In Q2 2008, world connections surpassed 3.6 billion, adding 165 million connections in the last quarter and two thirds of a billion in the last year. This represents 55.3% penetration by population and annual growth of 22.1%. We expect to reach 4 billion at the beginning of 2009. In this quarterly review, we examine the key trends, market drivers and challenges for each region.

As always, we value your feedback, so please do get in touch at info@wirelessintelligence.com to share your thoughts on the cellular market.

Regards,

Will Croft
Joss Gillet

Key trends

Africa
Africa continued to be the fastest growing region by connections. Low market penetration and significant investment in the region spurred 36.5% annual growth.

Americas
The Americas saw 23.1% annual growth, adding 20 million sequential connections. Number portability was introduced in Brazil, allowing cross-network churners to retain their number for the first time.

Asia Pacific
Representing 42% of all global connections, Asia’s growth has been phenomenal, adding half a billion connections in 6 quarters. The Chinese market underwent a reshuffling to segregate each technological arm and Japan’s PDC networks dropped below 10% of all connections for the first time.

Eastern Europe
Eastern Europe added 10 million connections from Q1 to reach 413 million. MTS and VimpleCom Group posted substantial growth amid new product launches and a price sensitive market.

Western Europe
Sequential cellular growth was 1.5% in Q2, reflecting the maturity of the region as it reached 123% market penetration - the highest in the world. UK operators reported a decline in net additions and also feature among the top 10 highest churn rates in Europe, blamed on the worsening economy.

Middle East
The Middle East grew 6% sequentially to reach 200 million connections. Half of all markets are under 80% penetration and the region has plenty of opportunity for growth.

USA/Canada
Cellular connections passed 280 million and market penetration grew 5% in the year to reach 85%. Operators reported variable churn as customers switched networks to follow exclusive device launches.
In the second quarter of 2008, Africa added 20.3 million connections accounting for annual growth of 36.5%, continuing to be the fastest growing region in the world. Seasonal trends were on a par with the previous three years, adding 24% of annual connections in Q2. We forecast that Africa will reach 400 million connections by the third quarter of 2009 as quarterly growth settles for the first time under 20%.

With low market penetration and next-generation networks in their infancy, Africa represents a massive opportunity for both incumbent operators and new entrants. But there remain significant challenges for the region. Indicative of the cash-based economy, 96% of all the region’s connections are on prepaid tariffs rather than higher-ARPU (average revenue per user) contract tariffs. The majority of customers simply cannot afford to switch to a contract-based tariff. This means that data bundles need to be offered on prepaid tariffs to even make a mark on next-generation adoption. The real challenge for operators is to balance their increase in capital expenditure as coverage and quality is improved, whilst maintaining profitability.

South Africa has been the region’s most developed market in terms of next-generation technology deployment. All three South African operators have commercially launched WCDMA and two have WCDMA HSPA networks, which account for 45% of the African total alone. But it is Libya and Egypt that are the fastest growing, in part due to their infancy. Market penetration is much lower in Egypt, whilst in Libya, a higher than African average per-capita income provides a rich base for rapid adoption.

In total, 19 WCDMA and 14 WCDMA HSPA networks are in operation, with a further six and five planned, respectively. Today the top three markets, South Africa, Libya and Egypt, account for more than 82% of all WCDMA and WCDMA HSPA (collectively known as WCDMA (Family)) connections in the region.

Zain Group has been particularly successful during the quarter, announcing a number of achievements including a network launch in Sudan, significant investment (USD 100 million in Malawi, USD 70 million in Zambia and USD billion in Nigeria) and first half revenues of USD 3.5 billion – an increase of 26% - all amidst an Initial Public Offering that raised USD 4.5 billion. Its African markets, Nigeria and Sudan, together with its Middle Eastern operations
in Iraq now account for more than half of Zain Group’s total 50 million customers.

Zain operates in the 14 markets obtained via its 2005 acquisition of Celtel Group and hopes to begin commercial services in Ghana by the end of the year. Across all of its markets, Zain has built up a reputation for call quality and aggressive tariffs underpinned by large-scale investment in network capacity and upgrades to data backbones. Building on this success, challenges for Zain include using the knowledge of their existing networks in Bahrain and Kuwait to introduce WCDMA and HSPA to its African markets.

Complementary to its ‘One Network’ initiative offering flat rate roaming across all of Zain’s territories, the operator group is pushing hard for market share by entertaining similar tariffs for cross-network calls. In Kenya, the ‘Vuka’ tariff undercuts the competition by up to 68% for a single off-network call. The aggressive move comes after a poor H1 and two straight quarters of negative net additions. As with most countries in Africa, local government is keen to attract the interest of foreign investors, particularly in the telecoms and technology markets which generally provide the most stable and successful jobs. The Kenyan government is considering waiving the country’s limit on the foreign ownership of mobile operators to fuel such progress.

Similarly Vodafone made headway into Africa with the purchase of 70% of Ghana Telecom for USD 900 million. Currently placed third in Ghana’s mobile market, Vodafone hopes to significantly increase market share through initiatives such as mobile money transfer as well as reducing the cost of its handset portfolio to further align itself with the 99% prepaid market.
In Q2 2008, the Americas (including the Caribbean) accounted for 412 million connections, 25% of our forecast annual total for 2008. Year-on-year, this represents a marginally stronger Q2 than in the past two years but may be an indication of a downturn towards the end of the year. The ratio between prepaid and contract connections remained stable, the former representing 83% of the total market, practically unchanged from the year prior.

Peru is the region’s fastest growing market with 16.3 million subscribers and 47% year-on-year growth. Such strong growth is a product of substantial investment from all three of the country’s mobile operators (Movistar alone will invest USD 232 million in 2008); Osiptel, the Peruvian telecoms regulator, now estimates that 77% of all districts have access to mobile networks. However, 56% market penetration in Q2 leaves plenty of opportunity. A key factor to future development will be the expansion of Movistar and Claro into WCDMA and HSPA and the challenge of balancing infrastructure spending with market return given the relatively high pricing for devices and the large prepaid base.

The region’s single fastest growing operator is Nextel Chile (33% quarterly and 220% annually) which has seen rapid growth since its launch in Q4 2006. The Nextel umbrella in Latin America differentiates itself by offering the only commercial iDEN network in the region, providing a high quality push-to-talk and data services to a 99% group-level contract customer base. Having just announced the commercial availability of its next-generation iDEN network in Chile, Nextel will easily strengthen their high-ARPU customer portfolio with North and Latin America iDEN roaming.

Brazil saw a shake-up at the beginning of September when Anatel, the telecoms regulator, introduced number portability in eight regions of the country. Smaller, regional operators such as Nextel traditionally have more to benefit from the introduction of number portability since customers will be swamped by a myriad of cross-network offers all trying to undercut the market leaders and can instead make an informed decision based on local quality of service. Claro, Brasil Telecom, Oi, TIM and Vivo have all reported decreasing revenues since the start of 2008. Number portability can be bad news if an operator needs to make a significant investment in either marketing or infrastructure.
(call quality) to fight churn. Being able to keep an existing mobile number (and the ease of switching) often provides the required incentive for consumers to make the leap. Market research suggests that almost 13,000 (mobile) porting requests were made in the first 21 days and Anatel hopes to extend the programme nationwide by 2009. Brazil remains the fifth-largest market in the world with 134.7 million subscribers.

Argentina, having crept over the 100% market penetration mark during the first half of the year, saw America Movil grasp top spot from Telefonica – a position it had enjoyed since 2005 despite America Movil reporting net additions an average of 24% higher than its rival over the same period. Representing 10% of all regional connections, Argentina is the third-largest country by connections and is an especially attractive mobile market since regulation in the country has kept fixed-line tariffs frozen since 2001. A more in-depth quantitative analysis for Q2 2008 is available in our recent report, Americas market review.
With over 1.55 billion connections in Q2 2008, Asia Pacific represents just over 42% of all global connections with China alone accounting for 38%. Growth in the region has been exceptional, taking only six quarters to reach the next half-billion compared to the growth between 500 million and 1 billion that took place between 2003 and 2006. Annual growth remained stable at 29.24% while penetration by population edged over 40%. Over a third of the Asian markets have yet to reach the regional average for penetration, including India, one of the fastest-growing markets.

GSM remained the region’s largest technology base, accounting for 79.5% of all connections, up 2% from two years ago. WCDMA (Family) connections represented slightly fewer than 7% of the regional total, up 2% in a year, while the CDMA2000 group of technologies were down from 13.6% to 12.8% over the same period. We estimate that HSPA connections will outnumber the older WCDMA technology and that, collectively, WCDMA (Family) connections will account for 9% of all connections in Asia Pacific by 2010.

India saw 60% year-on-year growth during Q2, approaching 300 million connections. In terms of technologies, GSM growth moved ahead of CDMA2000 1X as total GSM connections reached 230 million connections and 1X 80 million. The contract and prepaid split remained largely unchanged at 17% and 83% respectively. At the end of the quarter, Reliance Telecom and Shyam Telelink cemented plans to make use of the licenses won in January, the latter making GSM services available commercially in the circle of Rajasthan. Nine operators in total have received new or enlarged licenses and the associated spectrum to provide mobile services across the country, which should increase competition significantly in both the GSM and CDMA domains. Operators can expect a bumpy ride however as they keep a watchful eye on capex budgets; Reliance has seen capex as a percentage of revenue increase from 96% to 134% as it builds out its GSM network, representing some USD 2.4 billion since the start of 2008.

China saw the most turmoil in the region during the quarter as the reshuffling of its entire telecoms market was announced. The six state-owned companies will be folded into China Mobile, China Telecom and China Unicom in an attempt to rebalance competition and consolidate technologies, making China Unicom exclusively a GSM network when it sells its CDMA arm to China Telecom. Tenders for a WCDMA network by China Unicom are expected to complete during the coming quarter and have the potential to become the fastest growing next-generation deployment in the world. China continued its accelerating growth, adding 26 million net additions in the quarter. We expected it to pass 600 million connections during Q3, edging closer to 50% penetration in the first half of 2009.

Japan, having been one of the first markets in the world to introduce WCDMA in 2001 and
CDMA2000 1xEV-DO Rev. A in 2006 is winding down its older Personal Digital Cellular (PDC) networks which dropped below 10% of all country connections in Q2 as KDDI turned out the lights on its ‘TU-KA’ service. In terms of services, Japanese operators hope to take some of their more innovative services such as the popular ‘FeliCa’ RFID mobile money card abroad. Attempts to garner licensing fees for such services would help to raise shrinking profitability amongst next-generation subscribers where falling EV-DO and HSPA pricing plans are common amidst aggressive migration.

Operators in Thailand look set to finally rollout their high-speed deployments after numerous licensing and equipment delays, though many have recently scaled back next-generation deployment in the light of the current economic climate. AIS, the market leader, and DTAC have made public their intent to slash budgets and planned coverage by half in setting up 900 and 850 MHz WCDMA networks with the former having only launched commercially in Chiang Mai earlier in May. We estimate WCDMA and HSPA connections will collectively reach 100,000 by the end of the year. WiMAX trials early next year will also pave the way for new and faster services. Hutchison and AIS have reported two of the highest churn rates in the entire region, placing the market second in Asia Pacific with 4.37% monthly churn. Hutchison Indonesia saw the most significant drop, attributable to prepaid losses despite significant customer additions for the quarter with 37% quarterly growth and 872,000 net additions.

Indonesia faces a similar slow rollout for WCDMA, though, in this case, due to increasing competition and pricing pressure. Growth is strong yet competition is straining margins despite the market’s infancy, which is only at 50% market penetration. High speed networks were launched over two years ago but have only reached 3.5 million connections in the period – under 3% of all connections – a challenge operators will need to overcome to maintain profitability. Indonesian WCDMA is the subject of our latest Snapshot report, Indonesian operators look to high-speed networks to boost margins.
In Q2 2008, Eastern Europe reached 413 million mobile connections, adding just over 10 million connections from the previous quarter. The region’s total connections represent 11% of worldwide connections and it has just passed the 100% penetration mark. In Q2 2008, the regional growth was at 2.6% compared 3.4% a year ago. The vast majority (80%) of the region’s mobile connections are prepaid connections.

Uzbekistan is the fastest growing market in Eastern Europe in Q2 2008 with MTS and Unitel registering yearly growth of 124%. Ucell grew by 250% year-on-year, reaching 1.4 million connections compared to 416,000 a year ago. With a penetration rate of 31%, the market has plenty of room for growth in the coming years.

Russia passed the 170 mobile connections mark in Q2 2008 and represents around 40% of the total connections in the region. Mobile TeleSystems (MTS) reported a 36% increase in mobile revenue in Q2 2008 in Russia, reaching EUR 1.5 billion (51% margin). Russia contributes to 76% of MTS Group’s total revenue. The operator explains that the growth has been driven by seasonal roaming and new product launches related to new tariffs such as Stimul, Super Pervyi and Maxi. In Q2 2008, MTS also commercially launched Blackberry services for corporate users; MTS-Poisk, a location-based service, SuperPoisk, a mobile Internet service and a partnership with Mail.ru to provide email, social networking and video hosting services in Russia. As penetration continues to rise in Russia, MTS is focusing on revenue stimulation and the rollout of WCDMA/HSPA networks. Although voice constitutes the vast majority of the market revenue, the operator is aiming at encouraging data usage; in Q2 2008, VAS as a percentage of ARPU was at 15%.

In Slovenia, T-2, a WCDMA operator, launched in Q1 2008, following Tushmobil’s launch in Q4 2007. Both operators are competing against Mobitel and Si.Mobil with a clear focus on increasing data usage through the fast adoption of high-speed network users. Competition in Slovenia is rising to a level as intense as that in neighbouring markets such as Romania, Hungary and Slovakia. In Romania, DigiMobil (RCS&RDS) launched in Q4 2007 and is expected to reach 5% market share by year-end. The operator is commercially operating on a WCDMA network, competing against Orange and Vodafone’s well-established high-speed networks. Zapp, the local CDMA2000 1xEV-DO operator started to offer WCDMA HSPA services.
in June. The launch followed the acquisition of Telemobil, Zapp’s parent company, by Saudi Arabian telecoms investment group Saudi Oger in January. Zapp won a 2100 MHz licence in December 2006.

VimpelCom Group reported substantial growth in its revenues and mobile connections figures in Q2 2008. Mobile connections increased by 6 million compared to Q2 2007, reaching 53.7 million and revenues in its total mobile business reached USD 2.1 billion. In Russia, the operator regained some momentum and managed to increase ARPU by 19.5% year-on-year to reach USD 14.7 in Q2 2008. VimpelCom has also reported substantial revenue growth in its other operations in Eastern Europe (Kazakhstan, Ukraine, Armenia, Uzbekistan, Tajikistan and Georgia) which represent around 15% of its net operating revenues. In markets such as Kazakhstan, Uzbekistan and Armenia, VimpelCom is improving its distribution and direct dealership network as well as maintaining what the operator describe as a ‘conservative pricing policy’ to increase ARPU.

In Ukraine, the operator is now targeting high-end consumer segments through aggressive marketing campaigns to help stimulate data usage and raise the effective price per minute.

Vimplecom has also been active abroad. During the quarter, the group announced an agreement with GTEL Mobile in Vietnam and purchased 90% of Sotelco in Cambodia to build and manage, respectively, GSM networks. Closer to home, VimpleCom joined rivals MTS and Megafon to secure the rights to Apple’s iPhone in Russia and will launch the device later this year.
Western Europe

The latest results published by Western European mobile operators reflect that the region has been following established seasonal patterns to reach 490 million connections by end of Q2 2008. The second quarter of the year usually represents 24.7% of total mobile connections in the region. Western Europe is the highest penetrated region in the world with 123% market penetration.

Mobile connections have grown by 1.50% between Q1 and Q2 2008. This slow sequential growth reflects the level of maturity as the market is mainly driven by replacement. Year-on-year, Western Europe grew by 7.98% in Q2 2008 compared to 8.6% in Q2 2007. 58% of the region’s mobile connections are prepaid but it is the contract market that has recorded the fastest growth. On a quarterly basis, contract connections grew by 2.52% in Q2 2008 compared to 0.78% for prepaid connections.

In the UK, Italy and Ireland, Vodafone, TIM and T-Mobile have registered a decline in mobile net additions reflecting the high level of penetration and competition in these markets. Similarly, Vodafone, O2, Orange and T-Mobile all reported a decline in recurring revenues in Q2 2008 compared to Q1 2008. T-Mobile attributed the decline to the effect of a strong negative exchange rate in the pound sterling. In our latest report, *Western Europe cellular revenues reach EUR 155 billion in 2007*, we discuss how UK operators are facing strong competition in the face of rising penetration and cuts in termination rates are impacting revenues. Additionally, T-Mobile, Vodafone, O2 and Orange all feature in the ten highest ranked churn rates for the region in Q2 2008, with churn of 3.60%, 3.28%, 2.40% and 2.30% respectively. German and Spanish operators also appear in the ranking with churn rates around 2%. All are above the 1.96% average for the region.

Across the Irish Sea, operators in Ireland have reported the highest blended ARPU in Q2 2008 in the region. O2 Ireland reported ARPU of EUR 43.20, the highest in the region, compared to Vodafone Ireland at EUR 41.70 and Meteor Mobile at EUR 40.22. Operators in Germany reported the lowest ARPU with an average of EUR 16 for E-Plus, T-Mobile Deutschland, O2 and Vodafone.

Yoigo in Spain is the fastest growing operator in terms of contract connections annual growth. The operator launched in Q4 2006 and is offering free calls for the first hour between Yoigo mobiles every
day. E-Plus, O2 Germany and T-Mobile Deutschland are among the fastest growing operators in terms of quarterly net additions. All three German operators recorded a high increase of prepaid connections with E-Plus reaching a quarterly growth of 7.61%. T-Mobile attributes this growth to a change in the legal situation during 2007: prepaid users can now use their credits over a longer period and are therefore recorded as customers for longer. O2 recorded the highest growth in the contract space, mainly due to the success of promotions around O2 branded tariffs such as Genion S/M/L/XL tariffs and ‘Inklusivpakete’ minute bundles.

In terms of technology, we estimated that GSM connections declined by 2% on a quarterly basis in Q2 2008. For the fourth quarter in a row, WCDMA (Family) connections have been taking growth from GSM connections and it is expected that, by the end of the year, WCDMA (Family) connections will represent 30% of the installed base in Western Europe.
In Q2 2008, Middle East mobile connections passed the 200 million mark, following a sequential growth of 6%. The Middle East is the third fastest-growing mobile market after Africa and Asia Pacific. Afghanistan and Iran have been the fastest-growing markets in the region for the past four quarters, closely followed by Yemen. Half of the countries in the region have a penetration rate below 80%; those markets are expected to represent 50% of the total connections by Q2 2009, from 40% in Q2 2008.

Zain Group reported in Q2 2008 that it has reached 50.7 million mobile connections across the Middle East and Africa following a 58% annual growth. The Middle East represents around 35% of Zain’s total installed base. In Iraq, Zain acquired Iraqna in Q4 2007 and registered 120% yearly growth followed by Bahrain (119% yearly growth). Zain has launched its ‘One Network’ roaming service in Bahrain, Iraq, Jordan and Sudan.

Wataniya meanwhile, reported a net loss of KD 3.7 million for its iDEN operation in Saudi Arabia (Bravo). It is the fourth quarter in a row that the operator has reported a loss. Bravo owns a minority share of the market with less than 1% market share and is facing pressure from the two in-cumbents, EAE (Mobily) and Saudi Telecom as well as the newly launched Zain. Zain, who only began operations in August with 53% coverage by population, already offers next-generation services and devices.

The Afghan operator Roshan (TDCA) is reported to have borrowed USD 55 billion from the Asian Development Bank in order to fund future network expansion in an effort to rebuild infrastructure where frequent power cuts and ongoing conflict in the market has hindered the operators, despite booming demand. Additionally, Roshan hopes to rollout new services, notably mobile banking. Enabling access to key services such as money management over a mobile-centric platform makes sense in a country with a fragile economy.

The South African group MTN reported healthy revenues in Iran for the first half of ZAR 1.9 billion. MTN owns 49% of Irancell while the group’s other operations in the Middle East include Afghanistan (100% owned), Syria (75%) and Yemen (83%). MTN Irancell was actually the fastest growing operator annually, posting over 400% growth year-on-year. Second in line was the newest mobile op-
erator in the UAE, Du, gaining 2.3 million connections since its launch at the start of 2007 and posting year-on-year growth of 315% for Q2 2008. Their only competitor in the UAE, Etisalat, has seen slowing growth since Du’s arrival, attributable to aggressive pricing and a range of services, most notably email, mobile TV and music downloads. Du opted to move straight to HSPA allowing it to offer faster data rates and already has 20% of its subscribers on the newer technology, compared to Etisalat’s 12% customer base on both WCDMA and HSPA.
Mobile connections in USA/Canada passed the 280 million mark in Q2 2008, reporting 7.68% annual growth. The penetration rate in the region reached 85%, up 5% in a year. The US reached 260 million connections adding 3.2 million net additions in Q2 2008. The vast majority of the region (86%) is contract, which is a particularity unique to the region since the prepaid market is usually prevalent in other regions.

In the US, churn rates among the top operators have shown interesting trends. AT&T has reported a reduction in contract churn to 1.1% from 1.2% a year ago and rival Verizon Wireless has also reported a decline in contract churn to 0.83%, with its blended churn reaching 1.12% - a record level for the company. However, T-Mobile USA reported a sequential increase in contract churn to 1.90% from 1.70% in Q1 2008. The operator explained that the increase was mainly due to the anniversary of the introduction of two-year contracts in Q2 2006, and thus the first time these would have come up for expiry.

AT&T has reported substantial growth in non-voice revenue with data revenues growing by 52% year on year. Internet access revenues more than doubled since Q2 2007; revenues from email, messaging and data access grew by more than 50% and multimedia messaging grew by 170%. On top of that, the operator says that 18% of contract subscribers are using multimedia devices such as the newly launched iPhone 3G and upcoming Blackberry Bold which generate higher ARPU by offering easier means and more incentive to use Internet services. This represents roughly double the company’s ARPU average.

Sprint USA is focusing on reshaping its mobile business and has reported negative connections net additions for the third quarter in a row. In Q2 2008, revenues fell quarter-on-quarter from USD 9.3 billion to USD 9.1 billion. The operator has been targeting customer retention and profitability with initiatives such as its ‘Simply Everything’ plan and high-end multimedia devices such as Samsung Instinct, focusing on the higher-value consumer segment.

In Q2 2008, T-Mobile USA introduced T-Mobile@Home nationwide, a service that allows subscribers to add their fixed-line phone to their T-Mobile service; the operator also introduced the Unlimited Family Plan that offers unlimited nationwide calling, SMS, MMS and instant messaging. The operator has also been deploying its WCDMA network in New York and
announced its plan to launch in up to 27 additional WCDMA markets during the year. As a result of this network expansion (including EDGE network coverage improvement), capex increased to USD 1.06 billion in Q2 2008 compared to USD 690 million in the opening quarter of the year. T-Mobile will also be looking to ramp up deployment of its HSDPA network, particularly in the light of its exclusive launch of the Google/HTC venture handset, the G1.
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