

Definitive data and analysis for the mobile industry

# 5G in Sub-Saharan Africa: Laying the Foundations

DATE

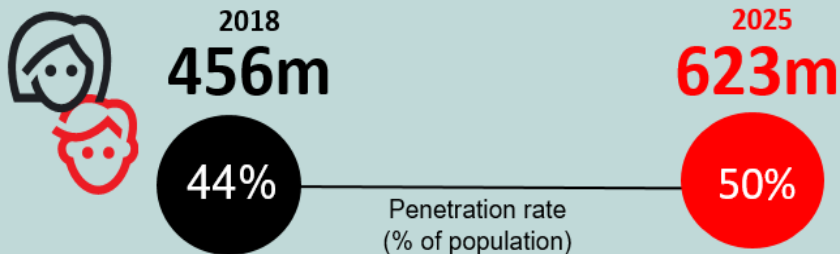
13<sup>th</sup> Sept, 2019

AUTHOR

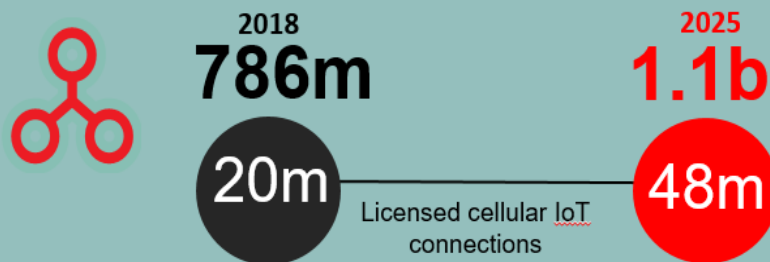
Kenechi Okeleke, Senior Manager

# Sub-Saharan Africa: mobile landscape

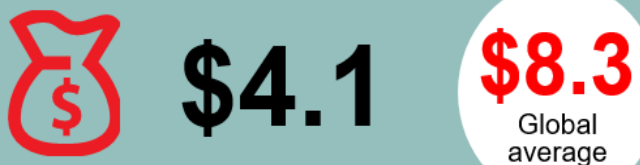
## Unique mobile subscribers



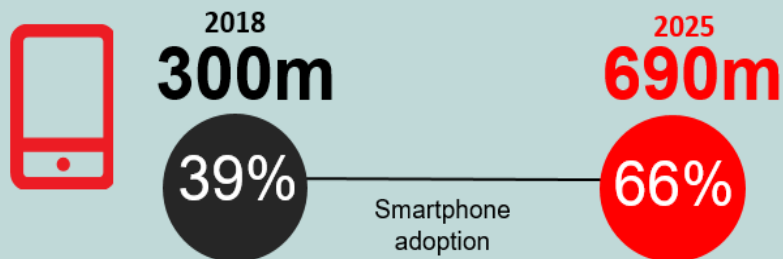
## Total connections



## ARPU per connection

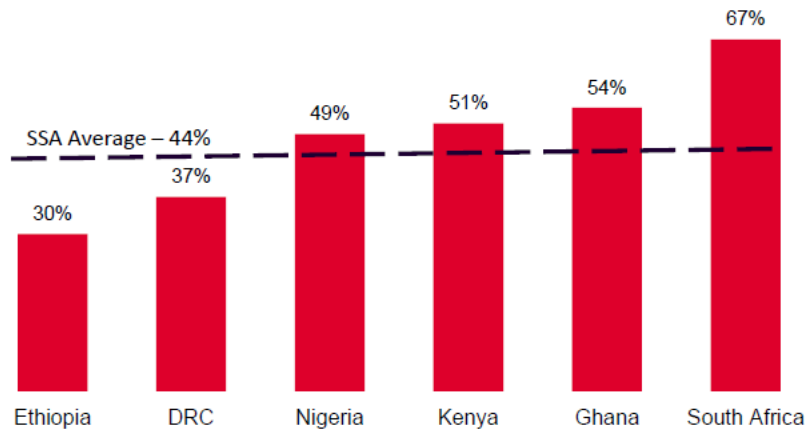


## Smartphone connections



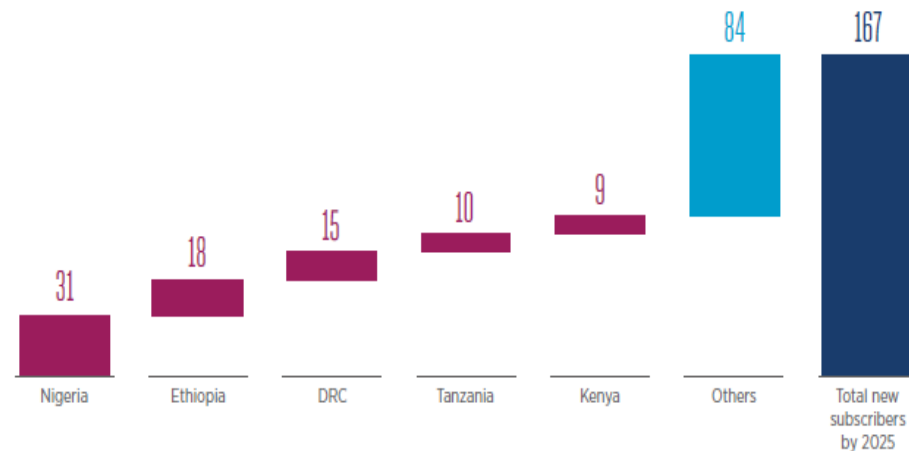
# Where will growth come from?

Unique subscriber penetration



Nearly 170 million new subscribers by 2025; half from five markets

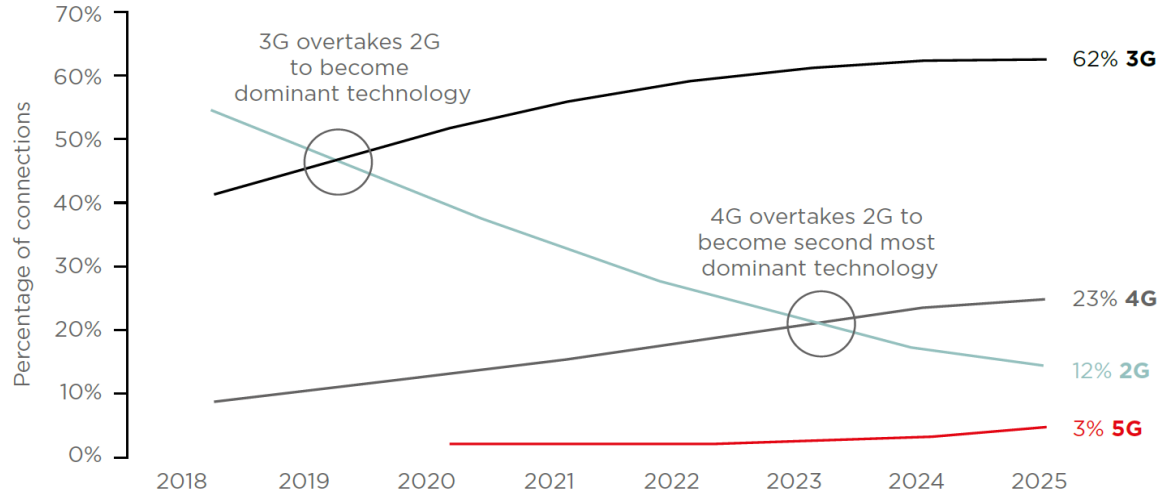
Subscribers (million)



Figures are for Q1 2019. Source: GSMA Intelligence

Large, underpenetrated markets will drive subscriber growth in the coming years, notably Nigeria, Ethiopia, and DRC

# The transition to MBB is accelerating

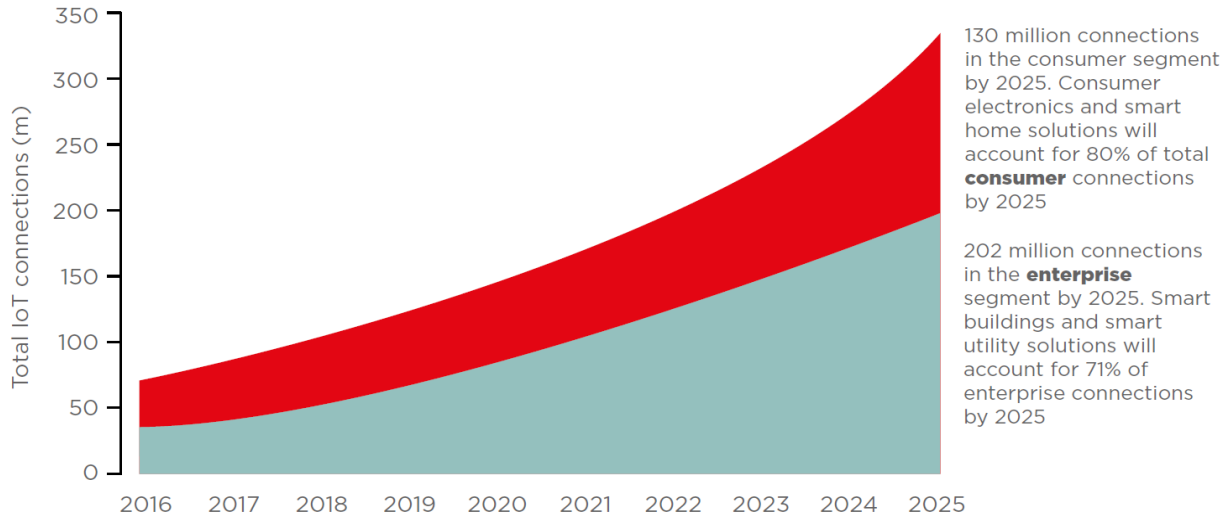


Source: GSMA Intelligence

By the end of 2019, mobile broadband connections (3G and above) will for the first time account for the majority (54%) of total mobile connections in Sub-Saharan Africa. This is driving rapid uptake of data: Ericsson estimates a fourfold growth in data traffic between 2018 and 2024

# Digital disruption and transformative tech

332m Cellular IoT connections by 2025, with applications across a range of use cases



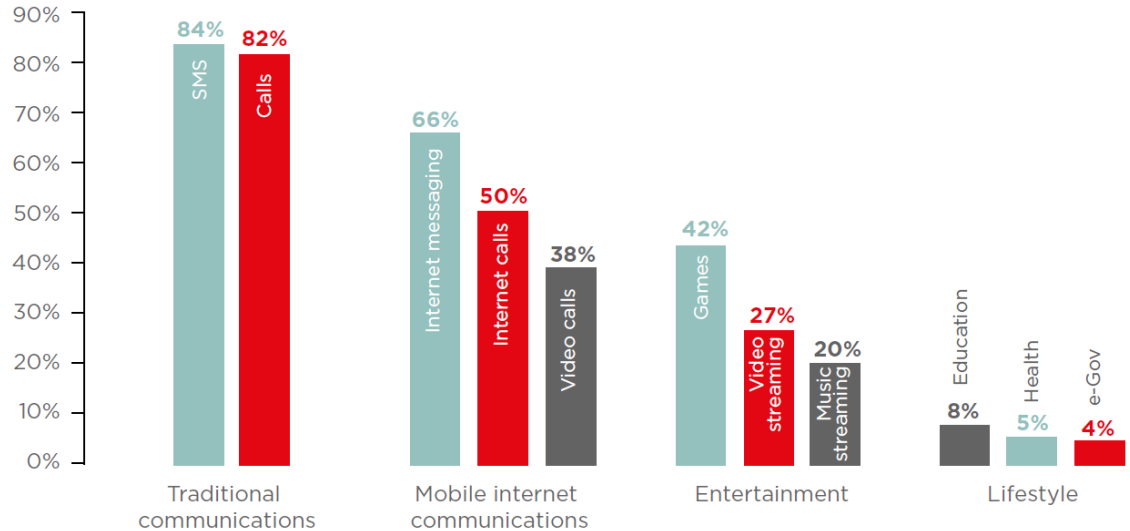
Digital technologies are enabling new business models that allow countries to leapfrog infrastructure and skills constraints to deliver key services to people and communities that need them

# A new generation of digital consumers

44%

Just over 450 million people in the region are under the age of 15 years. This generation of 'digital natives' will take a digital-first approach to social interaction, education, work, communication and entertainment

Smartphone usage by type of activity (percentage of respondents)



Source: GSMA Intelligence Consumer Survey 2018

# 5G and the future of connectivity in SSA



5G in Sub-Saharan Africa:  
laying the foundations

**Objective:** Support the mobile industry in taking a proactive rather than a reactive approach in defining the 5G narrative for Sub-Saharan Africa

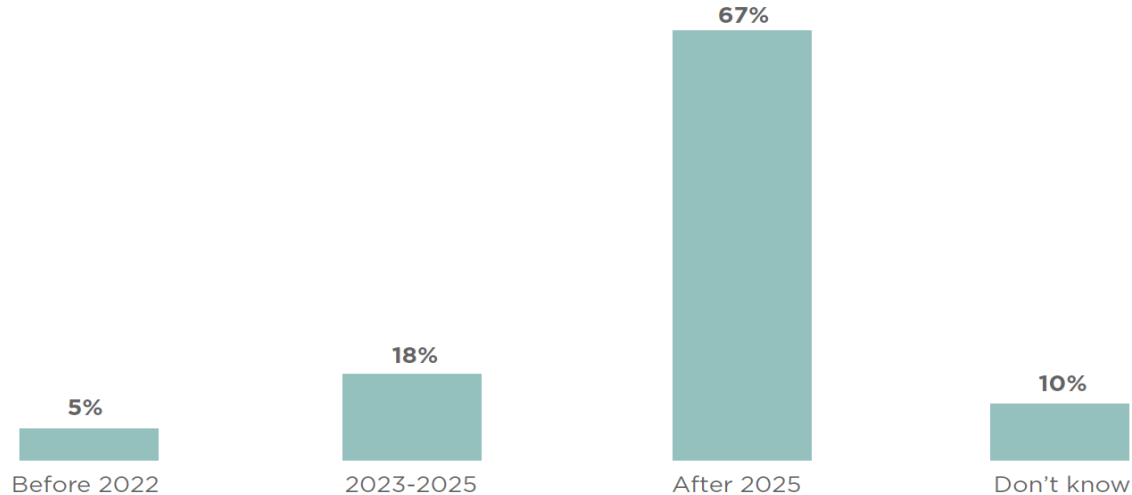
## Key questions

- Is 5G in SSA an oxymoron?
- When will the region be ready for 5G?
- What will the 5G era in SSA look like?
- How should the 5G transition be approached by key stakeholders to maximise value in the 5G era?
- What are the key ecosystem and policy imperatives to prepare for the 5G era?

# 5G in SSA is inevitable, but not imminent

Question: When will commercial 5G be available in your market?

Percentage of respondents

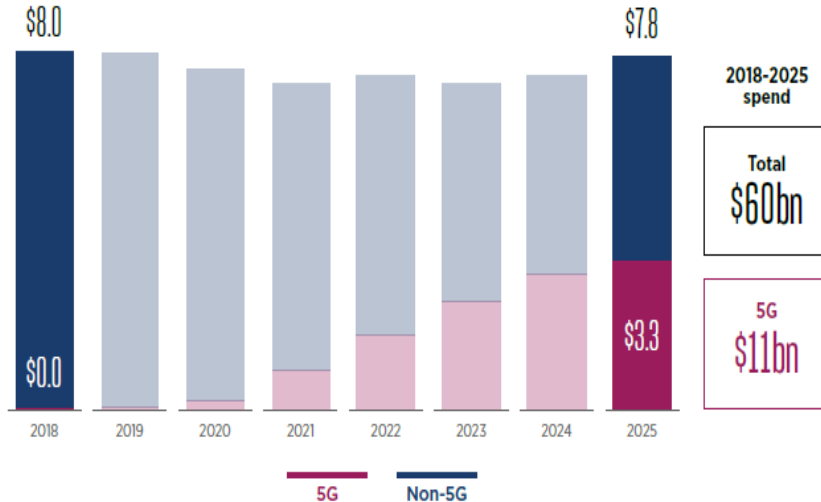


5G era in the region is a question of 'when' rather than 'if'. Stakeholders, including policy-makers and mobile industry players, should approach the 5G opportunity from a market readiness perspective

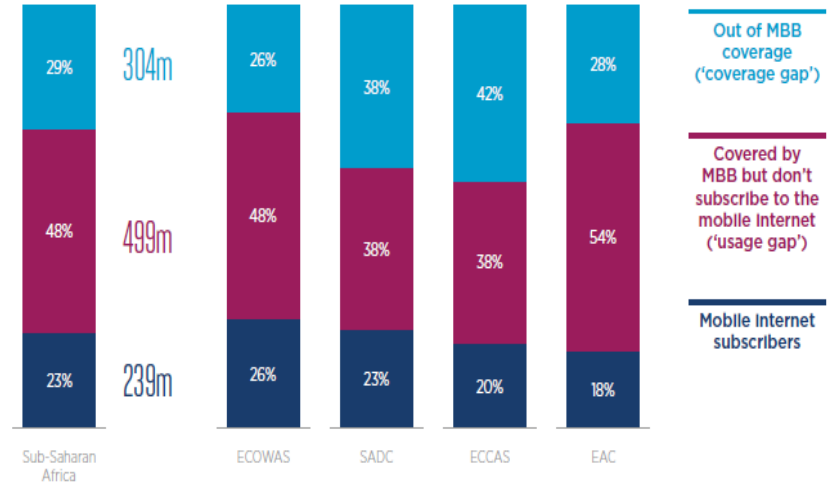


# Supply-side factors will drive 5G transition

Capex (\$ billion)



Percentage of population



92% of respondents to the 5G SSA survey expect investment in 5G infrastructure to precede customer demand for 5G services. This view is based on the uptake of 4G services, relative to network coverage, and ongoing network modernisation efforts by mobile operators

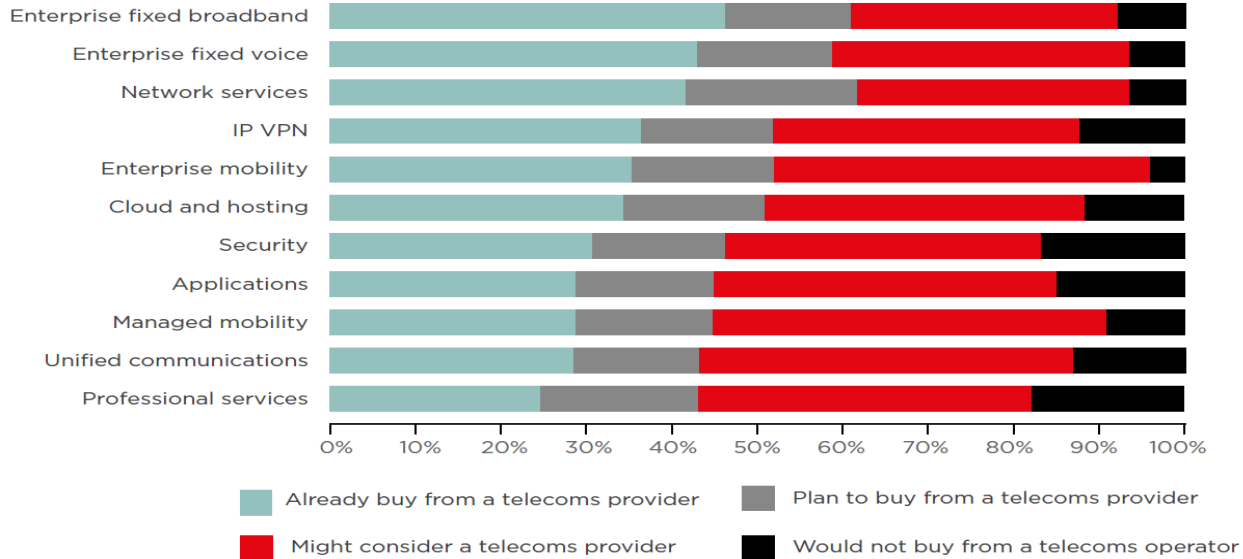
# Localised FWA presents entry point to 5G

	<b>Red ocean</b>	Fiercely competitive opportunity for home broadband. These are markets with household PC penetration of more than 40% and over 20% fixed broadband penetration.
	<b>Blue ocean</b>	Sizeable, and relatively uncontested, mass-market opportunity for home broadband. These are markets with at least 40% household PC penetration but less than 20% fixed broadband penetration.
	<b>Deserts</b>	Offer only a small, mass-market FWA opportunity because of low affordability and usability. These are markets with household PC penetration of less than 40% and less than 20% fixed broadband penetration.

With fixed broadband penetration typically below 2% across the region, 5G fixed wireless access (FWA) will be a primary 5G use case, particularly in the early stages of network deployment and adoption

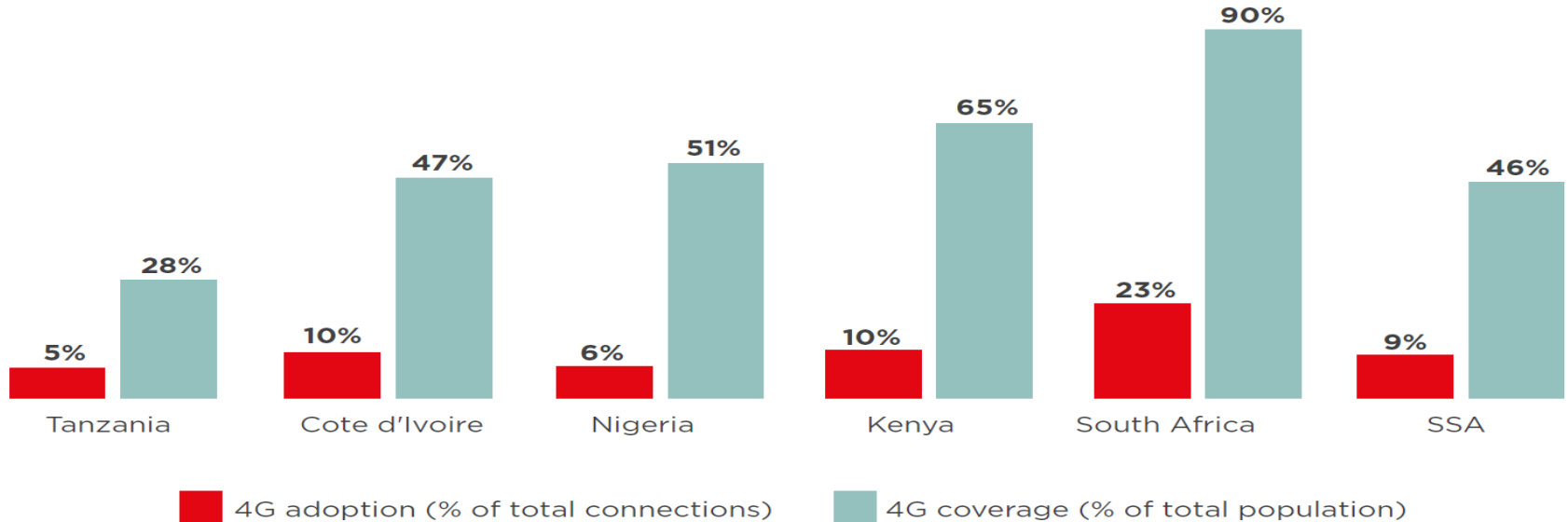
# Enterprise segment will drive initial uptake

Question: Which services does your organisation already buy from a telecoms operator?



5G offers an opportunity to better serve the enterprise market, but there is a need to increase awareness of the opportunities the technology can bring to enterprises

# Consumer segment is a long-term play



5G device costs will play a crucial role in 5G adoption rates in Sub-Saharan Africa. A lack of affordability for 4G-capable smartphones has held back 4G adoption and this could be case in the early years of 5G

# Key policy considerations for the 5G era



**Streamline regulatory conditions**  
to facilitate 5G deployment



**Provide regulatory flexibility**  
for innovative 5G propositions



**Release sufficient spectrum for 5G**  
that is harmonised and affordable



**Ease financial demands of 5G**  
by bringing down costs

The lessons learned in the 3G and 4G eras underscore the need for governments and other stakeholders to address key policy imperatives for the 5G era, both in the wider context of next-generation connectivity and advancement of the digital economy

# Collaboration could ease 5G transition

## Potential areas for ecosystem collaboration

Content creation to stimulate demand for connectivity

Solutions for cost effective network deployment

Initiatives to bring affordable devices to market

Development of 5G use cases for local enterprises

Ecosystem collaboration on key supply- and demand-side initiatives can facilitate the transition to 5G in SSA, by easing the cost burden of deployment and addressing the consumer barriers to adoption



The GSMA represents the interests of mobile operators worldwide, uniting more than 750 operators with nearly 400 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces the industry-leading MWC events held annually in Barcelona, Los Angeles and Shanghai, as well as the Mobile 360 Series of regional conferences.

For more information, please visit the GSMA corporate website at [www.gsma.com](http://www.gsma.com)

Follow the GSMA on Twitter: [@GSMA](https://twitter.com/GSMA)

GSMA Intelligence is the definitive source of global mobile operator data, analysis and forecasts, and publisher of authoritative industry reports and research. Our data covers every operator group, network and MVNO in every country worldwide – from Afghanistan to Zimbabwe. It is the most accurate and complete set of industry metrics available, comprising tens of millions of individual data points, updated daily.

GSMA Intelligence is relied on by leading operators, vendors, regulators, financial institutions and third-party industry players, to support strategic decision-making and long-term investment planning. The data is used as an industry reference point and is frequently cited by the media and by the industry itself.

Our team of analysts and experts produce regular thought-leading research reports across a range of industry topics.

[www.gsmaintelligence.com](http://www.gsmaintelligence.com)

[info@gsmaintelligence.com](mailto:info@gsmaintelligence.com)