SAMENA TRENDS

BUILDING DIGITAL ECONOMIES

A SAMENA Telecommunications Council Newsletter

TÜRK TELE KOM

Mr. Tahsin Yilmaz
Chief Executive Officer
Turk Telekom

M2M

EDITORIAL

M2M - Welcome to the New Reality

In the days of the Terminator, machines took on humans with a vengeance and it took the collective physicality and wit of three individuals to not only challenge but beat the revenge of the androids. Today, Machine-to-Machine (M2M) has surfaced as a viable new service revenue opportunity in the new digital economy.

The market opportunities appear to be not based on conjecture or speculation, but real world application. Early prognosticators were overly expressive about their expectations of M2M, which, during its early stages, saw delayed or postponed application and did not meet market estimates. Media giants such as Economist tracked the industry over a three-year period, and stated that opportunities were endless. However, slow adoption of M2M hindered its real growth at the time. It was 2008 then.

We are nearing 2013 now, and M2M's huge potential has started to become a reality. Machina Research saw market values improve to US$121 billion by 2010, but was still far short of earlier projections. However, endless reviews on the opportunity of M2M persisted and market uptake projections are now becoming far more realistic and prescient, with their larger market value realization.

One such projection by Global Information Inc. maintains that by 2021, M2M value to the wireless industry vis-a-vis three specific sectors, being intelligent buildings, smart cities and utilities, could exceed US$1.2 trillion. Another viewpoint by Machina, M2M has seen growth develop from an incubation basis in 2007, where the market realized value anywhere between US$25 and US$48 billion, depending upon what was included in the statistics. One such application then was used by Nestle, which placed hundreds of sensors in ice cream machines to monitor inventory levels. Machina now sees the uptake, as mentioned earlier, starting to potentially surpass earlier projections, although as late arrivals.

The SAMENA Council also believes that M2M is of high value and needs to be addressed with regard to making sure that new policy trends reflect this key element of the new digital economy. Connections between machines are ever increasing, and arguably on an exponential basis.

What's driving this new growth in reality and in projections of revenues for M2M? The answer: actual real world application of the technology! Proven deployments of M2M are proving that the concept has a real value, interest and that it works and works quite well. Latent use of the potential of ultra-high-speed networks being developed, make M2M a driver of innovation on efficiencies, automation of information and improved performance. Sectors now being seen making best use of M2M include:

- **Smart Buildings** - Automated Monitoring of heating, etc. Reduced energy costs
- **Smart Cities** - Street light dimming during light use. Cost savings
- **Automotive** - Emergency calling. Regulatory compliance and safety
- **Leisure** - Vehicle and Boat tracking – Safety and Security compliance
- **Consumer Electronics** - Connected Satellite devices to monitor traffic. Innovation
- **Health** - Remote monitoring of patients. Cheaper home based health care
- **Utilities** - Smart meters, energy demand response. Regulatory compliance
- **Transport and Logistics** - Fleet optimization, SC Tracking. Cost Savings
- **Retail** - Wireless payments. Retail innovation
- **Manufacturing** – Improved system monitoring. Reduced maintenance costs
- **Construction** - Monitoring usage of equipment. Cost savings
- **Agriculture and Extraction** - Remote monitoring of farm and mining ops. Proactive maintenance
- **Emergency Services** - Disaster response. Faster response times
- **National Security** - Critical infrastructure protection. Faster response times

These sectors have been defined by Machina Research: Economist Intelligence Unit.

As the industry evolves to new business models and usage mechanisms, instances such as the practical application of automated machine-to-machine connections can become a new spectrum of opportunity going forward, and at the same time, bringing greater efficiencies to multiple disciplines across a layered and horizontal platform made up of various sectors, mentioned above.

SAMENA and its membership see value in a constructive debate and discussion regarding the new Digital Economy. Such constructive, focused effort through committee and work group discussions would help deliver on the promise of today. If the M2M opportunity comes closer to some projections, it would certainly play a significant role in helping to displace older legacy revenues that are declining and in some cases, rather precipitously. The intended design of innovation on top of the operators' network environment can create strong new revenues.

The machines, indeed, are on their way to terminating inefficiencies and building omnipotent new revenue streams for all stakeholders involved. This is the new reality of digital economics.

Truly Yours,

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REGIONAL NEWS

GBI Connects the Red Sea to Milan With Advanced 100G Technology From Xtera

Gulf Bridge International (GBI), the Middle East's first carrier neutral regional network, and Xtera Communications Inc. (Xtera), a leading global provider of optical networking solutions, announced the full 100G connectivity between Zafarana cable landing station in Egypt on the Red Sea and Milan Point-of-Presence (PoP) in Italy. Xtera deployed its multi-purpose Nu-Wave OptimaTM platform in submarine and terrestrial line terminal equipment configurations delivering 100G waves in both the subsea and land sections of the 5,000-km Zafarana-to-Milan route. The subsea section across the Mediterranean Sea connects Abu Talat, Egypt to Mazara del Vallo, Italy and has been in service since the first quarter of 2012. It is the first commercial repeatered submarine cable system with 100G technology. The Italy and Egypt backhaul networks are believed to be the first commercial systems in the world with installed design capacity of 90 x 100G. The Zafarana-to-Milan route has its first 100G end-to-end connection with GBI offering routes from Europe to the Middle East and on to Asia. GBI is counting on the most advanced optical networking technology developments to deliver new services to the Middle East and beyond. The proven Nu-Wave OptimaTM multi-purpose platform offers unparalleled 100G WDM performance in real network conditions based on the combination of the industry's most powerful 100G technology and unique line equipment to face different span configurations. The deployment of 100G Nu-Wave OptimaTM solution over 8,000 km of optical routes for GBI represents an additional wide-scale 100G project for Xtera.

Intigral Announces Appointment of Dr. Ismaeel Makdisi as Acting CEO

Intigral, the Middle East's leading digital media solutions provider, announced the appointment of Dr. Ismaeel Makdisi as the company's Acting Chief Executive Officer (CEO). Dr. Makdisi replaces Karim Daoud, who served as the company's CEO for three years. Dr. Makdisi's appointment was announced by Intigral's Board of Directors as part of the company's new growth strategy, which will focus on its expansion into international markets, the building of new capabilities and the creation of new technologies. "Over the past three years, under Karim Daoud's leadership, Intigral has grown from strength to strength. It is now at an important juncture, marked by a revitalized growth strategy, even as it is posed for success from both, a regional and a global perspective," said Dr. Khaled bin Abdulaziz Al Ghoneim, Chairman of Intigral's Board of Directors. Dr. Makdisi previously served as Intigral's General Counsel and as Vice President of Corporate Affairs, in addition to heading its Mobile Advertising division. With over 21 years of experience in the United States and the Middle East and North Africa (MENA) region, he brings with him a wealth of diversified knowledge of the media and telecommunications industries. "I am honored to have been selected by the Board of Directors to help take Intigral forward. Karim Daoud's leadership and unwavering commitment has placed Intigral at the forefront of our industry and I am confident that we will continue to deliver on our promises and build on our success," Dr. Makdisi said.

Mobily and Sanofi Collaboration to Enhance Mobilized Healthcare

Etihad telecom (Mobily) and Sanofi, a global health care leader have announced their collaboration for boosting the Mobilized Healthcare services (mHealth) with an innovative approach in the mobilized healthcare services in Saudi Arabia. Sanofi and Mobily have committed this partnership aims to offer a state-of-art(IBG Star) device and the newest technology in diabetes management smart application; all of this will enable patients to communicate their diabetes related data to their physicians or health care provider. "The mobilized healthcare concept is expanding as patient electronic follow-ups, electronic records and disease and health related information is now available to the public as long as there's the supply of innovative and up to date e-health application, solutions and products which goes in parallel with a concrete, high speed reliable data transmission" services said Mobily CEO Khalid Al Kaf , adding " our partnership with Sanofi a health care leader will leverage the Moblized healthcare solutions in Saudi Arabia." Mobily is looking forward to maintain its position as a leader in (mHealth) through this collaboration as the group has already launched a several application and services concerning public health.

Etisalat Signs a Partnership Agreement with GAPCorp FNI to Deliver GPS Mobile Telecommunications Solutions

With the objective of providing mobile telecommunications solutions for Global Positioning Systems (GPS) services, Etisalat has signed a partnership agreement with GAPCorp FNI, a company that specializes in providing GPS services for vehicles. The agreement with GAPCorp will allow Etisalat to offer a wide range of positioning services such as hourly vehicle positioning, monitoring, follow up with emergency assistance, a geographical barrier service, automatic warning in case of theft, emergency cases warning facility, low battery warnings and other services. Under the agreement, Etisalat will provide special data-supportive GSM cards for positioning mobile devices within the vehicles. The GSM cards are able to send and receive data through the leased line connection, also provided by Etisalat, which links the GSM cards and the communication center at the company. In the first phase of the agreement, GAPCorp will sell around 100,000 GPS units, followed by a further 250,000, to reach a total of 350,000 units by the end of 2016. Moreover, in the project's second phase, GAPCorp plans to extend the application of the project to other regional and international countries.

Qtel Makes Passport Roaming Service Permanent

Qtel said it has made its Passport roaming service permanent, in response to demand. Qtel Passport provides 100 roaming minutes for all calls and 1 GB of roaming data for QAR 100, valid for seven days. It was launched as a promotion in July and it is available on 60 mobile networks in 35 countries around the world. If customers use up their Qtel Passport allowance during the seven-day period, then they will be charged QAR 1 per 1 MB of data or QAR 1 per minute until the seven-day duration expires, after which standard rates will apply.

Accenture Awarded Three-Year Contract for Implementation and Maintenance of Medicines' Evaluation Systems in Italy

Accenture has been awarded a new contract to develop, build and maintain an integrated Medicine Evaluation System by the Italian Medicines Agency (AIFA) – the national authority responsible for approving new medicines. Over the next three years, Accenture will provide AIFA with management consulting and IT services supporting all AIFA processes for administration and medical technology. This project, which will implement innovative technical solutions for AIFA and strengthen relationships with its stakeholders (patients, civil society, institutions and pharmaceutical companies), confirms AIFA's commitment to innovation, positioning the Agency at the forefront of European medicine agencies. Accenture delivers decision support and analytic solutions for clinical care, health administration, finance and patient operations for leading public and private health institutions worldwide.

Thuraya Launches the Mobile Satellite Industry's Fastest Handheld Hotspot

Industry leading Mobile Satellite Services operator, Thuraya Telecommunications Company announced the launch of its Thuraya XT-Hotspot product. Building upon the success of its Thuraya XT handheld, the industry's most popular and toughest satellite phone, Thuraya is introducing the XT-Hotspot, which is a pocket-size router that creates a Wi-Fi zone for multiple users to connect smartphones, laptops, and tablets to the internet over Thuraya's mobile satellite network. The XT-Hotspot is the only Wi-Fi router on the market offering a plug and play solution enabling easy and affordable internet access with the fastest satellite data speeds on a handheld of up to 60 kbps in the most remote of areas. The XT-Hotspot uses the GmPRS connection of the Thuraya XT handset, which supports faster connection speeds of up to 60 kbps, as opposed to 9.6 kbps currently offered on the market. The router creates a Wi-Fi zone of up to 30 meters, where multiple users can simultaneously access the internet seamlessly from their laptops or smartphones. It is a compact battery-powered device ideal for users from diverse sectors including NGOs, Government, Energy and Media.

Turk Telecom Renews SeaChange Multiscreen Monitoring Deal

Turk Telecom has renewed a contract with interactive TV specialist SeaChange for its Pulse Remote Managed Services and On Site Managed Services for monitoring the telco's back office and multiscreen video services. Turk Telekom's service management director Naci Ishakbeyoglu said, "We are fortunate to have SeaChange manage the day-to-day monitoring and reporting of our video services. The SeaChange team has been extremely easy to work with, defining the operational processes they would then manage and following through with expert monitoring and reporting around the clock every day of the year. It gives us great peace of mind to know we have video experts managing our overall system, which is critical to the success of our IPTV service."

Operator Leader's Vision

Mr. Tahsin Yilmaz
Chief Executive Officer
Turk Telekom

Mr. Tahsin is graduated from the Middle East University, Electrical and Electronics Engineering Department in 1989. He started his career at Türk Telekom in 1989, but has worked for different companies providing telecommunications services and products for 20 years. Having held executive positions at different levels in Turkcell, Telsim (Vodafone) and Aycell (Avea), the companies providing services in Turkey's mobile communications field, he was tasked with the responsibility for medium- and large-scaled projects in Nokia Siemens Networks between years 2004 and 2008. He was the General Manager of TTNET between March 2008 and September 2012 and has been the CEO of Türk Telekom since September 4, 2012.

Q. Turkey ranks in the top 10 countries worldwide in terms of Internet penetration for both Facebook and Twitter, how did you utilize this edge while previously working in TTNET and how Turk Telekom plans to make the most out of it?

A. We are proud of Turkey's high ranking position globally regarding social media usage. I was appointed as CEO of Turk Telekom in September 2012. Before, I served as CEO of our retail Internet Services Provider Company, TTNET for more than four years. Working at different parts of telecom sector including fixed & mobile operators and vendor side, I have experienced the phenomenal growth of internet and social media in Turkey. I believe there are three major drivers for Turkey's high ranking position in social media penetration; First, there is a strong demand driven by young dynamic population of Turkey for social media services. Turkey is among the fastest growing economies in the world and a booming country possessing unique opportunities with its key geopolitical location and extensive resources. As Turkish people, we like to share our ideas and life experiences with others. We like to express our ideas and ourselves online. I believe social media offers great opportunities for our need to share. Corporates use social media to sell and market their products and services and to actively manage customer relationship process. Personally, I am a big fan of social media. I am an active user of Twitter where I share with thousands of my followers many different things from the pictures of my field trips to interesting business ideas posted by other people. I can also hear first-hand via Twitter from customers about their experience with our products and services. They can share their ideas anytime anywhere.

Second, we have a good level of internet penetration and right enablers for social media. In order to increase internet penetration in Turkey, we continuously enriched our broadband services especially by increasing speed and capacity of data packages. We also increased PC and internet enabled device penetration via our device campaigns by Turk Telekom, TTNET and Avea. All these contributed significantly to the development of internet in Turkey. There were about 1.5 million ADSL connections in Turkey in 2005. Now, number of fixed broadband connections reached over 7 million. We achieved this robust growth thanks to our strong infrastructure throughout Turkey and sustained investments in network and channel. Considering the fact that Turkey's internet penetration is still behind European benchmarks, I am very optimistic about our growth potential. According to a recent market research by IPSOS, there is at least one internet enabled device in about 10 million households out of 19 million total households in Turkey. We believe there is significant potential for higher internet penetration and more usage.

Third, we have a content strategy to satisfy our customer's social media needs. TTNET created leading portals and services for music, video, game and TV in Turkey. We have invested significantly in content creation. Turkish local content is very important for millions of our customers. There are also other content which we expect to become more available such as online education and online shopping. The online education project of the government named FATIH offers significant opportunities for education content. Online shopping is also growing day by day in Turkey with significant growth potential. For example, according to a recent survey, currently only 24% of households use internet for online shopping compared to 87% for social media which shows the growth potential of online shopping.

As Turk Telekom, we are in the best position to provide right services and data packages with dynamic content for social media users. We believe this brings many competitive advantages to Turkey's achieving higher positions in internet and social media penetration worldwide. Turkey is expected to continue with that success story by delivering sustainable growth. We support this process with our broadband investments and convergence strategy.

Q. Please tell us about your upcoming ventures. Are you planning to collaborate with other telecom players in the market?

A. Turk Telekom is Turkey's world-class, integrated telecommunication and technology services provider offering its customers the complete range of fixed line, mobile, data and internet services. We work with global and regional leaders in information and communication technology in order to provide best products and services to our customers. We also sell our in-house developed products and services to other telecom operators.

We are focusing on digital life transformation. Turkish consumer is becoming digital by world standards and we want to continue to be catalyst in this transformation beyond connectivity by delivering value across verticals such as computing, content and e-verticals such as health. We aspire to drive this newly formed value chain by establishing incubation mechanisms and by orchestrating a sustainable partner eco-system including other telecom operators.

Q. What is the significance of Tivibu in Turkey?

A. Tivibu is Turkey's leading internet TV service developed and introduced by our retail Internet Service Provider Company TTNET in 2010. Under Tivibu brand, we offer web TV, IPTV, smart TV and mobile TV services to millions of broadband users. Tivibu Web reached more than 1 million subscribers within one year of its launch. Tivibu Home package offers more than 100 local and foreign channels with hundreds of high definition video-on-demand content.

New era TV platform Tivibu definitively changed TV-watching habits, finally offering the experience of world-class TV experience to Turkish customers. Tivibu also offers advanced TV watching features which are not possible via normal TV. Many Turkish TV viewers experienced features like catch-up TV or online video-on-demand first time in their life thanks to Tivibu's advanced technology. Our consumer feedback surveys show that catch-up TV and start-over TV are two key attributes which created strong interest.

TV is a focus area for us as a major service of our multi-play strategy. Similar to its internet user profile, Turkey ranks among top globally in terms of TV watching time. Turkish TV market already has strong players but we will differentiate our services via interactivity and bundle offers of voice, data, and TV.

Q. Please tell us about Turk Telekom's recent SeaChange multi-screen monitoring deal.

A. SeaChange has been a good partner so far for us in our IPTV roll out. It serves us as both systems integrator and primary technology provider. Most recently we extended a

contract with SeaChange for its managed services solutions for monitoring our back office and multiscreen video services. We receive daily monitoring and reporting of our video services. This constant monitoring is critical to the success of our IPTV service.

We will continue to provide our millions of customers with most advanced TV technology solutions by partnering with firms like SeaChange who are leading companies worldwide in their area.

Q. How do you aim to increase Türk Telekom's value through the privatization of its public shares?

A. Turkish Privatization Administration recently announced its intention to sell part of government's stakes in some assets including Turk Telekom. Most recently they announced appointment of investment banks who will advise on the potential sale of Turk Telekom shares. This is a shareholder decision and I respect any decision taken by our shareholders. As Turk Telekom Management, we will provide support to the process for it to be as smooth as possible. Regardless of the sale process, our job is to increase value for our shareholders and we will continue to focus on this.

Q. How Turk Telekom's fixed broadband network especially in fiber to the home/building (FTTH/FTTB) is contributing towards company's success?

A. As Turkey's leading technology and Telecommunication Company, we have the most extensive fixed line network throughout the country. We started an extensive fiber network investment to fulfill higher speed, higher quality needs and to transform our network for IP based services as well. We target to generate sustainable value through our targeted commercial activities in the medium and long term.

Most recently, we launched fiber internet transformation in 81 provinces of Turkey at the same time. Our fiber infrastructure of about 160, 000 km uniting all the cities keeps developing day by day. Our Fiber to the Building and Fiber to the Home networks now cover more than 1.5 million homes. We focus on growing the market by offering highest quality and optimized speed services. By improving our infrastructure by both green-field and brown-field investments, we both migrate existing ADSL customers to fiber infrastructure and acquire new customers with high speed broadband.

Complementing our fiber roll-out strategy, we also offer high quality TV services via our broadband offerings. Our retail ISP TTNET offers quad play packages of fixed voice, TV, internet, and country-wide free Wi-Fi hot spot access at thousands of locations.

All these developments contribute significantly to our financial and operational performance. Fixed broadband revenues, one of the main drivers of our revenue growth, now constitute a quarter of group revenues. Share of unlimited quota users reached 71% of TTNET's total customer base and average monthly data usage reached 25 GB levels. We are glad that we have made the essential investments in fixed broadband. We expect this upward trend to continue and plan our investments accordingly.

Q. The primary focus of Turk Telekom's recent investments was in 3G and fiber. Are there any other potential areas for Turk Telekom to look forward to?

A. As Türk Telekom group we have invested more than TL 10 billion in the last five years in our business. Our investment areas covered infrastructure, human capital, R&D and channel among others. As an integrated telecom operator, we think that it is indispensable for us to invest in information and communication technologies. Therefore, in addition to 3G and fiber investments we also invest in other information and communication technologies and in our IT group companies. These group companies are essential parts of our strategy of adding value to our customers. All of our group companies are well positioned to add value to both our customers and our group through the synergy they create.

Our group companies support the core business strategies. For example, our call center business AssisTT is critical for us to enhance customer satisfaction; products developed by Sebit (online education) and Sobee (online gaming) are bundled with other products of Turk Telekom/TTNET and support our Value Added Services strategy.

We foresee consumers will have multiple devices in Turkey like in early adopter markets. With multi-screen, there will be a natural shift in anywhere anytime data consumption and production, so it is critical to ensure that we have all the right constituents of technology platform to deliver such unique experience to our customers.

We believe these investments are essential for sector's and country's future. As Turk Telekom, we are very pleased to drive Turkey's telecom sector and prepare the country for the future's information society.

Preparing and Winning the OTT War

The invasion of new competitors broadly dubbed as Over-The-Top (OTT) players has the potential to challenge the entire existence of telecom operators as we know them today.

Operators - Prepare for victory against OTT competitors!

As global telco markets mature, operators face challenges of increased competition from fixed and mobile challengers and increasing market saturation. The Middle East is no exception. Moreover, a new trend is emerging an invasion of new competitors broadly dubbed as Over-The-Top (OTT) players. This trend has the potential to impact the telecom industry as a whole. Telecom operators, with their consumer insights and inherent ability to deliver breakthrough customer experiences, are uniquely positioned to win this war against OTT players. But, to do so, operators need to act now and choose the right mix of defensive and offensive moves to limit the voice and SMS degradation, while tapping into the new opportunities this new era offers.

Operators in many countries have become accustomed to their maturing and saturated markets with increased competition from fixed and mobile challengers. GCC markets have reached levels of saturation that surpass those of most European and North American markets. In addition, many Middle East markets have opened up as regulators stimulated increased competition. Operators, especially incumbents, have reacted by lowering prices and improving customer experience. They have also shifted their attention to improving efficiency by initiating cost optimization programs and outsourcing/offshoring selective activities.

> *Operators in many countries have become accustomed to their maturing and saturated markets with increased competition from fixed and mobile challengers*

Meanwhile, a new trend has emerged – which can potentially profoundly impact the telecom industry as a whole. In fact, it has the potential to challenge the very existence of telecom operators as we know them today. The traditional telecommunication value chain is reconfiguring with more and diverse players fighting for mindshare of subscribers. As a result, operators are increasingly confronted with new OTT competitors that offer video and audio via fixed or mobile broadband without the telecom operator or Internet Service Provider being involved in the control or distribution of the media itself.

While operators have closely monitored this trend, their focus has been more on the "data explosion" or "data tsunami" caused by increased media distribution over fixed and mobile networks to data-hungry consumers with their laptops, smart phones and tablets. This requires huge investments in networks with limited incremental revenues. The Middle East is no exception to this trend. YouTube statistics, which now account for 24 percent of global mobile traffic, reveal that with more than 90 million daily page views,

Saudi Arabia has the highest YouTube clicks per internet user in the world. With 167 million video views a day, the Middle East as a whole, is ranked as the second region, after the USA, in terms of the number of daily views.

OTT players are however having an even greater fundamental impact on telecom operators, and the battle has begun for voice revenues (especially high-margin mobile international traffic), SMS, and media. There are a number of illustrative examples of this. While Facebook Chat consumes 22 percent of all global instant message-related mobile bandwidth and WhatsApp carries 5 percent of global messaging traffic, operators like Telefonica in Spain and KPN in The Netherlands saw the number of SMS messages decline between 16-24% from 2008 to 2012; largely due to Mobile Instant Messaging. Also, in the UAE, total SMS sent decreased by 10% between 2010 and 2011 . Ovum estimates that consumers' increasing use of IP-based social messaging services on their smartphones cost telecom operators globally $8.7bn in lost SMS revenues in 2010, and $13.9bn in 2011 . There are already indications that this trend might be accelerating in some GCC markets, where some operators have seen reductions in SMS traffic of more than 30% in less than a year, mostly driven by adoption of free IP-based offerings such as WhatsApp, Viber, Facebook and BlackBerry Messenger.

> **" OTT players are however having an even greater fundamental impact on telecom operators, and the battle has begun for voice revenues (especially high-margin mobile international traffic), SMS, and media "**

While several telecom operators in the GCC have made huge investments in fiber networks and IPTV platforms, OTT players are easily able to offer media via their own platforms and eco-systems. OEM's proprietary systems with set-up boxes such as Apple TV or 'smart' televisions like Samsung's have their own embedded media eco-systems, which need only a broadband connection. The impact of which is reflected in the USA cable television viewership; subscribers dropped 4 million between 2006 and 2011. In parallel, OTT player Netflix almost doubled its subscriber base to almost 30 million.

The OTT invasion is occurring on four distinct battlegrounds: mobile voice, messaging, media, and cloud services. We believe that telecom operators, with their consumer insights and inherent ability to deliver breakthrough customer experiences, are uniquely positioned to win this war. Therefore, operators need to choose now the right mix of defensive and offensive moves, in order to limit the voice and SMS degradation while tapping into the new opportunities that this new era offers.

Offensive and defensive strategic moves per battleground

To successfully face OTT challengers head-on and leverage the opportunities for growth, operators require a variety of strategies in each of the four distinct competitive arenas of voice, messaging, media and cloud servicing.

In voice, especially mobile, operators face a significant risk of eroding revenues and profitability from Voice-over-Internet Protocol (VoIP) players such as Skype. But, they still have the opportunity to influence consumer behaviors. Being the only region still with meaningful growth in Minutes of Use (MoU), Middle East operators are in a unique position. While The Middle East showed a 3.5% growth in MoU in Q1 2012, other regions declined; North America (-5.3%), Asia-Pacific (-0.6%), and Western Europe (-0.4%) . This places the region in a position of advantage as they prepare for the voice battleground with the OTT players.

Operators can for example introduce "smart" plans by integrating voice and data bundles and linking them to devices. In the USA, Verizon has already launched a data centric "Share Everything' plan offering unlimited voice minutes, unlimited text and shareable data that can be used across up to 10 devices. Other USA operators offer similar packages. Probably the most important approach is to create a clearly differentiated quality positioning given the challenges in delivering high quality VoIP. Operators such as Orange already offer HD Voice in 15 countries as a differentiator to stave off competition from VoIP players. Other strategies could include launching own OTT solutions and focusing more on wholesale to mobile VoIP providers. For example, T-Mobile USA has setup 'Bobsled', an intrapreneurial venture offering users free calls to Facebook friends and any mobile or landline number in the U.S., Canada or Puerto Rico, from most browsers or iPhone/Android applications.

> **" Operators can introduce "smart" plans by integrating voice and data bundles and linking them to devices "**

The challenge in messaging is to delay the shift in consumer behaviors from traditional SMS to social networking and Instant Messaging (IM) while tapping into the IM opportunity itself. The price of SMS usage is an important driver for subscribers' migration to alternative IM offerings. However, user surveys indicate that the enhanced functionalities of IM services compared with plain SMS - such as multi-user conversations, sharing of pictures, and status updates - is for certain subscriber segments an even stronger driver to shift than just price. Operators therefore need to consider offering enhanced functionalities in the IM domain, by either partnering or entering alliances with other players, or by offering their own platforms. For example, South Korean operators introduced an IM app with interoperability across their networks resulting into a major increase in IM traffic with limited impact on the number of sent SMS. Deutsche Telekom, Orange, Telecom Italia, Telefonica, and Vodafone

have publicly stated their intention to deploy Enhanced Rich Communication Suite (RCS-e) services, which will allow fully interoperable IM services in Spain, Germany, France and Italy.

In parallel, operators will have to focus on enterprise and machine-to-machine (M2M) messaging. Shipment of cellular M2M devices is forecast to grow at a compound annual growth rate (CAGR) of 24.6 percent to reach 152 million units per year by 2016 . In the Middle East, the M2M market is dominated by Turkey, which had in excess of 1 million M2M subscribers in 2011. Opportunities for operators in the Middle East exist in partnerships with other operators to gain a strong foothold in the emerging M2M business, similar to the M2M Service Alliance between operators such as Deutsche Telekom, KPN, Swisscom, Vodafone, and others.

In media, the battle for the consumer is already raging with OTT players not only fueling the data traffic explosion, but also claiming stake to consumer mindshare and future telecom relevance. This battle will be fought on many fronts - television, video, gaming, music, advertising, and other digital services - and among adversaries that include telecom, media companies, OTT players, device and equipment manufacturers, and even artists. The success formula here is to provide superior customer experience, including service quality, convenience, and a broad content offering. Content might still be king, but customer experience rules in the digital era. For telecom operators, this means an all-inclusive approach must be at the core of a winning value proposition. Such an approach will require operators to establish successful partnerships with specialized players, selective acquisitions, or establishing separately positioned entrepreneurial ventures with differentiated new offerings.

The nascent, fast-growing Cloud Services market is opening up opportunities in consumer and enterprise businesses. Because the cloud market is so new, this is the optimum time for telecom operators to begin to capitalize on the opportunity with the right value propositions, the right technology and go-to-market partnerships. In fact, Cloud services offer operators a rare opportunity to decrease churn as subscribers will be less motivated to leave once their data, such as pictures and music, has accumulated into operators' clouds. A good example is Orange's partnership with VCE (The Virtual Computing Environment Company, formed by Cisco, VMware and EMC5). Orange delivers a broad range of cloud-based services while managing and owning customers as the single point of contact.

Turning the OTT threat into a profitable growth engine

It is apparent that the telecom industry is at a critical point in history. The battle for voice, messaging, media, and cloud has begun. In the short term, winning or losing will impact growth potential and profit margins of operators. In the long term, however, it could determine their relevance in the telecommunications industry.

We believe that telecom operators will be best prepared to meet the inherent challenges in this battleground and emerge victorious if they take the following steps, now:
- **Choose your battlefields:** be clear about where, when, how, and with whom you are going to compete.
- **Redefine value propositions and business models** that are both agile and adaptable, and partnering will be the best way to do this.
- **Create new platforms and approaches towards** customer experience.
- **Rethink organizational approaches** to be more creative, flexible, and ready to adjust with the right organizational structures, skills, systems, and mindsets.
- **Remain flexible & ready to adjust with the right strategy on each battleground.**

The Middle East is undoubtedly facing new challenges and operators have work to do to face the growing number of OTT players. But, the regional telecom industry is also in a strong position to turn the OTT threat into a profitable growth engine opportunity. Telco operators are in an enviable position with existing customer bases and with effective customer analytics they have the potential to harness the growth opportunities, unique to the Middle East. Is your profitable growth engine ready?

ATKearney

OTT applications are driving significant global mobile traffic growth

Bandwidth growth in mobile applications Growth in H2 2011

Source: Allot; A.T. Kearney analysis
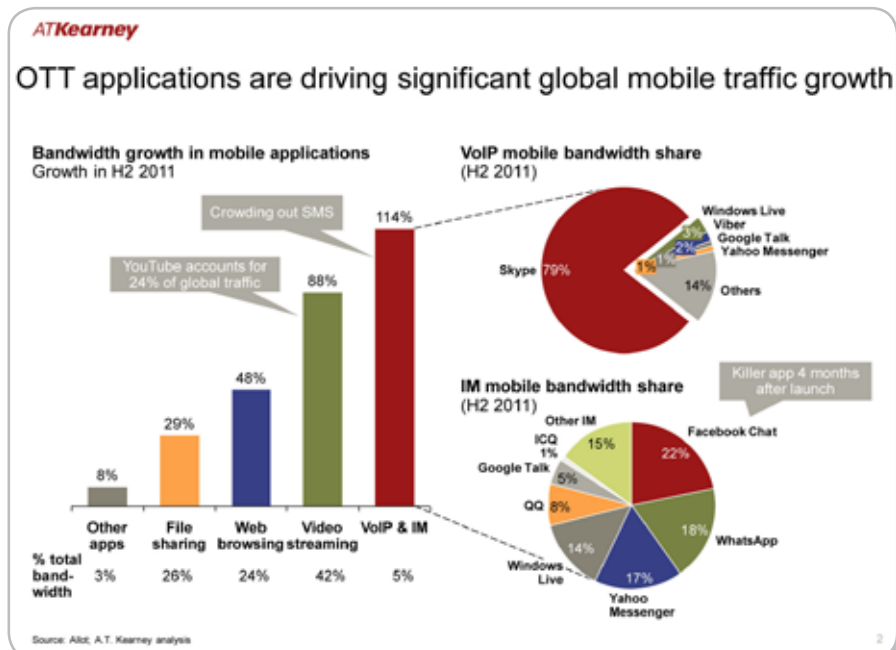
Marc Biosca
Partner and Leader
Middle East Communications, Media, and Technology Practice
A.T. Kearney

Rob Van Dale
Principal in the Middle East Communications, Media, and Technology practice
A.T. Kearney

ICT Infrastructure: Access & Use
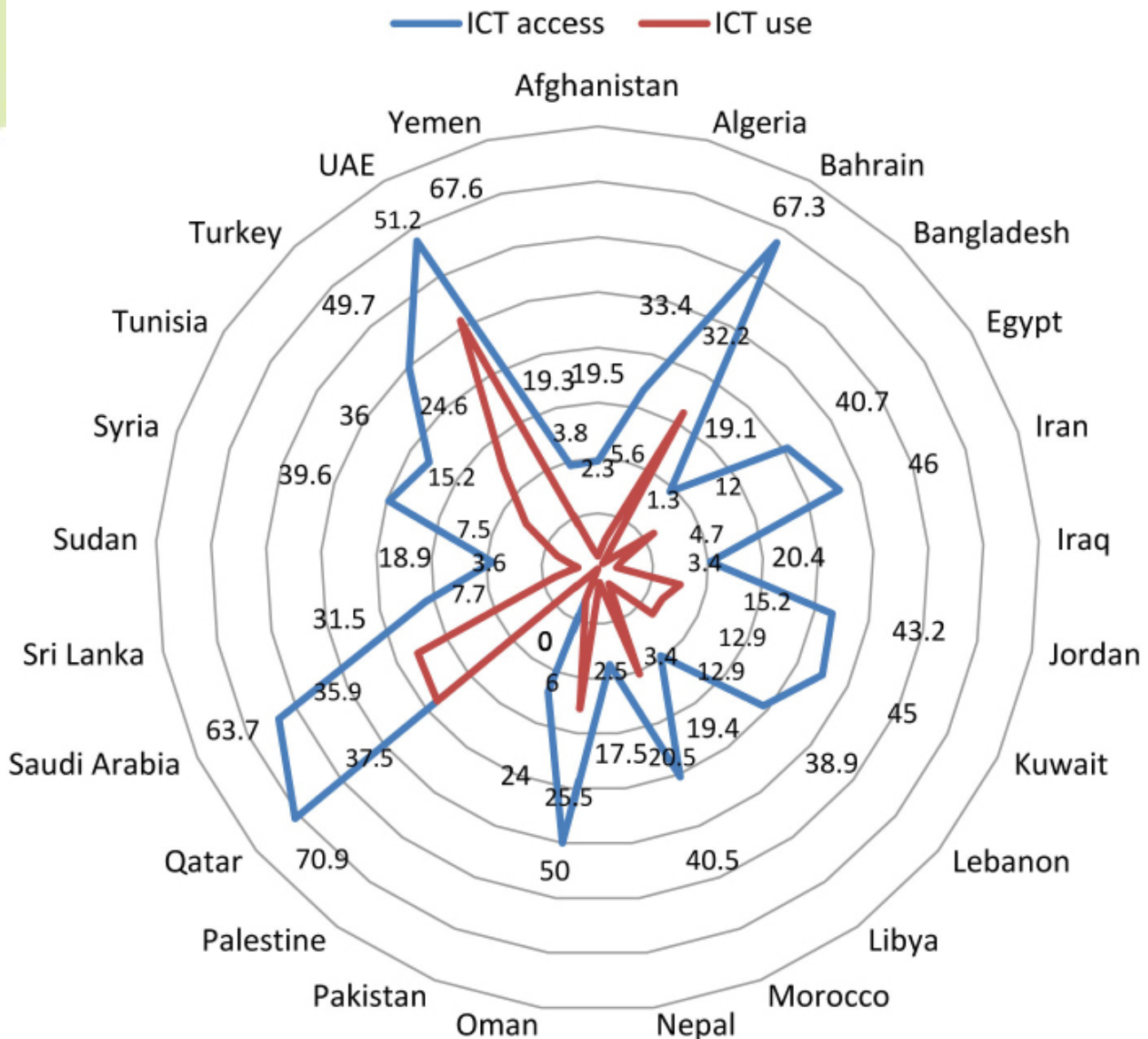
Image Source: SAMENA Telecommunications Council
Data Source: The Global Innovation Index 2012 by INSEAD
Research Note: An analysis of ICT infrastructure with regards to their access and usage is done in the 25 SAMENA countries. The services were rated between 1 and 100 with 100 being the highest possible value. It was observed that with regard to ICT access Qatar, United Arab Emirates and Bahrain are the top 3 countries respectively. Bangladesh, Sudan and Nepal are the bottom 3 countries within the SAMENA Region.
United Arab Emirates, Qatar and Saudi Arabia are the top 3 countries with regard to ICT use. Nepal, Afghanistan and Bangladesh complete the bottom 3 countries.
Data was Palestine was not available.

Regional Analysis of ICT Infrastructure
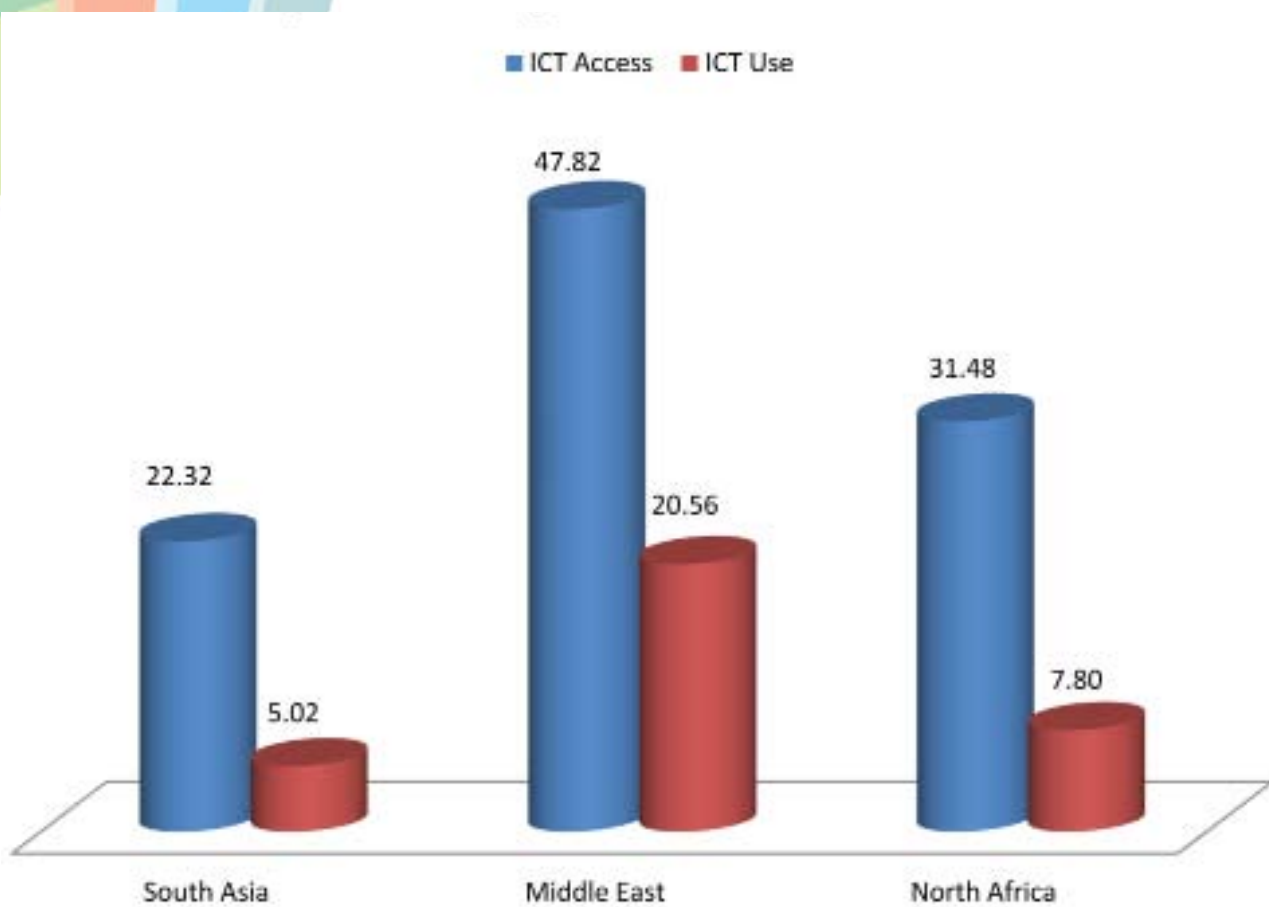
■ ICT Access ■ ICT Use

47.82

31.48

22.32

20.56

5.02

7.80

South Asia   Middle East   North Africa

Image Source: SAMENA Telecommunications Council
Data Source: The Global Innovation Index 2012 by INSEAD
Research Note: A regional analysis of ICT access and use demonstrates that Middle East is way ahead of South Asia and North Africa both in terms of ICT access and use. North Africa stands second both in terms of ICT access and use whereas South Asia lies at the bottom. This has had a direct impact on economy of these regions and the region with better ICT access and use has demonstrated a better economy.

SATELLITE NEWS

New Satellite Broadband Solution for UFU Member

The Ulster Farmers' Union, in partnership with satellite broadband provider Onwave, has a new satellite broadband solution for UFU members. Onwave offers a broadband solution to its members who have to date been unable to access a satisfactory broadband service. UFU deputy president Barclay Bell said: "Onwave's basic package offers a minimum download speed of 8 Mega-bits per second and a monthly data volume of 8 Giga-bytes. We know from speaking to our members that many of them are unable to access good broadband so we have turned to satellite technology to overcome this. I would encourage any of our members who would like to get online but have so far been unable to do so, to contact Onwave and find out more. It is very important to us that all our members have good access to the internet which is so important to family farm businesses." Onwave is guaranteed to provide reliable, affordable broadband services to its members and is offering one year's free line rental with the its phone service, which will replace the existing land line in use. They are also offering special discounts to all UFU members.

Intelsat Signs Agreements with Leading Bulgarian DTT and DTH Providers

Intelsat S.A., the world's leading provider of satellite services, announced new agreements with two of Bulgaria's premier media companies for Intelsat transponder services to enable digital terrestrial television (DTT) and distribution of high-definition programming. Under the first agreement, NURTS, the primary tower company and sole DTT operator in Bulgaria, will use capacity on Intelsat 12 at 45° East to contribute content to its terrestrial towers for DTT services launching soon in Bulgaria. Intelsat 12 offers a favorable look angle to serve Bulgaria's mountainous landscape, and its signals reach transmitter sites in even the most remote and rugged areas. Intelsat currently provides proven DTT solutions in several nations, supported by advanced coding and modulation techniques that enable efficient use of bandwidth. Intelsat also hosts video neighborhoods that serve all of the populated continents, offering increased access to the most popular content that complements the programming distributed by DTT providers. In the second agreement, Bulgarian Telecom (VIVACOM), Bulgaria's national telecommunications provider, also signed a multi-year agreement on Intelsat 12. VIVACOM plans to add high-definition programming to its recently launched direct-to-home (DTH) platform for delivery to viewers in Bulgaria, greatly expanding its current offerings.

Europe's Satellite Navigation System Galileo Launched

A very significant milestone in the construction of Galileo - Europe's satellite navigation system - was achieved. Two operational satellites were launched on 12 October at 18:15 UTC from Kourou, French Guiana, using a Soyuz launcher. These two new satellites, named David and Sif1, have joined another pair of satellites that has been orbiting the Earth since October 2011. Together they form a mini-constellation of four satellites needed for Galileo's validation and fine-tuning. The new constellation will allow improved services ranging from more precise in-car navigation, effective road transport management, search and rescue services, more secure banking transactions as well as reliable electricity provision, which all rely heavily on satellite navigation technologies to work efficiently. Galileo will provide EU business opportunities for a wide variety of applications in many sectors of the European economy, including electricity grids, fleet management companies.

Inmarsat Showcases Technology Portfolio and Unveils New Roadmap at Gulfcomms 2012

Inmarsat, the leading provider of global mobile satellite communications services, is showcasing its expanded portfolio of business-critical voice and data services at Gulfcomms 2012. The company will also be previewing the major new possibilities that will be enabled by its next generation of satellites and services that will be launched in 2013 and fully commercially available in 2014. Delivered via the world's most reliable, global satellite communications network, Inmarsat's comprehensive current offerings include voice, broadband and M2M (machine-to-machine) connectivity for a broad range of sectors, underpinned by 99.9% network availability.

Gulfcomms 2012 will see Inmarsat showcasing its product roadmap, including the new Alphasat I-XL satellite which will enhance the company's L-band service capabilities across the Middle East and Africa, providing even faster streaming performance and greater capacity. In addition, Inmarsat will be introducing a new, higher BGAN streaming rate service, which becomes available in 2013.

Eutelsat brings free internet to Albania

The Albanian government is bringing free public internet access via the Albanian postal service using the Eutelsat satellite system. The plan is to connect 850 post offices, schools and local government offices in rural areas to the internet as part of the Digital Age of Communications Agenda initiated to increase free public Internet access for Albanian citizens. Eutelsat's Skylogic affiliate has teamed up with its longstanding partner in Albania, Tring Communications, to equip schools and post offices with the Tooway broadband service powered by the Ka-Sat satellite. The first of a total 1,000 access points are currently being deployed, using an 8 Mbps satellite service that enables users to benefit from the Internet for information and education and to access services that include video streaming. The schools and post offices benefiting from Tooway are located across Albania, including in the most rural and hard-to reach areas that are easily served by a satellite service.

Avanti's Hylas 2 Satellite Service Live

Avanti Communications Ka-band satellite HYLAS 2 is now fully operational with all beams fully functioning and - for the first time - providing coverage to hundreds of millions of people across Africa, Caucasia and the Middle East. HYLAS 2 carries 24 active Ka-band user beams and six gateway beams providing two-way communications services to facilitate high-speed delivery of data to end-user applications such as corporate networking, IP Trunking, cellular backhaul, broadband Internet access, business continuity services and video distribution. Using the HYLAS 2 spacecraft, Avanti provides its data and video services to Northern and Southern Africa, the Caucasus, Eastern Europe and the Middle East. In addition, the spacecraft is equipped with a steerable spot beam, also operating at Ka-band, which can provide coverage anywhere on Earth that is visible to the satellite.

Emtele Selects Hughes' Satellite Technology for Remote Monitoring

Hughes Europe, the European subsidiary of the global leader in satellite broadband solutions, Hughes Network Systems, LLC (Hughes), announced that it has been awarded a contract by Emtele, a specialist value-added reseller in global machine-to-machine (M2M) solutions for remote monitoring, to supply high availability satellite connectivity services as part of a ten-year Smart Grid project for Finnish energy giant, Elenia. Based on the contract, Hughes Europe and Emtele have together now successfully implemented the Smart Grid solution and it has been fully taken into production by Elenia. At the heart of the solution is Emtele's broadband FieldCom® network service, which utilizes the very robust Hughes HN System platform and related satellite services for nationwide coverage, providing high availability connectivity to all electric distribution substations that are without access to reliable terrestrial networks. The communication network will enable Elenia to remotely monitor more than a thousand unmanned energy substations and other sites throughout Finland for the purposes of electric distribution remote management, including both security and maintenance.

Space Systems Loral Selected to Provide Direct Broadcast Satellite to DISH Network

Space Systems/Loral, the world's leading provider of high-power commercial satellites, has announced that it was selected to provide a direct broadcast satellite (DBS) to an affiliate of DISH Network. The satellite, EchoStar XVIII, is designed to provide exceptional sparing flexibility for the DISH Network fleet. EchoStar Satellite Services L.L.C., a subsidiary of EchoStar Corporation, is providing space program management services to DISH Network for the EchoStar XVIII satellite. These services include managing satellite construction, launch vehicle procurement and integration, in-orbit testing, and delivery. After launch of the satellite, EchoStar will provide spacecraft telemetry, tracking, and control services through its multiple Spacecraft Operation Centers. Space Systems/Loral designed EchoStar XVIII based on the SS/L 1300 satellite bus, which is the industry's highest power platform for advanced television services such as high definition television. The satellite will be used by DISH Network to augment its existing fleet and to assure the highest level of ongoing service.

Satellite – Can we Imagine a World Without Them!

Until 1950's our planet had only one satellite and with the launch of sputnik 1 in 1957, our planet was proudly able to say now it have two satellites. The satellite travelled at 29,000 kilometers per hour, taking 96.2 minutes to complete an orbit, and emitted radio signals at 20.005 and 40.002 MHz. Even though, it had been burned up on re-entering Earth's atmosphere on in 1958, it still was a huge success in human expanding his kingdom outside the world.

Since then hundreds of satellites have been launched successfully and are now playing their role in helping the mankind in many of the ways including communication, research, defense, and entertainment among others. Like a sci-fi movie where mankind is often complacent of the imminent challenge, so too have we become complacent of our dependence on satellites. Our life is becoming more and more linked to the satellite for we are experiencing increasing number of services that are reliant of satellites thus we can never think of a day without satellite.

Satellites are vital to us in many ways that we often take for granted. They provide us with communication, radio, entertainment, tracking, research, and other vital facilities. They allow us to make communication links long distances. They provide us with a global positioning system (GPS) so that we know exactly where we are and we can find

> ❝ *Our life is becoming more and more linked to the satellite* ❞

directions to anywhere we want to go. They circle the earth and relay weather conditions and forecasts. The government uses them for defense and safety purposes. They are used for space research. Until recently, the satellites have been increasingly used in providing broadband internet facility to remote areas thus overcoming the digital divide. Satellites even observe fields and tell farmers which areas need to be fertilized in order to produce healthy crop.

For the telecom & ICT service providers, satellite, no doubt, is one of the cost effective backhaul alternative in areas where traditional approaches such as fiber and copper cable are not available. Industry analysts predict that there will be a strong business case for satellite broadband services across the region and the sector is expected to flourish over the next few years with multimedia application such as video-on-demand and Internet TV services. Although the satellite services are still in its nascent state in different parts of the world including the Middle East and Africa, some significant advances are expected with the launch of a satellite with Ka-band capacity in the region.

The satellite broadband industry, at the same time, appears to gain momentum as there are now more than one million users worldwide. These subscribers quite often opt for satellite broadband because they cannot get the high speed connectivity from traditional services such as DSL, Cable, FTTx, among others in their respective markets. According to Satellite Industry Association, commercial communications satellites represent 37% of the total number of satellites. With a number of international players looking into the regional markets for investment in satellite industry, the satellite broadband sector is expected

experience considerable growth. Reportedly, a number of operators are planning to launch new satellites over the next year to improve the bandwidths and for further boosting the demand for new services and both service-based and content-based competition in the region. An increasing in number of operators are eyeing the Middle East and North Africa keeping in view of the growing bandwidth demand in these regions. Consumer satellite broadband revenues have increased by almost 10% from US$1 billion in 2009 to US$1.1 billion in 2010. Similarly, mobile satellite services revenues grew by 5%, from US$2.2 billion in 2009 to US$2.3 billion in 2010. Demand for satellite capacity is evolving and satellite operators are thus exploring new ways to offer satellite broadband services in an efficient and cost effective way.

The mounting reliance on satellite-based services has resulted in enormous positive developments, both for the public and for the private sector. But that reliance comes with risks, risks that you are all familiar with, risks that the general public isn't, we think, as familiar with. The satellite industry thus needs to progressively work towards understanding the dynamics of the market and the demands of the end consumer. With constantly evolving technologies, increasing consumer demand, emergence of cutting applications, the need for satellites is growing. Hence, the satellite industry has to play a decisive role in order to ensure continual progress of overall satellite foray.

The direct-to-home sector has congregated even better momentum since the launch of digital direct broadcast service. The main inconvenience is that without cable or satellite, one may fail to enjoy on a lot of live sports and live news coverage (despite the fact that more network websites now stream coverage of main events). And one may be unable to record shows to watch later. Since the early stages of the long distance telephone network, there has been a requirement to link the telecom networks of one state or a country to another. Though Submarine cable is one way to connect. On the other hand, there are times where a large long distance carrier will prefer to create a satellite based connection with transoceanic points, distant regions or developing countries that do not have an advanced communications infrastructure. Associations like the international satellite consortium Intelsat have satisfied much of the customers' requirements globally for this type of service.

There are a many benefits of satellite communications in a disaster, particularly for the "4Ci" aspects of Disaster Recovery (Command, Control, Communications, Computers and intelligence) as well as for re-establishing communications to and from end users, which means without a satellite a disaster would become tenfold. Satellites provide almost immediate infrastructure in the regions where any presence of technology infrastructure has been wiped out, or where it by no means existed in the first place. In conditions of liberty from terrestrial communications systems and virtually global coverage, satellite communications is suitable as a part of today's recovery plans. Without the presence of satellite phones, there could be swear security obstructions. These products can be used by public and SMEs to have security over assets and resources and to save endangered human lives. Satellite phones can operate virtually anywhere unlike GSM cell phones that is only operational in specific areas of coverage, satellite phones carry the call/data over an exceptionally clear, secure Code Division Multiple Access

(CDMA) satellite signal. Similarly, Globaltouch's Globaltrakker is a foremost service for keeping a close check and balance for corporate or individual assets anywhere in West Africa. Globaltrakker service unit is secured to clients' properties or other resources. The self controlled tracking unit sends the locality and alarm report across the Globaltouch satellite network that allows the users to trace, and map mobile assets all over West Africa and its nearby places. Without satellites, asset tracking would not be possible resulting in a challenging scenario.

Without the satellite there would be zero connectivity for last-mile localities or areas with no tradition ICT infrastructure. If we look at the defense system especially in the naval community, satellites offers good communication links to ships in the deep seas. These links connect the ship to a land based point of presence to the respective nation's telecommunications system. Similar to the marine based service, there are VSAT devices that are being utilized to set up communication links even from the world's most inaccessible areas.

> *Without the satellite there would be zero connectivity for last-mile localities or areas with no tradition ICT infrastructure*

Most significantly satellite messaging service for commercial jets is impossible without geosynchronous satellites that allow a passenger on an airborne aircraft to connect directly to a land based telecom network. It's impossible to predict the earth weather without the satellites. The weather satellites are helpful for the farmers and fishermen, whose living totally relies on weather and from time to time with the assistance of these satellites the lives of many people are saved mainly of fishermen. Satellites help oil companies to discover oil and gas reserves. The broadcasting companies are dependent on satellite technology to broadcast a diverse range of channels together with interactive channels. Satellite helps in investigating the space and even our plant. Some of the satellites are even so much accurate that you can easily trace an object on earth by virtually watching it.

Satellite based services are up-and-coming with more services becoming reliant on satellites including, agriculture, healthcare, banking, defense, communication, weather forecasts, and above all, telecommunications networks. With this, can we imagine what life would be without satellite? With our ever-increasing dependency satellite-based communications, broadcasting, and research services, our life today is more contingent to the satellite systems for they play an ever more vital role both in society and the global economy. Industries from entertainment to communications have flourished while organizations concerning emergency services and defense have been using satellites more progressively than ever before.

Bocar A. BA
President
SAMENA Telecommunications Council

REGULATORY NEWS

TRA to Extend SIM Card Re-registration by Three Months

The UAE Telecommunication Regulatory Authority (TRA) will extend the first phase of the re-registration of mobile SIM cards across the emirates by another three months. TRA told the media that the mobile subscribers in UAE who failed to update their personal data for the operators, Etisalat and du, their network will not be disconnected and they will be given three months more to finalize registration procedures. Mobile subscribers who got SMSes from the telecom service providers to update their personal information within three months and failed to do so, their mobile connection will not be disconnected. But they will be given another three months to conclude their re-registration with the second phase.

Kyrgyzstan Allocates LTE, WiMAX Frequencies to 12 Operators

The Kyrgyzstan State Communications Agency has allocated LTE and WiMAX frequencies under the new simplified procedure to twelve companies. They are Asia Info, Global Asia Telecom, Totel, Aknet, Kurulush Invest, T-Com, Fraton Plus, Foris Telecom, Aytel, WTT, Sayma Telecom and Intranet KG. The agency said 58 LTE base stations have been deployed in the Chuya region, as well as 65 WiMAX base stations in the Chuya region, Bishkek, Osh and Karakol.

Nigerian Regulator Sets December Deadline for MNP

The Nigerian Communications Commission (NCC) has set December as the deadline for the implementation of mobile number portability (MNP), according to The Punch. NCC director of public affairs Tony Ojobo said the commission would do everything possible to ensure the target was achieved. Ojobo said in preparation, the NCC had licensed a consortium of three companies, namely Interconnect, Saab Grintek of South Africa, and Telecordia of the US, to set up a clearing house and put in place the necessary infrastructure. The Executive Vice-Chairman Eugene Juwah had said the consortium would be given six months to roll out its infrastructure and another two months for testing, with the expectation that MNP would begin in September

Hungary Reduces Porting Time to 2 Days

Hungary's telecom regulator NMHH adopted new regulation whereby the portability process has been reduced to 2 days from 8 days as of October. The change applies to both fixed and mobile telephony services. According to the new decision, the request for porting a number should be answered in maximum one working day, and the maximum duration of the implementation procedures is 1 working day. A donor operator may only refuse number portability requests if customers who initiated a porting process have overdue bills that are older than 30 days.

Aeronet Acquires 2.5 GHz Spectrum

Aeronet, a Broadband Service provider, is pleased to announce that it has entered into a long-term de facto lease agreement for wireless broadband spectrum which covers Puerto Rico. "2.5 GHz Spectrum in Puerto Rico is currently held by industry leaders AT&T & Sprint. Now Aeronet joins this elite group of operators as the new spectrum holder in the 2.5 GHz band," expressed Gino Villarini, President of Aeronet. "This venture catapults Aeronet as the only Licensed Internet and Data Service Provider in PR." The FCC recently approved Aeronet long term lease for a 2.5 GHz Island wide Spectrum License. The new Spectrum would allow Aeronet expansion of its services by utilizing the exclusive 2.5 GHz band for Backbone and Customer Access. 2.5 GHz Spectrum has traditionally been used for customer access and last mile services. On the US the mayor holder and user of 2.5 GHz spectrum is Clearwire, which uses the spectrum to provide Broadband Access to its customer utilizing WiMAX and 4G LTE Technology. In 2011, the Company completed a US$1.5 million investment to upgrade its network. More investments are being made in 2012 with plans for more capital investments for the year 2013.

FCC to Auction 300 MHz of Bandwidth by 2015

The Federal Communications Commission has announced that it will be adding more bandwidth and thereby increasing the spectrum space that is currently being offered to carriers by 2015. The FCC plans to add 300MHz of bandwidth by the end of 2015 for use by high speed carriers, announced the FCC Chairman, Julius Genachowski. Most of the spectrum up for grabs will be in the bands currently servicing AT&T's LTE and T-Mobile's HSPA service. The AWS spectrum which will be auctioned will lie between the 1755MHz and 1780 MHz bands and any carrier obtaining spectrum in these bands will have to share it with the federal government and its agencies. Acquiring more spectrum is going to be a key aspect for carriers over the next few years as data usage is expected to increase exponentially in the coming decade. T-Mobile has stated that acquisition of more spectrum will provide a much needed fillip to its LTE efforts that are set to rollout next year. MetroPCS is also looking to pick up additional spectrum to expand its services, and perhaps the fact that MetroPCS will soon gain approval for acquisition of 14 bands of spectrum was reason enough for T-Mobile to acquire it. 300 MHz is itself a large swathe of spectrum to auction, but the official target is actually even more, to allot 800 MHz by the end of 2015.

CCK to Decide on MTR Cut Soon

The Communications Commission of Kenya (CCK) is expected to defy the President by announcing a cut in the mobile termination rate. CCK Director-General Francis Wangusi told the Business Daily that the board will meet soon to agree on whether to lower the rate to KES 1.44 or KES 1.60. President MwaiKibaki issued a directive in August that the Ministry of Information should not implement the MTR cut before a new study on the same is conducted. The operators had in May struck a deal to lower the rate to KES 1.60 a minute on 1 July, from the current KES 2.21. The regulator contracted government think-tank Kenya Institute for Public Policy Research Analysis to conduct a study on the impact of a lower MTR on the economy and operator finances. Information ministry Permanent Secretary BitangeNdemo said that the government had yet to see the KIPRRA report.

2G Spectrum Auction: Telecom Stocks Hit as EGoM Recommends One-Time Spectrum Fee

After an Empowered Group of Ministers (EGoM) recommended a one-time fee on existing operators for spectrum they hold beyond 4.4 MHz, telecom stocks shed up to 4 percent on the bourses on next day. Operators wishing not to pay the additional fee would be allowed to relinquish the excess spectrum beyond 4.4 MHz. The one-time fee would be imposed from the day the Cabinet takes a decision on the matter. Idea Cellular dropped as much as 4 per cent on the Bombay Stock Exchange (BSE), before trading 3.18 per cent lower at Rs 82.10 in noon trade. BhartiAirtel was also trading in red, down 1.35 per cent at Rs 266.50. Reliance Communications was down 1.51 percent at Rs 62.15. "The move will negatively impact incumbent players that are not hit by a Supreme Court order to revoke permits in a scandal-tainted 2008 sale and are not required to bid in the auction," Angel Broking said in a report. The Supreme Court in February had cancelled 122 licences granted during former Telecom Minister A Raja's regime.

Ofcom Welcomes Progress on 4G Broadband Delivery

Ofcom has welcomed the "significant progress" made recently in moving towards the delivery of competitive 4G mobile services across the UK. The government recently announced plans to move the 4G spectrum auction forward, in a move which should allow next-generation mobile services to be provided in the 800MHz and 2.6GHz frequency bands by spring 2013. This came after O2 and Vodafone agreed to drop plans for legal action against the decision to allow EE to launch 4G this month using its spare 1,800MHz spectrum. As such, Orange and T-Mobile customers will be able to access 4G services from October 30th - with 16 cities due online by the new year. Three may also be able to launch 4G broadband soon, having agreed to purchase some of EE's 1,800MHz spectrum - as required by competition rules. Other broadband providers will be able to launch their own services - supported by super-fast dongles and Mi-FI devices - from early 2013. Ed Richards, Chief Executive at Ofcom, said the actions it has taken with the broadband industry and government have avoided "significant delay". He said this is "tremendous news" for consumers, who might otherwise have waited "a considerable period" for the super-fast mobile broadband services.

FCC Approves Plan Sell TV Airwaves for Use by Smartphones

The Federal Communications Commission has approved a plan to buy unused television airwaves and auction them off for use by smartphones. The plan would raise an estimated US$15 billion for the government and help meet the rising demand for wireless computing. Part of the funds raised would be dedicated to the creation of a nationwide radio network for emergency workers. The auction is expected to take place in 2014. Verizon Wireless and AT&T Inc., the nation's two largest wireless companies, issued statements welcoming the FCC decision. Both companies have been actively seeking to acquire new frequencies to expand wireless coverage. Verizon recently won approval to buy frequencies from cable companies, but AT&T's bid to purchase T-Mobile, the nation's fourth largest provider, in a bid to acquire more wireless frequency was rejected.

A SNAPSHOT OF REGULATORY ACTIVITIES IN SAMENA REGION
Active Consultations & Invitations for Feedback

United Arab Emirates

For building the digital society, the TRA is developing a draft National ICT Policy 2013-2016 for submission to the Board. In keeping with the TRA's values of transparency and sector engagement, the TRA is conducting a Public Consultation on the draft National ICT Policy 2013-2016. The objective of the Consultation is to give all stakeholders the opportunity to review the draft Policy and contribute to its development before a final draft is submitted to the Board. Closing Date for submission of Initial Responses has been fixed as October 11, 2012. **(July 26, 2012) www.tra.gov.ae**

Oman

The Telecommunication regulatory authority has issued a public consultation on 'Analysis and Recommendations for Market Definitions, Dominance and related Regulation'. The objective of liberalization is to promote competition which is believed to deliver better services in terms of price and quality. In order to maintain an effectively competitive environment and to provide necessary safeguard from the abuse of dominance the TRA has set a competition framework based on Ex-ante and Ex-post Regulations and Guidelines for the Telecommunications Sector of Oman. The TRA has recently issued The Ex-ante Regulation (The Regulation of Dominance) and the Market Definition and Dominance Guidelines after carrying out quite extensive public consultation process. The next stage in this process is to carry out "Market analysis". This analysis comprises market definition, dominance determination, and proposing suitable remedies to avoid risk of harm of dominance. In accordance with the above referred regulations and guidelines, the Authority has prepared a preliminary analysis with preliminary recommendations in the draft Market Definition and Dominance Report. The TRA is seeking the comments of stakeholders and other interested parties on the said report so that such comments can be considered by the Authority before it finalizes its decision. All Telecom licensees and other interested parties including consumers and the general public are invited to look into the Consultation Paper and provide their comments and views by October 3, 2012. TRA shall give due consideration to all comments and contributions received from the interested parties. **(August 8, 2012) www.tra.gov.om**

Country-Wise Policy & Regulatory Developments

Afghanistan
Board Chairman: Mr. Abdul WakilShergul
[Afghanistan Telecommunication Regulatory Authority (ATRA)]
Afghanistan has launched an international competitive tender for a single license to position and operate a communications satellite at the ITU-allocated geostationary orbital position for Afghanistan (50oE) and/or associated planned frequencies. The complete tender document can be found at: www.mcit.gov.af. **(October 9, 2012) http://atra.gov.af**

Algeria
Chairperson: Ms. Zohra Derdouri
[Regulatory Authority for Post & Telecommunication (ARPT)]
Algeria is to see broadband services bolstered as new reports indicate that the high-speed Internet service is currently driving the country's IT sector. By 2018, government information says the telecom market in the country will be estimated at around US$7.4 billion and the sector with the most potential is broadband services. According to Frost & Sullivan, "mobile subscriber growth rates are projected to slow down even as mobile penetration rate was expected to reach 100% by the first quarter of 2012." But with Algeria only recently jumping on the 3G development, the telecom industry hopes that by boosting broadband penetration the sector can continue to grow at high speeds. Frost & Sullivan has said that despite this optimism, there must be an increase in regulatory bodies to oversee the development of the IT sector in the North African country or it could face a rise in illegal and illicit activities. As of the end of last year, broadband penetration was reported at a tiny 2.5%, but with demand growing in the country, most analysts and government officials believe this is only the beginning of the sector beginning to pull its weight. "Young consumers access the Internet through shared facilities like Internet cafes which are gaining popularity in the country. This trend restricts the adoption of individual broadband connections which are mainly adopted by the enterprise segment," said Frost & Sullivan. **(October 1, 2012) www.bikyamasr.com**

Bahrain
Chairman & General Director: Mr. Mohamed Bubashait
[Telecommunication Regulatory Authority (TRA)]
The Telecommunications Regulatory Authority TRA has reduced a fine it imposed in 2009 covering access to international cable facilities on Batelco from BD5.24 million (US$13.89 million) to just BD750,000. The issue centered on allegations of limited access for rival companies to Batelco property which is where the international cable landed in the country. The Group said that they are pleased that this matter has been finally resolved through an independent international arbitration panel and in a transparent manner where all parties involved presented their arguments. This is the first arbitration case carried out in Bahrain under the Telecommunications Law to have reached a conclusion. **(October 31, 2012) www.cellular-news.com**

The Telecommunications Regulatory Authority has published a Regulation relating to the supply of wholesale inbound services to foreign telecommunications operators. Wholesale inbound services are supplied by Licensed Operators in Bahrain to foreign telecommunications operators to enable the completion of international telephone calls to subscribers in Bahrain. On January 26, 2012, the Authority issued for consultation a Draft Regulation establishing price floors for wholesale inbound services supplied to other GCC operators. Having reviewed the submissions received on the consultation, the Authority considers that the price floors should apply to all international inbound traffic. The price floors that are established as a result of the Regulation are 12 fils per minute for calls to Fixed Subscribers, and 22 fils per minute for calls to Mobile Subscribers. While the Authority generally supports cost-based prices, the circumstances relating to the supply of wholesale inbound services to foreign operators justify the use of above-cost price floors for these specific services. In particular, in recent years the wholesale charges for these services have been falling, reducing the cost for foreign operators to supply international calls into Bahrain. However, these cost reductions have not been passed through by other GCC operators into their retail call charges. As a result, end users in Bahrain have not benefited from lower costs of being called. The Authority considers that the price floors established in the Regulation will ensure that economic profits will be retained in Bahrain, for the benefit of Bahraini users of telecommunications services. The Authority also considers that the fixed and mobile termination rates applying to international inbound traffic should be cost-based, as these are critical inputs into the supply of wholesale inbound services.
(October 1, 2012) www.ameinfo.com

Bangladesh
Chairman: Maj. Gen. Zia Ahmed
[Bangladesh Telecommunication Regulatory Commission (BTRC)]
According to figures from the Bangladesh Telecommunication Regulatory Commission (BTRC) the mobile base in Bangladesh grew to 98.47 million in September from 95.53 million in August. Grameenphone led the market with 40.95 million customers, versus 39.80 million a month earlier, followed by Banglalink with 26.78 million subscribers, up from 25.74 million in August. Robi Axiata grew its subscriber base to 20.80 million from 20.14 million and Airtel Bangladesh ended September with 6.89 million customers, compared with 6.78 million a month earlier. However, Citycell's subscriber base was flat at 1.68 million while Teletalk ended the month with 1.37 million customers, same as a month earlier.
(October 30, 2012) www.telecompaper.com

The Bangladesh Telecommunication Regulatory Commission (BTRC) has issued a directive on satellite phone service usage to provide emergency telecommunications service in case of unavailability of the terrestrial mobile phone network and public switched telephone network (PSTN), or if network infrastructure is damaged. Government entities and foreign missions would get the opportunity to use the service with the prior permission of the BTRC. An official of the BTRC, however, said any other entity not mentioned in the directives would get permission for the satellite phone, but no individual or private entity would be eligible to use it. At present, the disaster management bureau, Prime Minister's Office, foreign ministry, Armed Forces Division and some embassies are using satellite phones. The BTRC said that the Satellite Phone Service Provider would submit an undertaking to BTRC saying that the company would provide information to BTRC and law enforcement agencies when required. The official said the regulator might cancel the permission to use the satellite phone for the sake of the national interest. **(October 22, 2012) The Financial Express**

Bangladesh's telecom ministry has proposed a price of US$ 20 million per megahertz of spectrum as the starting price in the 3G auction early next year. Winners will be able to pay the spectrum charges in two installments, the first one at 60% of the total and the final one for the other 40%. Telecom Secretary said the proposal on the floor price has been sent to the finance ministry recently for its approval. The operators will have the opportunity to buy a minimum of 5 MHz to a maximum of 15 MHz spectrum to launch 3G services. Previously, the Bangladesh Telecommunication Regulatory Commission (BTRC) had proposed a floor price for the auction of US$ 30 million for per 1 MHz and suggested the operators should buy at least 10 MHz. If any new entrant wins the auction, it will have to purchase 2G spectrum at the same price as the existing local operators paid recently. In the draft 3G guideline, the BTRC proposed a reduced price for 2G spectrum for new entrants. State-owned mobile operator Teletalk will get a license without participating in the auction, while five local private operators, along with foreign firms, will fight for the other four licenses. Teletalk recently launched its 3G service on a trial basis.
(October 22, 2012) The Daily Star

The telecom regulator would not take any initiative to solve the ongoing dispute over balance re-charge commission between the cellular phone operators and re-charge businessmen, said a top official. "We are monitoring the ongoing dispute between the operators and balance re-charges businessmen that may cause any negative impact on services of users," Chairman (in-charge) of Bangladesh Telecommunication Regulatory Commission (BTRC) Giashuddin Ahmed told the news agency. He said the re-charge commission issue is an internal matter of the operators and balance re-charge businessmen. Ahmed hoped that the operators and re-chargers would settle the issue through negotiation. "We will take decision later if both the sides fail to a come to settlement." The mobile phone balance re-charge vendors are observing strike across the country by stopping offering credit recharge demanding increase in commission to 10 per cent from the present rate of 2.7%. The vendors under the banner of the Bangladesh Mobile Phone Re-charge Business Association (BMPRBA) have been making the demand for long. They (BMPRBA) gave ultimatum until October 13 to get their demands fulfilled; otherwise they threaten to go for strike for unlimited period.
(October 10, 2012) www.thefinancialexpress-bd.com

The Bangladeshi government has decided not to frame any licensing guidelines for mobile value-added services (VAS) at present. The Posts and Telecommunications Ministry has informed the Bangladesh Telecommunication Regulatory Commission (BTRC) of the decision in a letter sent to the commission on September 13. The commission had earlier drafted the VAS licensing guideline and sent it to the ministry for approval. In the letter, the ministry said the existing telecommunications infrastructures and the market in Bangladesh were not fit for having a separate VAS licensing in place. Before framing the guideline, all parties involved in the market for VAS and the value chain should be identified. **(October 3, 2012) The Financial Express**

Egypt
Executive President: Dr. AmrBadawi
[National Telecommunication Regulatory Authority (NTRA)]
Political uncertainty and proposed changes to the telecommunications sector have delayed Egypt's US$2.4 billion (Dh8.8bn) plan to expand the country's broadband

network. Headed by the National Telecommunications Regulatory Authority (NTRA), the national broadband plan is intended to increase broadband penetration across Egypt and provide 11,000 jobs every year. It was officially launched in July. The communications minister has proposed unifying the telecoms licenses between the three mobile operators and the state-owned fixed line operator Telecom Egypt (TE) to enable all four to offer both internet and mobile services. "The NTRA is working with all mobile operators to build a business model for the national broadband infrastructure," said Minister. TE now owns and operates the broadband infrastructure of the country. As part of the plan, it is changing the main copper lines to fiber optics cables, which is expected to take three and a half years to complete. The initial aim of ensuring 2 megabits of internet connectivity to 90% of the population by 2015 has been pushed to 2016 at the earliest. The 10-year plan, which is to be both privately and publicly funded, was proposed last November as part of the country's development strategy, but continues to face many challenges. By 2021, the country is hoping to deliver 25 megabits of internet connectivity to 75% of the population and fourth-generation mobile broadband services to 90% of the population, but it is unclear whether these aims will be met. Egypt's information communications and technology sector has been one of the most promising over the past few years, posting growth of 7 to 9% even in the tumultuous period of 2011. Last year, the country broke the 100% mobile penetration mark, and now has about 116 million mobile subscribers, pushing the penetration rate up to 115%. According to the World Bank, for every 10% penetration in broadband, GDP increases by 1.38%.
(October 22, 2012) www.thenational.ae

The Egyptian Competition Authority (ECA) has received a complaint from the Consumer Protection Agency filed against the country's three major cell phone operators. The watchdog is asking for investigations into whether Vodafone, Etisalat Egypt and Mobinil have a "secret agreement" to increase the prices for prepaid mobile credit cards. The ECA said several complaints have been received from users alleging that since January, the three telecommunication firms have begun deducting EGP 0.51 each month from customers' credit as "stamp tax," although no such tax was stipulated in their contracts. According to the Ministry of Communications and Information Technology, there are 90 million subscribers to the three networks.
(October 22, 2012) Daily Egypt Independent

The Egyptian telecom authorities mull launching international tenders for a 4th mobile license by 2013 despite opposition from existing operators Mobinil, Vodafone and Etisalat Misr. The Egyptian government says the move is part of its efforts to develop the telecom sector which has made outstanding growth in the past two years. The Internet and social media played a key-role in the uprising and telecom operators have since reported astonishing growth rates with soaring revenues and subscribers. The market earned revenues of $6.35bn in 2011 and is expected to reach $11.22bn by 2018. Despite the economic downturn, the mobile telecom market in Egypt witnessed high growth, with an average growth rate of about 23.1% since 2008, mainly due to aggressive pricing competition among the three operators: Mobinil, Vodafone and Etisalat Misr. The telecommunication industry is one of the fastest growing sectors in Egypt, with over 80 million subscribers in 2011. This number is expected to double by 2018, while the fixed-line voice services are set to decline due to the shift from fixed to mobile lines. High hopes are

pinned on the broadband to be the key driver of fixed-line services in the country. Egypt, which has adopted new liberalized telecom policies and regulatory laws, has seen lately a significant growth in low-income customer segment thanks to tough competition between various mobile operators, which has led to tariff reductions. The mobile penetration in Egypt is improving rapidly due mainly to the widespread use and popularity of mobile internet, increasing online business activities and the entry of 3G services. Mobile penetration is expected to reach 93% in 2015. According to some analysts, one of the main challenges for mobile telephony operators will be churn reduction. The current aggressive pricing competition is untenable and allows multi-SIM usage by subscribers. This is an important issue for operators as the next stage of growth is expected to emerge from low-income subscribers. Though competitive pricing is apparently the key driver for the growth of mobile services, the quality of service remains undoubtedly a key consideration for subscribers. It seems that the quality of service stands out as the major competitive differentiator amongst Egyptian operators.
(October 18, 2012) www.northafricapost.com

With Egypt's economy finally looking on the rebound, the government is now approaching the telecommunications industry with interest and hopes that it can develop the industry in a positive manner to increase revenues and users. According to the Ministry of Communications, Egypt is currently looking at a number of potential boosts to the sector, including officially launching a fourth mobile operator in the country, although it did not say when that would happen. ICT Minister Hany Mahmoud said that the earliest a new license would be offered in the country is the first quarter of next year. He added that the ministry was also looking at an alternative to the fourth license and the "government could work to develop the sector with the existing operators, namely Mobinil, Vodafone Egypt and Etisalat Misr." The telecom sector in Egypt has seen massive growth in the past two years, especially after the 2011 uprising that ousted former President Hosni Mubarak. The Internet and social media were widely seen as vital to that uprising and since telecom operators have reported massive rises in their number of subscribers. The government hopes that new efforts to support the industry can help alleviate much of the economic woes that have troubled the country since that revolution. **(October 11, 2012) www.bikyamasr.com**

The Egyptian government is again looking at the possibility of awarding a fourth mobile license in the country, although no decision is expected until early next year. The Telecoms Minister told that the government could issue a new license, or may work with the incumbent networks to improve services. "We are studying the whole telecommunications market and what we exactly need. Is it a new player or distributing things into the different players we have now? It's not clear yet and it will be finalized in the first quarter next year," Minister told on the sidelines of a business conference in Cairo. He recently put a new Chairman into the state-owned Telecom Egypt with a mandate to shake up the landline operator, which also owns a 44.8% stake in Vodafone Egypt. There have long been suggestions that Telecom Egypt would like its own mobile license, although it would probably then have to sell its stake in the local Vodafone operations as well. **(October 10, 2012) Reuters**

Concerns over the future of Egypt's telecom industry have been thwarted by recent company statements confirming

that their revenue is growing dramatically. After nearly two years of political turmoil in the country, the telecom sector is rebounding with better than expected revenue. According to combined reports from the three mobile phone operators in Egypt, Mobinil, Vodafone and Etisalat Misr, they have witnessed a 23.1% growth rate since 2008, including during the January 2011 uprising that saw the government shut off their networks for days. At the end of last year, Egypt had 83.8 million mobile subscribers, nearly 100% penetration, and a recent Frost & Sullivan report suggests that this number should double by 2018. Even though fixed-line services are expected to continue their decline as Egyptians turn toward mobile devices for their calls, Broadband Internet is also seen as one of the most important IT sectors that can grow in the country, which requires a fixed-line for the DSL service in the country. Frost & Sullivan added that the telecom market now finds itself earning revenues of around US$6.35 billion, but they projected that by 2018, this figure should jump over US$11 billion. The introduction of new triple-play licenses in the country is expected to generate US$1bn investment over five years in the telecom market.
(October 5, 2012) www.itnewsafrica.com

Iran
Minister of communication & Information Technology:
Dr. Reza Taghipour
[Communications Regulatory Commission (CRC)]

A federal court in the United States has postponed a decision in a US$ 4.2 billion legal battle between Turkcell of Turkey and MTN of South Africa over the latter's wireless operation in Iran, pending the outcome of a separate lawsuit in the US Supreme Court. Federal judges are awaiting the outcome of a court case between Kiobel and the Royal Dutch Shell oil company which alleges breaches of the Alien Tort Statute, a human rights law which Turkcell is using as the basis for its own lawsuit. Turkcell had previously been awarded the mobile concession in Iran but was then replaced by the South African firm, which went on to launch as Irancell. It is accusing MTN officials of using bribery to win backing in Iran and getting South African government officials to influence arms deals and to vote in favor of Iran's nuclear program at the United Nations. MTN has called for the case to be dismissed, saying US courts have no legal right to hear the lawsuit, but Turkcell claims the Supreme Court has jurisdiction because the case has international ramifications. MTN Irancell claimed almost 45% of Iran's mobile market with 38.3 million subscribers as of end-June 2012.
(October 15, 2012) Reuters

Iraq
CEO: Dr. Buhan Shawi
[Communication & Media Commission (CMC)]

Zain Iraq plans to go ahead with its long-delayed stock market listing in Baghdad by early 2013 at the latest. Zain Iraq still needs to convert to a joint stock company in preparation for the flotation. The firm is hoping to carry out an IPO in the last quarter of this year but the joint stock company conversion had been delayed. Zain's shareholding in Zain Iraq would fall to 51% from 76% should the IPO be fully subscribed. Asiacell will probably be the first operator to float. In August, Asiacell received preliminary approval from Iraqi regulators and has placed advertisements in Iraqi newspapers to publicize the flotation. **(October 3, 2012) Reuters**

Jordan
Chairman of the Board of Commissioners/CEO: Mr. Mohammad Al Taani
[Telecommunication Regulatory Commission (TRC)]

The number of active users of the internet in the Arab region has increased by 23% in the last two years, which is 1.6 times higher than the world average of 13% growth, according to Hatem Samman, director of Ideation Centre at Booz and Company. The Arab Digital Generation (ADG) constitutes 4% of the globally digital active users generation. Up to 90 million Arabs aged 15 to 35 years use the internet. It is expected that by 2030, about 38% of the Arab population will be using the internet. Samman was referring to a survey conducted by the company of 3,127 respondents from Saudi Arabia, Kuwait, Bahrain, Qatar, Jordan, Lebanon, UAE, Algeria and Egypt. Samman said that Arabs read more news on the internet compared with others, stressing that 260 million are globally digitally active. Samman said social media account memberships have increased by 20-30% in the Arab world in the last two years, adding that the UAE has the highest penetration of online purchases which is 12% compared with a world average of 20%. In 2006-2011, the number of internet users increased to a great extent. This is reflected by the high percentage of Youtube playbacks in the Arab world compared with the rest of the world. Eight-five percent of internet users in Saudi Arabia use YouTube, 83 percent in the UAE and 74 percent in Egypt. The overall figure for YouTube users in the Mena is 167 million. **(October 12, 2012) Gulf News**

Kuwait
Minister of Communication: Dr. Mohammed Al-Baseeri
[Ministry of Communication (MOC)]

Kuwait's mobile networks have been granted licenses to deploy LTE based 4G services, the Minister of Communications has announced. Under the decision, the three telecommunication companies Zain, Viva and Wataniya Telecom were granted authorization to refarm their 1800 MHz spectrum for LTE services subject to the payment of a KD 250,000 fee. The Ministry added that it has adopted a decree to realign the networks 900 MHz holdings by increasing the frequencies allocated for each of Wataniya Telecom and Viva to 10 MHz, and reducing Zain's holdings to 14 MHz. Zain was allocated a larger block of spectrum as a historic consequence of being the former monopoly operator in the country. (**October 8, 2012) www.cellular-news.com**

Lebanon
Acting Chairman & CEO: Dr. Imad Hoballah
[Telecommunication Regulatory Authority (TRA)]

BroadMap, a leading Geographic Information Systems (GIS) data, services and solutions provider announced the successful and timely delivery of the October 1, 2012 State Broadband Initiative (SBI) data deliverables to the National Telecommunications and Information Administration (NTIA) for its state and territory partners. This deliverable marks the sixth semi-annual submission BroadMap has made to the NTIA and includes data and reports. The SBI program implements the joint purposes of the Recovery Act and the Broadband Data Improvement Act to facilitate the integration of broadband and information technology into state, territory, and local economies. Under the program, BroadMap provides broadband mapping, work under the Leading Practices initiative, public broadband mapping websites, and data collection and verification applications. BroadMap's partner states and territories can track information received from service providers through BroadMap's unique Provider Portal, which allows providers to submit coverage data, view their data, and make changes to their coverage area through a secure, easy to use web portal. **(October 1, 2012) http://world.einnews.com**

Morocco
Director General: Mr. M. Azdine El MountassirBillah
[Agence Nationale de Reglementation des Telecommuncations (ANRT)]

French conglomerate Vivendi has begun negotiations with bankers Lazard and Credit Agricole with a view to hiring advisers to assess a potential sale of its 53% stake in Morocco's Maroc Telecom, according to the Financial Times citing several people familiar with the situation. The review of its options in Morocco – potentially including a sale worth roughly EUR4 billion (USD5.2 billion) – forms part of a wide-ranging strategic overhaul begun in April, under which Vivendi is actively seeking buyers for its Brazilian telecoms unit GVT, and, according to industry sources, has also received 'highly preliminary' interest in its flagship French telco division SFR, but the Financial Times' sources added that there is no pressure to sell any of the units. (**October 8, 2012) www.telegeography.com**

Nepal
Acting Chairman: Mr. Ananda Raj Khanal
[Nepal Telecommunication Authority (NTR)]

According to figures from the Nepal Telecommunications Authority (NTA) the number of mobile customers in Nepal grew from 15.06 million in mid-June to 15.33 million in mid-July. Of the total, 14.50 million were GSM users, up from 14.22 million a month earlier, and the remainder use Nepal Telecom's CDMA service called Sky Phone. Ncell led with 8.33 million GSM subscribers, up from 8.10 million in mid-June, followed by Nepal Telecom with a customer base of 6.17 million, compared with 6.12 million a month earlier. The number of Nepal Telecom CDMA users stood at 829,534, down from 832,292 in the prior month.
(October 5, 2012) www.telecompaper.com

Oman
Chief Executive Officer: Dr. Hamed Al-Rawahi
[Telecommunication Regulatory Authority (TRA)]

As per statistics issued by the National Centre for Statistics and Data (NCSD) subscribers of fixed phone services in the Sultanate stood at 296,569 at the end of July against 287,323 at the end of December 2011, constituting an increase of 3.2%. Subscribers of broadband service stood at 97,733 compared to 78,217 at the end of 2011. The total number of Internet subscribers stood at 2,737,284 as at the end of July compared to 2,168,049 during the same period last year. The number of leased Internet line subscribers stood at 3,683 as at the end of July compared to 3,670 at the end of 2011. The number of subscribers of phone Internet service at the end of July stood at 7,390 compared to 10,846 during the same period in 2011, a decline of 31.9%, which include subscribers of billed service (6,376) and subscribers of pre-paid cards (1,023). The statistics issued by the National Centre for Statistics and Data (NCSD) pointed out that subscribers of the billed fixed phone service stood at 220,612 at the end of July against 215,193 subscribers at the end of 2011. Subscribers of pre-paid fixed phone service stood at 25,834 against 26,345 in 2011. The number of public phones all over the Sultanate stood at 6,801. **(October 8, 2012) www.zawya.com**

Pakistan
Chairman: Malik Farooq Awan
[Pakistan Telecommunication Authority (PTA)]
Pakistan will begin monitoring e-mails, telephone calls, and other communications with the rest of the world within ninety days. The government has directed PTCL and other long distance operators to install monitoring equipment before the end of the year to allow checking voice and e-mail communications from abroad.
(October 22, 2012) The News International

The Pakistan Telecommunication Authority (PTA) has directed all telecom operators to maintain separate accounts for all its business and operational units for transparent reporting of revenues and expenses so that it could determine the tariff. In the Accounting Separating Guidelines issued recently, the telecom regulator said that all telecom operators should maintain separate accounts for access network, core network, retail activities and other commercial activities in the balance sheet. The balance sheet shall provide the breakdown of fixed assets, current assets and current liabilities. The balance sheet figures are the average values for the period to which the balance sheet relates. For ease of reconciliation with an operator's statutory accounts, the average may be calculated simply from opening and closing balance sheets for the period. The profit and loss statement before interest and tax shall disclose revenues and operating costs from each business activity. All accounts shall show any transfer charges to or from other business units. The transfer charging system shall follow the Regulatory Accounting Conventions. Accordingly transfer charges (revenues and costs) shall be attributed to cost components, services and main business units or disaggregated activities, which cause the revenues to be earned, or costs to be incurred. The attribution shall be objective and not intended to benefit any business or disaggregated activity. The transfer charges for internal usage shall be determined as the product of usage and prevailing unit charges. The charge for internal usage shall be equivalent to the weighted average charge levied for the equivalent product or service sold externally rather than internally. The telecom watchdog said that all telephony service providers shall establish and maintain specified accounting procedures in order to enable the authority to obtain all relevant information required for determining the tariff. The separated accounts shall disclose the transfer charges between business units and/or disaggregated activities, the guidelines stated. PTA is initially placing the obligation of accounting separation on operators who are determined to have significant market power in the national wholesale market and/or are determined to have significant market power in two or more retail markets. However, it may require any other operator to produce such information in the prescribed standard form for the performance of its function. **(October 9, 2012) www.dailytimes.com.pk**

Pakistan Telecom Industry that has been booster for the country's economy, now itself needs a catalyst of growth in terms of marketing innovations and technology evolution that is 3G. Telecom experts and players are unanimous in observation that the entire industry has been facing glut and slowdown especially in revenues. Therefore, the industry needs introduction of newer and latest technologies including 3G, 4G, and Long Term Evolution (LTE). According to the latest statistics released by Pakistan Telecommunication Authority (PTA), the telecom density in Pakistan has reached 68%, which is among the highest in the world. Mobilink still remains the top shareholder with 36 million subscribers, followed by Telenor Pakistan that is at the second position with 29 million subscribers. In order to secure its leading position in the future 3G markets, Telenor Pakistan has completed a tender in 2011 for an entire network swap and 3G rollout by selecting a Chinese supplier Zhongxing Telecom (ZTE). By the network infrastructure modernization with the latest technology, the growth of network profit and revenue is also expected. However, Telenor Pakistan has reportedly witnessed unenviable revenue slowdown with the first-ever continuous loss up to six million USD for the last three months since its inception 7 years ago. There is no question mark at all that telecom industry plays a pivotal role in the developing Pakistan economy and particularly the telecom operators have collectively been contributing positively to the national exchequer in the past years. On the other hand, the market needs an injection of 3G/4G/LTE or whatever to get excited. **(October 9, 2012) www.onlinenews.com.pk**

Qatar
Executive Director: Ms. Christa Cramer
[The Supreme Council of Information and Communication Technology (ictQATAR)]
Passive broadband network operator Qatar National Broadband Network Company (QNBN) has signed an agreement with Swedish technology provider Ericsson to deploy its fiber-to-the-x (FTTx) infrastructure across Qatar, with rollout to start 'immediately'. QNBN's passive network will provide equal and open access to operators while offering a choice of service provider for the end-user. Qatar's government established QNBN in 2011 to accelerate the rollout of a nationwide high speed, accessible fiber-to-the-home (FTTH) network, and it aims to provide fiber access to citizens and businesses, targeting 95% coverage.
(October 18, 2012) www.telegeography.com

Passive fiber network operator Qatar National Broadband Network (QNBN) has reiterated plans to expand direct fiber broadband access nationwide by 2015, and confirmed that it has budgeted an approximate initial capital expenditure (CAPEX) of QAR1.82 billion (US$500 million). CEO Mohamed al-Mannai said: 'The company's mission is to empower the country with high speed broadband fiber access (100Mbps) to citizens and businesses alike through maximum nationwide coverage.' Qatar Telecom (Qtel) and Vodafone Qatar are onboard the project and have agreements in place with QNBN that define the cooperation framework for building/operating infrastructure and delivering services. QNBN will lease passive fiber infrastructure for multi-play telecom services and aims to set appropriate national wholesale prices for operators to ensure low retail rates across Qatar, with end-users offered the choice of service provider. **(October 11, 2012) www.telegeography.com**

Saudi Arabia
Governor: Eng. Abdullah A. Al Darrab
[Communication & Information Technology Commission (CITC)]
According to the figures from the Communications and Information Technology Commission (CITC) the mobile penetration ratio was at 187.5% at the end of the first half of 2012, versus 188% at end-2011. Of the total mobile users, over 86 percent used prepaid services. The number of fixed phone lines reached 4.66 million at the end of June, of which around 3.3 million were household subscribers. This was equal to a household teledensity of around 68.1% and population teledensity of about 16%. The regulator said demand for fixed services was expected to grow due

to the rollout of FTTx networks in cities. Fixed broadband subscribers were put at 2.21 million, while the number of mobile broadband subscribers reached 12.6 million at the end of June. The total number of Internet users is estimated at 14.7 million, or just over half the population. CITC said earlier that the mobile market grew by 1.1% q-o-q in Q112 to 54.3 million subscribers by the end of March 2012. This partly reversed a contraction of 4.3% q-o-q during Q411. Business Monitor International (BMI) forecast that by the end of 2016, penetration in Saudi Arabia will reach 203%, unchanged from our previous update. This will equate to a predicted 63.2 million mobile subscribers. Growth in the country's mobile market will mainly be sustained by the influx of seasonal visitors for religious and business purposes, such as pilgrims to the annual Haj. BMI also expects STC's investment in next generation fixed network infrastructure to be a key growth driver for fixed-line connections. Despite growth in fixed-line subscriptions, the report sees fixed-line penetration to remain flat in the short term and then decline in the latter stages of the forecast period. By the end of 2016, BMI forecast a fixed-line subscriber base of 5.104 million, a penetration rate of 16.4 percent. CITC data revealed around 14.2 million Internet users in Saudi Arabia at the end of March 2012, up from 13.9 million in 2011. These figures include subscriptions to dial-up technologies, as well as mobile broadband subscriptions through smartphones. According to the CITC, there were around 9.01 million broadband subscriptions in Saudi Arabia at the end of December 2011, a penetration of 32.1%. By March 2012, the number of broadband subscriptions reached 9.71 million, reflecting growth of 7.8% during the first three months of 2012. We expect growth in the Internet sector to remain strong in 2012, driven by considerable investment into broadband infrastructure. BMI forecast Internet and broadband penetration rates to reach 68.1% and 49% respectively at the end of December 2016.

(**October 2, 2012**) www.zawya.com

Sri Lanka
Director General: Mr. Anusha Palpita
[Telecommunication Regulatory Commission (TRC)]
The overcrowded mobile phone industry in Sri Lanka should go for mergers and acquisitions with intensifying competition eroding profitability. Sri Lanka's Telecom industry has been overcrowded during the last couple of years and this remains the key medium-term risk to telecom operators in the country. Sri Lanka's mobile industry is one of the most competitive markets in the region with five operators competing for a total addressable population of 21.7 million and the competition among the five operators, Dialog, Mobitel, Etisalat, Airtel and Hutch is expected to remain high in years ahead and Trevor Mendis from University of Wales, UK said. He made these views addressing a seminar on "Strategic Business Growth through Mergers Acquisitions and Restructuring" organized by the Charted Management Institute (CMI) UK along with KPMG. Anilana Hotels Ltd MD Asanga Seniviratne said "In many cases, companies resort to mergers or acquisitions because they believe that it is the easiest and fastest way to growth. However, local business societies still fear to getting involved in mergers and acquisitions. In Sri Lanka, most of the mergers and acquisitions are led by the side broking industry. However, Sri Lanka does not seem to have specialized companies in the practical deal making area. If the level of competition is very high, only option is to go for acquisitions or mergers, otherwise, rivalry will take over. When you're negotiating, you have to make sure that the team that you have is on your side in practical deal making area, sometimes you will find your members are working against you. Secrecy is very important in a country like Sri Lanka and it is key to have a trustworthy team when it comes to making a good deal. Today, family franchises are moving out and getting equity and world expertise in. One of the biggest issues we are facing in our industry is trying to break this family tradition."

(**October 15, 2012**) www.dailynews.lk

Sri Lanka has set in motion plans to develop a policy and regulatory framework for Next Generation Network and is also set to unveil a National Broadband Policy shortly. Secretary to the President and chairman of the Telecommunication Regulatory Commission of Sri Lanka (TRC) Lalith Weeratunga said the government is making many efforts to expand and develop the ICT sector and ensure equity of access. He said one is to introduce a National Broadband Policy. He was speaking to the media after the inauguration and the morning session of the 12th Global Symposium for Regulators in Colombo. "The government of Sri Lanka gives very high priority to placing Sri Lanka at the cutting edge of new technologies, such as, broadband mobile and the spread of digital technology throughout the length and breadth of the country, particularly in the rural and remote areas, as we steer our country forward, in line with our vision and goal of making Sri Lanka the 'Wonder of Asia' and the key regional hub" Weeratunge said. During his speech at the inauguration of the event, President Mahinda Rajapaksa too mentioned the above whilst adding that a Broadband Policy will be unveiled before the end of this year. "We see the importance of broadband connectivity through-out the land for our people to fully benefit from the speedy advances in ICT" he added during his speech. The general idea behind the NGN is that one network transports all information and services (voice, data, and all sorts of media such as video) by encapsulating these into packets, similar to those used on the Internet. In answer to a question from the media on the relevance of holding the ITU-GSR 2012 in Sri Lanka, Weeratunge stated this could be viewed in two broad paths, one was to promote the country among the international community and secondly the exchange of knowledge and using it to make further advances in the field of ICT for the benefit of the people. He also added choosing Sri Lanka as the venue for this very significant global symposium too was a proud moment for the TRCSL and the country in general. He said it was also another opportunity to show the world the advances and gains made by the country in the short span of three years since ending terrorism. He said the ITU considers many salient factors before choosing a host for its annual symposium, such as, its capabilities in hosting the event, advances the country has made in ICT, what it can offer to participants in terms of knowledge, whether the country concerned has the commitment and potential to take advantage of it to further capabilities in ICT etc.. Speaking on the morning session he said that there was a very fruitful debate among participants on the topics of Make the World One: Regulation in the Global Village and Net Neutrality: To Regulate or Not to Regulate. ITU Secretary General Dr.Hamadoun I Toure, TRCSL Director General Anusha Palpita and ITU Telecommunication Development Bureau Director Brahima Sanou were also present at the press conference. (**October 3, 2012**) www.dailynews.lk

Tunisia
President: Mr. Hassoumi Zitoune
[National Telecommunication Commission (INTT)]

Tunisia believes the future of their telecom market is in the 3G sector and not in fixed-lines. The government has announced that in their push to boost the 3G and mobile markets, they will break up the country's fixed-line monopoly to promote diversification and competition. Tunisian authorities believes the future of the country's telecom market lies in 3G ahead of fixed-line. According to the ministry of communications, the country's telecom sector accounts for roughly 11% of Tunisia's Gross Domestic Product. It currently has three operators in the country, Orange Tunisia, Tunisiana and Tunisia Telecom, with a reported penetration of 115.3% through last year. A report from Frost & Sullivan says that by 2018, the telecom market could near the US$3 billion in revenue target as it continues to see positive growth. The arrival of the new fixed and mobile service operator in 2010 dissolved the monopoly of the fixed-line incumbent. At the same time, it increased competition which is likely to drive growth in the telecom market. With the operators grabbing 3G licenses, the study of the North African country's telecom industry notes that they expect Tunisia to see continued exponential growth as more and more citizens are able to use their Smartphones. It will also open up the market for hand devices as citizens want to be able to get onto the Internet as they go about their daily life. The only concern Frost & Sullivan had for Tunisia going forward was the political instability in the country. As a result of the 2011 uprising, the telecommunication market has been significantly affected by the unrest as the market's revenue shank by 3.6% in 2011, but experts and the government believe it will be back on track this year.
(October 4, 2012) www.itnewsafrica.com

Turkey
Chairman & CEO: Dr. Tayfun Acarer
[Information & Communication Technologies Authority (BTK)]

The Turkish government is considering legislation which, if passed, would require Internet users to submit a password and their national identity number to gain online access, reports Digital Civil Rights in Europe (EDRI). The commission's "Draft Law on the Regulation of Informatics Network Services and Informatics Crime" includes other grave proposals: - to establish "Internet Monitoring Center", which had been put on the agenda five years ago but then suspended, under TIB (Telecommunications and Communications Commission) in order to monitor and audit the entire Internet medium; - to make it mandatory for service and hosting providers to keep their records for five years, which would mean a further violation of privacy; to oblige "service providers" to intervene in "unfavorable" broadcasting; - to make heavier punishments of hacking. The proposal that crowns this draft law is "to make it obligatory to enter a password accessing the Internet so that all the operations of Internet users can be recorded".

EDRI notes that in addition to violating ethics related to the right of privacy, the proposed law violates both the Turkish constitution and European Union law. Turkey's bid for membership in the EU has been stalled for years due to the opposition of key member states like France. This subject is a sore one in Turkey, which has recently been focusing its foreign policy on the Arab Middle East where it ruled large swathes of territory in the days of the Ottoman Empire. Turkey is a member of NATO and the Council of Europe. **(October 11, 2012) http://techpresident.com**

United Arab Emirates
Director General: Mr. Mohamed Nasser Al Ghanim
[Telecommunication Regulatory Authority (TRA)]

In a bid to ease the process involved in the 'My Number, My Identity' campaign, the Telecommunications Regulatory Authority (TRA) has instructed the two mobile service providers - Etisalat and du - to speed up online registration services. "The TRA also instructed the operators to speed up the launch of the online registration services to accelerate the process and ease the load on the commercial outlets. With many customers complaining about the tedious process involved in registering their SIM cards, the TRA has decided to step in with the online alternative. The TRA had recently extended the deadline, by three months, for the first batch of customers as they found the service providers were unable "to provide smooth mechanisms to facilitate, accelerate and stimulate subscribers to update their data". The TRA has since instructed Eitsalat and du to improve their mechanisms and increase the number of commercial outlets that are easily accessible for subscribers. The move has been put in place so that subscribers can safeguard their identity and avoid them from getting involved in legal or financial misuse. Currently the process requires the customer to head to a centre, listed by the service provider, and submit an application form along with copies of their ID proof. This is a one-time process and will ensure that SIMS are not cancelled. **(October 31, 2012) www.zawya.com**

The Telecoms Regulatory Authority (TRA) announced that more than 88,000 new users joined the country's mobile phone market in August, taking the total number of subscribers to a record high of around 12.9 million. This puts the mobile penetration rate at 159% at the end of August. In total, 913,000 new service users joined the country's two operators Etisalat and Du during the month, boosting the total number of subscribers to mobile phones, landlines and internet to nearly 15.78 million at the end of the month. **(October 30, 2012) www.telecompaper.com**

The Telecommunication Regulatory Authority (TRA) said there are no plans for a third company to provide telecommunications services and regulator does not have any intention to license a third operator besides the existing service providers, Etisalat and Du. The setting up a new telecoms company requires a comprehensive market study for at least one year. UAE recently launched LTE, making it one of the first operators of such a network in the world. **(October 23, 2012) www.telecompaper.com**

The Telecommunication Regulatory Authority (TRA) will extend the first phase of the re-registration of mobile SIM cards across the emirates by another three months. The UAE mobile subscribers who failed to update their personal data for the UAE operators, Etisalat and du, their network will not be disconnected and they will be given three months more to finalize registration procedures. Mobile subscribers who got SMSs from the telecom service providers to update their personal information within three months and failed to do so, their mobile connection will not be disconnected. But they will be given another three months to conclude their re-registration with the second phase, he added. TRA had launched the "My Number, My Identity" campaign in collaboration with the two licensees (etisalat and du) to increase awareness on the new registration procedures. **(October 15, 2012) http://gulfnews.com**

Yemen
Minister of Telecommunication & information
Technology: Dr. Ahmed Ebeid Bin Dagher
[Ministry of Telecommunication & information Technology
(MCITT)]

Yemen's telecom sector is representative of the growth opportunities that abound in such a developing market. Fixed lines subscriptions are increasing, with a penetration rate of less than 5% indicating significant room for growth. Given that over 60% of the population lives in rural areas a significant amount of fixed line investment has been in the form of wireless local loops based on a variety of technologies. In addition the incumbent has invested in core and transmission network infrastructure to expand bandwidth and to support the ability to offer new products and services. Broadband Internet subscribers are growing steadily but from a very small base, with services available via ADSL. Internet cafes are a popular Internet access method given low PC ownership. Despite challenges such as low PC penetration and illiteracy Yemen has launched

a number of digital economy initiatives centered on e-government, e-education and e-health. Social network sites such as Facebook are growing in popularity and have been credited with allowing protestors to organize the recent anti government protests. Mobile telecom continues to be the big success story in Yemen. Steady growth has seen penetration rates rise to over 40%. Competition is healthy with four mobile network operators offering services. Foreign investors include regional mobile operators Batelco of Bahrain and MTN of South Africa. Attracting investment is Yemen's low mobile penetration, the lowest in the Middle East. Yemen's mobile data market is also in the nascent stages of development, with mobile messaging and mobile Internet access offered. The latter has the potential to develop into a significant market given the lack of competition in the fixed broadband market and low PC penetration. As most other Middle East markets are becoming totally saturated, Yemen will remain of interest as one of the few markets with potential for growth. **(October 10, 2012) http://developingtelecoms.com**

Regulatory Activities Beyond the SAMENA Region

ITU

Global harmonization of the information and communication technology (ICT) principles continues to be a preferred approach in addressing future data protection, including in matters of protecting end-user information and country's sovereignty. Those are among the existing understanding among ICT stakeholders gathered for the International Telecommunication Union (ITU) Telecom World 2012, at the United Arab Emirates. This, given rejection of the world leaders and industry players on the notion of a global regulation on the ICT sector, despite the excessive trust in the industry, is now a cause for concern. Citing Malaysia's stance, Information, Communication and Culture Minister Datuk Seri Dr Rais Yatim said, ICT related security must be an important agenda within the international community's cooperation to prevent encroachment into people's privacy as well as sovereignty of a country. It is also imperative for a nation to determine its own domestic requirement in protecting the interest of its citizens in cyberspace, with a view to imbuing generational and civilization future with good values. Rais said the rapid development of connectivity such as through the Internet need to be seen as a possible threat to the sovereignty of a nation. "This is because in the future, guns, cannons or fighter jets may not be tools of invasion but ICT skills which would jeopardize us when irresponsible parties attack government systems," he said while acknowledging that the subject was easier said than implemented. Rais was representing Prime Minister Datuk Seri Najib Tun Razak as the head of Malaysia's delegation to the five-day conference, which provides a platform for industry players to discuss issues on the ICT industry's radical transformation and its implication on policies, laws and global competition strategies. Rais said for Malaysia, the factor of governance was very important whether at domestic or international levels so that there was no clash of regulations from the aspects of cyber and conventional crimes. "We want to ensure that a thief in the virtual world or in cyber space would still be a thief from the eyes of the law," he said during a session. Having said that, Rais added that Malaysia had asked ITU to provide guidelines for the international community so that ICT related security could

be a topic of collaboration. "Though action is difficult, it is imperative," according to Rais. Stating his view on the matter, Andy Haire Principal at AJH Communications, USA believes that the ITU could be a vehicle for this agreement, but what has to happen is it has to flow back down to the individual jurisdictions. "I don't think there should be a worldwide regulator, but I do believe what you could have is a bunch of principles that flow down into individual economies and individual governments for them to start working on," he said in a 'Leadership Summit: Protecting The Future' session. Mohamed Al-Ghanim, Telecommunications Regulatory Authority Director-General from UAE, pointed to an upcoming ITU event that his country would host, as a possible opportunity to advance the discussion. "World Conference on International Telecommunications (WCIT-12) in December is an opportunity to put these issues on the table. We need a global solution to these problems," he said. WCIT is the ITU's landmark conference to discuss international telecommunications regulations. ITU World Telecom 2012 was attended by over 300 stakeholders from 162 countries from across the public and private sectors. Continuing ITU Telecom's commitment to annual events, the upcoming ITU Telecom World 2013 will be held in Bangkok, Thailand, for the second time after its first hosting in 2008. **(October 17, 2012) www.bernama.com**

International Telecommunication Union's Global Symposium for Regulators 2012 forum in Sri Lanka's capital Colombo is looking at ways to create better conditions to foster information technology as broadband coverage takes holds around the world officials said. Lalith Weeratunga, chairman of Telecommunications Regulatory Commission of Sri Lanka said regulator had to strike a balance between regulation to provide better services and excessive regulation that will stifle market growth and innovation. He was speaking to reporters after during the first day of International Telecommunication Union's Global Symposium for Regulators 2012, with delegates from over 100 countries and operators and technology providers also shared their experience and feedback. "Here in Sri Lanka, you are very fortunate in having a very positive climate for ICT growth, thanks to the active efforts of the Telecommunications

Regulatory Commission of Sri Lanka," Hamadoin I Toure, director general of ITU said. "It is decisions that are made by national regulators - of which there are now 159 worldwide - that shape the market conditions for the growth information and communications services. Until the early 1990s when Sri Lanka started to de-regulate the telecom sector and give freedom to private investment and competition, the sector was stifled by a state monopoly. In 1992 soon after Sri Lanka licensed the region's first cellular operator with foreign investment the island had 2,644 cell phones and 157,000 fixed lines after nearly a century of telecom services under state ownership and control. By 2002 Sri Lanka had 883,000 fixed lines 931,000 mobile subscribers, with even the incumbent being a listed company with foreign investment, three fixed access providers and four mobile operators. By 2012, the people, with foreign and local investment had built themselves networks that had 3.4 million fixed access phones and 19.2 million mobile phones. Fixed access voice telephony is now shrinking as more people move to mobile and broadband. **(October 4, 2012) www.lankabusinessonline.com**

United States

The Federal Communications Commission FCC has adopted revised rules to enable Wireless Communications Service (WCS) licensees' to use a total of 30 megahertz of underutilized spectrum in the 2.3 GHz band for wireless broadband services, while protecting the adjacent Satellite Digital Audio Radio Service (SDARS) operator Sirius XM Radio against harmful interference. The revised rules are consistent with a compromise proposal between AT&T and Sirius XM designed to facilitate the efficient deployment and coexistence of the terrestrial mobile services and satellite radio. Of the 30 megahertz of total spectrum, 20 megahertz may be used for mobile broadband services and 10 megahertz for fixed broadband services, with possible future use as downlink spectrum to serve mobile broadband devices. The revised rules also provide Sirius XM greater certainty and flexibility by adopting conditions for identifying and resolving harmful interference to satellite radio operations on roadways and by relaxing the satellite radio licensee notification requirements for low-power terrestrial repeaters and for minor modifications to repeaters. The Order also provides a limited extension of the WCS construction periods and restarts the WCS construction periods to enable WCS licensees to respond to the rule revisions while ensuring significant deployment of facilities in the near term. The Order also addresses a number of other technical issues raised in various petitions for reconsideration that were not the specific focus of the AT&T and Sirius-XM joint proposal. **(October 18, 2012) www.cellular-news.com**

FCC Chairman Julius Genachowski detailed plans to free up more wireless spectrum that carriers say they need to offer high-speed mobile services. The agency is on track to make 300 MHz of new spectrum available for commercial mobile networks by 2015, fulfilling part of the 2010 National Broadband Plan, Genachowski said. Mobile operators have been clamoring for at least that much spectrum to fulfill what they say will be rapidly growing mobile data use by consumers over the next several years. CTIA, the main trade group for U.S. cellular carriers, has called for 800 MHz of additional spectrum by 2015. Genachowski's forecast included good news for most of the major U.S. operators, though it wasn't as clear for Dish Network, which is hoping to build a completely new network using fast LTE Advanced

technology. He named several changes that the cellular companies have sought and said the FCC is on the way to making them happen. The agency is on track to auction several blocks by 2015 in the AWS (Advanced Wireless Services) band, a key piece of spectrum for LTE networks. Among them is a band between 1755 MHz and 1780 MHz, where a commercial user would share the spectrum with current government users. T-Mobile USA has been advocating that spectrum-sharing plan and hopes to use the band in its LTE service, set to launch next year. But first, the agency expects to sell licenses for a band that Sprint Nextel has been seeking to bolster its LTE service. The proceeds from the so-called AWS-2 H-Block auction would fund a nationwide public safety network and help to pay down the federal deficit. There was some good news for Dish Network. Genachowski said he expects the FCC later this year to lift restrictions that have prevented Dish from using 40 MHz of satellite spectrum for a land-based LTE network. However, if it follows through on the H-Block auction that Sprint has been clamoring for, the agency will have to move Dish's spectrum up by 5 MHz. Dish opposes that move because the current LTE standard lines up with the band it already has. Charlie Ergen, the founder and chairman of the satellite-TV company, said it might take a year or two to get that change made at the 3GPP, the standards body that oversees LTE. However, this week Sprint told the FCC there is room for both carriers to get what they want if they cooperate, and that the LTE changes could take six months or less if they work together. Genachowski also said he expects the FCC later this year to open up 30 MHz of AT&T spectrum in the so-called Wireless Communications Service band for use with LTE. Without giving any time frame, the FCC chief also noted his agency is "working with stakeholders" on allowing LTE in the "L band" historically reserved for satellites. That's where LightSquared has sought to deploy a controversial national LTE network. LightSquared, now bankrupt, had its earlier plans shot down by the FCC and recently proposed a new plan that would include a spectrum swap with the government. The moves Genachowski laid out on Thursday should help build up capacity and keep several competitive carriers supplied with spectrum, said analyst Tim Farrar of TMF Associates. But the planning and building of networks is yet to come, he cautioned. "No one's going to notice a difference next year because of what he's announcing today," Farrar said. Even the most immediate developments probably won't yield new networks or added performance for two or three years, he said. In light of this, it's likely the FCC will hand out strict buildout timelines along with the spectrum licenses, Farrar said. When it approved Verizon's acquisition of spectrum from a group of cable companies earlier this year, the agency forced a faster rollout of the network to make sure the spectrum got used, he said. "There've been people who sat on spectrum in the past," Farrar said. **(October 5, 2012) www.techhive.com**

Deutsche Telekom and MetroPCS Communications have signed a definitive agreement to merge T-Mobile USA and MetroPCS. The combined company will retain the T-Mobile name, with the transaction approved by Deutsche Telekom's supervisory board and MetroPCS' board of directors. The deal is structured as a recapitalization, in which MetroPCS will declare a 1 for 2 reverse stock split, make a cash payment of US$ 1.5 billion to its shareholders (around US$ 4.09 per share prior to the reverse stock split) and acquire all of T-Mobile's capital stock by issuing to Deutsche Telekom 74% of MetroPCS' common stock on a pro forma basis. Deutsche Telekom has also agreed to

roll its existing intercompany debt into new US$ 15 billion senior unsecured notes of the combined company, provide the combined company with a US$ 500 million unsecured revolving credit facility and provide a US$ 5.5 billion backstop commitment for certain MetroPCS third-party financing transactions. Based on analyst consensus estimates for 2012, the combined company is expected to have around 42.5 million subscribers, US$ 24.8 billion of revenue, US$ 6.3 billion of adjusted EBITDA, US$ 4.2 billion of capital expenditures and US$ 2.1 billion of free cash flow in 2012. Once the deal is closed, the company's headquarters will be in Bellevue, Washington. The transaction is subject to MetroPCS shareholder approval, regulatory approvals and other customary closing conditions. It is expected to close in the first half of 2013. **(October 3, 2012) www.telecompaper.com**

The Federal Communications Commission has approved a plan to buy unused television airwaves and auction them off for use by Smartphones. The plan would raise an estimated $15 billion for the government and help meet the rising demand for wireless computing. Part of the funds raised would be dedicated to the creation of a nationwide radio network for emergency workers. The auction is expected to take place in 2014. Verizon Wireless and AT&T Inc., the nation's two largest wireless companies, issued statements welcoming the FCC decision. Both companies have been actively seeking to acquire new frequencies to expand wireless coverage. Verizon recently won approval to buy frequencies from cable companies, but AT&T's bid to purchase T-Mobile, the nation's fourth largest provider, in a bid to acquire more wireless frequency was rejected. **(October 1, 2012) www.bizjournals.com**

The Federal Communications Commission has put U.S. spectrum policy on a path to the world's first incentive spectrum auction to repurpose broadcast television spectrum for mobile broadband use. But broadcasters appear determined to hold onto their spectrum. Carriers are supporting the FCC's auction proposals, eager to see more spectrum freed for mobile broadband use. However, broadcasters — who are supposed to participate voluntarily in the new auction format — have historically been reluctant to give up spectrum. Even before the FCC meeting, some legislators and industry insiders were expressing reservations about coverage loss and fears that the auction may not be strictly voluntary. The FCC said it anticipates holding the world's first incentive spectrum auction in 2014. This auction would have three major pieces, as outlined by the commission.

- A reverse auction in which broadcast VT licensees submit bids to voluntarily relinquish spectrum usage rights in exchange for payments.
- Repacking the relevant bands in order to free up a portion of the ultra-high frequency (UHF) and configure it into contiguous blocks of spectrum suitable for flexible use.
- A "forward auction" of initial licenses for flexible use of the newly available spectrum.
- Funds raised from the auction will support the launch of FirstNet, the nationwide public safety network. FCC is gathering comments on all aspects of the proposed auction process. **(October 1, 2012) www.rcrwireless.com**

Chile

Telecom regulator Sub-Secretaria de Telecomunicaciones (Subtel) has announced plans to eliminate domestic long-distance (DLD) charges before 2014. Customers will be required to precede the phone number with the digit '2' when calling to fixed lines, either from a mobile or another fixed line. The watchdog is rolling out the new system on a region-by-region basis starting with Arica and Parinacota from October 20, 2012, whilst Coquimbo will be the last to receive the update, in June 2013. In areas that the system has been implemented, DLD calls will be charged at local rates. **(October 11, 2012) www.telegeography.com**

Chile will auction 700 MHz spectrum for LTE services in June or July of 2013. The spectrum winner will be announced in the second half of 2013. Chile has adopted the Asia Pacific Telecommunity (APT) band plan for the 700 MHz band for mobile services. **(October 5, 2012) Daily Valor Futuro**

Brazil

The National Telecommunications Agency (Anatel) has announced that on October 16, the authorizations to use radio frequencies in the sub-ranges of 2.500 MHz to 2.690 MHz, 451 MHz to 458 MHz and 461 MHz to 468 MHz will be issued. The 2.5 GHz band will be used to bring 4G mobile telephony to Brazil, while the 450 MHz auction will permit rural areas to be served by voice and data services. All municipalities with over 100,000 inhabitants will have 4G coverage by 31 December 2016. **(October 16, 2012) www.telecompaper.com**

Dominican Republic

The telecoms regulator, Instituto Dominicano de las Telecomunicaciones (Indotel), has implemented an official resolution which ensures operators provide consistent quality of service (QoS) and also forces telcos to compensate users for interruptions to their service. The new regulation says operators must apply a credit to the account of subscribers if an outage last for over two hours, except in cases of 'force majeur'. **(October 11, 2012) Telesemana**

Colombia

The National Spectrum Agency (ANE) has announced that trials of 700 MHz Long Term Evolution (LTE) technology will begin later this year and confirmed plans to auction 700 MHz spectrum licenses in 2013. BN Americas reports that Chinese Vendor Huawei will begin trailing the platform in Q4 2012, whilst ZTE and Ericsson will conduct further tests in Q1 2013. Colombia has repeatedly delayed the auction of 4G spectrum in higher frequency bands, most recently postponing the tender from September to December 2012. In August this year ANE revealed plans to sell off the following sets of frequencies: 2575 MHz-2615 MHz; 1710 MHz-1755 MHz paired with 2110 MHz-2155 MHz; 2525 MHz-2570 MHz paired with 2645 MHz-2690 MHz; and 1865 MHz-1867.5 MHz paired with 1945 MHz-1947.5 MHz. **(October 15, 2012) www.telegeography.com**

European Union

The European Commission has launched a public consultation with a view to updating the current list of relevant wholesale and retail telecoms markets subject to the Commission's "Article 7" procedure under EU telecoms rules. These markets include retail access to the public telephone network and wholesale broadband access. Having

a list of relevant markets helps national telecoms regulators manage their markets in a coordinated manner. The review will take into account major market and technological developments, such as internet-based applications and services, the convergence between different types of networks and services and the development of very fast internet networks and services. Based on its results, the Commission will then revise the current Recommendation on Relevant Markets which was last updated in 2007. The Commission invites interested parties to respond to the consultation by January 8, 2013. Neelie Kroes, European Commission Vice President for the Digital Agenda said: "We need to be up-to-date with technological developments in the sector so that regulation only focuses on persistent structural competition problems and facilitating investment." The purpose of the questionnaire is to identify major relevant trends and to consult stakeholders on the revision of the current list of relevant markets and their scope, as well as on markets to be possibly added to the list, including markets regulated at national level and trans-national markets. The consultation is the first step in a review process. Based on its results and after consultation with the Body of the European Regulators for Electronic Communications (BEREC) and the Communications Committee (an advisory committee composed of Member State representatives), the Commission will adopt a revised Recommendation.
(October 16, 2012) www.cellular-news.com

The European Union's digital agenda commissioner Neelie Kroes took to the stage on the opening day of this year's Broadband World Forum in Amsterdam to call on policy makers to spur network investment as a matter of urgency. "We are at a crossroads," she said. "Take the right turn, and we will see the benefit for years to come. Take the wrong turn, and future generations will curse our missed opportunity." Kroes warned that Europe is slipping behind other regions in terms of broadband availability, which if left unchecked will have dire economic consequences as more and more business is conducted online. "In 2020, when an international business looks at where to put itself, it is going to look at digital societies with high-speed broadband," she said, the implication being that Europe may find itself without the infrastructure needed to attract high-flying multinationals. "Be aware that your competitive position is not forever carved in stone," Kroes continued. "We have the talent, and we have the research capability, but we still need to fill in the gaps to make a digital single market." Kroes earlier in October called on telcos to help lobby for the release of €9.2 billion from the EU's Connecting Europe Facility, which could go towards broadband infrastructure deployment in underserved areas. However, even with public funding, rollout targets at both national and EU-level, and demand for broadband from end users, Kroes admitted that building a business case for investing in rural networks, particularly fiber, "is still shaky". "Where you can't expect to put fiber, other technologies should be used," she said. However, when questioned about whether speed or availability should be the priority for broadband strategists, her message was clear: just any Internet connection will not suffice; it has to be broadband.
"It's essential to our future...we are far from hitting the Internet's innovation potential," Kroes said. **(October 16, 2012) www.totaltele.com**

United Kingdom

The Competition Appeal Tribunal has dismissed a complaint by Telefonica O2 over how the telecoms regulator, OFCOM handled the setting of mobile termination rates. The dispute related to termination charges levied by Vodafone and Hutchison 3G UK (H3G) in October 2010, and in particular a practice known as "flip-flopping", a means by which mobile communications providers exploited the way in which average call termination charges were calculated under OFCOM's mobile call termination statement published on March 27, 2007. The Tribunal rejected each of Telefónica's grounds of appeal, and concluded that OFCOM had clearly understood that dispute resolution constituted a separate limb of regulation, distinct from the pre-existing charge control regime. It also found that OFCOM had given consideration to the question of whether the October 2010 charges were fair and reasonable in the light of all of its regulatory duties and objectives, and in light of the prevailing regulatory regime. The Tribunal also ruled that there was also no error in law on OFCOM's part in giving predominant weight to Vodafone's and H3G's putative compliance with the significant market power regime.
(October 31, 2012) www.cellular-news.com

The UK's switchover from analogue to digital terrestrial television is finally complete, with the last broadcast having been transmitted in Northern Ireland. Over the past five years, the UK has gradually been switching off its five national analogue TV channels, region by region, and replacing them with over 70 digital channels. The process has been run by Digital UK, broadcasters and transmission company Arqiva. The switchover to digital TV has freed up much needed capacity in the 800 MHz spectrum band, which will be used for the delivery of 4G mobile services. The communications regulator OFCOM will begin the process of auctioning this spectrum, known as the "Digital Dividend", at the end of 2012. **(October 24, 2012) http://news.techworld.com**

The UK's major mobile operators have made another step towards speeding up the deployment of LTE based 4G mobile phone services in the UK. Some 4G mobile services will use frequencies which were used for television until digital TV switchover, and are adjacent to the frequencies still used for Freeview television signals. Without action, the new 4G services are likely to interfere with the reception of the TV signal, making it difficult to watch Freeview. EE, Telefónica O2, Three and Vodafone have now formed a jointly-controlled company Digital Mobile Spectrum Ltd that will be responsible for ensuring that consumers continue to receive clear Freeview TV signals following the roll out of 4G mobile services. The new company will be funded by the successful bidders for 800 MHz spectrum in the upcoming auction. Commenting on the development, Culture Secretary Maria Miller said: "The roll-out of 4G is a huge step forward for mobile broadband services in the UK, and will be incredibly important in driving economic growth. I am pleased that the mobile operators will be working together to ensure that no viewers lose their television services when 4G is rolled out, and congratulate them on setting up the assistance scheme so quickly." The UK's mobile networks are required to fund a £180 million (US$285 million) scheme that will deliver a filter to most of the affected homes so that their TV service won't be affected by the mobile signals. Extra support to fit them will be offered to the over-75s and people who are registered disabled. **(October 19, 2012) www.cellular-news.com**

A UK firm has been hit with a record £800,000 fine after being found guilty of breaking regulations applying to premium rate telephone services. The premium rate services regulator, PhonepayPlus took action against the premium rate line competitions run by Churchcastle, which were widely advertised in newspapers and magazines nationwide. These competitions were followed up by misleading direct mail marketing that encouraged consumers, many of whom were elderly, to continue to engage with the premium rate service, often at considerable expense. In many cases, PhonepayPlus was alerted to the consumer harm by relatives or careers that discovered that their loved ones had unexpectedly high phone bills. **(October 11, 2012) www.cellular-news.com**

OFCOM has welcomed the significant progress made in moving towards the delivery of competitive 4G mobile services across the UK. The government recently announced plans to move the 4G spectrum auction forward, in a move which should allow next-generation mobile services to be provided in the 800 MHz and 2.6 GHz frequency bands by spring 2013. This came after O2 and Vodafone agreed to drop plans for legal action against the decision to allow EE to launch 4G this month using its spare 1,800 MHz spectrum. As such, Orange and T-Mobile customers will be able to access 4G services from October 30 with 16 cities due online by the new year. Three may also be able to launch 4G broadband soon, having agreed to purchase some of EE's 1,800 MHz spectrum as required by competition rules. Other broadband providers will be able to launch their own services supported by super-fast dongles and Mi-FI devices - from early 2013. Over the last 18 months OFCOM has consulted widely on how it proposes to auction the spectrum available in the 800 MHz and 2.6 GHz bands. The regulator is required to ensure this process creates a competitive market, with rival network operators given fair opportunity to take advantage of 4G services. Following discussions with TV broadcasters, Digital UK and the transmission company Arqiva, OFCOM has secured the earlier release of frequencies previously used for digital-terrestrial broadcasting. This spectrum will now be cleared and ready for 4G mobile services across much of the UK five months earlier than previously planned, from spring 2013, OFCOM explained. This has only become possible in the past few months as a result of the significant progress that has been made to date with the digital switchover and the clearance program itself, which has been running ahead of schedule. **(October 4, 2012) www.uswitch.com**

The UK's four main mobile network operators have reached an agreement for the launch of 4G mobile broadband services. The move will see competitive 4G services made available to consumers in spring 2013, with OFCOM set to begin an auction later in 2012. The progress made in moving forward the delivery of 4G mobile services was welcomed by regulator OFCOM. Chief executive CEO said that the action of industry and government avoids the risk of significant delay and was good news for consumers. OFCOM plans to start the auction process to release spectrum at end-2012, with bidding starting in early-2013. Following discussions with TV broadcasters, Digital UK and the transmission company Arqiva, OFCOM has secured the earlier release of frequencies that were previously used for digital-terrestrial broadcasting. This spectrum will now be cleared and ready for 4G mobile services across much of the UK five months earlier than previously planned, from spring 2013. **(October 3, 2012) www.telecompaper.com**

The OFCOM has announced that it will be releasing Digital Dividend radio spectrum sooner than it had planned in order to speed up the deployment of LTE based services. The spectrum will now be cleared and ready for 4G mobile services across much of the UK five months earlier than previously planned, from spring 2013. **(October 3, 2012) www.cellular-news.com**

Austria

Austria's planned auction of supplementary mobile spectrum is not likely to happen until September 2013. Previously, in April 2012 the RTR's sister organization Telekom Control Commission (TKK) revealed that it had suspended publishing a tender document for the joint allocation of frequencies in the 800 MHz, 900 MHz and 1800 MHz frequency bands. The decision was made in the wake of the proposed takeover of Orange Austria by Hutchison Whampoa's H3G Austria unit, with the TKK saying that it was unwilling to launch a tender for the spectrum while the controversial acquisition had yet to be finalized. In September 2010 the TKK announced the completion of an initial spectrum auction, in which a total of 14 paired and nine unpaired frequency blocks in the 2.6GHz band were offered, with bids starting at EUR7.4 million (US$9.5 million). The TKK reportedly raised a total of EUR39.5 million from the sale process, which all of Austria's mobile network operators participated in. **(October 11, 2012) www.telegeography.com**

France

French communications regulator the ARCEP has published its reflections on the reform of audiovisual sector regulation following a move by the French government to investigate whether telecom and TV regulation should be brought closer together. The ARCEP said that whether a move to bring together the regulatory bodies responsible for telecom and TV regulation – meaning the ARCEP and the CSA respectively – would be justified would depend on the purpose of regulation of the audiovisual sector. If this were to be focused on "preserving strong content regulation" in the spirit of France's 'cultural exception', while modifying rules to take account of new modes of distribution, then it would make sense to preserve two distinct regulatory regimes. This could be combined with a more informal committee including members of both to look at areas of common interest. If the goal were to base a modernised regulatory regime more on economic principles, it would make sense to split responsibilities between the tow with ARCEP looking after technical and economic regulation of both sectors while the CSA looked after content. If on the other hand regulation were to be based principally on economic considerations, it would make sense to merger the pair into a single regulator on the model of the UK's Ofcom, said the ARCEP. The ARCEP said that the outcome would depend in large part of the enquiry currently being conducted by former Canal Plus chief Pierre Lescure and the conclusions drawn by the government and parliament. **(October 12, 2012) www.digitaltveurope.net**

French MVNO association Alternative Mobile has asked France's Competition Authority to rule on the implications of all of the constraints (pricing, legal, technical) that are susceptible of hindering their capacity to play their role fully in the market. The sector was hit by the arrival of Free Mobile on the market, with MNOs now offering prices that they are unable to replicate profitably. Alternative Mobile also called on the government to ensure that future measures currently

being drawn up allow MVNOs to survive in the fiercely competitive mobile market. MVNOs have created nearly 3,000 jobs in the last 5 years and have around 7.5 million customers for an 11% market share.
(October 11, 2012) www.telecompaper.com

Germany

The Federal Network Agency (FNA) Germany's telecoms regulator, has announced that three of the country's mobile network operators have fulfilled coverage obligations for the 800 MHz band. According to the watchdog, the three cellcos Telekom Deutschland (TD), Vodafone Germany and Telefonica Germany (O2) have now fulfilled coverage obligations in twelve of the 13 required states. Coverage obligations in the remaining underserved state, Brandenburg, are close to being fulfilled. Germany's auction of spectrum in the 800 MHz band concluded in May 2010, as part of the regulator's wider sale of frequencies in a number of bands. Three of the country's mobile players each secured two paired 5MHz blocks in the 800 MHz band, with Telefonica Germany paying the highest amount – EUR1.212 billion (US$1.6 billion) – for the two blocks, followed by Vodafone (EUR1.21 billion) and TD (EUR1.15 billion). The 800 MHz frequencies included a phased rollout obligation to cover areas underserved with broadband services, also known as 'white spots', with operators required to cover 90% of these regions before they could roll out mobile broadband (including 4G Long Term Evolution services) in other areas using 800 MHz spectrum. Rollout is to be carried out in stages based on the number of inhabitants, beginning with municipalities with 5,000 people or less, and followed by larger towns in the subsequent stages. When the coverage obligation has been fulfilled in a federal state, assignment holders can make unrestricted use of the 800 MHz spectrum there. **(October 10, 2012) www.telegeography.com**

Austria

Telekom Austria Group announced that Vipnet, its Croatian subsidiary, has obtained a 10 MHz paired frequency block (total of 20 MHz) of the 800 MHz frequency spectrum for a total of HRK150 million (US$25.6 million). The sale of blocks within the 800 MHz spectrum, so called "Digital Dividend", was conducted by the Croatian regulatory authority HAKOM through a public call procedure and took place from 14 September 2012 to 15 October 2012. The spectrum was officially awarded on October 29, 2012. Whilst a total of 3 frequency blocks were offered, only Vipnet and T-Hrvatski Telekom participated in the process. The regulatory requirement for these frequencies is to achieve coverage of at least 50% of the Croatian territory within five years, whereas the starting date has not yet been defined by HAKOM. The licenses of the acquired frequencies will expire on October 18, 2024. The companies plan to use the spectrum for LTE services. **(October 30, 2012) www.cellular-news.com**

Netherland

Dutch spectrum regulator AGENTSCHAP Telecom has released documents explaining how frequencies will be extended. The regulations explain what the market parties will have to provide so that the regulation can correctly assess their applications. The current licenses for GSM900 and GSM1800 run until mid-February. Operators may need more time to adapt their networks following the auction set to take place on October 31. They can now extend their licenses, if need be. Companies wishing to extend must

specify which masts they want to adapt and how much technician capacity they will need. The regulator said it needs this information because all the operators together form a ecosystem, where each depends on the other. What the extension will actually consist of; will be determined only after the auction. The regulator said it will release information about how it will assess applications and extend licenses, as soon as possible after the auction. If there are unexpected delays, all permits will be extended by three months. This period has been set to ensure that all mobile networks (both legally and operationally) remain intact after February 26, when the old permits expire.
(October 24, 2012) www.telecompaper.com

New Zealand

There will soon be one million ported numbers in New Zealand; with the milestone due to be reached in late November or early December if recent activity levels continue, according to the NZ Telecommunications Forum. Number Portability recently celebrated its fifth birthday in April, and the Forum notes that to hit one million numbers in such a short space of time is quite an achievement. It is likely that this milestone will cap off a very busy year for Number Portability. For the past six months there have been new networks and service providers added to the system constantly, with at least two pieces of work on at any one time. In addition, the IPMS recently successfully tested the transition to its Disaster Recovery site, when the main hardware was taken down and relocated to a new data centre. The shift required the efforts of almost 30 companies, including software support and hardware hosts to accomplish and resulted in a successful transition with a minimal after-hours outage. The Forum now expects that users can be sure that in the event of a real disaster, portability will continue to operate even if the main IPMS hardware is completely destroyed.
(October 8, 2012) www.cellular-news.com

Poland

Polish regulator the Office of Electronic Communications (UKE) has invited comments on the need for a universal service operator, obliged to provide telecoms services to areas with limited coverage, poor service quality or inadequate competition. The watchdog's move follows the termination of the universal service obligations of the incumbent telco Orange Poland in May 2011. UKE has set a deadline of November 16, 2012 for comments.
(October 18, 2012) www.telegeography.com

Romania

ANCOM has published for public consultation a draft decision aimed at allowing the use of the 900 and 1800 MHz bands for 4G services in order to impel the provision of multimedia mobile communications and data transmissions services with higher capacities and at higher speeds. According to the draft decision, the operators holding licenses for the use of these bands will be able to also offer 4G communications services in these frequencies by means of LTE or WiMAX technologies. At present, the rights of use over these bands are held by three operators – Orange Romania, Vodafone Romania and Cosmote Romanian Mobile Telecommunications. Upon the approval of this decision, the three operators currently using these bands to provide second generation services and, from 2010, 3G services will be able to use them in order to provide 4G services as well. Furthermore, RCS&RDS, which won a share of spectrum

in the 900 MHz band following the auction ANCOM held this year, will be able to offer 4G services as soon as the license obtained becomes effective. The 4G technology may be also implemented in the 800 and 2600 MHz bands from 2014, as a result of the recently closed Romanian spectrum auction. The providers will choose whether to implement new technologies in these frequencies, the implementation calendar and the time of the commercial launch of the 4G services. The draft Decision on the harmonization of the use of the paired bands 880-915 MHz, 925-960 MHz, 1710-1747.5 MHz and 1805-1842.5 MHz is available for consultation on the ANCOM website. **(October 30, 2012) www.ancom.org.ro**

Malta

Telecoms regulator the Malta Communications Authority (MCA) has launched public consultation for a proposed new cost structure for fixed core and access services. The MCA has proposed the introduction of rates based on a Bottom-Up Long Run Incremental Cost (BU-LRIC) model. A proposed glide path would see fixed termination rates drop from a current average – at present, rates vary depending on time of day – of EUR0.0072 per minute to EUR0.0038 by June 2013, and EUR0.00046 by end-December 2013. **(October 10, 2012) www.telegeography.com**

South Africa

In South Africa the introduction of Call Termination Rate Regulations in March 2010 has resulted in the cost of prepaid mobile voice calls dropping by 24% from June 2010 to June 2012, from R1.37 to R1.04. The 24% drop in the costs for prepaid mobile voice calls clearly demonstrates that the benefits of the reduction in termination rates has led to a direct benefit to end-users and particularly the prepaid market, the majority of mobile phone users. Termination rates represent the fee that one operator must pay another in order for consumers to contact each other, where a high termination rate keeps off-net retail prices high. The actual cost of a call faced by an end-user is not the advertised, or headline tariff, but the combination of free minutes for recharging and other promotions as well as those calls for which the end-user actually pays. The introduction of one-rate packages across networks in 2010, new tariff plans launched in early 2012 as well as the increased number and benefits available to end-users through promotional packages subsequent to the regulation of termination rates indicate an increasingly competitive retail market and lower retail prices. The termination rate is set to fall further from the current R0.56 at peak time to R0.40 in March 2013. The effective tariff is calculated by comparing total revenue to total traffic volumes for a given period of time. The figures below indicate the industry trend in the effective tariff for a mobile prepaid voice call on a six-monthly basis from January 2010 to June 2012. **(October 19, 2012) www.itnewsafrica.com**

South Africa's long-awaited awarding of spectrum suitable for the provision of Long Term Evolution (LTE) services is reportedly drawing near. Speaking at a communications forum Minister of Communications told delegates that the Department of Communications is 'almost at the point where we will be able to allocate' spectrum for LTE. The minister went on to say that an announcement would be made 'probably by next month', although she added that the 800 MHz digital dividend band would only become available in 2015. Other spectrum, such as frequencies in the 2.6 Hz band, is expected to be available for use immediately. **(October 18, 2012) MyBroadband**

Nigeria

The Consumers Empowerment Organization of Nigeria (CEON) has filed a formal complaint against mobile service operators Airtel, Globacom and MTN with the Nigerian Communication Commission (NCC) for alleged anti-competitive conduct. "As a consumer advocacy group, our interest in this matter is based on our concern that such discriminatory conduct by these GSM services providers is capable of distorting competition in the mobile content application space through constraining the choice of consumers, reducing output and retarding innovation, hence we see the need for the Commission's intervention," CEON said in a statement. The complaint arose out of comments by Executive Vice- Chairman of NCC, Eugene Juwah, when he advised telecommunications subscribers to "protect their right by reporting any unfair practice by the telecoms operators including extreme poor service quality to the appropriate authorities," wrote Nigeria's This Day. In a letter to This Day, "CEON urged the NCC to determine if the Global System for Mobile Communications (GSM) service providers was engaging in 'concerted practices' between themselves by collectively discriminating in providing access to their network infrastructure to competing Mobile Content Service Providers (MCSPs)." It is expected that the NCC will issue a written notice to the parties concerned. **(October 18, 2012) www.itnewsafrica.com**

The Nigerian Communications Commission (NCC) said the number of telecommunication subscriptions in the country has passed 105 million. While active mobile subscriptions on GSM networks increased from 91 million in January to 101.4 million at the end of August, those with CDMA operators declined from 4.4 million to 3.3 million. Active GSM subscriptions increased to 92 million in February and 94.5 million at the end of March, to 96.6 million in April and 97.5 million active subscriptions in May. In June, July and August, the combined active GSM subscriber base increased to 98.3 million, 99.4 million and 101.4 million respectively. For the CDMA operators, thenumber of customers declined to 4.03 million lines in February, 4.01 million in March and 3.90 in April. They reached 3.72 million in May; went down to 3.54 million in June, fell to 3.45 million in July and finally to 3.35 million at the end of August. There were 688,333 million fixed lines at the start of the year, falling to 488,088 by the end of August **(October 9, 2012) Daily ThisDay**

Kenya

According to statistics released by the telecoms regulator the number of mobile subscribers in Kenya grew by 1.7% between March 30 and June 30 this year to stand at 29.7 million, thereby increasing the penetration of mobile telephony services to 75.4%. Compared to the same period last year, the annual mobile subscriptions registered a significant growth of 17.5% from 25.2 million recorded in the 2010/2011 financial year. According to the Quarterly sector statistics report for the fourth quarter of the 2011/2012 financial year, prepaid subscriptions continued to dominate the total mobile subscriptions with 29.4 million pre-paid subscriptions, representing 99.1% of the total subscriptions. Annual post-paid subscriptions grew by 18.3% to stand at 273,367 as at June 30, 2012. In respect to the Internet, the number of subscriptions rose by 19.2% from 6.4 million in the previous quarter to 7.7million during the quarter under review. The annual growth in the Internet/data market segment may be attributed to the increase in international connectivity bandwidth by 58% to 264,584 Mbps during

the quarter under review. The used bandwidth represented 46% of the total available bandwidth capacity. Mobile data/Internet subscriptions continued to dominate the Internet market contributing 98.9% of the total Internet/data subscriptions. Mobile money transfer service experienced 2.73% growth to record 19.50 million registered subscribers. The total deposits handled during the period were recorded at 192.73 billion representing a 4.0% growth from 185.36 billion recorded in the previous period. Mobile money transfer service also continued to create employment opportunities across the country with 49,079 active agents recorded during the quarter. The ICT sector continued to create employment, as a total of 17,596 people were employed in the mobile, data and postal segments, with women making up 38.9%. These numbers are expected to continue growing with the expansion of ICT services across the economy. Fixed line network and the postal and courier industry continued to face stiff competition from the telecommunications sector. Total fixed lines (fixed terrestrial lines and fixed wireless) recorded an annual subscription decline of 29.9% from 374,942 main fixed lines in FY 2010/11 to 262,711 in the quarter under review.
October 10, 2012) www.cellular-news.com

Zambia

Zambia could issue a tender for a fourth mobile network license in the near future after the government overturned a law banning a fourth license being issued before 2015. The previous government had introduced the law saying at the time that the three incumbent networks needed time to recoup their investments. That government also privatized the state-owned mobile network in a controversial sale which has since been reversed. The country has three networks, MTN, Airtel and Zamtel/Cell C. The Minister of Communication and Transport said the government is in the process of allowing a fourth mobile operator in order to encourage competition and subsequently lowering of prices for mobile phone services. The first stage was the rescinding of the 2009 law banning the award of another mobile license. It will now be down to the regulator to take advantage of the opportunity now presented to it. (**October 28, 2012) www.cellular-news.com**

Zambia's Transport, Works, Supply and Communications Minister suggested that the government is open to idea of licensing a fourth mobile network operator. The minister is cited as claiming that the introduction of another player would help the industry thrive, while also calling on the country's existing cellcos to expand coverage further in rural and remote areas of the country, in order that more citizens had access to mobile voice services. 'This service is not a luxury anymore, it is a necessity, people need to have a tool of communicating to loved ones, this is something that we should give to each and every Zambian,' minister noted.
(October 18, 2012) Daily AllAfrica

Liberia

The Liberia Telecommunications Authority (LTA) says it takes its regulatory and other responsibilities very seriously and will endeavor to carry out these duties in the sector without fear or favor. LTA information officer Chris Harris-Williams said the LTA remains focused and will not be detracted by influence-peddlers. The officer said the LTA will continue to show restraint and flexibility in regulation and encourages continued investment, and will not tolerate any sector player acting as if it is above the laws or LTA regulations.

Harris-Williams encouraged members of the public in doubt about information regarding the telecommunications sector to visit the institution for clarity instead of denigrating and blackmailing the LTA and its commissioners. Harris-Williams said the act that gives the LTA its statutory powers also allows those affected by its decisions to seek redress.
(October 16, 2012) The News

Australia

The Australian Communications and Media Authority (ACMA) has published its strategic approach to meeting the future spectrum needs of public safety agencies. The cornerstone of the approach is the provision of an additional 60 MHz of spectrum across a number of bands to facilitate the deployment of high-speed, nationally interoperable mobile broadband networks by the agencies. Some 50 MHz of spectrum on the 4.9 GHz band will be made available as well as 10 MHz of spectrum from the 800 MHz band. ACMA released two papers to outline its spectrum approach and the regulator will continue to work with public safety agencies on the development of an appropriate licensing framework as part of the ongoing review of the 803-960 MHz band, with a discussion paper to be released in December.
(October 30, 2012) www.telecompaper.com

Russia

Following a preliminary hearing the Moscow Arbitration Court has set a date of November 27 to hear a lawsuit filed by Russia's competition regulator FAS. The watchdog is seeking to overturn a deal made in February that resulted in Telenor securing an increased stake in Vimpelcom. The ownership of the operator has been the subject of a long-running dispute between Telenor and billionaire Mikhail Fridman's Altimo. It is understood that the position of the FAS is that it is concerned with the dominant position of Telenor – a foreign state-controlled company – in Vimpelcom, whose Russian operating subsidiary is considered a strategic asset by the government. Earlier this month, the FAS said that it would consider withdrawing the lawsuit if Telenor and Altimo resolve their differences and reach equal ownership in Vimpelcom. **(October 18, 2012) Reuters**

Kyrgyzstan

The Kyrgyzstan State Communications Agency has allocated LTE and Wimax frequencies under the new simplified procedure to twelve companies. They are Asia Info, Global Asia Telecom, Totel, Aknet, Kurulush Invest, T-Com, Fraton Plus, Foris Telecom, Aytel, WTT, Sayma Telecom and Intranet KG. The agency said 58 LTE base stations have been deployed in the Chuya region, as well as 65 Wimax base stations in the Chuya region, Bishkek, Osh and Karakol.
(October 11, 2012) Daily Tazabek

Malaysia

The telecommunications regulator has conducted a detailed study into the cost of operators to provide services and has flagged a review of wholesale prices. The Malaysian Communications and Multimedia Commission (MCMC) said: "We believe that this review is timely as it is expected to lower prices for consumers in the long term and contribute towards higher broadband penetration in Malaysia." The regulator has released a public inquiry paper with its preliminary findings and sets out the regulatory principles adopted by MCMC, the proposed wholesale prices, and the regulator's preliminary views on whether to regulate those

prices. The MCMC will make a final decision by the end of this year. **(October 2, 2012) www.telecompaper.com**

Indonesia

The Ministry of Communication and Information Technology has decided to postpone the 3G tender after Telkomsel was declared bankrupt by a court. The 3G tender involves five telecommunication companies, including Telkomsel, which is looking to take two of the 3G blocks available. Telkomsel was declared bankrupt by the Commercial Court of Central Jakarta as it was judged unable to pay the relatively small IDR 5.3 billion debt that Prima Jaya Informatika says it is due. The process of selection for the two important blocks of 3G airwaves should have been held at the end of September. The ministry itself must be cautious in its decision to delay the tender of the remaining 3G blocks. The Business Competition Supervisory Commission (KPPU) has begun to oversee the bidding process. If it postpones it because of the Telkomsel bankruptcy, the ministry could be accused of being biased towards Telkomsel and that could also cause the authorities to be in a breach of competition and monopoly law. On the reverse side, the ministry does not want to prolong the process as it will lose money from the non-tax state revenue (PNPB). **(October 5, 2012) Daily Detik**

Philippine

The National Telecommunications Commission (NTC) of Philippines has approved an arrangement between Bayan Telecommunications, Inc. (Bayantel) and Globe Telecom, Inc. to jointly use a mobile radio frequency despite opposition from Smart Communications.
(October 2, 2012) www.bworldonline.com

Thailand

The Finance Ministry is calling for a probe into allegations of collusion between the three private mobile networks who won 3G licenses in last week's long delayed auction. The way the auction was structured and level at which the reserve price was set had been criticized as it reduced the opportunity for competition during the auction. However, equally, the lengthy delays in holding the auction and the local market conditions made it less appealing to new entrants to participate. The Finance Ministry has written to the telecoms regulator, the NBTC and the National Anti-Corruption Commission calling for a probe into the auction. Finance Ministry argued that there should have been fewer licenses than bidders and that the reserve price should have been set at a higher level. The licenses were eventually auctioned off for just slightly higher than the reserve, with competition limited to preferences over which block of spectrum the bidders wanted. The auction raised US$1.4 billion for the government. **(October 22, 2012) www.cellular-news.com**

The long-awaited auction of the third-generation 3G spectrum on the international standard 2.1 GHz frequency was completed with all nine slots sold for a combined value of 41.625 billion baht. The National Broadcasting and Telecommunications Commission (NBTC) divided the 45 MHz bandwidth into nine slots and set a minimum bid of 4.5 billion baht for each. Bids increase in 225 million baht increments, or 5% of the floor bid. Each bidder was entitled to a maximum of 15 MHz, or three slots. There were three qualified bidders: Advanced Wireless Network, a subsidiary of Advanced Info Service (AIS); DTAC Network, a subsidiary of Total Access Communication (DTAC); and Real Future, a

part of True Corporation. In the first round of bidding, only six slots reached the tender price. One slot was ignored until the sixth round of bidding, so this particular slot was auctioned off at the floor price of 4.5 billion baht. In conclusion, two slots were auctioned off at 4.95 billion baht each, one at 4.725 billion baht and six at 4.5 billion baht each. The NBTC will officially announce the winner in each slot within three days. Of the three bidders, the one who offered the highest combined price for three slots will have first right to choose a preferred 3G spectrum. The combined final price was 1.125 billion baht higher than the floor price, or around 2% higher than the floor price. The three bidders earlier announced they would spend a combined 130 billion baht on the 3G network rollout over the next three years. They plan to launch 2.1GHz 3G commercial services by mid-2013. **(October 16, 2012) www.bangkokpost.com**

While 3G is no stranger to Thais--we even have 3.9G courtesy of TOT--carriers are finding it harder and harder to provide consistent quality service on their currently allocated bands. Several years back, it was decided that auctions for the 2.1GHz range would be beneficial to Thailand's rapidly expanding wireless services as it would give carriers more headroom to provide better, faster and even more services to the general public. It was proposed that privately held companies such as AIS, Dtac and True would be allowed to directly bid in this auction. Allowing non-state affiliated organizations to directly hold concessions to public airwaves would be a first for Thailand. CAT and TOT, who were the current concessions holders and were in turn, subletting them to companies like AIS, Dtac and True, had other things in mind. Citing loss in revenue if private carriers were to hold their own concessions, they logged complaints that should auctions were to proceed as planned, the loss in revenue would directly affect the general public as profits generated from TOT and CAT went directly to the state. Auctions were postponed while the complaint was being debated by the powers that be. Later on, another attempt at holding the auction was thwarted again as complaints that the NTC did not have the authority to hold the auctions as they would soon be replaced by the NTBC were found to be sound. As October 16 nears, it looks like we will finally be able to proceed with the auction just in time for deploying our 4G network. As TOT and CAT have used the extensions and delays to deploy their own infrastructure which will likely be rented out to private carriers, who will be using their shiny new 2.1GHz airwaves. **(October 11, 2012) http://asia.cnet.com**

Thailand's three largest private mobile networks AIS, DTAC and True Corp have all qualified in pre-bidding tests for the country's long delayed 3G licenses. However, no new foreign companies will be participating in the auction, the telecoms regulator, the NBTC has confirmed. Subject to no more last minute delays, the auction is now due to take place on the October 16. The reserve price per 5-MHz block of radio spectrum remains unchanged at 4.5 billion baht (US$130 million). A total of nine blocks are up for sale. Fitch Ratings recently noted that the issuance of 3G licenses could prove a positive step in regulatory and policy frameworks, as private telecom operators move away from concession schemes which have been prone to regulatory, policy and legal uncertainties. These include the pending reviews of concession amendments, tighter restriction on foreign-ownership laws and concession expiration. **(October 9, 2012) www.cellular-news.com**

Thailand's three main mobile operators - AIS, Dtac and True - have submitted applications to participate in the upcoming 3G auction. The National Broadcasting and Telecommunications Commission (NBTC) rejected an application from the company Tantawan as it lacked all the documents and a bank-guarantee. A total 17 companies had bought the documentation on participating in the auction. The NBTC will announce the names of pre-qualified bidders on October 9, and the auction will open on October 16. **(October 1, 2012) Daily The Nation**

India

The Indian government's empowered group of ministers (EGoM) has decided to impose a charge on the mobile networks that hold what is claimed to be excess amounts of radio spectrum. If approved by the Cabinet, the mobile networks will need to pay a fee for any radio spectrum they hold above 4.4 MHz from this month onwards. The EGoM also decided to impose a retrospective fee for spectrum beyond 6.25 MHz held between July 2008 and October 2012, although at the 2001 rates, adjusted for interest rates. The plans could raise around Rs.27,000 crore (US$5.1 billion) for the government. It's estimated that Bharti Airtel may have to pay around Rs. 4,500 crore more, Vodafone about Rs. 3,000 crore, RComm around Rs. 3,600 crore and Idea around Rs. 2,200 crore. If a network does not want to pay the fee, it can surrender the radio spectrum back to the regulator. **(October 18, 2012) www.cellular-news.com**

Telecom Commission's decision to refarm and redistribute 900 MHz airwaves and substituting it with frequencies in the 1,800 MHz will hit mobile tariffs as well incumbents such as Bharti Airtel, Vodafone and BSNL. According to a report, mobile tariffs are set to increase after the decision to refarm all spectrum in the 900 MHz band when the licenses come up for renewal. Moreover, it will also impact the telcos because those 'unsuccessful in winning back spectrum through the auction will need to shift to the 1,800 MHz band' and will also have to participate in a fresh auction to retain the spectrum, adds the report. This is according to a recommendation made by the Telecom Regulatory Authority of India (TRAI) and as well as DoT. **(October 17, 2012) http://voicendata.ciol.com**

The Empowered Group of Ministers on telecom decided to refund or adjust license fees of companies whose licenses stand cancelled following the Supreme Court's verdict on 2G spectrum allocation but have no criminal charges against them. "License fee would be adjusted of those players who bid and win spectrum in the auction. Even if they do not participate or win, the money may be refunded," a senior Department of Telecom (DoT) official said. The apex court had February 2 ordered cancellation of 122 telecom licenses affecting firms such as Uninor, SSTL, Idea Cellular, Videocon, STel and Etisalat and asked the government to redistribute them through auction. These players had paid around Rs.1,650 crore as their license fees for 2G spectrum in 2008 to the government. According to the official, the government might end up adjusting around Rs.8,250 crore given the number of licenses that stand cancelled. The government is expecting a substantial amount from the 2G spectrum auction in November this year. The reserve price for the auction has been kept at Rs.14,000 crore. The official also said that the government is also mulling to give an option to the existing telecom firms to surrender license beyond 4.4 MHz and 2.5 MHz in case of GSM and CDMA, respectively. **(October 9, 2012) www.smetimes.in**

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ROAMING NEWS

Swiss Consumers Want Same Roaming Prices as in the EU

Swiss consumer magazines Bon a Savoir and K-Tipp have handed out symbolic gold coins to each member of the federal parliament to remind them that mobile phone users were paying for mobile roaming services "at the price of gold". Tribune de Geneve writes that Swiss consumers paying around CHF 330 million more a year for roaming than their EU neighbors, the same amount as in September last year. The consumer associations have also asked federal council member Doris Leuthard to intervene quickly to request that the council impose the same roaming prices as in the EU. A motion tabled by PS/BE member Ursula Wyss a year ago was held up by the transport committee of the state council, which decided that it would be impossible to set caps without signing a bilateral agreement between Switzerland and the EU. It encouraged operators Swisscom, Orange Switzerland and Sunrise to lower their roaming fees voluntarily.

VivaCell Lowers Roaming Tariffs for Artsakh

VivaCell-MTS has lowered the cost of roaming calls from NagornoKarabakh (Artsakh) Republic to Armenia. The calls will now be operated at AMD 45 per minute instead of the previous AMD 140. The calls inside Artsakh can be made for AMD 45 instead of the previous AMD 80.

Smart Explores LTE Roaming Partnerships with Asian Telcos

Wireless services provider Smart Communications, Inc. is in talks with several Asian telecommunications companies to allow Smart subscribers abroad to surf the Internet via Long Term Evolution (LTE). Discussions are currently ongoing between Smart and Japan's NTT Docomo, Hong Kong's Hutchison Telecommunications, South Korea's KT Corp., and Singapore's StarHub. "We are working on LTE roaming arrangements with other leading Asian telcos so Smart subscribers would continue to have the best Internet experience when traveling abroad," Alex Caeg, Smart International Carrier Business head, said. Currently the fastest fourth-generation (4G) wireless connection in the world, LTE is capable of speeds as fast as 100 Mbps, making it ideal for high-speed broadband applications. It allows users to stream high-definition (HD) videos faster, download HD movies in minutes, and play lag-free online games.

Tele2 Russia Cuts Roaming Rates

Mobile operator Tele2 Russia has significantly reduced roaming rates for subscribers of its Call Cheaper tariff. Calls rates have been reduced to RUB 7.5 per minute (from RUB 35) in Africa, Asia and Australia. The rate was almost to RUB 33.5 (from RUB 65) per minute in the Americas. Incoming and outgoing calls to Russia, as well as local calls, are priced at RUB 5.5 per minute instead of RUB 9.5, now the rate for European states and Turkey.

Simyo Lets Customers Book EU Roaming Plans at Any Time

The Simyo discount brand of German mobile network operator E-Plus is now allowing customers to book its popular EU roaming packages at any time. Previously, they could only be booked every seven days. In response to customer demand, EU voice or internet plans can now be booked whenever a customer uses their allocated allowance, instead of having to wait for the week to end.

Cell C-Vodacom Roaming Details and Pricing

Cell C has recently secured a 3G roaming agreement with Vodacom, but it is unlikely that Cell C will use Vodacom's network in areas where it has coverage. Cell C CEO Alan Knott-Craig told that the company is seeing higher speeds on Cell C's HSPA+ network than on Vodacom's 3G networks – which mean that there is no benefit to Cell C's data subscribers to roam on Vodacom. Knott-Craig further said that the cost of roaming on Vodacom's data network will cost Cell C in the region of 15c per MB – basically in line with the company's standard data pricing. It therefore does not make financial sense for Cell C to roam on the Vodacom network where it has coverage. However, there is still value for Cell C in the 3G roaming agreement with Vodacom. Cell C subscribers will roam on the Vodacom network in areas where Cell C does not have HSPA+ coverage, and if there is a problem with the Cell C network, users will automatically shift to the Vodacom network.

Vodafone India Unveils International Roaming Data Plan

Vodafone India has launched an unlimited data plan for those visiting Japan and Saudi Arabia that will enable its mobile subscribers access the Internet in these countries. The move comes in the backdrop of customers preferring to take up 60 percent discount packages on international tariffs that were introduced in June, Vodafone India said in a statement. "The unlimited international roaming data package offer is one more customer-friendly offering from Vodafone India, enabling customers to use data on mobile services while travelling abroad", it said. Customers can choose packages ranging from Rs 1,499 (for three days) Rs 2,499 (for five days) and Rs 3,499 (for seven days), the company said. Data services while on roaming in Japan and Saudi Arabia are offered to customers through its partner with Softbank's network in Japan and Mobility's network in Saudi Arabia, it said.

OneSimCard Launches International SIM

OneSimCard Standard has launched an international SIM card which offers inexpensive incoming calls and bulk data packages in many countries at US$29.95, plus airtime costs. OneSimCard works with unlocked GSM phones. The card will work in AT&T and T-Mobile phones as long as they're world-compatible (and you ask your carrier to unlock your handset), as well as in Sprint's and Verizon's slim selection of "world phones." The card will fit in the iPhone 4S but not the iPhone 5, as OneSimCard offers full-sized and "micro" SIMs but not yet the unique nanoSIM used by the iPhone 5.

MACH Sees Unprecedented Demand for its Data Roaming Transparency Solution

MACH, the leading provider of cloud-based managed communication services, announced that it is seeing unprecedented demand amongst the world's mobile network operators for its quick-to-market, data roaming transparency solution. Called the MACH Bill Shock Prevention Solution, it eliminates 'bill shock', alleviates consumer concerns associated with high data roaming charges and protects operators against increasing bad debt as a consequence of unpaid bills. The company says it is in discussions with 45 mobile operators worldwide around its Bill Shock Prevention solution, following the GSMA's launch of its Data Roaming Transparency Initiative in June this year. As part of its initiative, the GSMA recommends that mobile network operators meet three key criteria, including sending text messages to remind customers of roaming tariffs upon their arrival abroad, data roaming spending limits and alerts when data usage approaches a set limit and the temporary suspension of data services when usage exceeds the agreed spending limit. The 25 operator groups and GSMA board members who initially signed up to the scheme have agreed to adopt these measures by December 2012, while the more than 40 Latin America operators who signed up to the scheme in September this year have agreed to implement by June 2013. MACH's Bill Shock Prevention solution ensures compliance with all of the guidelines of the GSMA's initiative, and can be implemented in just 12 weeks.

Starhome Announces New EU 2014 Roaming Regulation Solution

Starhome, the leading provider of multi-network mobility solutions, announced that its new EU Regulation solution will effectively address the EU 2014 Roaming Regulation and the GSMA Initiative. The solution is set to provide mobile operators with the tools to comply and leverage the new EU regulation. The EU regulation, set to come into effect in July 2014, will replace the traditional one-subscriber-one-H-MNO. Subscribers will be able to purchase roaming packages from any Alternative Roaming Provider (ARP), Local Breakout (LBO) for data services in a visited country, or H-MNO, irrespective of their domestic provider, while keeping the same mobile number. With free subscriber choice, HMNOs will be facing competition with one another as well as with new non-traditional players, for example, travel agencies or airlines wishing to become an Alternative Roaming Provider. The Starhome EU Roaming Regulation solution will be available early 2013 for operators to implement ahead of the mandatory time frame. The Starhome solution encompasses several new products and existing product upgrades to enable the MNO to support ARPs and LBOs for subscribers within the EU.

TECHNOLOGY NEWS

PLDT Launches P1.8-B FTTH Connection

The Philippine Long Distance Telephone Co. (PLDT) has launched a P1.8 billion fixed-line network roll-out program to deliver the full range of broadband Internet services; including ultra-fast broadband connection via fiber-to-the-home (FTTH) to millions of Filipino homes in various parts of the country. The FTTH expansion program entails installing about 240,000 access ports from which fiber links can be brought to residences by late 2013. The fiber facilities will "pass by" over two million homes, referring to the potential market that can be served by these facilities, according to PLDT-Smart Technology Group Head Rolando Pena. The first phase of the two-year program costing about P1 billion will be completed by the end of this year with around 90,000 fiber optic lines that "pass by" about one million homes. As of end-September, the PLDT Group has already laid down almost 30,000 FTTH lines. FTTH is a fixed line broadband communications technology that supports higher bandwidth and new services, such as Voice over Internet Protocol (VoIP), Video on Demand (VOD), and high-definition video streaming. PLDT's Home Business has already launched its ultra-fast fiber optic service called PLDT Fibr that delivers up to 100 megabits per second (Mbps) internet speed to upscale residential villages around the country, including Forbes Park, Dasmarinas Village, and Ayala Alabang. The service will soon be available in 100 villages in Metro Manila and in other key cities nationwide like Cebu.

Plingm Introduces Free VoIP Calls for Facebook Users

Plingm, the Swedish mobile VoIP app, has introduced free phone calls for Facebook's one billion users. Plingm users with an iPhone can call their contacts on Facebook directly. India has over 59 million Facebook users, which means that more than 73 percent of the online population in India uses the social media tool. Thanks to a back-end solution developed by Plingm, Facebook users can now also call and talk with their Facebook friends for free anywhere in the world. "Mobile numbers are legacy. By calling friends with our Facebook feature, you can always reach the person you want to speak to even if they change their number", says Pandelis Eliopoulos, co-founder of Plingm. "With the growing use of social media, the possibility to call your Facebook friends directly without a phone number is a logical evolution of mobile communication." To use the app, you need to download the Plingm app from the iOS App Store, and grant permission to connect it with your Facebook account. The app automatically scans and imports all your contacts. Calls between Plingm users are free all over the world. Plingm, previously called Freephoo, lets you talk with your friends long and often. Calls to friends using Plingm are free, and calls to people without Plingm are low cost and always at a fixed rate, no surprises.

Vivo to Inaugurate Sao Paulo IPTV Service

Telefonica of Spain's Brazilian fixed and mobile operator Vivo Participacoes has launched an IPTV service in the city of Sao Paulo over its fiber-to-the-home (FTTH) network. The announcement follows a successful trial period in selected homes and full-blown marketing of the service will begin within weeks, it said. It is understood Vivo's new IPTV offer, which uses Microsoft's Mediaroom middleware, will cost from US$36.7 per month and will initially target its existing 100,000 FTTH subscribers. People signing up to the service will receive free-to-air as well as pay-per-view channels and have access to social networking sites and interactive applications. They will also be able to take advantage of Multiroom DVR, video-on-demand (transactional and subscription) and instantaneous channel skipping, it said. At launch, Vivo's IPTV service is available to a potential 500,000 homes in Sao Paulo, with plans to reach a further 600,000 in the area with FTTH in 2013. In addition, Vivo has requested that the regulator Anatel approve its request for new so-called 'Conditional Access Service (SeaC)' licences to allow it to extend the offer to other areas.

Nvidia Pushes 4G LTE Compatible Tegra Processors

AT&T becomes the first U.S. carrier to approve an NvidiaTegra 3-powered smartphone with 4G LTE support for its network. The goal of mobile processor makers is to bring as much of the functionality of the smartphone or tablet onto a single piece of silicon. It makes sense because it means that fewer separate components are needed, reducing costs and power consumption, and allowing manufacturers to keep shrinking the device. Qualcomm's Snapdragon S4 processors enjoy integrated LTE support, while Nvidia had to rely on third-party LTE modems, usually Qualcomm parts. However, Nvidia's acquisition of soft modem chipset maker Icera showed that the company was serious about getting into the 4G LTE. HTC's One X+ Android smartphone becomes the first Tegra 3 quad-core smartphone with 4G LTE capability in the U.S., and according to Nvidia's figures, this smartphone is 67 percent faster than its predecessor, the HTC One X LTE, a smartphone powered by Qualcomm's Snapdragon dual-core processor.

Broadband Internet at 1Gbps to Make an Appearance by Mid-2013

By the middle of next year, you may be able to download a two-hour movie in 30 seconds. Telecom Infrastructure firm, Radius Infratel has revealed that residential broadband consumers may see downloads get speedier with ultra-fast download speeds reaching 1Gbps by mid-2013. The company has projected that these new changes may take effect across nine Indian cities. "In the next six--nine months, world class 1,000 Mbps or 1Gbps (Gigabits per second) plans will be available in India to residential consumers. On connections like these, the same two hour HD movie will download in 30 seconds...A two-hour movie in high definition version will be about 2.2GB size," reports quoted Radius Infratel CEO RajnishWahi as saying. Although Wahi did not share the names of service providers or the cities where the new plan may take effect, he said that discussions are underway and network deployment is complete to enable this in Gurgaon.

Verizon Wireless Launches 400th 4G LTE Market on Oct 18

Verizon Wireless has announced that it will launch 4G LTE service in its 400(th) market next week, surpassing its previously announced goal of providing its blazing fast, mobile broadband service in 400 markets by the end of this year. By the end of October Verizon Wireless' 4G LTE service will be available in 417 markets across the United States when it is introduced in 21 new markets - including number 400, Marquette, Mich. - and expands in 37 current markets. The company will hold celebrations with customers in Marquette and several other new markets to mark this milestone. With the new and expanded markets, more than 245 million people throughout the U.S. - roughly 4 out of 5 - will have access to the Verizon Wireless 4G LTE network. At the end of the second quarter, nearly 11 million customers were on the Verizon Wireless 4G LTE network. At the end of September, more than 35 percent of the company's data traffic was being carried on the 4G LTE network. In real-world, fully loaded network environments, 4G LTE users should experience average data rates of 5 to 12 megabits per second (Mbps) on the downlink and 2 to 5 Mbps on the uplink. When customers travel outside of 4G LTE coverage areas, devices automatically connect to the Verizon Wireless 3G network, where available, enabling customers to stay connected from coast to coast.

UK Broadband Launches Commercial 4G Network Ahead of EE

Residents and businesses in Swindon, Southwark and Reading have become the first in the UK to experience superfast 4G broadband speeds, following the launch of a new wireless broadband network by Broadband UK. The company has stolen a march on mobile network operator EE, whose 4G network is due to go live on 30 October - although the two companies are offering very different services. UK Broadband's new 4G broadband service, called "now broadband", offers speeds of around 40Mbps via a home router without the need for a phone line. Mobile devices can connect to the router via WiFi, and the router connects back to the network backbone via TD-LTE (a variant of the LTE wireless standard developed specifically to meet the growing demand for data capacity). The LTE therefore replaces traditional fixed-line fiber links, hence UK Broadband's description of the service as "fiber through the air". While LTE promises internet at speeds typically five times faster than 3G speeds today, the WiFi connection can act as a bottleneck. But Philip Marnick, CTO of UK Broadband, told Techworld that speeds delivered by now Broadband will be "equivalent to BT's Infinity broadband service".

Bouygues Telecom Launches Mobile TV for Windows Phone

French operator Bouygues Telecom has launched a Windows Phone version of its TV app, already available for iOS and Android. The app is free to download at the Windows Phone app store to be used to watch streaming TV either as part of customers' mobile package or at EUR 0.15 per minute. The app can be used completely free of charge to watch TV over WiFi, and includes a 7-day program guide, presentation of programmes on air now or on the same evening, and alerts and reminders about shows.

Digitizing for Better Health

History is witness to the fact that the telecommunications industry has made exceptional progress over the past decade. The year 2012 began with cellular subscriptions rising to almost 6 billion, amounting to a global cellular coverage of 86%, and evidencing a disproportion in the number of cellular subscribers and actual inhabitants in many markets around the globe. Furthermore, as can be verified with the ITU's statistics, more than 2.3 billion have been using the Internet over the past 12 months.

The observed decline in PSTN revenues and the rise of over-the-top services, among other factors that include changing end-user behaviors and the rise of new communications technologies, have brought about a major shift in how telecommunications services have been used.

Today, mobile communications services too have begun to reach saturation in many markets around the world, prompting the need to innovate, again. While content service revenues have not been quick enough to compensate for declining voice revenues, there certainly has been an observable rise in content development and the adoption of digital services. These are some of the key areas where future growth now lies.

The rise in the adoption of digital services—a concept that the telecom industry knows as digitization—has begun to impact our lives. However, more importantly, such adoption has challenged existing models within the telecommunications industry, simultaneously creating strong revenue-generation opportunities as well as potential for the realization of digital services that can improve the lives of the people subscribing to those services. Granted the challenge to promote digital services and to help realize their envisioned value at both public and private sectors exists, improvement in the access to the Internet and the development of target content as well as digital applications are supporting the case for digitization.

Within the South Asia – Middle East – North African region, digitization has primarily been revolving around mBanking and to a limited extent mEducation, with the former being realized primarily for fund transfers and financial notifications and the latter for inquiry-based communication. Progress is being made on both fronts. However, it is mHealth that requires equal, if not greater, attention.

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Empirically speaking, the South Asia – Middle East – North Africa (SAMENA) region shares a significant portion of the overall burden of the world's malnutrition, endemics, and pandemics. Throughout the region, the number of health practitioners or even basic healthcare service providers, including healthcare workers, is irrationally small when compared with the region's populations and when seen in relation to the region's otherwise improving access to connectivity services. Only a handful of mHealth programs are in existence today, though various initiatives are in the planning phase.

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Highlighted in the Swiss eHealth Summit, the healthcare sector, despite its gradual pace of acceptance of new communications technologies, has been undergoing transformation, whereby existing medical practices—ranging from patient diagnostics and treatment to medical record-keeping—have begun to change and become more efficient. Recognizably, "physicians and patients, nurses, pharmacies, local authorities, the economy as well as politics and society – numerous players are involved in the digitization of the healthcare sector."

A part of the justification for a slow uptake of health-related communications technologies, that is digitization, has been linked with potential negative consequences, which relate to data management, information security, and privacy. However, such consequences can be managed by employing a combination of innovative information access and security technologies and by catalyzing general willingness to adapt to change. Such change, however, should not be exclusive of the need to standardize and structure processes that should be understood across the healthcare industry, across regions.

Markets where digitization has taken a priority slot include the Republic of China, where the government has pledged US$126 billion toward digitization services in the healthcare sector. In the context of healthcare needs of the SAMENA region, mHealth can immediately improve health monitoring, endemic management, healthcare fee payment, and maternal health management. Notably, both statistical and empirical findings in some countries, including Pakistan, show that improvement in maternal health in impoverished areas has a direct impact on a community's ability to mitigate poverty and realize reduction in child mortality rates.

Such are the incentives for digitizing healthcare services. Markets that recognize the impact of digitization toward the realization of their digital agendas and in the improvement of their socio-economic progress today, will be the ones to which the future will belong.

Izhar Ahmad
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SAMENA Telecommunications Council

The Internet of Things – M2M
Communicate - Manage - Distribute

It is really impressive how the Internet is changing our life in various aspects over the past decade. The way we are socially interacting, the type of services that can be accomplished online and the transformation witnessed in various industries such as the music industry are samples of that change, which the Internet brings in our world nowadays. The nature of the Internet and its governance are the main reasons behind its massive and fast development. Looking at the basic technical nature of the Internet, which is simply based on IP, Domain Names, Root Servers and Web Hosting Services, one can set no limits of what can be achieved through this huge network of networks. By studying the Internet user behavior development, several stages can be noted. First was the "Pull Stage", where most of the Internet users were considered to be content consumers while few were content producers. Later on comes the "Pull-Push Stage", where the behavior changed by the introduction of social networks. Social networks enabled Internet users to turn out from being consumers to content providers. What is common on the above mentioned stages is the Internet user, a HUMAN BEING. Now the time comes to add a new factor to the equation of the Internet development by the introduction of a new type of Internet user. A user who is NOT a human being, yes it is the area of the Internet of Things. Machines with IP connectivity are becoming popular and largely used; however, there are challenges to overc ome.

One of the challenges is the numbering allocation. The number and type of devices connected to IP Network is spiraling at a significant rate. According to the RIPE NCC, on Friday 14 September 2012, the RIPE NCC, the Regional Internet Registry (RIR) for Europe, the Middle East and parts of Central Asia, distributed the last blocks of IPv4 address space from the available pool. It is now imperative that all stakeholders deploy IPv6 on their networks to ensure the continuity of their online operations and the future growth of the Internet. With addresses built of 128 bits of information versus IPv4's 32 bits, IPv6 offers some 340 trillion trillion trillion addresses. By the introduction and application of IPv6, the issue of numbering allocation should not remain a problem; however, the challenge remains in the readiness for such migration. It is important to know that the transition period from IPv4 to IPv6 is likely to be long, could be complicated, and will certainly consume staff and financial resources.

> *It is now imperative that all stakeholders deploy IPv6 on their networks to ensure the continuity of their online operations and the future growth of the Internet*

Another important element, which can have a direct positive impact on the telecom industry business model, is the opportunities lying behind the Internet of Things. There is no doubt that M2M is a new field where operators still have the chance to tap in and get benefit from as a new revenue stream. To maximize the benefits, the consumers' needs and behavior must be monitored in an empirical manner. Which

> " *Another important element, which can have a direct positive impact on the telecom industry business model, is the opportunities lying behind the Internet of Things* "

is more important for a customer? To have his refrigerator connected and be able to control it remotely, or to have the school bag of his son connected and have the ability to identify his behavior at school remotely. Answering such questions related to the consumer needs will help in providing the appropriate service of the right consumer.

As mentioned above there are no limits for what can be achieved and obtained by the Internet of Things. The SAMENA Council believes that opportunities are massive in comparison with the existing challenges. There are several ways for operators to use M2M for more revenue generation. The adoption of M2M needs implementation of new technologies such as deployment of IPv6 by technology provider, comprehensive market study with a wide vision by operators and a generic ICT policy framework by policy makers and regulators. It is a multistake-holder process that will ensure success for all players.

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