

## Gauging the relationship between fixed and mobile penetration

From mobile dominance to fixed-mobile convergence

Global mobile penetration based on connections is set to reach 100% in the second half of this year, widening the gap between fixed-line and mobile penetration rates to record levels. Our research shows that fixed-line connection penetration (as a percentage of population) is 77 percentage points lower than mobile connection penetration on average across Asia-Pacific, Latin America, Middle East, Sub-Saharan Africa, the European Union and Northern America.

Our research uses [fixed-line connection figures published by the ITU](#), mapping them against mobile connection data available from GSMA Intelligence. This analysis shows that in 2012 mobile connection bases were on average 6x greater than fixed-line connection bases in Asia-Pacific, Latin America and the Middle East, compared to 3x in the European Union and 2.3x in Northern America. The largest gap was found in Sub-Saharan Africa where mobile connections were almost 50x (47.8x) greater than fixed-line connections.

Fixed-line connection penetration was as low as 1% in Sub-Saharan Africa in 2012, according to our calculations using ITU data. With such a lack of fixed network infrastructure, mobile networks play a critical role in driving socioeconomic development in many countries in a region that is home to 872 million people. Yet, despite such large market potential, certain factors are still inhibiting mobile growth. Our research shows that at the end of Q1 2014, one third of the Sub-Saharan population (about 290 million individuals) will subscribe to mobile services, with these users accounting for 564 million active mobile connections. This is explored in our recent report, [Targeting 100M users across the Congolese and Sudanese markets](#).

Fixed-broadband penetration averaged 0.3% in 2012 across Sub-Saharan Africa, showing that mobile is for many in the region the first and only means by which to access the internet. According to our research, half of the region's mobile connections will be running on mobile broadband networks in 2020, up from 12% last year.

In Asia-Pacific, fixed-broadband penetration was around half (54%) that of fixed-line penetration in 2012 according to the ITU, compared to just under half (45%) on average in Latin America and the Middle East. Across all three regions, fixed-broadband penetration averaged around 8% of the population.

Fixed-broadband penetration in the European Union and Northern America stood at 28% on average in 2012, 16 percentage points lower than fixed-line penetration (at 45%). Both regions have hit mobile market saturation with unique subscriber penetration above 70% of the population, a ceiling above which mobile growth tends to slow. In addition, 55% and 80% of EU and US mobile connections markets, respectively, were running on mobile broadband networks by Q4 2013.

Despite the dominance of mobile networks over fixed services in developed markets, fixed infrastructure still represents an important asset for convergent operators, which have been focusing on multi-play bundled tariffs to maintain fixed revenues. For instance, in Q3 2013, a

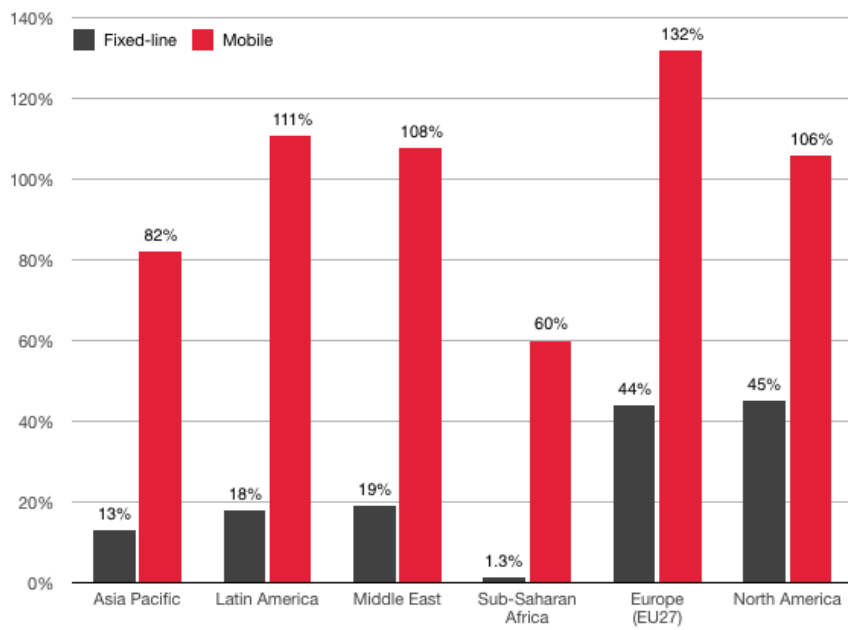
year following the launch of its 'Movistar Fusión' plan (which bundles fixed, mobile and internet services under a single bill), Telefonica's Spanish operation had signed up 2.6 million customers on the tariff. As of September 2013, Fusión customers accounted for 52% of the operator's fixed broadband customers and 39% of mobile contract customers in its residential segment.

The Netherlands, Denmark and France recorded the highest fixed-broadband penetration rates across the European Union in 2012, at 40%, 39% and 38%, respectively, according to the ITU. In the Netherlands, KPN recently noted that it has made "significant investments" in its mobile and fixed networks over the past three years in an effort to "reduce churn and optimise customer lifetime value," adding that "bundled services are at the heart of our strategy." The operator noted that its triple-play penetration reached 43% in Q3 2013, an increase of 11 percentage points year-on-year, claiming that "eventually, all our mobile brands will likely become eligible for quad-play."

In some Latin American markets, bundled deals have also helped operators to maintain revenue growth. America Movil has been consistently reporting improvement in fixed revenues across its Latin American operations, attributed to Pay TV and fixed-broadband being bundled into double, triple and quad-play plans. Meanwhile, Stefano de Angelis, the CEO of Telecom Argentina, recently announced an annual increase of 16% in fixed business revenue in Q3 2013, and emphasised the contribution of fixed-mobile network integration to this success in Argentina.

Similarly, Millicom added 16,000 new fixed broadband customers to its Latin American footprint in Q3 2013, with most of the growth coming from Paraguay where it has been upgrading fixed-broadband customers to cable services. Fixed-broadband connection penetration in Paraguay stood at 1% of the population in 2012 according to the ITU, one of the lowest levels in the region.

Another benefit that fixed-assets bring to convergent operators is the ability to offload mobile data traffic onto their fixed-broadband networks. As mobile broadband networks are expected to account for 75% of the Latin American total connections market by 2020 (from less than a third currently), mobile data network capacity will be put under greater pressure over the coming years. Offloading mobile data usage onto fixed-broadband hotspots will help convergent operators relieve some of that pressure. This is likely to be the case in Colombia, where third-placed operator Tigo (Millicom) is expected to merge with convergent player UNE (EPM) in May this year.



### Fixed-line vs mobile penetration based on connections, 2012

Source: GSMA Intelligence, ITU