Overcoming the OTT threat

Welcome to the tenth edition of Inside Telecommunications, EY’s review of the most significant developments in the telecoms sector. In this issue, we consider a number of industry themes, from operator strategies to cope with over-the-top providers to the drive for single market reforms in Europe.

We hope you find this material useful. Please do not hesitate to share your feedback with me or any of my colleagues at EY.

Jonathan Dharmapalan
Global Telecommunications Leader
More efficient market structures cannot come too soon: at present, Europe is lagging behind other developed regions in LTE rollout and take-up, placing operators and regulators alike under increasing pressure to increase the availability of new infrastructure.

Such concerns extend into the fixed-line environment too. While Europe is close to attaining an EU Digital Agenda target of 100% coverage of basic broadband by the end of 2013, coverage levels of super-fast broadband remain low. A target of 100% household availability of 30Mbps+ services has been set for 2020, but such services only grew from 49% coverage to 54% in the year to January.1

Infrastructure rollout remains very much top of mind for operators, but so does the need to develop new service propositions. The battle for the home is intensifying, and operators are adding new home security offerings to their residential propositions. In recent months, US carrier AT&T has introduced new “Digital Life” products for consumers, designed to simplify management of home activities.

Innovative security-oriented products are being unveiled by operators across a range of use cases. In May, Deutsche Telekom launched a tool allowing developers to identify vulnerabilities in apps and websites regardless of the programming language used to create them. Managed security services for enterprise are also gaining traction, while many in the industry are calling for new frameworks for mobile security standards. Standards bodies are already responding – in May, the US National Institute of Standards and Technology (NIST) published a fourth revision to its “Security and Privacy Controls for Federal Information Systems and Organizations,” factoring in the security implications of the bring-your-own-device (BYOD) trend along with the growth of mobile malware.

Meanwhile, the thorny issue of smartphone theft has also been generating plenty of headlines. Police figures show that 10,000 handsets are stolen every month in London alone, and device manufacturers are being called upon to introduce measures to help curb this unwelcome phenomenon. In June, US prosecutors and other groups announced a “Secure Our Smartphones” initiative, which tasked phone makers with providing “kill switches” and other technology innovations to help prevent the resale of lost or stolen phones.
1. Service innovation

Telcos take different paths to absorb the OTT threat

Much has been made of the challenge posed by over-the-top (OTT) players whose services undermine mobile operators’ legacy revenue streams, such as text messaging. In 2012, this threat grew as the number of mobile instant messages (IMs) sent on chat applications overtook the number of SMS text messages for the first time, according to industry research.²

While many users are attracted by the free or low-cost nature of such services, increased functionality – such as the ability to have group chats – also scores highly as a usage driver. Mobile IM users are also more prolific than SMS users. According to Informa’s research, OTT users send an average of 32.6 messages per day, compared with just 5 messages per day per SMS user.³

Figure 1. Global SMS and mobile IM traffic growth

Average number of messages sent per day (billion)

Source: Informa Telecoms & Media, EY research.

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² “Press release: OTT messaging traffic will be twice the volume of P2P SMS traffic by end-2013,” Informa, 29 April 2013.
³ Ibid.
As usage of mobile instant messaging continues to grow, the threat to operator voice and SMS revenues is clear: one forecast suggests that social messaging apps will cost operators US$32.6b in 2013, growing to US$86b in 2020. To counter this rising threat to their revenue streams and customer relationships, operators are pursuing a number of strategies, from partnerships with app developers to launching in-house messaging platforms.

Late last year, South Korean mobile operators SK Telecom, KT and LG U+ joined forces to launch their own voice and messaging platform, Joyn, a brand backed by the GSMA. The South Korean market has been heavily disrupted by apps such as KakaoTalk, yet SK Telecom announced that it had signed up one million users less than two months after the launch of the service.

Greater cooperation between operators is also apparent in the Chinese market. In May, China Mobile and China Unicom announced that they would provide a standard payment plugin for app users and developers, which they hope will allow them to take a greater share of the payments made for mobile apps in the world's largest mobile market.

At the same time, China Mobile is making efforts to reignite its Fetion instant messaging service, announcing in April that it would open up the platform to other service providers. Launched in 2007, Fetion initially proved popular with mobile subscribers before local OTT players such as Tencent and Sina began to dominate the IM market. China Mobile is set to retender the operation of Fetion, while investing over RMB638m into the platform over the next year to make it more competitive.

Operators are also using increased service bundling in order to protect themselves from OTT-driven revenue erosion. Last year Vodafone launched its range of Red tariffs, which combine unlimited voice calls and messages with tiered data. In April, the UK-based provider announced that its latest Red offers would be extended to 14 European markets.

European operators are also pressing ahead with new app-centric brands that are designed to compete head-on with the OTT customer experience. In February, O2 UK launched the TuGo VoIP app for postpaid customers using Apple and Android smartphones. Essentially a cloud-based communications service, it allows end users to log on from different devices and runs over Wi-Fi, while also offering integration with native voice and SMS services.

Reformulating tariffs and innovating directly at the app level are two distinct approaches; another involves a more dynamic repositioning in the mobile value chain. In January, Telstra created a new business unit called Global Applications and Platforms (GAP), with a view to developing app solutions. Due to overcrowding in the consumer market, the new entity is focusing on developing apps for enterprises and the public sector – and is open to partnering with application developers as well as developing new products in-house.

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4 “Social messaging will continue its rise in 2013,” Ovum, 5 March 2013.
5 “China Mobile to pour $100m into mobile IM,” Telecom Asia, 18 April 2013.
Another feature of operators’ relationships with application providers and device manufacturers comes in the form of operators providing them with capabilities that they lack. Direct-to-bill services have proved popular – for example, Telefonica struck an agreement with Samsung in May to allow customers to pay for digital content through their phone bill.

This followed the announcement in February that Skype had teamed up with mobile billing company Mach to provide direct operator billing, initially in Russia before being extended to the US and Canada.6 Such arrangements, where mobile operators are in line to take a cut of mobile VoIP purchases, reveal how more discrete B2B business models are helping to allay carriers’ fears of retail revenue cannibalization.

One of the more surprising turn of events in recent months was Orange’s admission that Google is making payments to the French multinational to deliver traffic for the search giant in Africa, turning the net neutrality argument on its head in the process. While prioritized web service is not new in itself – look at Amazon’s AWS Direct Connect offering – this represents a significant departure from the traditional relationship between web giant and network operator.

Nevertheless, such relationships remain the exception rather than the rule. In April, all three Chinese mobile operators demanded compensation for the strain placed on their networks by OTT services – a move that illustrates how net neutrality remains a highly sensitive issue between operators and their OTT counterparts.

In summary, operators are experimenting with a range of coping strategies as they work out the best way to coexist with application providers, as well as ambitious web and technology giants. The type of response depends on a number of factors – whether capitalizing on certain local market dynamics or embedding partnerships as a low-cost route to reach new market segments cost-effectively.

More tactical moves are likely to occur in specific markets or with specific partners. As part of long-term repositioning, operators are establishing new business units to improve their agility and shorten time-to-market on a global basis. Looking forward, a range of responses is likely to persist as operators assess how best to protect legacy revenue streams as they overhaul their service propositions in a more interdependent industry landscape.

Figure 2. Operator strategies in the OTT environment

Subsidy models under scrutiny as operators introduce handset financing

Growth in mobile data usage remains a key talking point in the global telecommunications industry. However, the divergent growth profiles of data traffic on the one hand, and data revenues and profits on the other, continues to unnerve mobile operators.

In recent months, a number of service providers in Europe and North America have taken steps to reduce the high levels of device subsidies they offer in order to preserve their profit margins. In March, T-Mobile USA became the first US player to remove smartphone subsidies before announcing a new program in July called Jump. Jump allows smartphone users to upgrade to a newer device twice a year. By paying a US$10 monthly fee, subscribers are eligible to upgrade to a new device once they have been on the scheme for six months.

Meanwhile, AT&T has also launched a new mobile plan that offers handset financing to its customers. Called Next, the new range of plans allows postpaid subscribers to trade in their devices every 12 months if they pay a monthly fee, based on a 20-month cycle.

6 “Skype goes live with MACH Direct Operator Billing,” Business Wive, 5 February 2013
Both US mobile players are attempting to provide their customers with greater flexibility, delineating between handset costs and monthly usage tariffs in a way that gives device owners more choice. At the same time, such plans take advantage of the high resale value of nearly new smartphones. Even so, implied subsidy levels for leading smartphone manufacturers still stand at above 70% in the US device market.

**Figure 3. Average US handset subsidy price ratio by manufacturer**

<table>
<thead>
<tr>
<th>Subsidy as % of selling price</th>
</tr>
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<tbody>
<tr>
<td>Apple</td>
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In Europe, operators have been experimenting with the subsidy model for longer. Service providers in Spain were the first to eliminate phone subsidies, although with contrasting outcomes. Spurred on by a declining economy and high competitive intensity, both Telefonica and Vodafone scrapped subsidies in 2012, only for Vodafone to reintroduce them in the second half of the year, while Orange remained firmly in favor of subsidized smartphones.

The Spanish situation highlighted how operators should remain agile as they refine their offers. Reductions in operating costs through removing or reducing subsidies may be offset by higher churn rates, while subsidies will still remain an important tool for building market share and growing data revenue.

There is also the risk that delineating handset costs on a monthly basis from overall tariffs may make it more difficult for customers to choose the right plan. Customer research shows that many smartphone and tablet owners remain confused by mobile data packages. EY’s survey of 6,000 mobile users worldwide found that only 56% effectively understand their data tariffs. Introducing additional nuances at a time when tiered mobile data pricing and overage rates are being implemented in many markets could worsen this situation.7

Nevertheless, Europe continues to witness a surge in new handset financing plans. In April, O2 UK launched the Refresh tariff. As with similar offerings in nearby markets, such as TDC Rate in Denmark or O2 Germany’s My Handy plan, customers can choose between different plans and pay for their handsets separately from their airtime, texts and data. Innovative elements of the plan include allowing customers to trade in their old devices for cash and reducing monthly payments to just the cost of their airtime plan once the balance of the phone plan has been paid, aiding those who are less eager to upgrade to new devices.

Looking ahead, packages are likely to be tweaked still further as mobile operators seek to appeal to as wide a range of customer impulses as possible – whether these are demands for greater transparency on costs or the desire to upgrade devices frequently without the penalty of early termination fees.

Customer needs are likely to evolve further still – high-end prepaid users in particular may warm to new forms of handset financing plans – while margin management will continue to define successful service providers in developed markets. In this light, handset financing models and subsidy-light plans are likely to evolve in new directions. As such, it is vital that operators do not sacrifice the effective communication of simple service propositions even as they pursue more flexible pricing models.

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7 *The mobile maze*, EY, October 2012.
LTE rollout continues to impress

LTE technology is maintaining its status as the fastest-growing mobile technology in rollout terms. The most recent update from the Global mobile Suppliers Association (GSA) shows that 200 commercial LTE networks were available in 76 countries as of 31 July 2013. All told, a total of 443 operators are investing in the technology worldwide in 130 countries, and the GSA expects 260 commercial networks to be available in 93 countries by the end of 2013.

The 1800MHz band continues to be the most popular frequency for LTE services, accounting for 43% of commercial networks in service, with 2.6GHz networks underpinning 34% of commercial 4G systems and the 800MHz digital dividend spectrum the band of choice for 1 in 10 live LTE networks.

Figure 4. Commercial LTE network launches

Cumulative totals

Source: “GSA confirms 200 LTE networks are commercially launched in 76 countries,” GSA, 7 August 2013.
Recent months have seen a number of operators introduce 4G services. In April, MTN became the first operator in Uganda to launch LTE, with Smile Communications launching Tanzania’s first 4G service the following month in the 800MHz band. In Lebanon, state-owned Touch also unveiled an LTE service in May, with a 4G signal that reportedly reaches 80% of the capital, Beirut, at launch.9 Mobile operators in developed markets also continue to launch LTE services. In June, Swiss mobile operator Sunrise switched on an LTE network covering 22% of the population, with plans to extend this to 50% later in the year. In Australia, Vodafone launched the country’s third LTE offering in June, covering Adelaide, Brisbane, Melbourne, Newcastle, Perth and Sydney. In May, the UK-based multinational became the first Spanish operator to make LTE commercially available, covering seven cities with equipment and devices running in both the 1800MHz and 2.6GHz bands.

Figure 5. Global LTE deployments at June 2013


9 “Touch launches commercial LTE,” Telecompaper, 23 May 2013
Meanwhile, the need for speed is also seeing operators launch more advanced iterations of LTE. In June, South Korea’s SK Telecom launched an LTE-Advanced offering, a world first. With expected download speeds of 150Mbps, the move followed the launch of the world’s first LTE-A phone by South Korean manufacturer Samsung. Interestingly, current LTE-tiered data price plans have been left unchanged for the faster offering, which allows end users to download an 800MB movie in just 43 seconds, according to the operator. In July, LG U+ became the second South Korean carrier to launch LTE-A – both operators are using carrier aggregation technology to support faster network speeds.

Despite the relentless growth of LTE, there are concerns that certain regions are falling behind in terms of rollout. In May, the GSMA highlighted that Europe was behind the US in terms of LTE deployments and network speeds, with research showing that by the end of 2013, 20% of US mobile connections will be on LTE networks, compared with less than 2% in the EU. This disparity is also reflected in data from the GSA, which shows that Europe currently accounts for only 2.4% of LTE connections. Solutions identified by the GSMA to close the gap include regulatory reforms and the encouragement of efficient market consolidation.

Boundaries blur between handset categories in emerging markets

Many headline developments in the smartphone world pivot on the latest developments in high-end devices, whether in terms of improved processing power or the advent of new OS capabilities. Yet in developing markets, many device manufacturers and app developers are presented with the challenge of providing a smartphone-like experience in more basic terminals that can be offered at lower price points.

Device manufacturers are eager to capitalize on growing demand for high-capability devices in emerging regions. One forecast suggests that these regions will account for 65% of all smartphones shipped in 2013, up from 43% in 2010. Moreover, competitive intensity between device manufacturers is high in developed markets, forcing many players to differentiate their growth strategies by targeting the needs of emerging market mobile users.

Nevertheless, the number of feature phone owners in emerging markets remains considerable while the average selling price for smartphones in developing regions is set for gradual decline, from US$307 in 2013 to US$259 in 2017. This is forcing handset manufacturers and application providers to provide a more sophisticated device experience without turning to more costly mainstream smartphone operating systems.

**Figure 6. Proportion of population using feature phones in selected markets**

<table>
<thead>
<tr>
<th>Country</th>
<th>% Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>100</td>
</tr>
<tr>
<td>Kenya</td>
<td>90</td>
</tr>
<tr>
<td>Brazil</td>
<td>80</td>
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<tr>
<td>India</td>
<td>70</td>
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<td>Indonesia</td>
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<td>Thailand</td>
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<td>Turkey</td>
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Source: BuzzCity (based on 300m clickthroughs from mobile phone adverts)

This year, a number of vendors have announced new device ranges that blur the traditional boundaries between smartphones and feature phones. In February, Samsung launched its Rex series comprising four so-called “smart feature” phones. The Java-based handsets come integrated with a range of chat services – including ChatON, Yahoo Messenger and Google Talk – while support for Facebook, Twitter and Google+ is also available. All devices are available in single-or dual-SIM versions, an important consideration in markets such as India and Africa, where cross-network calls cost more and carrying more than one SIM can save on call costs.

13 “Smartphones Expected to Grow 32.7% in 2013 Fueled by Declining Prices and Strong Emerging Market Demand, According to IDC,” IDC, 4 June 2013.
14 Ibid.
Among handset vendors, Nokia has been very much the trailblazer with devices that marry smartphone-like functions to low price points. The Asha range of phones it introduced in 2011 run on the Series 40 platform as opposed to Windows Mobile. In May 2013, Nokia launched the Asha 501, the first in the range to run on its new Asha platform, based on software leveraged from Smarterphone, a Norwegian mobile software firm it acquired two years ago.

Against this backdrop, prices for devices running on mainstream software platforms continue to fall, pitting an ever-larger universe of operating systems against each other in a narrowing band of price points. Indian manufacturer Micromax has been adding to its low-cost, Android-powered Smarty range in recent months, while another local player, Karbonn, launched the A4 and A3 Android devices in April. Both models support dual-SIM and have 1GHz processors but are 2G-only handsets. The appearance of new mobile software platforms such as Firefox OS is also set to redefine device price points and relationships within the handset ecosystem as affordable smartphones become an area of industry focus.15

Meanwhile, application developers are also innovating to provide a better application experience for feature phone users. Australia-based startup BiNu has an applications platform that can deliver a screen of text using less than a kilobyte of bandwidth, compared with up to 100 kilobytes in a standard mobile browser, according to the company.16 Such functionality has allowed more than five million feature phone users in countries like Nigeria and Turkey to use social media, chat with friends and learn languages using apps provided on the BiNu platform.

All told, the very definition of the smartphone is being challenged by such innovations, in the same way that “phablets” are blurring the boundaries between smartphone and tablet. Yet the concern over smartphone and feature phone definitions is more than a question of language. Poorly defined product categories could diminish the value of market intelligence, depending on how vendors and industry analysts categorize different types of device.

Furthermore, expectations of both other entities in the device ecosystem, such as application developers, and end users themselves depend on shared interpretations of different device categories. Whether industry terminology can keep pace with quickening rates of innovation in mobile computing remains to be seen.

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15 See Inside Telecommunications Issue 9 for further details of new mobile operating systems.
16 “Making Feature Phones Smart – BiNu Brings App World to Developing Countries,” Bloomberg, 20 June 2013.
EU presses ahead with single telecoms market reform

One of the enduring industry debates this year has centered on the need for overall reform of telecommunications regulation in Europe in order to reduce inefficient investment and stimulate faster technology adoption rates. The gap between Europe and the United States in LTE deployment and take-up remains considerable, with Europe currently accounting for less than 1 in 20 LTE connections worldwide. Meanwhile, on the fixed-line side, only 2% of European households currently have access to super-fast broadband.

Market fragmentation is seen as a root cause of Europe’s slower technology cycle in fixed and mobile broadband, compared with other regions. The European Commission (EC) recognizes that there remain barriers to the kind of scale economies required for growth, with Vice President of the EC Neelie Kroes underlining in a June speech that “operators cannot reach economies of scale.” At the same time, the EC has estimated that the benefits of a single telecommunications market could amount to €110b per year.

According to European policy-makers, a drive toward a single European market would help reduce some of the obstacles currently facing operators. Various initiatives have been proposed to catalyze this move toward a more unified European telecommunications sector, such as the introduction of an EU passport whereby carriers authorized in one EU country would be recognized in other member states and answerable to their home regulator. A clear focus on standardized network access products such as virtual bitstream and higher-quality interconnection is also seen as helping to create a more predictable environment for operators.

Spectrum release policies have also come under scrutiny, with the EU highlighting that a lack of regional coordination is hampering both operator multi-market investment strategies and handset manufacturer initiatives to provide suitable LTE devices. Operators themselves have indicated that money raised from spectrum auctions is often not reinvested in network infrastructure itself, while some in the industry believe that associated rules encouraging new entrants as part of auction frameworks can be counterproductive. According to the EC, standardization efforts in areas such as license duration and spectrum block sizes could create a more consistent industry environment.

Yet the focus on reducing industry fragmentation does not sidestep the needs of the end user. Abolishing mobile roaming rates remains very much top of mind for the EC, which in June voted to end roaming rates for voice calls, text messages and internet access while traveling within Europe. In July, the drive to end roaming fees by 2015 was unanimously approved by the European Parliament’s Industry Committee. However, fears exist that a sharp reduction in wholesale rates could lead to a spike in competition, which in turn may affect network investment.

At the same time, net neutrality remains under scrutiny, with the EC underlining the need to provide legislation that guarantees the equal treatment of content by operators. Previously, the EC has adopted a wait-and-see approach to this issue, emphasizing the need for transparent communications with customers and easier processes to switch suppliers as building blocks for an open internet. Yet in a June speech, Kroes underlined blocking or throttling of OTT services as practices that should end.18

With EU proposals set to go to the College of European Commissioners in September with a view to being written into law before parliamentary elections in 2014, time is of the essence. As such, the single market recommendations represent a refinement of existing rules rather than a reworking of the European framework.

Looking ahead, the need to make market structures more efficient is more pronounced than ever. Yet even the very changes proposed run the risk of producing new challenges themselves. For one, ensuring that spectrum plans are not developed in isolation will be difficult to achieve: there remain significant variations in valuations of spectrum and auction formats. Indeed, if achieving scale within markets and across borders is the end game of reducing industry fragmentation, then greater network sharing could also have an important role to play.

Operator reactions to EU plans have been largely ambivalent. While the European Telecommunications Network Operators’ Association (ETNO) has welcomed the prospect of single market reforms, it has also argued that current plans do not go far enough, with its Executive Board Chair arguing that a clear reform package has yet to be seen.19 According to this view, reforming spectrum allocation will not provide a near-term boost to the industry, while pan-European access products are seen as potentially adding to the regulatory burden rather than alleviating it.

**Myanmar awards mobile licenses as telecoms sector opens up**

In June, Myanmar’s Government selected Norway’s Telenor and Qatar’s Ooredoo as the successful applicants for the country’s two nationwide mobile licensees, which are set to run for 15 years. A consortium of France Telecom-Orange and Japanese company Marubeni has been nominated as backup candidate if the current licensees do not complete the licensing process.

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18 “Speech: The EU, safeguarding the open internet for all,” European Commission, 4 June 2013.

Although still to be issued, the licenses will carry coverage commitments designed to ensure that mobile infrastructure reaches the country’s rural population. Telenor has already outlined its approach to providing mobile services in Myanmar, highlighting that it would build a network using HSPA and LTE-ready technologies, with a launch slated for 2014. Meanwhile, Ooredoo has underlined the direct and indirect job creation that its investment in the previously closed market will bring.

The license awards mark a significant step forward in Myanmar’s efforts to liberalize the telecommunications sector. In late 2012, the Government established an independent committee, the Telecommunications Operator Tender Evaluation and Selection Committee, in order to assess potential licensees. Interested parties were then asked to submit prequalification applications, and then applicants were ranked according to their rollout plans, coverage and distribution commitments, among other criteria.

Looking ahead, the rollout of national mobile infrastructure is seen as a principal catalyst in Myanmar’s long-term socioeconomic transformation. With population penetration standing at just 11% at the end of 2012, Myanmar represents one of the last untapped markets worldwide for mobile industry players. The Government believes that mobile services can transform society and has set a 50% population penetration target by 2015.

Growth in the telecommunications sector is expected to boost national productivity. Past studies suggest that a 10% increase in mobile penetration can produce a 0.6% increase in GDP, and other Asian markets bear witness to this correlation between the take-up of mobile services and economic improvements. At the same time, value-added propositions available through mobile devices, such as mHealth and mobile financial services, are also well-placed to transform lives in the country.

**Figure 8. GDP per capita and mobile penetration in South East Asia, 2012**

Sources: ITU, IMF World Economic Outlook.

20 “Telenor is a successful applicant for telecommunications licence in Myanmar,” Telenor, 27 June 2013.


Although Myanmar’s relative lack of penetration promises plenty of upside for the winning licensees, a number of specific issues still need to be addressed. For one, the Government’s overall penetration targets may be ambitious, given that there is almost no rural coverage in the country at present. Africa has been the scene of explosive mobile growth rates in recent years, yet the continent reached the 60% mobile penetration mark only in 2012, having stood at 12% in 2005. In this light, Myanmar’s aim to add 40 percentage points of penetration in two years looks challenging.

For the country’s new operators, a range of challenges present themselves. Mountainous terrain, a dispersed population and poor road infrastructure will need to be factored into the network rollout process, while site acquisition issues also need to be considered.

In addition, question marks remain around the affordability of mobile services in rural areas, while mobile networks in neighboring China and Thailand have already proved popular with more affluent citizens living in border areas and are likely to provide higher-quality services in these regions for some time. Nevertheless, Myanmar’s demographics are fundamentally positive: literacy rates stand at 91% while 25% of the population is below working age.

Meanwhile, the country’s ICT policy-makers will need to put robust frameworks into place in both the short and long term. For a start, the mobile licenses themselves cannot be issued until a new telecoms law has been passed by parliament. Delays to this crucial piece of legislation had already warded off some of the initial license applicants, who saw it as a sign of heightened regulatory risks.

At the same time, ICT is not the only industry where reliable infrastructure is lacking – the country has only one ATM available for foreigners, while electricity supply is intermittent. The degree to which mobile technology can overcome the limitations of, and act as a substitute for, other infrastructures will require innovative thinking at a cross-industry level. Enlightened policies will have a pivotal role to play if Myanmar is to make the most of its opportunities for socioeconomic uplift.

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Momentum in global M&A activity continues. The number of deals announced in Q2 2013 stood at 165, up from 148 in the preceding quarter. Total deal value of US$21 billion was down 61% quarter-on-quarter, reflecting reduced activity in the Americas following a spate of transformational deals. However, the number of in-market transactions registered in Europe underlines how leading operators are refocusing their portfolios, altering their exposure to smaller markets and pursuing opportunities to strengthen their market position in others.

EMEIA accounted for 85% of deal activity in Q2 2013 with US$17.8 billion of announced transactions, while the Americas total was sharply down on the high levels of the preceding six months. Deal value also fell in Asia-Pacific and Japan, as attention shifted to deals across a number of European fixed and mobile markets.

Figure 9. Telecoms M&A deal value by target area, Q2 2013

Seeking scale and wider product scope in Germany

The largest deal of the quarter saw UK-based Vodafone bid US$10.1 billion in June for Kabel Deutschland, the largest cable operator in Germany. The acquisition of Kabel – with 8.5m households that take broadband and pay-TV services – enables Vodafone to strengthen its position in the fixed-line market. Going forward, it will be able to leverage a quadruple-play bundle of mobile and fixed voice, broadband and TV services as the battle for the home intensifies in Germany.

As well as helping to attract new customers, integrated packages help generate lower churn rates. Prior to the deal, Vodafone’s mobile subscriber base was almost ten times larger than its broadband base in Europe’s largest market. Following the deal, Vodafone becomes the leading challenger to the incumbent in fixed-line and benefits from Kabel Deutschland’s high-speed cable infrastructure, which reaches 33% of households.

Vodafone expects more than €300 million in annual cost and capital expenditure synergies four years after the deal, underlining how the quest for scale economies and broader product sets go hand in hand. In May, the UK-based player had struck an agreement regarding access to Deutsche Telekom’s network in order to provide VDSL broadband and TV services for its customers: the acquisition of Kabel Deutschland will allow it to reduce its reliance on renting the incumbent’s infrastructure.

Looking ahead, the German market for multi-play services is less mature than France or Spain, while high-speed broadband has scope to grow further. Although coverage levels of high-speed infrastructure outperform the EU average, the proportion of broadband connections that are above 30Mbps is lower than other EU markets.

Figure 10. Germany infrastructure reach and service take-up in 2012

Consolidation is also underway in the German mobile market. In July, Telefonica announced a cash and stock deal – worth an implied US$10.7 billion (not included in the Q2 2013 M&A data) – to acquire Germany’s smallest mobile operator for US$10.7 billion. The tie-up between the number three and number four mobile operators would provide stiffer competition to Vodafone and T-Mobile Germany, which together account for more than half of the mobile market.

Signaling yet further desire for scale and synergies in the German market, the proposed purchase would create a mobile operator with 38% market share and 43 million customers. Savings of 5 billion to 5.5 billion euros have been targeted through the integration of distribution, customer service and network services.  

Assets change hands in Bulgaria, Croatia, and Ireland

The European market as a whole represents a hotbed of deal activity as operators reshuffle their portfolios and sharpen their focus on certain territories. In June, Hong Kong-based Hutchison Whampoa moved to strengthen its presence in Ireland, acquiring mobile operator O2 Ireland for US$1.1 billion in cash.

The deal quadruples local unit 3 Ireland’s market share to 37.5%, just shy of the market leader Vodafone. With plans to compete on price and leverage 4G services to drive revenue growth, the transaction follows last year’s abortive attempt by Hutchison Whampoa to acquire Irish incumbent Eircom, which owns number three mobile operator Meteor.

The transaction will draw scrutiny from the European Commission. Although the EU recognizes the role that can be played by consolidation as a by-product of the drive towards a single market in Europe, the antitrust arm will ponder the merits of this latest in-market deal. Mobile prices in Ireland remain high, while Hutchison Whampoa may face requirements to divest spectrum, as was the case last year when it acquired Orange’s assets in Austria. The EU may look more kindly on the Vodafone-Kabel Deutschland transaction in Germany, given that it does not impact mobile market share and may boost competition over the long term.

For O2 Ireland’s owner Telefonica, the deal demonstrates further trimming of its footprint. In April, the Spanish incumbent announced that it was selling 40% of its assets in El Salvador, Guatemala, Nicaragua and Panama to multinational conglomerate Corporacion Multi Inversiones (CMI). Telefonica is set to maintain control of its operations, which are to be merged into a joint venture with CMI called Telefonica Centroamerica Inversiones.

Central and Eastern Europe is also seeing an uptick in deal activity. In April, Norway’s Telenor announced it was acquiring Globul, Bulgaria’s number two mobile player with 36% market share, from Greece’s OTE for US$935 million. Telenor Group already generates more than half of its revenues outside of its core Nordic markets, and is present in Hungary, Montenegro and Serbia – where it acquired banking firm KBC Banka in April as part of a mobile payments play. Looking ahead, the Norwegian incumbent hopes that it can combine its scale and experience with Globul’s local market expertise.  

Meanwhile, a Russian investor has acquired Max Telecom, a Bulgarian WiMAX operator. The company plans to launch LTE services in Q3 2013 using an 1800MHz band license it bought in December 2011.

In June, VIPnet, a subsidiary of Telekom Austria, announced the acquisition of three regional cable network providers in Croatia, as part of plans to accelerate its convergence strategy. The country’s second-largest mobile provider acquired OKI and KTS, as well as the residential fixed-line assets of Metronete Telekomunikacije, a business service provider.

These transactions give VIPnet an additional 6,500 customers in total, while also opening up access to an additional 27,000 households in Zagreb and along the Dalmatian coast. VIPnet has highlighted opportunities for cross-and up-selling of mobile communications and wider product bundles going forward.

25 “Telefonica agrees with KPN the acquisition of E-Plus to form a leading digital telco in Germany,” Telefonica, 23 July 2013.
26 “Telefonica reaches an agreement with Corporacion Multi Inversiones to sell 40% of its assets in El Salvador, Guatemala, Nicaragua, and Panama,” Telefonica 30 April 2013.
27 “Telenor acquires the second largest mobile operator in Bulgaria,” Telenor, 26 April 2013.
28 “VIPnet Acquires a Further Three Local Fixed Net Providers in Croatia,” Telekom Austria, 7 June 2013.
Asia-Pacific incumbents add capability in enterprise solutions

There is a clear desire among Asia-Pacific operators to extend their solution sets entering new growth segments in new geographies. Regional deal value for the quarter stood well down on levels reached in Europe and the Americas; yet this reflects a greater appetite for smaller acquisitions in the technology sector and beyond.

Japan’s NTT is continuing its overseas expansion, with opportunities in enterprise services driving its appetite for bolt-on acquisitions. In June, the Japanese incumbent bought US-based Solutionary, a managed security services provider, for US$210 million. Solutionary has more than 600 corporate clients, providing security analytics and consulting services to a wide range of sectors including financial services and healthcare.

In the same month, NTT Communications took a 74% stake in Digital Port Asia Limited, a Thailand-based data center that was established last year to address the need for business continuity planning in a country devastated by floods in 2011.
Data center services are also a target area for Telecom New Zealand, which in April acquired privately-held data center provider Revera for US$82.5 million. Under the terms of the deal, Revera will retain its brand and operate as a separate business, ramping up Telecom New Zealand’s existing foothold in cloud services through its enterprise arm, Gen-I. Looking ahead, both businesses will collaborate on new products for their respective customers. Meanwhile, Revera can take advantage of broader sales reach and further investment in its core platforms.

Telstra has also been active during the quarter, investing in a technology start-up through its venture capital unit, Telstra Ventures. The Australian incumbent invested US$18m in US-based application developer Kony Solutions, which provides a customizable platform so that large enterprises can quickly deploy applications across a range of operating systems and devices. The deal is set to accelerate Kony’s expansion across Asia-Pacific, leveraging Telstra’s existing customer channels.29

Operators drawn to digital health

Enterprise demand for cloud and mobile solutions continues to grow, and Asian operators are now targeting specific industries that are in the midst of digital transformation. Healthcare – often cited as a sector where new technologies can create efficiencies across the value chain – is proving particularly attractive.

In May, Telstra and Seven West Media jointly invested US$11m in HealthEngine, an online health platform. Launched in 2006, HealthEngine provides a directory of healthcare practitioners along with a booking system and is planning to expand into medical specialist sectors. Since then, Telstra has also invested in IP Health, which provides patient information to medical practitioners on devices, expanding the range of services it offers to hospitals in the process.

29 “Kony Secures $18.3M Series D Funding from Telstra Ventures for Global and Cloud Expansion Companies also announce joint reseller agreement,” Kony, 25 June 2013.
In April, NTT DoCoMo acquired a 77.5% stake in Japan's largest medical database, Nihon Ultmarc. This forms part of NTT DoCoMo's bid to expand its competencies in digital health services. It is one year since the Japanese operator set up a new health unit, in conjunction with medical equipment specialist Omron Healthcare, in order to provide seamless management of health-related data.\(^{30}\)

Although healthcare costs as a proportion of GDP in Japan are below the global average, more than one in five of its population is over 65 years, a proportion expected to rise to 40% by 2060.\(^{31}\) At the same time, Japan has a low ratio of physicians per capita compared to other developed economies, standing at 2.14.\(^{32}\) These factors pave the way for new technologies to drive greater efficiencies in outpatient and clinical collaboration scenarios.

### Figure 12. Selected Telecoms M&A in Asia-Pacific

<table>
<thead>
<tr>
<th>Date</th>
<th>Bidder</th>
<th>Target</th>
<th>Stake (Value)</th>
<th>Business nature of target</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 Jun 2013</td>
<td>Telstra Ventures (Australia)</td>
<td>Kony Solutions (US)</td>
<td>100% (US$18.3 million)</td>
<td>App developer</td>
</tr>
<tr>
<td>17 Jun 2013</td>
<td>NTT Corp (Japan)</td>
<td>Solutionary Inc (US)</td>
<td>100% (US$210 million)</td>
<td>Security service provider</td>
</tr>
<tr>
<td>4 Jun 2013</td>
<td>NTT Communications Corp (Japan)</td>
<td>Digital Port Asia Limited (Thailand)</td>
<td>74% (US$40 million)</td>
<td>Data center service provider</td>
</tr>
<tr>
<td>7 May 2013</td>
<td>Telstra (Australia); Seven West Media (Australia)</td>
<td>HealthEngine</td>
<td>na (US$11 million)</td>
<td>Online health directory</td>
</tr>
<tr>
<td>28 Apr 2013</td>
<td>Telecom New Zealand</td>
<td>Revera Limited (NZ)</td>
<td>100% (US$82 million)</td>
<td>Integrity computing infrastructure and service provider</td>
</tr>
<tr>
<td>26 Apr 2013</td>
<td>NTT DoCoMo (Japan)</td>
<td>Nihon Ultmarc Inc (Japan)</td>
<td>77.5% (US$26 million)</td>
<td>Provider of medical database and contract research</td>
</tr>
<tr>
<td>26 Apr 2013</td>
<td>China Telecommunications Corporation</td>
<td>E-surfing Media Co Ltd (China)</td>
<td>80% (US$194 million)</td>
<td>Platform operating service provider for mobile internet video</td>
</tr>
<tr>
<td>19 Apr 2013</td>
<td>Private investor (Cambodia)</td>
<td>Soteico (Cambodia)</td>
<td>N/A</td>
<td>Wireless telecom provider</td>
</tr>
</tbody>
</table>

\(^{30}\) “DOCOMO and Omron Healthcare to Establish docomo Healthcare, Inc,” NTT docomo, 2 July 2012.

\(^{31}\) “Japan population to shrink by a third by 2060,” The Guardian, 30 January 2012.

\(^{32}\) “Global Health Observatory Data Repository,” World Health Organization.
Cash on the line 2013 is the latest in a series of working capital management reports based on EY research. With revenues under pressure, the global telecommunications service industry has continued to evolve rapidly – striving to capture the growth potential from data bundling of services and new digital technologies, while protecting operating cash flows and improving returns on capital.

Against such a challenging background, most operators have maintained their focus on WC management as a lever for improving cash, reducing costs, enhancing customer service, boosting network differentiation and funding new investment. Yet, as the pace and scale of industry change continue to grow and with the “low-hanging fruit” in this area already largely harvested, managing WC will become increasingly challenging.

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