU) to introduce 5G network infrastructure and test use cases in the north African nation.

Under the terms of the deal, which was signed and announced at Mobile World Congress (MWC) 2019 in Barcelona, both companies agreed to collaborate on 5G deployment as well as the evaluation of appropriate use cases of the technology in the Egyptian market. The companies are working together to deploy 5G network with Nokia's end-to-end 5G solutions.

In addition, the Finnish mobile giant and the Cairo-based telecom firm will also explore joint marketing initiatives "accelerate

Mobile World Congress (MWC) in Barcelona

the development of an IoT partner ecosystem" in the country.

Amr El Leithy, head of the Middle East and Africa market at Nokia, said the MoU was part of the

long-term strategic partnership between the two companies. "5G solutions will allow Telecom Egypt to proactively address the increasing data traffic, create new revenue

streams as well as continue working on the improvement of customer experience," El Leithy said.

Telecom Egypt managing director and chief executive officer Adel Hamed added: "This MoU marks a new chapter of the partnership between the two companies as it will allow our company to support the realisation of the digital transformation strategy in Egypt."

The two companies also announced they will build what is claimed to be the first cloud infrastructure in Egypt exclusively for the provision of IoT services. Telecom Egypt will use Nokia's Worldwide IoT Network Grid (WING) as a service as the platform to launch IoT services for the enterprise segment in 2020.

Safaricom's recruitment drive

Safaricom is set to recruit 300 interns from local universities in Uasin Gishu County to work at its new Eldoret call centre.

According to Safaricom chief customer officer Sylvia Mulinge, the internship program will help build partnerships with learning institutions and provide an opportunity for the students to gain experience.

"Our plan is to offer three months paid internships for students from various campuses within the county. This will not only help us to build partnerships with the learning institutions but will also enable us to offer the youth work experience

and mentorship," she said.

The call centre, built at a cost of KSH900m will further enhance Safaricom's efficiency in handling the over 150,000 calls addressing customer's needs.

The telco records 24 million daily use of the USSD solution and over 700,000 smartphone users using the mySafaricom app. It also introduced Safaricom Jitambulishe, a Voice Biometrics identification system.

The systems grant customers to use their voices for authentication before accessing assisted services such as resetting their M-PESA PIN and PUK requests.

Vodafone Egypt seeks bids for 50MW solar park

Vodafone could be the first company in Egypt to go 100 per cent solar after its Vodafone Egypt arm opened a EGP500m tender for a solar park that will be able to provide 50MW of capacity for its networks.

The British telecoms giant said it plans to generate all of its own electricity through massive solar plants in Banban, Aswan.

It said the clean power plants are set to produce between 20MW and 25MW of renewable energy by 2025 – and Vodafone Egypt will use this power to run all of its facilities,

stores and offices across the country.

The company also said it will contribute towards the nation's 2030 vision to cut its carbon foot print and encourage sustainability.

Vodafone Egypt's CEO Alexandre Froment-Curtil and other senior executives recently visited the site of the solar plants to assess upcoming bids from solar panel producers.

The firm aims to immediately start building the projects once this stage has been finalised.

Specific details about the Egyptian tender were not made public.

Vodafone Ghana signs deal to roll out 4G network

Vodafone Ghana has rolled out its 4G network service across major cities in the country.

Chief executive officer, Vodafone Ghana, Yolanda Cuba, said at the pre-launch that the technical team of the company have been able to fast track the process for an early launch of the 4G service instead of later in 2019.

She said the company has more than 200 mobile sites across the

country where customers can access the 4G service. Cuba noted that the introduction of the 4G service forms part of Vodafone-Ghana's drive to ensure that its customers have access to better internet services.

"Prior to the acquisition of the 4G network, we indicated to you that customers will be able to get the service by the second quarter of the year, I'm happy to announce

that there has been a massive support from the technical team and all members at Vodafone hence we will launch commercial operations of the 4G services next week (March 19th)," Cuba said. "This will mean an improved network quality for customers and all our services."

Vodafone Ghana signed a deal with the National Communications Authority (NCA) in late 2018, for

the purchase of one slot of the 2x5MHz frequency spectrum in the 800MHz band for mobile services.

The mobile operator was awarded a licence at the cost of USD30m following the successful financial negotiation with the NCA, in line with the latter's published programme for the bid process.

Vodafone Ghana will be the second operator in the country to launch LTE after MTN.

Eutelsat signs TV contracts

Eutelsat Communications has signed separate multi-year contracts with the Ethiopian Broadcasting Corporation and the Association of Ethiopian Broadcasters for video capacity on its Eutelsat 8 West B satellite. The aggregate of these contracts represents multi-transponder capacity, including incremental resources.

MainOne's Facebook fibre deal

MainOne has entered into a partnership with Facebook to roll out a metro fibre infrastructure project in two states of Nigeria. The infrastructure collaboration is part of Facebook's efforts to connect more people to broadband internet. As part of this project, MainOne is building and operating approximately 750km terrestrial fibre infrastructure in Edo and Ogun States, two of Nigeria's fastest-growing states, with a combined population of seven million.

Orange extends LTE-A service

Orange Burkina Faso, which launched LTE-A services in the capital Ouagadougou early this year, has extended its footprint to five new locations, including Bobo-Dioulasso, the second largest city in the country. Other new locations now covered by the operator's 4G infrastructure include Koudougou, Koubri, Banfora and Manga. Orange was awarded a 4G licence by the Ministry of the Development of Digital Economy and Posts in January 2019. It paid XOF40 billion (USD69.5m) for the 15-year concession and committed to pay a further XOF40 billion to renew its existing 2G/3G licences.

Airtel–Telkom Kenya merger under threat

The proposed merger of Airtel Kenya and Telkom Kenya is under threat after a committee in the Kenyan National Assembly refused to approve it until more information is revealed about the proposal.

The committee claimed "the deal has the hallmarks of a scandal where private individuals are buying off a public entity through the back door for a song" and called on government agencies to provide further details about the merger.

In 2014, the Public Investment Committee released a report which made several suggestions for privatising and restructuring the finances of Telkom Kenya and it has been claimed that these have been ignored.

Alongside Telkom Kenya, the

The Kenyan National Assembly took place at the Parliament of Kenya in Nairobi, Kenya

agencies mentioned in the report include the Communications Authority of Kenya, the Ethics and Anti-Corruption Commission, the Ministry of ICT and the National Treasury. All of them have been summoned before the committee.

If the merger went ahead, it would create a new joint venture formed from Airtel Kenya and the mobile, enterprise and carrier service units of Telkom Kenya. In addition, it would allow the operators to compete more effectively against the dominant market leader Safaricom.

Egyptian giants sign profits deal

Egypt Telecom and Vodafone Egypt have signed two 10-year transmission and infrastructure agreements worth a total of LE10.85bn.

The first agreement concerns the distribution of profits from Vodafone Egypt to Telecom Egypt, which amounts to LE5.5bn. The first tranche of LE4.8bn was paid in March, while LE700m is slated for June 2020.

The total distribution of profits for Telecom Egypt since the

signing of the partnership contract between the two companies has amounted to LE8bn. The second agreement will see Telecom Egypt provide fibre optic access services to the Vodafone network.

"We have reached an agreement with Vodafone International regarding Telecom Egypt's share of the profits, which we consider an important step," said managing director and chief executive officer,

Telecom Egypt, Adel Hamed.

Vodafone Egypt's chief executive officer Alexandre Froment-Curtil said that the confidence of the government and the board of Telecom Egypt in investing in Vodafone Egypt reflects Vodafone's strength and success.

"We believe that the distribution of profits to Telecom Egypt as a shareholder in Vodafone Egypt will help build a strong infrastructure in Egypt," he added.

Internet speeds in Nigeria still below par despite subscription uplift

Internet speed in Nigeria is still slow despite an increase in subscriptions to 3G and 4G in the past year, according to the latest data from the Ookla Speedtest Global Index (OSGI).

Nigeria ranked 107th with a mobile internet download speed of 12.22 megabits per second (mb/s) compared to 12.76 mb/s in January.

The OSGI, which compared internet speed data from around the world each month, found that the global average for mobile internet download

speed for the 136 countries surveyed in February was 25.27mb/s, while 10.05mb/s was the global average upload speed achieved.

Industry data from the Nigerian Communications Commission (NCC) indicated that about 23 million new 3G and 4G subscriptions were added by telecom operators in the 11 months since March 2018.

As of January 2019, the country attracted 61.7 million new 3G and 4G subscriptions.

The OSGI also found that Nigeria's

ranking for fixed broadband download speed also dropped six places from 133th position in January to 139th position globally in February this year.

In the fixed broadband category, the country recorded a 10.47mb/s average download speed and an 8.83mb/s upload speed in February.

The global average for fixed broadband download speed for the 177 countries examined was 55.58mb/s while it recorded 27.64mb/s for the upload speed.

Clickatell helps MTN South Africa launch chat commerce on WhatsApp
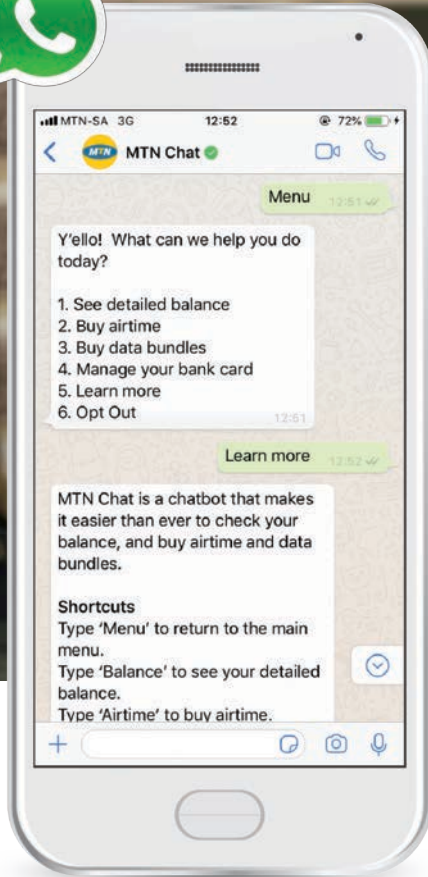
Global customer engagement company Clickatell, has technically empowered MTN South Africa, to launch MTN Chat, enabling MTN customers to engage and transact with the telco over WhatsApp. A pioneering execution of Chat Commerce in Africa.

MTN Chat will enable MTN customers to initiate the purchase of airtime and data bundles within their WhatsApp chat session. In the near future, customers will additionally be able to access customer support and self-service options, including performing upgrades, managing their accounts, and receiving low balance alerts. MTN Chat is part of the MTN vision to significantly enhance its digital business offering to boost its customer base through advanced services. Clickatell plays an integral part in bringing this technology to fruition.

"Clickatell understands that mobile operators are under increasing pressure to deliver excellent customer service over the digital channels their customers prefer. By offering convenient services over a secure, convenient channel, MNOs can both increase their transactional volume and attract and retain customers – something that is paramount in an age of continuous digital transformation and growing competition," explains Pieter de Villiers, Clickatell Founder & CEO.

Clickatell, in their quest to solidify themselves as global pioneers of Chat Commerce, have already helped Absa Bank (RSA), GTBank (Nigeria), Steward Bank (ZIM), First Bank of Nigeria and United Bank of Africa – UBA (Nigeria & soon Mali) successfully deploy Chat Banking capabilities on WhatsApp across Africa. With the ability to extend across verticals, like Banking, Retail, E-Commerce, Travel & Hospitality, and many more Public and Private sector enterprise verticals, Clickatell's solutions continue to prove their capabilities and deliver delightful customer experiences across Africa and the world.

Clickatell is an authorized WhatsApp Business solution provider. The WhatsApp Business API provides brands the ability to send out notifications and conduct two-way conversations with consumers within WhatsApp once they have opted in. Clickatell's Touch Flow and Connect platforms gives businesses the capability to unify its communications channels, customize user workflows and connect to internal systems, seamlessly and efficiently.

"It is imperative that companies focus on improving their self-service experiences in order to retain and grow customers. Clickatell's offerings provide an easy, secure and convenient way of giving users control over their accounts through WhatsApp, a platform they already have an affinity for," says Jacqui O'Sullivan, Executive for Corporate Affairs, MTN SA.

De Villiers, Clickatell Founder and CEO says Clickatell's low effort, high return offerings can propel mobile network operators onto a digital transformation path that vastly and rapidly differentiates them from their competitors.

"Clickatell has worked hard to ensure that solution deployments are far less challenging than typical enterprise platform integrations. With over 1.5 billion people in 180 countries using WhatsApp every month, delivering Chat Commerce experiences on WhatsApp is one of the most efficient ways to reach more consumers, who can immediately benefit from the services offered on the channel. There is no doubt that this solution is perfect for MNOs around the world where WhatsApp is the dominant social engagement channel."
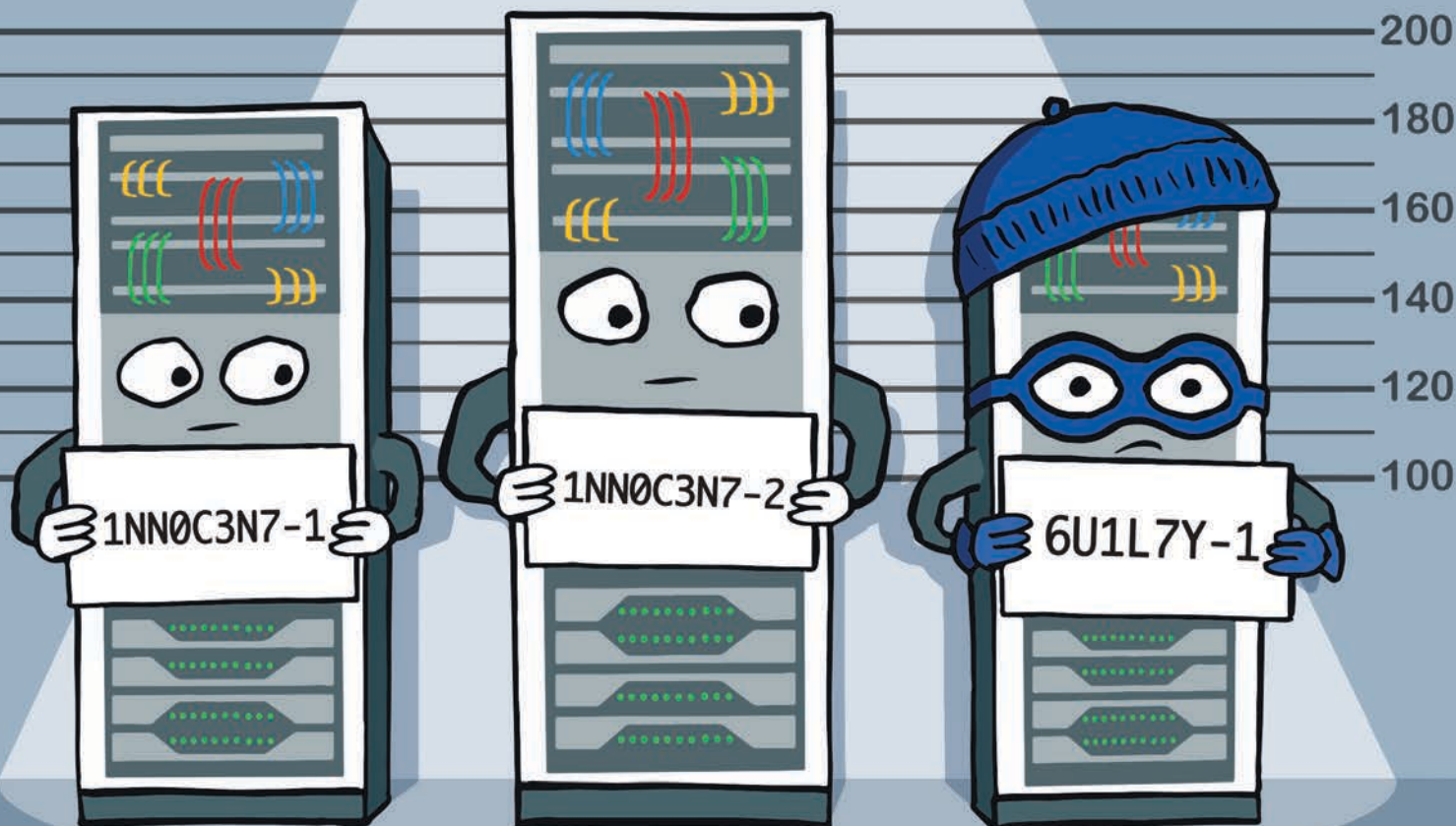
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- easily identify STP, UTP, COAX and fibre optic cables
- easily identify racks, servers and components

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Everything you need to know about complying with the latest TIA-606-C labelling standard
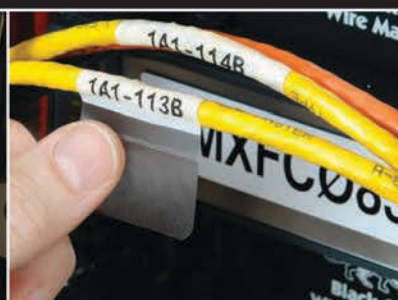
Ibrahim stands down from big job at Ericsson to advise CEO

Ericsson announced that Rafiah Ibrahim, senior vice president and head of market area Middle East and Africa will step down from her role to become advisor to company chief executive officer Börje Ekholm.

Ibrahim joined the Swedish firm in 1996 and has since held various managerial positions across the company. She had been in her most recent role since April 2017.

Ekholm praised Ibrahim for her contribution to Ericsson over the years and highlighted some of her key achievements in that time.

"Rafiah has been a very important leader in our sales and delivery organisation," said Ekholm. "In her latest assignment, she successfully led the merger of two important markets, Middle East & Africa, increasing customer value and securing scale and efficiency as well as implementing a robust operational structure."

Ericsson made no further comment on Ibrahim's move but said in a statement that a recruitment process was already in place and that a successor would

be named in due course. However, the company did not indicate whether Ibrahim would be replaced before she takes on her new position in late August. It is also unclear at this stage whether the replacement is most likely to be an internal or external candidate.

Speaking at the Mobile World Congress 2019 in late February, Ibrahim said affordability would be no barrier to people embracing 5G as devices will become cheaper when the technology is more commonplace.

"When I download a lot of video,

Ibrahim will take on her new role August 31st 2019
PHOTO CREDIT: WWW.ERICSSON.COM

it becomes obvious that soon 4G will not be enough," she said. "Soon even consumers will want more. The more you have the more you want. Is it affordability (that is the problem)? It won't be."

Dark Fibre Africa opens Zimbabwe office

Open-access fibre telecommunications firm Dark Fibre Africa (DFA) has marked its first network expansion into markets outside South Africa, by opening an office in neighbouring Zimbabwe.

The new Harare hub will be headed up by Simon Chimutsotso, who has "extensive experience" in rolling out telecoms infrastructure in Zimbabwe, Zambia and South Africa.

DFA said it plans to roll out a high-speed fibre network in Zimbabwe, which will be made available on a wholesale open-access basis.

"We have rolled out network infrastructure in all of the major South African metropolitan areas and have extended our footprint to large and small towns, amounting to over 13,000km of ducting space," said

DFA executive for strategy, mergers, acquisitions and innovation Vino Govender. "Our entry into Zimbabwe is in line with our strategic intent of expanding into sub-Saharan and other African markets."

Chimutsotso said DFA Zimbabwe will "build on the extensive experience from its South African counterpart to give, among others, Zimbabwean

telecoms operators and internet service providers access to the same premium connectivity infrastructure that DFA South Africa is known for".

He added: "We are excited to build our customer base in this new territory and at the investment opportunity and value to be derived by the telecoms sector of Zimbabwe and the economy at large."

PAT and WATT pen Nigerian infrastructure agreement

Nigerian firm Pan African Towers (PAT) and Canadian company WATT Renewable Corporation have signed a N7.2bn infrastructure investment financing agreement to address the energy needs of Nigeria's telecoms industry.

Speaking at the signing ceremony in Lagos, chief operating officer and founder, WATT Renewable Corporation, Oluwole Eweje, said it is an infrastructure-based partnership in which his company will provide power supply to the tower firm.

Eweje said power accounts for about 70 per cent of the company's operating cost (OPEX), adding that the mandate of WATT is to provide between 40 and 50 per cent savings."

"So, part of what we are doing is we are using a combination of technology and conventional energy sources to provide power to (the) off-taker which is PAT," he said. "The offshoot of all of these is

the socio-economic component of what we are doing. We are not just providing power to the business, part of what we are doing is that we are looking at using that as anchor station so that we can provide power to businesses within the country which currently do not have power."

Eweje added that the partnership had been in the works for about a year before the final signing of the deal.

He said investors have committed to spending about N7.2billion (over USD20m) on the project.

Safaricom signs new Chinese e-commerce pact

Safaricom has expanded its e-commerce reach in Kenya by providing mobile payment services on online store Aliexpress.com.

The company has partnered with the Chinese run web business under Alibaba Group, to use M-Pesa as a payment option.

It has been predicted that it could boost the telco's daily

mobile money transactions, which currently stand at 17 million or 25,000 transactions per minute, as more Kenyans start to favour online shopping driven by increased internet access.

"This partnership seeks to connect Kenyans to even more business opportunities by enabling them to seamlessly source, purchase and import goods from the world's leading manufacturers," said Safaricom chief customer officer Sylvia Mulinge.

Under the terms of the deal, Ant Financial, which runs the portal's payment services, will offer M-Pesa as one of the payment options with transactions denominated in the Kenyan shilling.

Telecom Egypt signs Microsoft Azure deal

Telecom Egypt has partnered with Microsoft to extend the latter's cloud network in the country.

The telecom firm said it will provide low-latency connectivity into and across Egypt to help enhance

performance and increase reliability for customers of Microsoft services.

The partnership will increase Microsoft's reach to the large Egyptian market in addition to improving its connectivity across that region of the continent.

"Through our collaboration with Telecom Egypt we are extending Microsoft's global network in Egypt and improving connectivity across north Africa and the Middle East," said Yousef Khalidi, Microsoft corporate vice president for Azure Networking.

The new partnership was announced at Mobile World Congress 2019 in Barcelona.

Aurecon chooses Orange to manage global communications

Engineering and infrastructure advisory giant Aurecon has chosen Orange Business Services (Orange) to manage its global communications infrastructure, including SD-WAN and cybersecurity services, as part of a USD25m five-year network

transformation agreement.

The French telecom giant said the deal will affect 60 sites across more than twenty countries, including African nations such as Angola, Botswana, Kenya, Mozambique, Namibia, Nigeria and South Africa.

It is based on the provision of Orange's SD-WAN service, which the carrier described as a fully managed end-to-end solution that will provide a four-fold increase in agile network capacity.

"This increased capacity is critical for worldwide collaboration, cloud-based CAD software and work-sharing," Orange said in a statement. "It will offer more visibility and flexibility to grow and evolve across its business operations. The scalable, cloud-based security services from Orange will enable Aurecon and its partners to work securely from any location, while securing its cloud-based business applications."

Orange entered into partnership with Aurecon in 2014, when it redesigned, consolidated and managed the latter's network infrastructure and deployed a high-speed global WAN, connecting sites across Africa and other parts of the world. Aurecon is based in Australia and South Africa.

Dos Santos clings on…for now

Isabel dos Santos, known to the media as Africa's richest woman, has been re-elected to the board of Angolan telecom giant Unitel.

The decision came after speculation that dos Santos could have been cast aside in a shareholder dispute at the company that dominates Angola's telecoms market.

The daughter of former Angola president José Eduardo dos Santos, she owns a 25 per cent stake in the business. Brazilian telecom company Oi, Angolan state oil company Sonangol and Angolan businessman and former government official Leopoldino do Nascimento also have an equal share.

The three co-owners previously always voted as a block, but Sonangol recently indicated that it was looking to sell its stake and wanted to reduce the influence of dos Santos in the process.

Dos Santos went through a turbulent period after her father was replaced by president Joao Lourenco in September 2017.

The latter has since moved to push aside powerful figures associated with his predecessor and fired Isabel dos Santos as chairwoman at Sonangol.

It is uncertain whether she will hang on as Unitel chairwoman when the board convenes for its first meeting, which is scheduled for May 6th.

MTN Group announces divestment plan

MTN Group has announced a USD1billion divestment programme over the next three years that will slim down the continent's biggest mobile phone operator and refocus it on high-growth markets in Africa and the Middle East.

Chief executive Rob Shuter, who joined MTN from Vodafone in 2017, has drawn up a turnaround plan that includes shedding loss-making e-commerce assets and exiting countries where MTN has little or no prospect of reaching second position by market share.

Shuter is also pushing the company into different avenues, such as mobile financial services, music streaming and mobile gaming. The aim is to target a burgeoning young tech-savvy population to offset falling prices for basic telecoms services.

Founded in 1994, MTN has been one of South Africa's biggest corporate success stories. However, clashes with regulators in Nigeria, Uganda and elsewhere in Africa have curtailed its growth.

NuRAN adds Fouladi to board

NuRAN Wireless, the mobile and broadband wireless infrastructure solutions provider, has added industry veteran Babak Fouladi to its board of directors, replacing the outgoing Francis Létourneau.

Fouladi, who is currently chief technology and digital officer at Dutch landline and mobile telecommunications company KPN, has joined as an independent and non-executive director. He will assist NuRAN with both the technical and business challenges of rural and remote connectivity. He

PEOPLE MOVES & CHANGES

Date	Name	New employer	New position	Previous employer	Previous position
11/1/19	Jens Thostrup	DAMM Cellular Systems	chief executive officer	Airbus	head of PMR terminals business and indirect sales
15/1/19	Nicolas Hauswald	NA	chief executive officer, ETELM	NA	sales and marketing director, ETELM
01/3/19	Douglas Craigie Stevenson	Cell C	Interim group CEO	NA	Still chief operating officer
26/3/19	Babak Fouladi	KPN	Independent and non-executive director on NuRAN Wireless board	NA	Still chief technology and digital officer at KPN
28/3/19	Foster Plender	AfricaOnline (subsidiary of Gondwana International Networks (GIN)	Managing director	GIN	Consultant
1/6/19	Hauke Holm	DAMM Cellular Systems	Vice President R&D	Hytera Mobilfunk	Chief technology officer
31/8/19	Rafiah Ibrahim	Ericsson	Advisor to the CEO	NA	Head of market area Middle East and Africa

INVESTMENTS, MERGERS, ACQUISITIONS

Date	Buyer	Seller	Item	Price	Notes
14/1/19	Bharti Airtel	Helios Investment Partners	Telkom Kenya	NA	MPs have raised concerns regarding the proposed deal so it may not go ahead
22/3/19	Maroc Telecom	Millicom	Tigo Chad	NA	The acquisition forms part of Maroc Telecom's strategy to expand operations in north and central Africa, while Millicom focuses its efforts on Latin America

has also held a number of senior executive roles in the telecom industry, including chief technology and information systems officer at MTN, chief technology officer (CTO) of Vodafone Spain and Vodafone Romania, as well as vice president of multimedia and services for Ericsson.

Martin Bedard, chief executive officer and president of NuRAN Wireless stated: "We expect this addition will further strengthen NuRAN's marketing and sales strategy, as well as increase NuRAN's visibility throughout the telecom industry."

Due to company by-laws regarding the maximum number of directors, Létourneau resigned from the board to allow Fouladi's appointment.

Fouladi said he was looking forward to contributing to the efforts at NuRAN and to help the company achieve its goals of connecting rural African communities and other areas of the world. "Often times it is the smaller participants in a market who can move swiftly and really change the landscape, I feel that NuRAN has this potential," Fouladi added.

Morocco passes new law to safeguard sector and attract new business
Morocco has passed a new law to safeguard competition in the telecommunications sector, as well as attract more investors and business ventures to the country.

Law 121.12 has identified three primary axes to improve both the customer and competitor experience of the Moroccan market of telecommunications.

The first axis is to uphold "complete transparency" with the objective to "inform and protect consumers".

Axis two relates to mechanisms and "tools to reinforce regulation and competition". The third and final axis increases the discharging and regulatory powers of the National Agency for the Legalisation of Communications (ANRT).

Prior to the passing of this new law, ANRT did not have complete regulatory powers. If it received complaints about anti-competition practices, it had to start a legal process, which could take years to complete. The new law allows ARNT to directly punish a company that falls foul of the rules.

MTN claims "world first" airtime top-up deal with WhatsApp
MTN South Africa has claimed it will become the first mobile network in the world to let customers purchase airtime and data bundles as well as check their balances directly on WhatsApp.

Its new MTN Chat service, a joint venture with global customer engagement company Clickatell, will enable users to purchase airtime and data bundles within their WhatsApp chat session. Going forward, customers will be able to also access customer support and self-service options, including performing upgrades, managing their accounts and receiving low balance alerts.

"Clickatell understands that mobile operators are under increasing pressure to deliver excellent customer service over the digital channels their customers prefer," said Pieter de Villiers, Clickatell founder and chief executive officer. "By offering convenient services over a secure, convenient channel, MNOs can both increase their transactional volume and attract and retain customers – something that is paramount in an age of continuous digital transformation and growing competition."

Clickatell said it already helped Absa Bank, GTBank, First Bank of Nigeria and United Bank of Africa successfully deploy chat banking capabilities on WhatsApp across Africa.

Ethio Telecom opens Joint Innovation Centre with Chinese tech firm
Ethio Telecom and Chinese international provider of telecommunications, enterprise and consumer technology solutions for the mobile internet, ZTE, have launched a Joint Innovation Center in partnership in Ethiopia.

The collaboration will help Ethio Telecom to undertake verification on new technologies as well as tests of products and services. It will also aid the business to organise seminars, workshops and conferences.

Located in the Telecom Excellence Academy, the Joint Innovation Center, complete with a lab exhibition hall, is equipped with mobile broadband, fixed broadband, core network NFV, IP, BSS/OSS, RCS and IPTV facilities. ZTE donated and deployed various cutting-edge technologies.

Following the opening ceremony in early March, the companies also signed a memorandum of understanding for future cooperation expecting to make full use of the Joint Innovation Center and optimise its operation. Ethio Telecom and ZTE have collaborated on various projects since 2000.

Telkom Kenya gets to work on fibre loop
Telkom Kenya has started to build a fibre loop for the city of Mombasa to meet growing demand for faster data from both its business and individual customers.

The new metro loop will connect the seaport city and link it to Telkom's over 10,000km national backbone and the 1,000km redundancy backbone between Mombasa and Tororo, town in the eastern region of Uganda.

The idea is to improve connectivity and enhance quality of service to customers, following the recent completion of a fibre metro loop for the city of Nairobi and its environs.

Mugo Kibati, chief executive officer at Telkom, said that the company intends to set up similar fibre loops in all large towns within the country to meet the growing demand for broadband by businesses, homes and individuals.

"This demonstrates our commitment to connect the people that keep Kenya on the move with the provision of fast, reliable internet," Kibati said. "These metro loops will facilitate access to the internet, which plays an important role in the lives of individuals and businesses. It further serves to entrench our position as Kenya's preferred data network.

Kibati added that "for broadband revolution to be a reality", the metropolitan bottleneck must be broken with architectural transformations that will help

LATEST COMPANY RESULTS

Date	Company	Country	Period	Currency	Sales (m)	EBITDA (m)	EPS (units)	Notes
21/2/19	Orange	France	Annual	EUR	41,381	13,005	NA	A 1.5 per cent increase in revenues in Africa and the Middle East accounted for almost half of the group's growth in 2018, driven by data and mobile financial services.
07/3/19	MTN Group	South Africa	Annual	ZAR	134.56 b	48.246 b	NA	MTN noted that service revenue also increased by 10.7 per cent year-on-year, supported by growth in MTN Nigeria (up 17.2 per cent), MTN Ghana (up 23.0 per cent), MTN South Africa (up 4.2 per cent) and MTN Uganda (up 8.9 per cent). However, MTN Cameroon and MTN Ivory Coast delivered a 7.3 per cent and 6.6 % decline in service revenue respectively.
27/3/19	C-COM	Japan	Annual	USD	13.53 m	NA	NA	Sales figure is revenues. The company saw a 31.6 per cent increase year-on-year.
29/3/19	Huawei	China	Annual	USD	107 bn	NA	NA	NA

convert bandwidth demand into opportunities. "As more and more applications are emerging, we must have matching or even better bandwidth in place," he said.

Mobilis selected for universal access

Mobilis, the mobile arm of Algérie Télécom, has been selected by the Algerian telecoms regulator to provide universal access in 750 areas with low population density and on 178 roads axis the north African country. The company was chosen by Autorité de Régulation de la Poste et Télécommunications (ARPT) after bids were submitted during the tender process, which launched in February 2019. It is understood that Mobilis was helped by the fact its competitors Djezzy and Ooredoo failed to submit a bid because of "restrictive clauses" in the tender call, such as the submission deadline.

Vodacom starts 5G talks with prospective partners

Vodacom has entered talks with South Africa's mobile data-only network operator Rain and data, voice and IP provider Liquid Telecom, in a bid to launch 5G products in the country when commercial 5G routers become available.

The mobile communications giant wants to offer South Africans affordable fixed-broadband products and faster mobile services, but it currently faces the obstacle of lack of spectrum.

Vodacom has already deployed standards-based 5G technology in the country but can only launch 5G services in the region once it secures access to 5G spectrum.

"We reiterate our call to license 5G spectrum in South Africa as soon as possible, as this spectrum is not subject to any digital migration processes," Vodacom said.

Rain recently announced at Mobile World Congress in Barcelona that it has launched the first 5G commercial network in South Africa in partnership with Huawei. The move will make South Africa one of the first countries in the world to launch 5G.

Zimbabwe plans telecoms merger for future investors

Zimbabwe is planning to merge two of its state-owned telecoms businesses, particularly in South Africa, according to finance and economic development minister Mthuli Ncube told a media briefing recently.

The Zimbabwean government is looking to sell a significant stake in the two state-owned telcos, namely mobile network provider NetOne and fixed and broadband network provider TelOne.

Ncube said the move would make the businesses more attractive to would-be investors.

South African telcos Telkom and MTN have reportedly previously expressed interest in the two Zimbabwean companies, but nothing concrete followed.

"If these entities (Telkom and MTN) are still interested – and we will approach them by the way and let them know – then they have a much bigger asset to compete for in the form of the two assets together, as opposed to a TelOne or NetOne, which was the case before," said Ncube. "But there will be other suitors that we will invite."

Shares in MTN Group plummet

Shares in MTN Group fell almost seven per cent March 26th after Nigeria's government said Africa's biggest mobile operator evaded taxes and urged a Lagos court not to block a USD2bn penalty.

Government lawyer T.A. Gazalo said the high court of Lagos should throw out the Johannesburg-based company's attempt to stop it from paying backdated taxes. Wole Olanipekum, a lawyer for MTN, argued Nigeria's attorney-general, who imposed the penalty on the mobile carrier, had no right to do so.

MTN had previously denied the charge and the case was adjourned to May 7th. The share price nosedived 6.8 per cent, the most in more than five months of trading, before paring losses to 2.1 per cent by midday in Johannesburg.

Rwandan government and OneWeb launch pioneering satellite

The Rwandan government and UK-based OneWeb have launched the first ever satellite that will connect remote schools to the internet.

According to the government, the global satellite shows its commitment to preparing the country for a hyper-connected future.

The first school to benefit from the broadband satellite is St Pierre secondary school, which is on Nkombo Island. Its location had made it very costly and inefficient to be connected to standard fibre connections and so the government said satellite was the best solution to get it connected to the internet. OneWeb's partnership with Rwanda will ultimately enable orbiting satellites to connect more schools in remote areas across the country. Nicknamed 'Icyerekezo' by pupils at the school, the broadband satellite is one of the first six satellites to be launched by the UK firm. The telecom giant had already announced plans to install 650 more satellites in public facilities worldwide.

Paula Ingabire, the country's minister of Information, communications technology and innovation said satellite internet was a good opportunity because circa USD2bn would have been needed to extend the traditional backbone to Nkombo Island. "Investing in space technology is part of our broader mission: reduce the digital gap by providing equal digital possibilities to rural and remote communities," she said.

Major spike in Zambia's mobile internet usage

The number of mobile internet users in Zambia has rocketed to 10 million from 7.9 million in just over three months, according to the latest statistics from regulator the Zambia Information and Communications Technology Authority (ZICTA)

An increase of approximately two million users was attributed to a number of things, such as improved data networks, affordable data services and the expansion of networks by operators aggressively competing for new business.

The minister of communications and transport Dr Brian Mushimba said much of it was down to faster internet speeds, combined with the roll out of 4G by main operators MTN Zambia, Airtel Zambia and Zamtel.

"Every citizen, regardless of which part of the country he or she comes from, is entitled to voice calls and better internet connectivity," said Mushimba.

Zamtel chief executive officer Victor Mupeta said the company would erect 700 communication towers by the close of the year.

"Internet connectivity has become more of a necessity than luxury," he said. "We are now in an era where mobile device users are constantly using their gadgets to connect to the internet and stay online for very long periods of time navigating different apps."

Cost of internet access has dropped, unless you live in Africa

The cost of internet access dropped globally 2018, except in Africa, according to data from an initiative to make the internet more affordable to people worldwide.

With Internet users on the continent already more for mobile data compared to average monthly income, the Mobile Broadband Pricing report from the Alliance for Affordable Internet (A4AI) reported the average price of a gigabyte of data (relative to income) increased over the past year in Africa, but dropped or remained the same in other parts of the world.

Nigeria, Egypt and Rwanda offered the cheapest tariffs on the continent, the research said. At the end of 2018, A4AI ranked Nigeria behind Egypt as the country with the lowest tariff in Africa.

A4AI made up of 80+ member organisations from the private, public and not-for-profit sectors in both developed and developing countries.

IN BRIEF…

Cell C has parachuted in Douglas Craigie Stevenson as interim group chief executive officer (CEO) of the company, effective March 1st. Stevenson has taken on the role vacated by Jose Dos Santos, who announced his resignation from the South African mobile firm last month.

Currently, Stevenson holds the position of chief operating officer, responsible for all operational aspects of Cell C.

The firm described him as a seasoned executive with over 20 years' experience in the telecommunications industry and said he is well versed in the financial, operational and technical side of the business.

"As a board, we believe he is capable of achieving the company's objectives, strategic imperatives and long-term vision," said Kuben Pillay, chairman of the Cell C board. "Douglas has a proven track record in successful planning, execution and negotiation at various organisational levels and we believe he will add tremendous value to the Cell C leadership team."

Stevenson joined Cell C in October 2017. Prior to that he was CEO of Telekom Networks Malawi. He also had roles fulfilled various senior roles in Vodacom, including group managing director of the Vodacom Business Africa Group.

Moving Wireless Forward

Mobile Mark is a leading supplier of innovative, high performance antennas to wireless companies across the globe. We've been in the wireless industry for over 30 years and have our roots in the early Cellular trials. We have grown and evolved over the years, along with the industry.

Today, we benefit from enhanced design capabilities and expanded production capacity – along with a greater understanding of new and emerging markets – all of which have allowed us to become one of the best antenna developers in our field.

Our customers have been our partners throughout the years. We believe in taking the time to understand our customers' individual needs. Through close consultation with clients, we are able to deliver innovative, tailored solutions that meet specific antenna requirements.

Rapid prototyping capabilities allow us to take our designs from concept to reality in an extremely short time span, and to verify the performance of the antenna. A variety of network analyzers and an anechoic chamber enable us to conduct measurements up to 13 GHz, and ensure that the antennas designed meet or exceed customer requirements.

We have onsite injection molding equipment and a fully equipped modeling shop staffed with skilled model makers to assist in the design phase and help us come up with a superior product – an antenna that not only meets the customer's electrical specifications, but is also very attractively packaged.

Mobile Mark antennas are used in many sectors of the wireless industry. Here are just a few examples:

Asset Tracking & RFID

Managing and tracking important assets can be a challenge in the field, and both RFID and WiFi offer effective wireless solutions. RFID / WiFi technology allows us to identify, monitor and track items ranging from medicine to fruit to parcels to people. Since each application has its own challenges, Mobile Mark offers a range of antennas so network developers can choose the right mix.

Commercial Fleet Management

Mobile Mark has consistently lead the industry with the most extensive and innovative range of antenna solutions that combine multiple wireless technologies: from simple GPS & Cellular antennas to complex 6-cable antennas combining LTE MIMO, WiFi MIMO, DSRC and GNSS in the same antenna housing. This combination of wireless technologies allows fleet owners to track and/or redirect their fleets of cars and trucks for optimum efficiencies. Mobile Mark antennas are rugged enough to handle tough environments and efficient enough to maintain reliable connections.

Public Transit & Bus Management

From monitoring the location of the bus to monitoring the condition of its tires, wireless has become an essential part of professional bus management. Mobile Mark's multiband antennas allow the system to capture that information and transmit it back to a central monitoring station with real-time connectivity. For an added touch, real-time WiFi service can also be added for the passengers. That's why companies like INIT have selected Mobile Mark antenna to complete their product offerings. And they have made the following endorsement:

"INIT GmbH – as a worldwide leading supplier of integrated planning, dispatching, telematics and ticketing systems for buses and trains – uses Mobile Mark bus antennas in public transportation projects all over the globe.

For example: INIT has installed Mobile Mark antennas in projects located in Abu Dhabi, Hertfordshire UK, Turku Finland, Oslo Norway, Montreal Canada, Luxembourg, as well as several German projects.

In 2017, a fleet of more than 1,500 buses will have Mobile Mark Antennas installed in one of INIT`s

current major projects for National Express, West Midlands, UK."

Remote Monitoring & Surveillance

Surveillance plays an important role in maintaining secure settings. Network deployments need to be low maintenance and weather resistant. Broadband surface mounts offer flexibility for multi-frequency coverage and are rugged and dependable. YAGI antennas provide practical point-to-point coverage. Our antenna solutions are designed to handle tough conditions while providing the reliable wireless connection you would expect from a Mobile Mark antenna.

Mining & Exploration

Modern mining operations rely on a battalion of vehicles, ranging from massive extraction vehicles to modest-sized material transport trucks. These vehicles operate in tough environments where high vibration is a frequent wear and tear challenge. Mining companies throughout Africa have relied on our rugged, foam-filled mobile antennas for consistent connections. Mobile Mark's infrastructure antennas have been used for rapid deployment and redundancy coverage for effective wireless coverage in isolated settings.

Smart Cities & Smart Highway

For cities and highways, the lynchpin of a successful "Smart" system will be dependable wireless connections. Companies like Kapsch understand this, and have worked with Mobile Mark to find ideal antenna solutions. Wireless networks must reach seamlessly into hard-to-cover corners of city intersections and along vast expanses of highways. They must be carefully embedded in city lighting and electrical meters. Mobile Mark offers both small network infrastructure as well as embedded antenna elements to help network designers tie all the pieces together.

Let us know how we can help

We understand the RF wireless world and are ready to help you evaluate your options. Contact us by email, phone or fax and let us know how we can help.
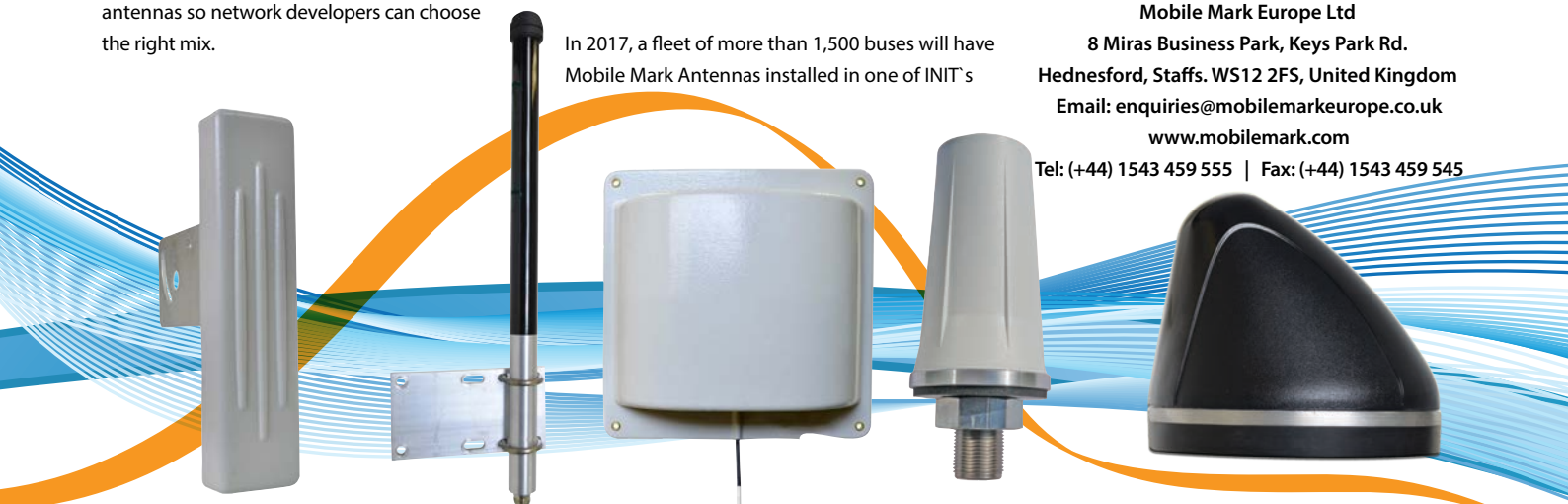
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G+D debuts new platform

Giesecke+Devrient Mobile Security used Mobile World Congress 2019 to debut a new platform that enables the integration of multiple security applications on a single security chip – for mobile connectivity, mobile payment, transit and other security applications.

Targeting device manufacturers, the platform combines the eUICC (Embedded Universal Integrated Circuit Card) and the eSE (Embedded Secure Element) on a single chip.

The firm says this allows the embedded SIM functionality to be combined with other services such as mobile payment, ticketing or secure authentication. G+D also claims the platform meets all relevant specifications and certification requirements of the GSMA as well as international payment and transit organisations. In addition, it successfully completed tests against all relevant back-end systems of MNOs, banks or transit authorities.

The new converged platform is based on the Sm@rtSIM CX secure element product line and the AirOn eSIM management platform provided by G+D, including the required secure personalisation and data management services.

G+D says device makers and end users will benefit from the new integrated solution as the space-saving format of the single-chip enables device makers to develop smaller, leaner and therefore more attractive products, enabling a wide range of functions easily, quickly and securely. www.gi-de.com

Amphenol RF launches new 2.2/5 connector series

Amphenol RF has launched a 2.2/5 connector series, which it claims to be ideal for wireless infrastructure in indoor and outdoor applications. With an interface that is a more compact version of the previously released 4.3/10 connector series, its footprint is 53 per cent smaller. Described as lightweight with the ability to "accommodate thick, low loss cables up to a half inch",

coupled with a robust design, Amphenol says the 2.2/5 connector series is tailored to the needs of applications which require low PIM in order to avoid interference in network quality during high-speed data transmission. "These connectors offer flexibility in installation with the ability to blind mate and are IP-68 rated in the mated condition" Amphenol says. "This allows for

prolonged exposure to the elements without compromising the performance." The 2.2/5 are "ideal" for wireless applications such as small cells, mobile networks, distributed antenna systems (DAS), low power base stations and in-building architecture and 5G communication technology. www.amphenolrf.com

Extreme Networks announces WiFi 6

Extreme Networks has announced six new high-performance 802.11ax (Wi-Fi 6) indoor, outdoor and stadium Wi-Fi access points and a range of multi-rate Gigabit switches.

Extreme's new solution provides connectivity in dense and challenging environments and a best-in-class edge CX, while delivering 4x greater capacity. This ultimately enables organisations to support an ever-increasing number

of devices and applications, and scale networks for future growth.

By tapping into the power of AI and machine learning, customers can better understand the behaviour of 802.11ax RF networks. This ultimately enables them to optimise performance and the overall experience, while simultaneously minimising the workload for engineers and also automating networking at the edge.

The product is also equipped

with built-in WPA3, which offers enhanced security for networks transmitting sensitive data, thereby assuring users that their wireless communications are secure.

Extreme also say the three modes of software-programmable radios enhance user engagement analytics, granular locationing, and IoT connectivity. This ultimately supports a variety of devices and delivers optimal performance, without cable retrofits. www.extremenetworks.com

GL approaching LightSpeed

GL Communications is rather gushing about its LightSpeed 1000 product and claims it can do a lot of things. The hardware platform (PCIe Card and USB Pod) is capable of OC-3/12 and STM-1/4 wire-speed processing on quad optical ports for functions such as wire-speed recording and wire-speed playback of unchannelised and channelised ATM, PoS, and RAW Traffic. Two of its four ports are designed for SONET/SDH unchannelised and unframed data. The other two

ports are meant for SONET/SDH channelized data of carrying many independent unframed/framed T1, E1, T3 and E3 streams. It also comes with software for overall monitoring, BERT, emulation and protocol analysis and GL says its price tag "compares very favourably" with similar test instruments at three times the price. Its main advantage, GL says, is that any of the T1/E1 or DS0 test requirements can be met without resorting to electrical access. www.gl.com
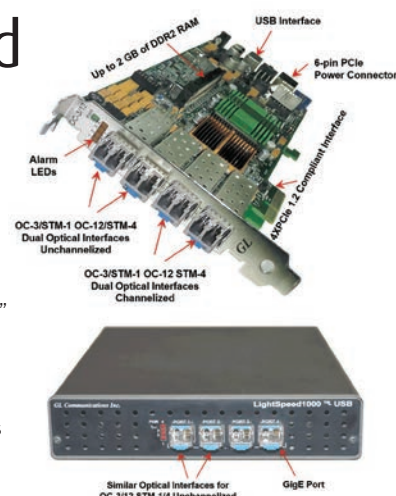
Comtech's CDM-760 modem 'significantly enhanced'

Comtech EF data reckons its CDM-760 advanced high-speed trunking and broadcast modem "has been significantly enhanced with faster data rates" and was designed to be the most efficient, highest throughput, point-to-point trunking and broadcast modem available. The company says it's

a popular solution for high-speed trunking, fibre restoration and broadcast applications. "Now with 2X faster speeds", the CDM-760 supports . 720 Mbps simplex and > 1.4 Gbps duplex data rates. Comtech further claims the Gigabit

capability enables faster data transmissions between satellites and ground stations, allowing service providers to deliver new services and improve quality of experience for

end users. The modem now offers expanded modulation techniques with support for 128APSK and 256APSK operation. Comtech says this increases the potential spectral efficiency and maximises the usable throughput of satellite links. www.comtechefdata.com

Centiel's Li-ion battery solution to hit the market

Centiel has brought its Li-ion battery solution to market. Unlike lead acid, Li-ion batteries are happy running at a temperature of high 20s/low 30s (°C). Similarly, most IT systems work at >25°C and the UPS technology itself can work well up to 40°C. By contrast: an industry standard estimate is that for every 10 degrees above 20°C the operating life of a VRLA battery is halved. The firm claims Li-ion batteries typically require less than half the physical space of the equivalent lead acid blocks and are less than 25 per cent of the weight. It also reckons that while 10-year

design life lead acid batteries are normally replaced every seven or eight years, with Li-ion this is 13-15 years. Centiel says the adoption of Li-ion within UPS systems so far, has been greater in developing countries in Africa and the Middle East, where the main power grid is less reliable than in the UK and frequent power problems are more commonplace. In these instances, the UPS and battery systems are required to be cycled several times per day. The company says this greater take-up is primarily due to the higher cycling life of Li-ion: typically, 2,500 power-up and

down cycles compared with around 300 for VRLA technology.
www.centiel.com

Sepura expands communication accessories with introduction of mRSM

Sepura has extended its range of communication accessories by introducing the mRSM – a compact remote speaker microphone compatible with Sepura's SC2 and STP Series TETRA terminals.

Described as "small, robust and lightweight", the mRSM has been specifically designed for users operating in a wide range of environments including public safety, commercial and industrial operations.

Sepura says the design ensures that users are protected whatever the conditions. What's more "the positive tactile feel of the PTT and

emergency buttons ensure that the mRSM is easy to use even in dark environments or when wearing gloves, while a 2W speaker ensures outstanding audio even in crowded or busy environments".

Despite its compact size, Sepura says the mRSM boasts IP67 environmental protection and WaterPorting technology, ensuring that, like Sepura's SC2 Series radios, the mRSM can

maintain clear audio even in continuous, heavy rain.

"The mRSM offers superior audio quality and robustness in a lightweight form factor, suitable for many public safety users, or those in industrial or manufacturing facilities," says John Drewnicki, head of products – accessories at Sepura. "For users seeking a compact RSM with all the audio capability of a larger device, the mRSM answers their needs." www.sepura.com

Narda releases equivalent remote controlled version of SignalShark

Narda Safety Test Solutions has just released an equivalent remote-controlled version of its SignalShark at, what it describes as, an attractive price/performance ratio. This new "real-time remote analyser" detects, classifies and localises RF signals in the frequency range between 8 kHz and 8 GHz to the highest degree of precision and reliability. Narda says the product has been modified and optimized for universal applications

requiring efficient, centrally-controlled monitoring of systems, the components of which may be widely spaced and spread out over a large area. Other key features Narda points out are the module's ability to solve complex measurement and analysis problems, thanks to its high RF performance, ITU compliance, reliability and speed.
www.accutronics.co.za

SK Telecom & Samsung perform 5G EN-DC tests

Korean giants SK Telecom and Samsung Electronics have successfully completed a network device interoperability test that applies dual connectivity technology, using both 4G and 5G networks provided by the latter.
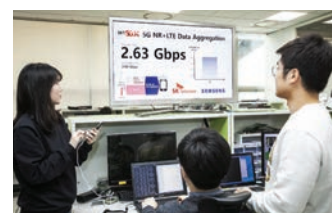
This technology, known as E-UTRAN New Radio Dual Connectivity (EN-DC), is based on the 3GPP 5G New Radio standard.

During the test, the companies witnessed 2.65 Gbps in data speeds on a 5G smartphone, combining both 1.5 Gbps in 5G using 100 megahertz of the 3.5 GHz band, with 1.15 Gbps in LTE using a combined 65 megahertz of 1.8 GHz, 2.1 GHz, and 2.6 GHz frequencies — all of which are available for commercial use by the carrier.

Carried out at Samsung Electronics facility located in Suwon, Korea, the test used Samsung's commercial 4G and 5G NR end-to-end networks solutions. The firms also used Samsung's virtual core that supports simultaneous 4G and 5G as well as its Galaxy S10 5G smartphone.

In a statement, Samsung said SK Telecom would be able to boost the overall transmission data speed by 80% by leveraging the 4G and 5G dual connectivity. It will allow users who are in 5G service coverage to download ultra-high-definition videos of 2 GB in just 6 seconds, and large video content such as 4K virtual reality video of 10 GB in less than 30 seconds.

"In the early stages of 5G era, the combined capabilities of 4G and 5G networks are important forces for mobile carriers to maximise the characteristics of the 5G network— ultra-fast speed, low-latency, and massive-connectivity by leveraging widely deployed 4G network coverage," Samsung said.

During the test, the companies witnessed 2.65 Gbps in data speeds on a 5G smartphone

Satellite technology for inclusive connection

Antenna installed at a mining site

Forget the notion that satellite is old and irrelevant, it's changing perceptions and breaking new ground, writes Dr. NICOLA DAVIES

The term "satellite" may conjure a traditional image of a large satellite dish mounted on the ground and pointed toward the sky, requiring a clear, uninterrupted view to enable a connection with a device floating high up in space. In many remote areas, this is still one of the most effective ways to connect far-flung communities to the rest of the world.

The satellite advantage

Satellite technology has one primary advantage over other technologies: "The sole benefit is that communications can be achieved in areas so remote that conventional land-based fibre or copper cannot be deployed." This is according to Phil Thomas, operations manager at New Era Systems - a company that sells satellite equipment to markets in Africa, North America, and South America. This capability to provide connectivity in hard-to-reach locations makes satellite technology a viable choice for companies in industries such as energy and banking that are aiming to increase coverage for customers situated in underdeveloped locations, miles away from the urban centres in northern and southern Africa. With further innovations in the field, satellite may have an opportunity to become the chosen method of connection, particularly for industries aiming to serve the needs of untapped communities.

Demand for connectivity in Africa

Global consultancy firm McKinsey describes the African region as the world's next big growth market. A continent of 54 countries, with an estimated population of 1.2 billion, Africa is bigger than the combined land mass of the continental United States, China, India, and Europe.

The median age in Africa is 20 years, offering a region of young people keen to adopt (and innovate with) digital solutions. Indeed, active users of mobile financial services amount to 122 million and Smartphone connections are expected to grow from 315 million to 636 million from 2015 to 2022.

In McKinsey's 2018 book Africa's Business Revolution: How to Succeed in the World's Next Big Growth Market, the consultancy group outlines five trends:
• A rapidly-growing and urbanizing population, with corresponding increase in spending power.
• An opportunity to industrialize the region to address domestic demand and gain a foothold in export markets.
• A determination for governments and private companies to close gaps in electricity, transport, and water infrastructure.
• Abundance of natural resources including agriculture, mining, oil, and gas. This offers the potential to innovate within the fields of food production and energy, helping create wealth for the region.
• Swift adoption of mobile and digital technologies, helping Africa overtake numerous obstacles to economic growth.

Demand for digital solutions to essential services, such as electricity and banking, is growing rapidly. Thomas says, "Our clients are the hub operators in Europe or the Middle East who sell service to Africa and other regions.

There is a strong demand for service in the interior of Africa, places that terrain and remoteness make it difficult for any other form of connection. Africa is large and the population increasing; they have the wish to get access to global communication networks."

While some may see it as a hindrance to doing business, the lack of existing infrastructure in many areas and industries could in fact be an opportunity for smart companies to offer services in innovative ways. Digital-only methods may be some of the most cost-effective ways for energy companies and financial institutions eager to expand their markets, and satellite technology can help these companies overcome the lack of infrastructure. "Satellite connection only requires power and a direct view of the sky where a suitable satellite is located," says Thomas. "Land-based systems need either a wireless tower or copper cable connections between the provider and the consumer. The cost of deploying cable internet connections to low density rural areas, possibly over difficult terrain, makes the task unprofitable. The downside is that satellite bandwidth costs are dramatically higher than terrestrial costs. Urban areas can benefit from hard-wire or Wi-Fi connections and are adverse to paying the higher cost of satellite bandwidth."

Rural electrification

The household electrification rate in the Sub-Saharan African region remains the lowest globally, according to a 2018 report by the World Bank. 2 In 2016, 42

per cent of households had access to electricity, the majority of which are located in urban areas. Of rural households, the electrification rate is estimated to be 22 per cent. Thus, extending access to electricity is one of the most important development issues in the region. Electrification is one of the factors that will help increase productivity in many untapped areas of the continent.

According to McKinsey, the continent continues to experience large gaps in energy. The lack of power in rural areas is still described as one of the major challenges for Africa. While people living in urban centres may now have little or no problem getting connected, the needs of communities in far-flung areas lacking infrastructure remain unmet. Electricity and an Internet connection go hand-in-hand, and satellite companies may be able to help connect rural communities with energy providers in the region. This is why opportunities still abound for satellite technology within the energy industry.

One example of how satellite is helping energy companies reach remote areas is the hybrid wind farm/power station in Amdjarass, Republic of Chad. The plant is operated by Vergnet Group, a French company delivering renewable energy solutions. The facility has allowed Amdjarass to become the first city in Chad to run on 100 per cent renewables. Its operations control centre is located in France, but a premium VSAT ("very small aperture terminal") service by Marlink, a global provider of satellite communication services, enables the centre to remotely monitor and maintain the plant. The connection is secure and "always-on," ensuring the plant is constantly delivering energy to the community. In a media release, an executive from Marlink says that terrestrial networks are either unavailable or unable to provide the bandwidth or reliability necessary for the delivery of sustainable energy production in remote regions. The connection has a guaranteed redundant link for Machine-2-Machine (M2M) data transmission, as well as Internet access and email. This reliability is why satellite communication technologies are essential in energy production and delivery.

Reaching the under-banked

In a February 2018 report, McKinsey described the African overall banking market as the second-fastest-growing, as well as second-most profitable, in the world. Challenges particular to retail banking include low banking penetration, minimal credit coverage, frequent use of cash in transacting, and the presence of only a few branches and ATMs. There are 54 separate markets comprising the rapidly growing African banking sector. In 2012, 170 million had access to banking services. As of 2017, this number grew to 300 million. In 2022, the estimated number of Africans with access to banking will be 450 million, almost half of the continent's population. From 2012 to 2017, banks in the continent grew revenues at twice the global average. Additionally,

they were more than twice as profitable (on average) as banks in developed markets.

Since there are still many unserved or underserved individuals, enterprises, and communities, there are also many opportunities within the banking and financial services sector for satellite technology. The technology's ability to reach areas not served by terrestrial networks makes it a dependable tool for banks and other institutions who intend to take advantage of the rapid economic growth and the need to address financial inclusion.

One example of a financial institution using satellite communications is in the East African region, where Liquid Telecom works with Kenya Commercial Bank (KCB) to expand its network with satellite services. Specifically, the KCB uses VSAT technology to connect 24 branches in South Sudan. Lacking an effective Information and Communications Technology infrastructure, companies in countries such as South Sudan can take advantage of satellite services that can provide reliable links for branch-to-branch or other internal connections. They can also take advantage of dependable networks for essential services such as ATMs or the use of point-of-sale terminals.5

Another example in the financial sector is the partnership between iDirect, a global provider of satellite communications, and Q-KON, a telecommunications system integrator with 30 years' experience operating in various parts of Africa. Q-KON specializes in the development and operation of "off-grid" connectivity for businesses throughout the region, with expertise in the financial services industry. The telco group focuses on locations and services that are not provided by national telecom networks or cannot be met by existing infrastructure.

While mobile networks provide 3G, the finance sector requires higher reliability and guaranteed Service Level Agreement (SLA) services for operational concerns, such as ATM connection, point-of-sale services, and branch back-up. Q-KON and iDirect have created unique satellite solutions which combine the advantages of satellite (constantly on, access from anywhere, and high dependability) with the efficiency, optimized costs, and SLA support of network services.

A Swaziland-based bank has approached Q-KON to build primary and backup communication networks for ATMs and branches not just within the country but also to its headquarters based in South Africa. Pan-African banks are facing increasing pressure to develop both regional and

national markets. Local monetary regulations require that processing must be done in-country, and companies must find an efficient and cost-effective way to decentralize infrastructure and build local networks and country-specific processing hubs. IDirect helped create what they call a regional node mesh solution to address this need. The service uses one main network core to provide connection to Pan-Africa, with the option to install a regional node, using a mesh receiver, in each country to provide full local connectivity. This way, the company does not need to invest too much on infrastructure in each new location, but still complies with local regulations.

Advantages of satellite technology

Today, satellite communications technology is developed enough to be able to deliver a quality connection, whether this is for voice, video, or data. Networks are reliable, enabling consistent connectivity in areas where terrestrial solutions fail or are unavailable or too expensive. In addition, the technology is modular. It is easy and quick to deploy, making it a convenient option for companies that need to continuously add a new location to its existing network. Even in disaster scenarios, companies would be able to use satellite as a back-up connection to immediately restore communications in affected areas.

Innovations push satellite forward

While satellite has traditionally been known for its "last mile" proposition, innovations in space satellite technology may help push the industry forward. The development of low earth orbit (LEO) mega-constellations is one such development.

LEO satellites are those that orbit the earth at an altitude of 160 km up to 2,000 km. Since this type of satellite is close to the ground, it requires less power and less time to transmit data, compared to satellites in higher orbits.

The new LEO satellites are lighter, smaller, and less expensive to develop than traditional satellites meant to go in higher orbit. With competition increasing, the cost of LEOs may continue to drop. Satellites can be built with lower-cost mass-produced parts. In case one of these parts malfunctions, it can simply be replaced instead of fixed. In the same way, if one satellite within a mega-constellation fails, an operator may simply send up a new one instead of spending time and other resources repairing the broken satellite.

A constellation or group of satellites are designed to communicate with each

other in such a way that data is not returned to the ground. Instead, the information is bounced along the sky. Operators on the ground have a terminal that automatically picks out which particular satellite within the constellation has the best signal at that moment in time, and then makes a connection to this satellite. The terminal will need to switch satellites frequently because LEOs move relative to the planet. However, since there will be a large number of these small satellites, on-the-ground terminals will always have one available to them. The terminals themselves will also be smaller and easier to install compared to traditional satellite dishes. Information will travel along Ka (26.5GHz to 40GHz) and Ku (12GHz to 18GH) frequency bands.

LEOs move and are distributed around the Earth, so some satellites may temporarily go to a different part of the sky, over a region where there could be little to no usage of the satellite. There is an opportunity, then, for satellite companies to offer connection services to these areas for a lower price than other markets, because any additional business from these previously untapped regions would increase overall revenue.

Beyond energy and banking

These developments in satellite technology are an opportunity for further digital innovation. Local African businesses and foreign companies may find it worth taking the high risk (and potentially high returns) of investing in the region. One company helping enterprises and consumers in the region is YahSat, a satellite communication company from the United Arab Emirates (UAE). Optimistic about Africa, the Abu Dhabi-based group invested more than $200 million on its Al Yah 3 satellite, which started operations in early 2018. The new satellite has enabled YahSat to launch its broadband service, branded as YahClick, in eight new markets, which include Cameroon, the Democratic Republic of the Congo, Ghana, Ivory Coast, and Zimbabwe. Rural areas in these countries can now have access to the internet.

YahClick has been available to customers in Kenya, Nigeria, and South Africa for some time. Satellite broadband services can help improve the quality of life of remote communities, ensuring businesses are constantly connected. Affordable, easy-to-install, uninterrupted internet services help entrepreneurs, government agencies, schools, and healthcare providers become efficient in their daily operations. This, in turn, enables them to effectively serve the people within the community.

Combining solutions

Satellite technology is a one of the most effective ways to help remote locations get connected to the Internet. It is now as fast as terrestrial solutions, with the added benefits of easy installation, low cost, and "always-on" dependability. However, as the needs of individuals, households, and communities grow, it may be necessary for companies to come up with combined terrestrial and satellite-based solutions. Thomas says, "Increasing populations in rural areas will see an expansion of satellite connectivity. At some stage when the population reaches a certain level there will be a tipping point and somehow the terrestrial connections will be brought into that area and will replace satellite. We have been focusing on two-way satellite connections, but as we have seen in the US, platforms transmitting television and other streaming content will hold their own and have a much longer life even when cable reaches a particular area."

Increasingly complex data requirements may

Demand for VSAT satellite services growing as Africa strives for a bright digital future

Thanks to the arrival of HTS (high-throughput satellite) in Africa, the demand for VSAT satellite services is on the increase and remains critical to unlocking connectivity on the continent where over 70 per cent still remain unconnected. This sentiment was also evident at the Mobile World Congress 2019 where Intelsat made clear that delivering on the promise of 5G would depend heavily on the provision of satellite networks.

Once thought destined to be obsolete as mobile and fibre networks were ever increasing penetration in Africa, HTS satellite services are proving they can deliver on today's customer expectations for high speed affordable connectivity in areas where even mobile networks do not reach.

Elsewhere in the world, Africa is seeing a greater reliance on internet connectivity as governments strive to enable new digital economies and the many associated economic benefits. Every 10 per cent increase in broadband penetration can trigger a 1.38 per cent increase in a country's GDP, and every one per cent increase in broadband connectivity can generate a five per cent increase in job creation. Clearly, the wider the prevalence of broadband, the higher the probability for improved economies, and satellite is definitely key to widening the reach of broadband access in Africa.

While satellite is often the only means of delivering broadband connectivity in Africa, even if used for mobile backhaul to bring 3G services to remote areas, or as a central point for connectivity in a village, there has been little to no price improvements on VSAT modems. CPE equipment pricing remains amongst the biggest obstacle to the successful rollout of satellite broadband on the continent. Until we see large reductions or innovative financing approaches for end-user satellite modems, the utopian goals of mass-scale satellite broadband penetration in Africa may be limited.

Despite some challenges, and iWayAfrica's investment in fibre services and wireless

also need a network that seamlessly utilizes a mix of Low Earth Orbit (LEO), Medium Earth Orbit (MEO), and Geostationary Orbit (GEO) satellite constellations, as well as land-based technologies. This could be the case with the low latency and gigabit connectivity needs of native 5G networks.

As Africa continues its journey of vast economic growth, it is essential that every community can access essential services, including power, banking, education, healthcare, and small-business support. The importance of the internet in promoting inclusion, efficiency, and innovation cannot be understated. Satellite technologies have a massive potential to help many remote African communities not only catch up, but flourish with the rest of the region.

Michèle Scanlon, managing director, iWayAfrica (wholesale VSAT division)

networks to evolve alongside changing customer requirements, satellite continues to be a core service offering, and one which spans over 25 years on the continent. More recently, iWayAfrica was appointed as an Avanti Master Distributor following the launch of the HYLAS 4 satellite. The importance of HYLAS 4 to Africa is the near ubiquitous coverage of sub-Saharan Africa that it provides. Previously HTS Ka-Band services were not able to deliver ubiquitous coverage of the continent, rather focusing on key areas for coverage. With HYLAS 4, we are excited to take Avanti's high-speed service plans to West and Central Africa for the first time.

An example of the impact of satellite broadband connectivity can have is iWayAfrica's community project in Uganda, which utilises its Jupiter platform with Intelsat's IS-28 wide-beam capacity. The wholly solar powered JOLAspot service provides WiFi connectivity across the village with vouchers sold by women agents, while the additional power generated by Winch Energy powers device charging facilities, a printer for photocopying and print services, as well as a fridge selling the only cold drinks in the village. The next phase is to expand the site to offer micro-finance online banking facilities to the community that require both power and connectivity.

iWayAfrica is investing in new markets, especially West and Central Africa, through establishing new distributor channel partners for VSAT growth. We already have our own licenses in eight markets and are open to new license opportunities to expand our footprint even further. Our aim is to bring broadband happiness to Africa to facilitate a bright digital future, especially in areas where there is no, nor likely to be, alternative means of connectivity.

Maternal and child healthcare unit in Aweil, South Sudan

The best medicine for the worst off patients

The advent of telemedicine in some of the most rural and underprivileged parts of the world has been a game-changer for medics and patients alike

Daniel Martínez, a coordinator of the Médecins Sans Frontières (MSF) telemedicine service, receives an alert on his mobile phone. The organisation's team in South Kivu, Democratic Republic of Congo (DRC), has a question about a paediatric case – a five-day old baby with suspected tetanus.

The question is immediately forwarded to the system's near 350 experts from more than 30 medical specialties around the world who answer cases requiring expert opinion very swiftly. That's a typical day for the MSF (known in the Anglophone world as Doctors Without Borders) telemedicine operation carried out in Africa and in more than 72 countries worldwide.

Telemedicine allows remote medical teams to consult with a network of experts whenever they are confronted with cases outside their area of expertise.

Nearly a decade on from its launch in 2010, the store-and-forward telemedicine services (where questions are submitted via secured online platforms) is being used by medical practitioners has not stopped growing. Now it's invaluable.

Currently, an average of eight to 10 cases are received a day, but the figures can spike significantly in any given month. In 2016 there were 3,000 cases. As of 2018, there were over 10,000 cumulated cases.

However, it's not as straightforward as it sounds. Scaling new technology is often tricky, but when your raison d'être is urgent crisis response in resource-poor locations, the pressure to react and deliver can be immense. For that reason alone, clear communication is vital.

For the service to be functional 24/7, coordinators work with their counterparts across the globe to diagnose and treat patients as soon as possible. On average, the coordinator takes less than 10 minutes to forward the query coming from any MSF project to the expert. The response time from specialists largely varies depending on the nature of the case. However, some urgent cases are closely followed up by coordinators and the response from a specialist can arrive within one or two hours. For rest of the cases, depending

upon the nature and number of specialists involved, the response time five to 24 hours. In some cases they are followed up for days or even months with input from multiple specialists.

"I was so impressed with both the quality and accuracy of the answers that I couldn't stop using it," says Kay Hodgetts, an Australian doctor, who worked for a few weeks in an emergency intervention to assist displaced people and victims of violence in Leer, South Sudan.

She recalls her first assignment with MSF in Ethiopia. A four-year-old was one of the patients she treated with the support of telemedicine. "It was a particularly complicated case: the child was malnourished, had fever and pancytopenia (a reduction of red cells, white cells and platelets in the blood that is usually related to diseases that affect bone marrow), and was not responding to multiple lines of treatment," she says. Kay and the medical team , used the telemedicine service and sent the patient case history, details of how they had treated him, photos, a video and the results of a blood test. After weeks of treatment, the patient was finally discharged .

"Currently, increasing widespread internet access in MSF projects helps bridge the gap between the level of care in the field and in large medical centres," says Kay. "In fact, it makes even more sense that we use telemedicine in these contexts because we have fewer diagnostic tools."

Helping to compensate for lack of medics and reducing isolation in remote locations

Many of the countries where MSF operates are plagued by conflict or with dysfunctional health systems. The upshot is a lack of health workers and hardly any medical specialists outside the referral hospitals. For example, a number of patients in the system are children under five and so demand for paediatricians often outweighs supply.

The referral hospital in the district of Madaoua, southern Niger, is taking steps to address this. Every year, Niger faces the same problem – a peak in malaria and malnutrition from May until September, when the number of paediatric beds triples to 300. Doctors at the hospital send their queries via the telemedicine platform and then, every Thursday, they connect with a Canadian and British paediatrician based in Gambia to discuss the most complicated cases in depth with MSF specialists via video-conference.

Accessing highly specialised expertise

Treating diseases is one thing, but treating serious wounds brings its own pressures.

"We need to know whether plastic or orthopaedic surgery will be possible or if the best option is to amputate the hand." That's the desperate message an MSF team in the DRC received shortly after sending a photo of an eight-year-old patient with a horrific hand and wrist wound.

The response came fast: "Don't amputate. Children's capacity for recovery and adaptation

Rutshuru Hospital, Rutshuru, DR Congo

is tremendous. So just check the infection, try to close or graft the wound, and put the wrist in the correct position with a sling. Keep me informed."

According to 2017 figures from MSF, enquiries about surgery represent more than 10 per cent of the total received by the telemedicine service,

Drugs delivered by drone

Malawi reached its very own aviation milestone in January 2018. A team from Virginia Tech in the US supervised a fully autonomous, 19km simulated drug delivery flight in a drone designed at the university and built by Malawian students.

The aircraft, EcoSoar, was designed at the Unmanned Systems Lab for it to be fabricated and operated in Malawi for remote medicine delivery.

EcoSoar flew in the drone testing corridor in Kasungu, which was opened by the Malawi government, in conjunction with the UN's children's agency Unicef, in June 2017. The corridor was designed to explore the impact of drone applications in emergency supply delivery, vaccines, sample delivery for diagnosis and remote sensing.

Across a two-day workshop, Kevin Kochersberger, Zack Standridge and James Donnelly from Virginia Tech coached 13 students from Malawian universities through the construction of the aircraft that is made of foam core (poster board) and 3D printed parts to facilitate local production to keep costs to a minimum.

The corridor is the first of its kind in Africa and allows for beyond visual line of sight (BVLOS) testing in a territory over 5,000km² and up to 400 metres above ground level.

It is designed to provide a controlled platform for the private sector, universities and other partners to explore how drones, also known as unmanned aerial vehicles (UAVs), can help deliver services that benefit communities and schools.

"This humanitarian drone testing corridor can significantly improve our efficiency and ability to deliver services to the world's most vulnerable children," says Christopher Fabian, Unicef office of global innovation principal adviser.

This corridor is now used for to provide humanitarian assistance, including vaccinations.

Early in the morning, health worker Amidu Malope holds his regular clinic for children under five-years-old, in the shade of some trees on the edge of the village. He arrives by bicycle and sets up an outdoor consultation area: a wooden table with benches and a box full of drugs, malaria test kits and other medical

so doctors on the ground can receive very specialised opinion for their cases, often faster than in the developed world. Paediatrics then radiology are two major specialities that account for number of cases on telemedicine platform.

The range of cases are diverse: radiology, dermatology, burn and wound care, snake bites, critical care, surgery, mental health, cardiology, nephrology, obstetrics and gynaecology.

Dr. Joanne Liu, a Canadian physician who currently serves as MSF's international president, was instrumental in developing MSF's use of telemedicine after realising the critical support it can provide to the organization's doctors in the field. "Suddenly you're not all by yourself in the middle of South Sudan or Congo," she says. "Telemedicine can make a huge difference."

A group of 13 students from Malawian universities make drones from foam core (plaster board) and 3D printed parts

supplies. His waiting room is a mat on the dusty ground, which by 8am is already full of waiting mothers and children.

Regular deliveries by drone will allow Amidue to vaccinate children on schedule, as opposed to once a month. Connectivity drops will allow him to inform the district hospital of urgent medical cases and arrange transportation. What's more, aerial mapping could help him create an accurate map of the villages in his area, along with water sources and other relevant information.

Global businesses that participate in the corridor are required to spend time training and working with local students, engineers and entrepreneurs. They are also required to share skills and best practices.

"Malawi has limited road access to rural areas even at the best of times, and after a flash flood earth roads can turn to rivers, completely cutting off affected communities,"

Unicef Malawi representative Johannes Wedenig adds: "With UAVs we can easily fly over the affected area and see clearly what the impact has been on the ground. This is cheaper and better resolution than satellite images".

Now, with the help of telemedicine, care is given to the poorest and hardest to reach families in Malawi. The choice of location for the corridor allows companies to test drones in a rural setting with a variety of landscape and several remote areas, where health clinics and schools struggle with transportation and mobile reception.

Unicef is also exploring the potential for drones to be used to support immediate search and rescue efforts.

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Ericsson factories across the world are developing and implementing the first 5G and Industrial IoT (IIoT) systems in a real manufacturing environment

Internet of Things shaping the future of the workplace

Everyone is talking about the Internet of Things, but not everybody knows how it is about to change the way we all live and work, as Nora Wahby explains

The Internet of Things is one of the most talked-about topics in the tech industry today. You cannot attend a technology event without hearing this term over and over again. But the Internet of Things, or IoT for short, is not always easily explained.

IoT is set to have a profound impact on our future. Enabling anything to be connected and providing 'smartness' to these connected things will bring value across a number of sectors. By 2024, there will be 4.1 billion cellular IoT connections. Such connections are not specific to one region or industry – they're emerging everywhere.

IoT connects 5.7 million devices every day and promises additional revenue potential of up to 36 per cent, depending on your ecosystem role. For service creators providing end-to-end ecosystem offerings, the value adds up to USD619bn by 2026.

Companies all over the world are vying for position, eager to capture new IoT business potential as there are high expectations for commercial possibilities. Three Ericsson factories in Sweden, Estonia and China are fast-tracking the introduction of a new generation of smart manufacturing by developing and implementing the first 5G and Industrial IoT systems in a real manufacturing environment.

On the other hand, IoT is being widely embraced by the MENA region with the number of connected devices growing rapidly – and it is helping to turn the communications sector in the Middle East and Africa into one of the most dynamic and vibrant in the world.

The success of IoT does not only depend on 5G. While 5G is undeniably the underlying connectivity platform for IoT, our research found that 85 per cent of the applications needed in what we call optimizer countries and cities can be achieved over 4G connectivity. That also applies to industries like mining. Then there's weather forecasting and water management services, smart metering – the list goes on.

Nora Wahby,
head of west Africa ,
Ericsson
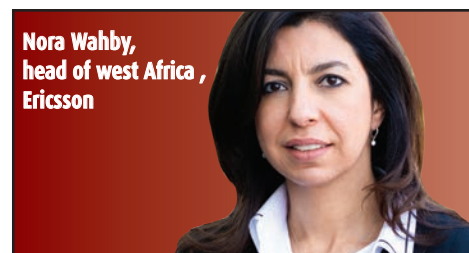
Evolution to 4G can lower your cost per Gigabyte, deploy multi-Gigabit 5G ready radios and basebands, boost capacity with Massive MIMO, and address new opportunities in Fixed Wireless Access and Critical Broadband Networks.

Optimizer countries such as Morocco, Egypt, parts of South Africa and Nigeria, are adopting future-proof, scalable 4G network architecture with innovations that are built for tomorrow's demands.

Now that we know the connectivity is no barrier to IoT, what can it be used for?

Communication and connectivity are key enablers for GDP across Africa and IoT is an enabler for the majority of the industries. Let us look at three sectors critical to everyday life.

Security

By 2024, we're going to have more than 22 billion connected devices in the world. It's a vast opportunity but it also brings vast risk. How do you keep billions of devices secure? How about the networks they run on? How do you make sure the data from all those devices isn't compromised?

IoT security cannot be an afterthought or an add-on. Security must be built in from the beginning. There is an imperative need for enhanced security enablement and IoT can drive that security business and improve the security conditions in bigger cities like Lagos, Johannesburg and others.

When it comes to IoT, security requirements are unique. Connecting devices is different from connecting individual people and personal computers. To verify its identity, an IoT device can't simply enter a password as a person would. Similarly, the systems that run our PCs are regularly updated, but IoT has to work all time.

A reliable infrastructure is a must, and this is especially true for mission-critical applications. 3GPP technologies provide this reliability. The IoT expands rapidly, and security must be end-to-end.

Agriculture

When you think IoT, agriculture and cultivation may not be the first industries that come to mind. But agricultural businesses can benefit greatly from IoT solutions. As in any industry, repeatable processes become trackable and more efficient with help from sensor-equipped machinery connected to the cloud.

For instance, IoT-based solutions can be used to keep constant watch over fields and greenhouses, using sensors to monitor conditions such as temperature, humidity and soil saturation. AI is applied to correlate that environmental data with the predefined ideal growing conditions for any particular crop. Based on this formula, appropriate adjustments could be made to machinery such as fertilization, irrigation and greenhouse ventilation systems.

We are in talks with many farms and government entities across Africa to provide IoT technology which helps farmers maintain an ideal growing environment for any crop.

Every industry will benefit from IoT

Road traffic management

Big cities like Lagos and Addis Ababa are obvious use cases for IoT solutions that apply real-time data from traffic sensors and cameras to automate and dynamically control traffic lights, warning signals and message signs, resulting in improved traffic flow and operational decision-making.

What are the key steps toward 5G innovation in Africa?

IoT provides an opportunity for mobile operators to bring new products and services to underserved markets, opening new possibilities for growth within the region.

Africa remains the region with the highest growth rate in mobile subscriptions globally and ICT and broadband are becoming central to its development. As digital infrastructures and interactions become increasingly central to the functioning of our societies and economies, affordable broadband access will need to be extended to billions of individuals who remain economically excluded.

Broadband is further enabling new technologies environment like cloud, big data, artificial intelligence and IoT. We can already see IoT is making in-roads, but there has to be a readiness within the industries to deploy additional services that improve the quality and service delivered to

the customer and at the same time help monetize the platform from a service provider perspective.

There is high demand for data connectivity in the big cities and capitals like Abuja and Dakar. The roll out of applications that can run on 4G do fulfil the requirements of the use cases in those markets. So, despite 5G being the underlying connectivity platform for IoT, we believe 85 per cent of the applications needed in optimizer countries and cities can be achieved over 4G connectivity.

In order to unlock IoT's potential in Africa, regulatory authorities, mobile operators and stakeholders will need to work together. Africa is still looking at spectrum availability and prices of licenses – regulation needs to be in place to promote and drive this. The government should not look at this at a one-time sale opportunity of the spectrum. Instead, it should look at it as a growth engine for the economy.

Failure to understand and fully develop the links across the various stakeholders in the ecosystem could stunt the growth of IoT in the region.

It's also key to remember IoT has two prongs. One is for creating new opportunities and the other is efficiency. With industrialization, if you automate you might optimize and become less head count intensive – like in factories, for example. At the same time, the amount of data you collect will definitely make firms like ours better understand the needs of industry and help us create more opportunities and offer better services to them.

Naturally, there will be questions surrounding security, but I don't see any risks. We see countries that suffer from security issues, but connectivity and monitoring can help us create and understand the need and opportunities for improved security services.

To enable all this is the technology, the willingness of the operators and service providers is crucial. Service providers count on innovation to deliver growth, so the impact of IoT cannot be ignored.
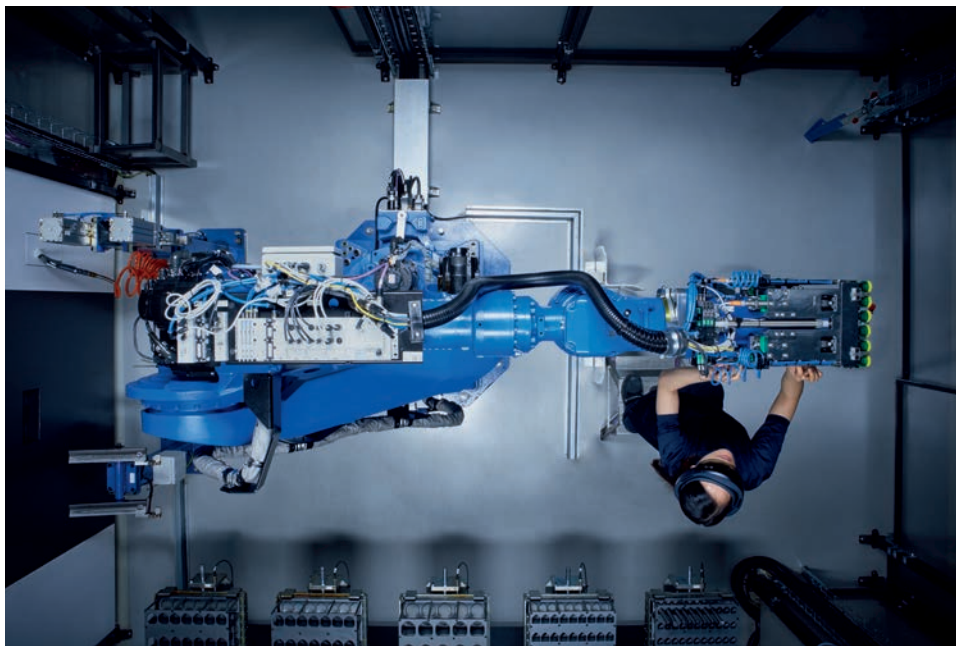
IoT will connect machines of all different shapes and sizes
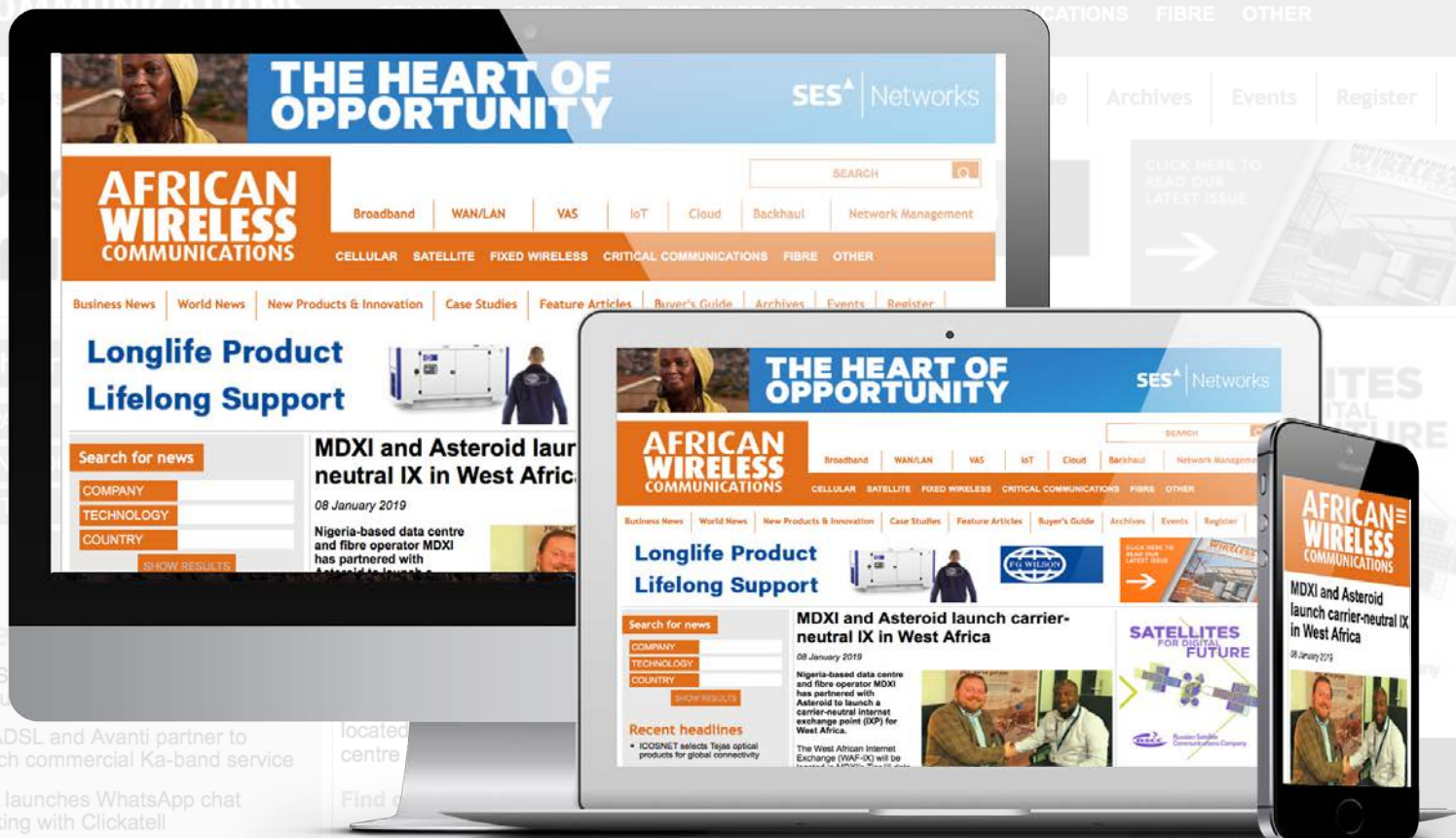
Telefónica's download upgrade

Spanish giant Telefónica said it plans to soon offer download speeds of up to 2.5 Gbps through its FTTH network. It currently offers 600 mb/s via its Fusión packages. Telefónica's FTTH speed has long been viewed as key to securing subscribers and Spain's operators have been involved in a fierce battle to provide the fastest networks, with Vodafone and MasMovil already offering 1Gbps speeds to some customers. The provider had 21.3 million FTTH passed homes by year end with 3.9 million customers after capturing 517,000 new subscribers last year. In total, Spain had 8.55 million FTTH lines by year end, representing 57 per cent of the total broadband market.

Bahrain moves forward in race for 5G rollout

The Kingdom of Bahrain said it has finished preparations for the rollout of 5G networks and claimed it will be one of the first countries globally to provide commercial 5G services by June 2019.

The news was announced by Bahrain minister of transportation and telecommunications, Kamal bin Ahmed Mohammed, who added that the achievement was pending availability of consumer handsets and equipment.

All of the regulatory requirements for full 5G implementation have been met, with the licensing and spectrum allocation set to be finalised before mid-April by the Telecommunications Regulatory Authority (TRA).

"Bahrain's state of readiness is a testament to the leadership

Manama, the capital and largest city of Bahrain

of the government of the Kingdom of Bahrain in enabling the implementation of cutting-edge technology and promoting innovation, and the continuous support of all stakeholders including the TRA and the national Spectrum Strategy and Coordination Committee (SSCC), all of which serves to highlight the Kingdom's continued role as a regional leader in telecommunications and ICT," said Mohammed.

Mobile operators in Bahrain have already begun rolling out the necessary network infrastructure.

MegaFon extends Mastercard partnership

MNO MegaFon has teamed up with Mastercard to roll out Credit via Mobile, a full service financial marketplace for its mobile network subscribers across Russia.

The latest feature enables customers to use their smartphone to apply for credit from Russia's largest financial institutions without having to visit a bank. The loan request is analysed and the approved funds are sent immediately to the customer's mobile phone bank account.

Subscribers will then be able to use the funds to make payments "anywhere they want using a virtual Mastercard card linked to Apple Pay, Google Pay or Samsung Pay," Megafon said.

MegaFon's customers can already turn their mobile phone account into a bank account using the MegaFon Bank mobile app and use their mobile credit balance to pay for goods and services anywhere that accepts Mastercard.

TDC shuns Huawei for Ericsson

Denmark's biggest telecom group TDC has chosen Swedish firm Ericsson and turned its back on existing provider Huawei to roll out its ultra-fast 5G mobile network across the country.

The US and several other western nations have shut Huawei out of tenders for the development of 5G networks, because they are concerned about the company's close ties to the Chinese government.

"TDC has chosen Ericsson to build and deploy its 5G network," TDC chief executive officer Allison Kirkby said in a statement. "Over the past year, TDC has negotiated with several suppliers about the upcoming 5G rollout."

However, there was no mention of Huawei, which had equipped TDC's network since 2014.

TDC did not disclose the value of the Ericsson deal, which will run until the end of 2023.

The firm said it hopes to offer its customers 5G by the end of 2020.

## Angola Cables and Broadband Infraco look to boost connection in southern Africa

Angola Cables has signed a "memorandum of understanding" with Broadband Infraco to extend internet connectivity within southern Africa.

The deal is for the interconnection of over 14,960 km long South African terrestrial network of optical fibre to Angolan international submarine cables. The additional data capacities provided, courtesy of the agreement, will help the South African firm deliver its promise to provide high-quality internet to the "Square Kilometre Array" (SKA)'s project antenna in South Africa.

In Africa, Angola Cables has focused on the 15 member states of the Southern African Development Community (SADC), having established itself as the main international telecoms service provider for the Angolan market.

Angola Cables executive chief officer António Nunes, said that the partnership provided a genuine opportunity to collectively fast-track connectivity on the continent. "The very real possibility now exists to connect Brazil and South Africa to the other BRICS nations of Russia, India and China through a high speed, low latency connection," he said.
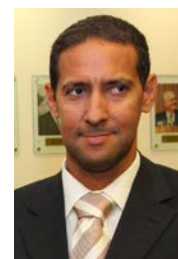
Anonio Nunes, chief executive officer at Angola Cables

"Such a connection together with our robust network will accelerate international co-operation on multiple levels, promote economic development and fast-track projects that will enable new opportunities for digital content exchange across the region."

East Africa Com

14 – 15 May 2019, Radisson Blu, Nairobi Upper Hill, Kenya

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700+
TELECOMS &
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SOLUTIONS-FOCUSED
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50
VISIONARY SPEAKERS

27%
CXO LEVEL

"
We saw a fabulous speaker line up – some of the biggest names in the industry and I made very useful contacts."

Ishkhan Alexio Manyonde,
Senior Engagement Manager
Information & Analytics,
Unilever

African mobile operators facing a constant 'countdown to no'

Prepaid churn in South Africa is so astronomical that operators must replace their entire prepaid subscriber base every 18 months on average, according to new research from Strategy Analytics and Juvo.

The report, called *Death by a thousand nos*, highlighted the methods to encourage sustainable loyalty amongst prepaid customers and calculated the reduced churn and increased revenues that are possible for developing market operators.

Although prepaid is the dominant form of mobile connection – accounting for 94 per cent of connections and 80 per cent of revenue in Africa as a whole in 2018 – in South Africa alone, operators wasted USD51m last year replacing lost prepaid customers. That is because 93 per cent of subscriber acquisition cost expenditure was devoted to replacing churning customers – amounting to 2.7 per cent of prepaid OPEX.

James Muriithi, head of Africa at Juvo, said more than nine in 10 African mobile customers are on prepaid plans, accounting for eight in 10 dollars of mobile revenue on the continent. "But churn is so high that operators across Africa spend hundreds of millions of dollars a

IMPACT OF A 20 PER CENT CHURN REDUCTION ON EBITDA

Legend:
- India
- Malaysia
- Philippines
- Thailand
- Argentina
- Brazil
- Mexico
- South Africa

year simply replacing lost prepaid customers – over R700m in South Africa in 2018 alone," he said. "The way we, as an industry, approach prepaid must change.

African operators face a constant 'countdown to no' – swathes of customers leave every month, most as they run out on credit. The solution is to flip this around. By saying 'yes' and offering customers convenience airtime credit to all

subscribers at the point of low balance, operators change the relationship. More importantly, with the data they generate, operators can build financial identities to offer personalized mobile financial services which are proven to boost loyalty and provide a sustainable foundation for new, revenue-generating services."

The report also found that prepaid services dominate the mobile market

in many other parts of the world, but primarily in developing countries. Globally they accounted for 5.7 billion connections and USD265bn in service revenue in 2018 shares of 71 per cent and 32 per cent respectively. However, these ratios were significantly higher in developing regions, where prepaid services account for 82 per cent of connections and 50 per cent of revenue in developing Asia-Pacific markets.

MTN Zambia becomes first operator in Africa to deploy Instavoice ReachMe app

MTN Zambia has become the first operator in Africa to offer a new roaming service for customers travelling outside Zambia, which makes a "drastic" reduction in the cost of making and receiving calls overseas.

The Instavoice ReachMe app, from voice messaging and social media mobile apps specialist Kirusa, also allows customers to use their existing MTN Zambia number anywhere in the world, even where the operator has no roaming partners.

It works by converting regular phone calls into Voice over Internet

Protocol (VoIP) calls, which allows users to make or receive such calls within the app. This means the user does not suffer when roaming, is out of network coverage or the device is on flight mode but without an active data connection. It could be data from a sim card, roaming data or a Wi-Fi network.
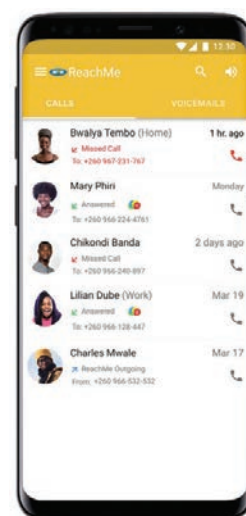
Furthermore, there will be an opportunity to purchase virtual numbers for the US, UK, Canada and France for $1 a month. Additional countries are expected to be added shortly. The numbers can be used alongside a current mobile number and can be activated instantly

without having to liaise with an operator. Up to 10 numbers can be linked to a business and used on any device, which means the users need only carry one phone.

Customers can now download the app from Google Play, the Apple store or MTN subscribers can visit *https://go.onelink.me/0Wz6reachme.*

MTN Zambia said ReachMe "solves a pain point" for its frequent flyer audience. "This app is an outcome of totally re-thinking roaming and, by clever integration with the cloud, drastically minimizes our costs thereby allowing us to roll

The app allows customers to use their existing MTN Zambia number anywhere in the world. Even where the operator has no roaming partners

out attractive roaming packages," said Seun Soladoye, acting chief marketing officer."

A1 chooses Nokia for 5G strategy

Austria's flagship telecoms firm A1 has penned a deal with Nokia to build 5G mobile networks in the country. A1 Group, which is controlled by Mexico's America Movil and the Austrian state, said Nokia would provide it with 5G wireless technology and cloud-based core network technology. The rationale is to deliver super-fast connectivity and facilitate new applications from self-driving cars to medical robots. "Together with Nokia, we will leverage the full potential of 5G," said A1 Austria chief executive, Marcus Grausam.

Nokia look to Japan

Finnish giant Nokia has partnered with the Rakuten Group to build a new mobile network in Japan. Nokia "will provide full turnkey services" to plan, manage, deploy and integrate cloud RAN, AirGile cloud-native core network technology and various Nokia software functions. Rakuten said it will use its experience as an IT specialist and exploit its membership base of 100 million+ users in Japan as it enters the market as a greenfield mobile operator and digital service provider.

CETel expands

CETel, the Germany-based provider of managed end-to-end communications solutions, says it will deliver "fibre-like" connectivity into Africa utilising O3b's medium Earth orbit satellite constellation. Under a long-term contract signed last November, the company said it will support a "leading" communications and technology solutions provider to further expand its network across the continent. The unnamed company will serve various vertical markets, such as mining, enterprise, construction, telecoms/ICT and government.

UK firm Trustonic launches new cyber security app

African mobile network operators can dramatically reduce smartphone theft, fraud and trafficking following the launch of a product by mobile cyber security firm Trustonic.

The new Asset Lifecycle Protection Service (ALPS) will also help them to safeguard their device investments, protect revenue and drive additional profit contribution. Trustonic, which is based in the UK, said two key services that will aid African operators include supply chain security and protecting subsidised, financed and leased devices.

The former protects devices by locking them at the moment they are produced and safeguards every stage of the lifecycle – and every participant involved – by making devices worthless to thieves. The latter prevents the use and resale of devices if instalment payments are not made. Once the subsidised

By improving supply chain security and protecting subsidised, financed and leased devices, the new service will assist operators in their fight against smartphone theft, fraud and trafficking.

plan is paid in full, a subscriber can request the device to be unlocked. Alternatively, once a lease agreement ends, devices can be locked if not returned.

Ben Cade, chief executive officer, Trustonic said a global crime wave of stolen, fraudulently obtained and sold-but-not-activated smartphones "is costing operators billions of dollars in lost revenue annually, not to mention the loyalty of defrauded customers" and the safety of employees. "After developing and proving the service with some of North America's largest operators, Trustonic is pleased to launch ALPS in Africa and globally," he said. "Our relationships with device makers and the impartial, trusted role we play in the ecosystem means Trustonic can rapidly deliver a single solution to operators that protects revenue across their device portfolio. African network operators can now take control in their fight against fraud, theft and device trafficking by improving supply chain security and protecting subsidised, financed and leased devices." Cade said it not only solves a billion-dollar problem for the industry, it also added a significant contribution to their bottom line performance.

UK criticises Chinese tech giant for security and technical failures

The UK has severely criticised embattled Chinese tech giant Huawei for failing to fix security flaws in its mobile network equipment and also revealed new technical issues it said led to further risks.

Despite the comments in its annual report, the Huawei Cyber Security Evaluation Centre (HCSEC) oversight board said the issues were due to "poor software engineering and cybersecurity processes" rather than Chinese state interference.

"Further significant technical issues have been identified in Huawei's engineering processes, leading to new risks in the UK telecommunications networks," the report said. "HCSEC has continued to find serious vulnerabilities in the Huawei products examined. Several hundred vulnerabilities and issues were reported to operators to inform their risk management

and remediation in 2018."

Huawei said in a statement: "The 2019 oversight board report details some concerns about Huawei's software engineering capabilities. We understand these concerns and take them very seriously. The issues identified in the oversight board report provide vital input for the ongoing transformation of our software engineering capabilities."

Last year, Huawei said it would implement a USD2bn company-wide transformation programme to enhance its software engineering capabilities. It also said it could take up to five years to see the results.

Nevertheless, the report warned: "No material progress has been made on the issues raised in the previous 2018 report."

Findings from the board will be submitted to the UK National Cybersecurity Centre, which will then advise the government.
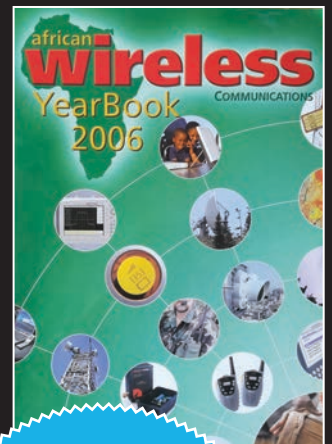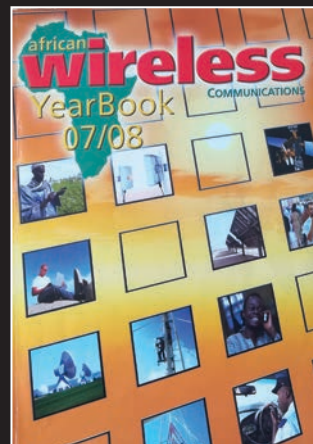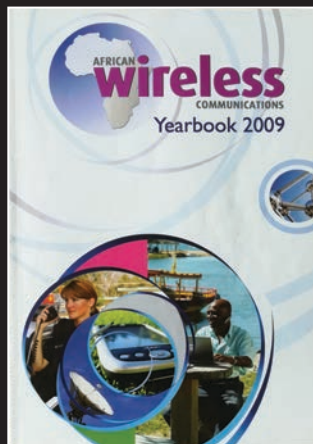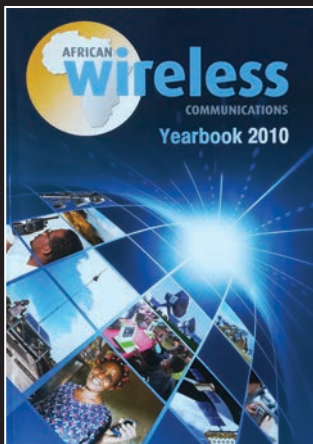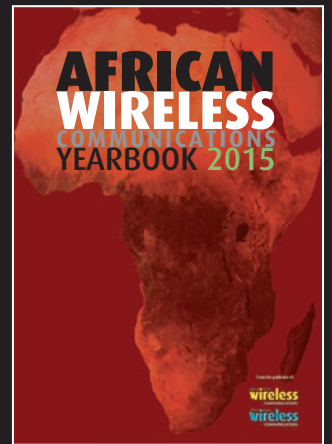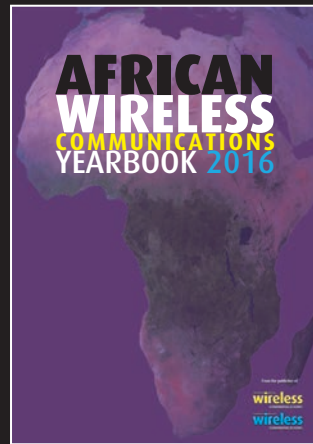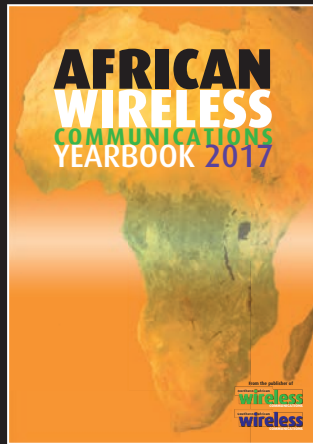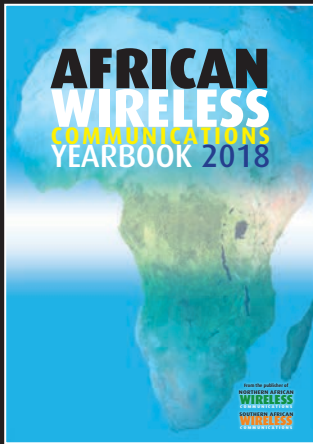
Meanwhile, Huawei has opened a cybersecurity lab in Brussels, the heart of the European Union, in a bid to win over government leaders and fight the allegations. Company executives inaugurated the Huawei European Cybersecurity Centre, which will allow its wireless customers to review the source code running its network gear.

A new lab in the Belgian capital gives Huawei a venue to reassure the EU's policymakers about its cybersecurity credentials. It opened a similar centre in Bonn, Germany, in November 2018.

Ken Hu, deputy chairman, Huawei, told a crowd gathered for the opening in Brussels that all regulators, standards organisations and customers were welcome to use the centre.

"Both trust and distrust should be based on facts, not feelings, not speculation and not baseless rumour," he said.