



**BROADBAND FOR  
SUSTAINABLE  
DEVELOPMENT**

**Mr. Brahima Sanou**

Director

ITU Telecommunication Development Bureau



# EDITORIAL

## Operators' Issues in Convergent World

The telecoms & ICT industry is growing rapidly and service providers are investing heavily in order to be the first to adapt the latest technology and fulfil the growing demand for bandwidth. It is quite obvious that the substantial growth of the internet has both created challenges and opportunities for the industry stakeholders.

There is a growing need for telecom operators in the SAMENA region to drive down cost of capital assets or infrastructure deployed for provisioning telecommunications services. This has been expressed in recent times by many operators who now come, together, on basis of mutual, agreements, to consider sharing infrastructure. The telecom market in the region is driven by growing demand for broadband. This high demand from telecom users combined with the growing competition of a gradually maturing telecoms markets across the SAMENA region has driven many operators to explore ways of reaching their potential customers in very cost efficient and cost effective ways, hence the need to reduce the cost of rolling out telecom infrastructure while at the same time achieving the numbers through effective network coverage. Also, the national regulatory bodies in the region have been actively backing and supporting these initiatives by providing the legal and technical guidelines that would ensure fairplay and enhance fair competition.

The declining ARPU trend is causing telcos to reconsider and reengineer their business models. Various approaches have been suggested and implemented worldwide to increase revenues. This does not however mean that increased revenues will always results in increased profits. In fact reducing OPEX is another aspect that can be considered for maximizing profits. Today, telecom operators are relying on large

scale advanced computing architecture processing huge data and running a number of applications develop, manage, and deliver these services. These services can reduce internal computing resource needs. This ultimately leads to considerably reduced infrastructure investments as well as maintenance cost thus leading to increased revenues.

Telcos now have been more actively considering cloud and other SaaS architecture as a way to cut IT infrastructure costs and to use this approach as a starting place for more profits. In the meantime, vendors are also taking into consideration SaaS architecture compliance for their products. Unbridled traffic growth, and service substitution by the OTTPs are legitimate challenges to the telecom operators on both a revenue and cost basis. Such traffic growth is largely based on various types of video services, and others such as Internet Video to TV, PC/VoIP/ Video Communications/Gaming/P2P/Web, and Data. Operators have invested and continue to invest a large amount in CAPEX to develop, engineer, build and sustain high-speed broadband delivery services to their customer subscribers. They sustain both high OPEX and CAPEX in order to produce quality technical and operations capabilities to provide OTTPs the ability to access customers with high speed broadband delivery services.

The proliferation of the digital content has projected progressive use of the Internet and while the operators wish to throttle the costs of network CAPEX relative to OTTPs, however it may be difficult to limit the access and use type to the network. When the regulators do begin to serious address these types of issues, the operators in the region must be ready and prepared to respond.

Yours truly,

**Bocar A. BA**  
Chief Executive Officer  
**SAMENA Telecommunications Council**

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## EDITORIAL



# INDUSTRY LEADER'S VISION



## Mr. Brahim Sanou

Director  
ITU's Telecommunication Development Bureau



Mr Brahim Sanou has been Director of the ITU Telecommunication Development Bureau (BDT) since January 2011, following his election at the Plenipotentiary Conference in Guadalajara, Mexico, in October 2010.

As BDT Director, Mr Sanou is committed to promoting ICT as a major driving force for sustainable socio-economic development, bringing the unprecedented benefits of next-generation networks and services to remote and rural regions, least developed countries and persons with special needs in particular.

He has placed particular emphasis on the mobilization of resources and knowledge-sharing through the forging of collaborative, cross-sector multi-stakeholder partnerships. Key elements include the m-Powering Development Initiative to deliver improved services such as healthcare, education and business over mobile platforms; the Smart Sustainable Development Model initiative, focused on optimizing resources for sustainable development and disaster management; and the ITU Academy, offering an integrated online resource for the provision of ICT education and training opportunities.

Mr Sanou draws on over thirty years of experience in the ICT sector at regional and international level. As Head of ITU Regional Office for Africa and Liaison Officer to the African Union and the United Nations Economic Commission for Africa (UNECA) from 2000 - 2010, he worked to foster the growth of mobile telecommunications across the continent through the establishment of policy and regulatory frameworks nationally and regionally. In his role as coordinator of the African regional project on telecommunications reform and the General Agreement on Trade in Services (GATS) from 1997 - 2000, he drew attention to the need for human resource development and capacity building in Africa.

He began his professional career in his native Burkina Faso, where he held several high-level positions in the Posts and Telecommunications services, and was instrumental in the separation of the services and the liberalization of the national telecommunication sector.

Mr Sanou holds a degree in Engineering from the Ecole Nationale Supérieure des Télécommunications (ENST) in Paris, and a post-graduate diploma from the Centre for Financial, Economic and Banking Studies, also in Paris. Fluent in French and English, he is married with three children.

## Q. How do you look at the role of Broadband for sustainable development, particularly in the context of developing economies?

A. Let me start by saying that affordable, ubiquitous broadband networks today are as critical to social and economic development as networks like transport, water and power.

Broadband infrastructure, applications and services have become essential for various aspects of our daily lives; covering not only smooth delivery of information, trainings, education and healthcare solutions but covering broad spectrum of businesses around the globe. Its power contributes to improving people's lives in many different ways, through more efficient delivery of public services, job creation and enhanced environmental initiatives and their management. Broadband is seen increasingly as an essential tool for empowering people, creating an environment that nurtures the technological and service innovation, and triggering positive change in business practices as well as in society as a whole.

Having said that, the theme of the upcoming WTDC-14, which will take place in Dubai from 30 March to 10 April, is "Broadband for Sustainable Development". The conference will be preceded by a strategic dialogue covering the same areas of interest.

## Q. Do you share thoughts that mobile broadband is integral to the use of ICTs for development? How do you look at the significance of infrastructure sharing in mobile broadband development?

A. According to our data, the number of mobile-cellular subscriptions is approaching 7 billion and mobile broadband is the most dynamic market, with 2.1 billion subscriptions globally. It is predicted that there will soon be as many mobile-cellular subscriptions as people inhabiting the planet, with the figure set to nudge past the seven billion mark in 2014. This unprecedented reach of mobile technologies could provide a powerful channel for reaching various development goals.

In developing countries, mobile telephony has been crucial in making ICT services available to the masses. However, I would like to stress that there's a lot that needs to be done to increase the penetration of mobile services, particularly in rural areas.

The problem arises from the high costs of network infrastructures that result in increasing prices as operators focus on returns on their investments.

Sharing mobile infrastructure is an alternative that can significantly lower the cost of network deployment, especially where commercial delivery of services remain challenging, such as in scarcely populated and remote areas.

Mobile infrastructure sharing may also stimulate migration to new technologies; enhance competition between mobile operators and service providers; and bring substantial environmental benefits.

Mobile communications have great potential which is still to be leveraged for development. New prospects can be focused on to improve health, education, agriculture, trade and commerce.

## Q. Does the pace of innovation in ICT Industry favor a shift from regulatory oversight towards a legal rules-based policy model?

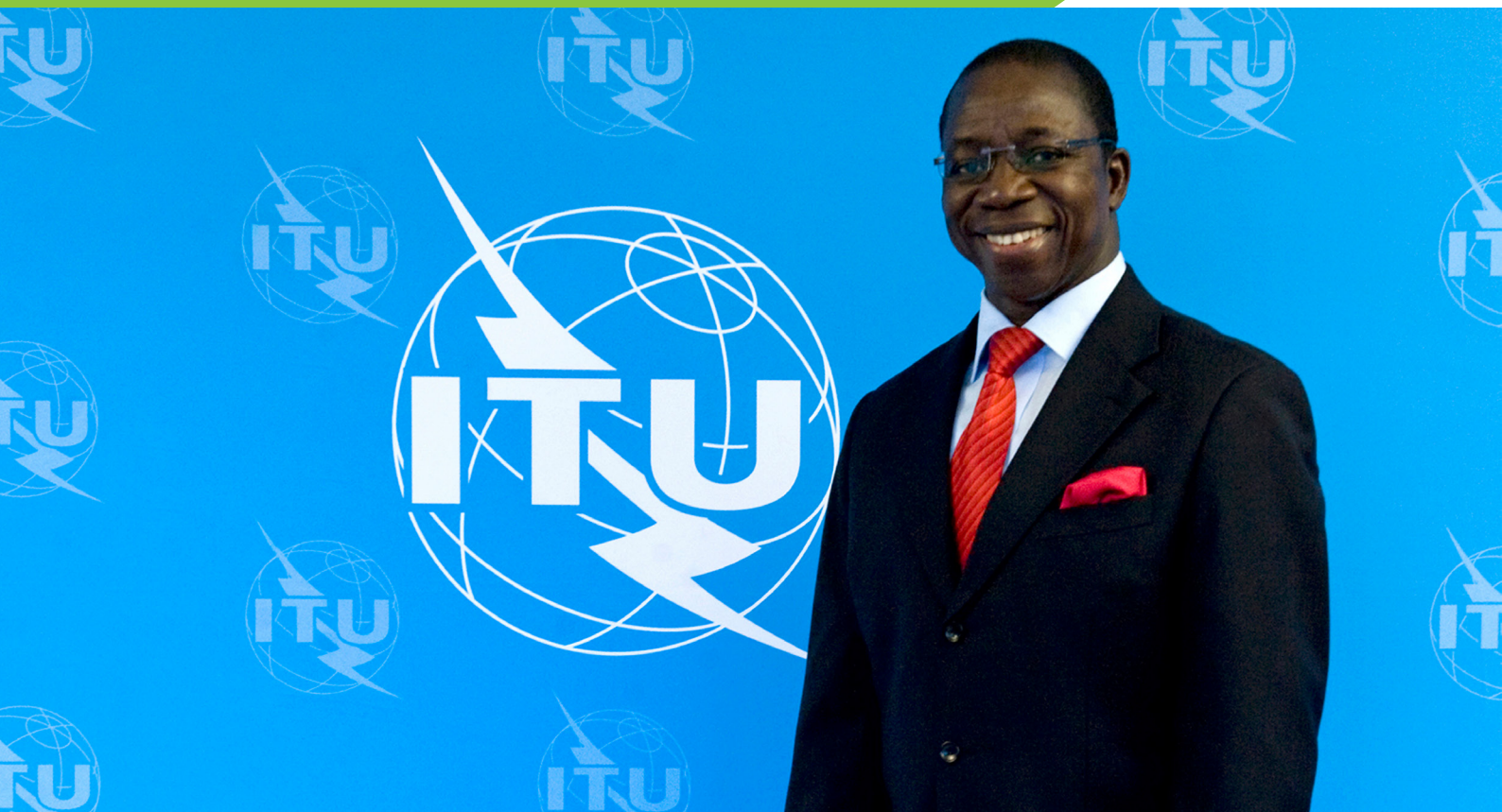
A. Definitely, technological and service innovation is giving rise to a new regulatory paradigm for the digital age. As ICT markets become more aggressive and resulting in innovative and often disruptive new technologies and applications, the rationales for exclusive ex ante regulations no longer hold. Regulators need to transition from ex ante to ex post regulation and this involves gradual fine-tuning or, in some cases, even full withdrawal of targeted ex ante regulation to better reflect competitive conditions in the market and serve consumer interests.

This is particularly true in the case of broadband markets, where the various links in the value chain may be subject to different degrees of competitive pressure. Due to the fast pace of technological advancements and an increasing recognition of the value of robust competition, policymakers increasingly have implemented ex post rules to foster innovative markets while imposing targeted ex ante regulation to address specific market failures, particularly with respect to the physical layer of the broadband ecosystem. When market conditions warrant the phasing out of ex ante regulation, regulators should consider, on a case-by-case basis, the need to establish sunset provisions or transition periods to ensure a smooth shift into an ex post regulatory environment.

## Q. Keeping in view the evolving landscape of the telecoms & ICT sector, how do you look at the challenge of creating and maintaining and enabling regulatory & market environment essential for the development of ICTs?

A. I believe that in order to reach the global potential of broadband, regulators and policy makers need to embrace a global vision of the collective benefits keeping in view latest technologies, especially broadband. They need to balance regulatory certainty with flexibility, making the ICT marketplace vibrant and competitive.

In an era in which broadband is increasingly considered the right of every citizen, smart regulation will continue to evolve toward greater openness and dynamism, while mitigating the associated challenges and threats.



In this context, an effective regulator is certainly needed to juggle competing interests, ensure a level playing field, promote transparency and create an environment that nurtures the technological and service innovation that's at the very heart of the ICT sector.

Regulators however increasingly need not only to understand engineering and to carry out complex economic and legal analysis, but to have the foresight to quickly recognize and adapt to shifting technology paradigms. They need to be ready to question previous approaches in a continuously-evolving market, while nevertheless applying consistent regulatory principles. Regulators face the challenge to judge when market failure requires regulation, and when regulation is no longer required and can be removed.

**Q. With the evolution of connectivity, and the increasingly networked world, expanding access to ICTs globally is in everybody's interest. Do you share the thought that digitization would be a significant driver of sustainable economic growth in this context?**

**A.** Absolutely. Digital technologies have radically transformed businesses and individual lifestyles alike. Storage and communications have been made much more efficient.

The digitization of information also makes it more easily transferable among the Medias, reduces information loss, and is more suitable for remote or distributed access.

The Internet, especially since the creation of the World Wide Web (www), has allowed common man to develop various tools and share information and knowledge instantly over the web that is indeed accessible from anywhere on the globe.

The advent of digital mobile technologies was an equally revolutionary development, as technologies like 3G and, more recently, 4G heralded the dawn of an entirely new digital world where people remain connected at all times. The advent of broadband over analogue narrowband technologies has brought about considerable gains in efficiency and productivity, and is able to generate potentially huge economic and social impact.

Moreover, digital platforms are becoming mainstream for banking and other financial transactions: from e-commerce to new mobile payment systems.

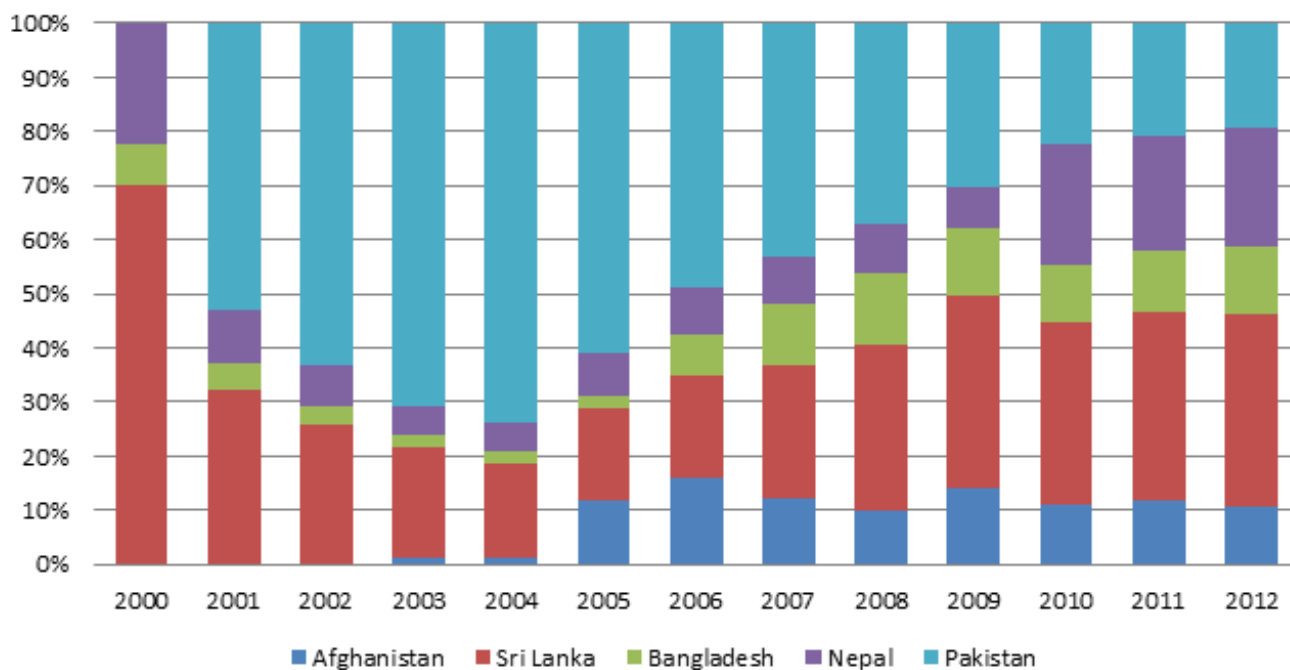
The rapid growth of the digital economy presents huge opportunities for economic and social development, creating global markets for applications and services, improving productive capacity, reducing the cost of doing business, and unleashing creativity and innovation. The growth of digital technologies, services and applications accelerates this trend, offering the opportunity to leapfrog time, distance and limitations hence providing greater opportunities across the globe.

Change - technological, social, in the business models and in the mindsets - which lies at the very foundation of the new digital world, has been a constant driving force of economic growth and will require continuous adaptation and rapid response to enable digital inclusion and sustainable development.

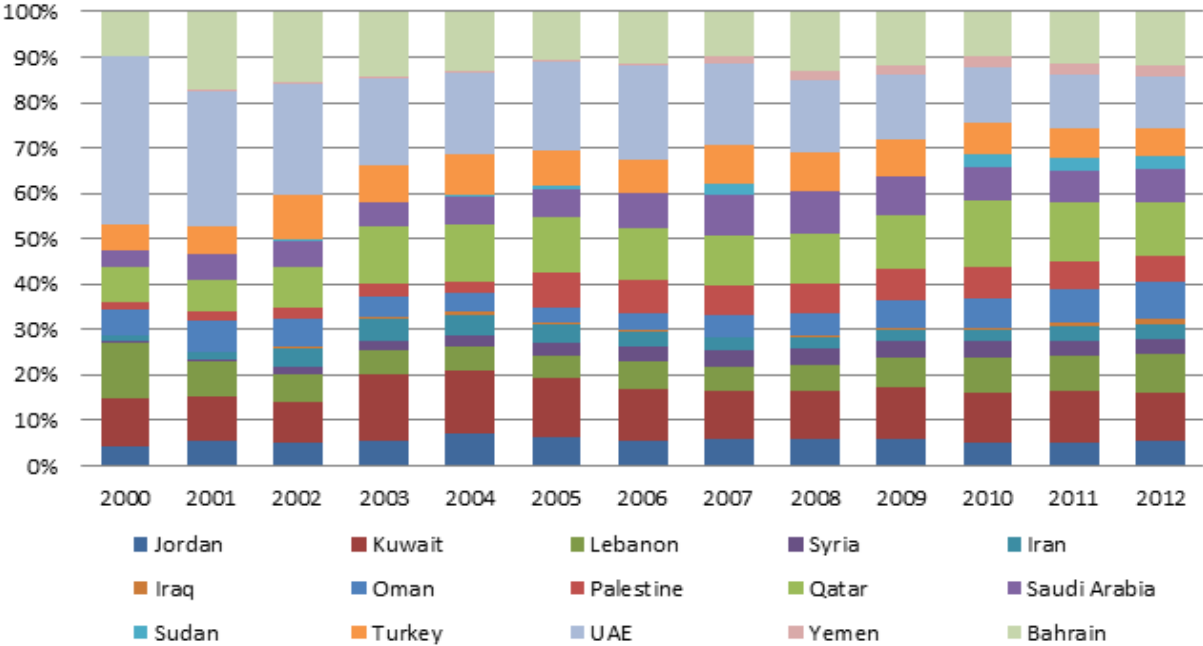


# REGIONAL PERFORMANCE

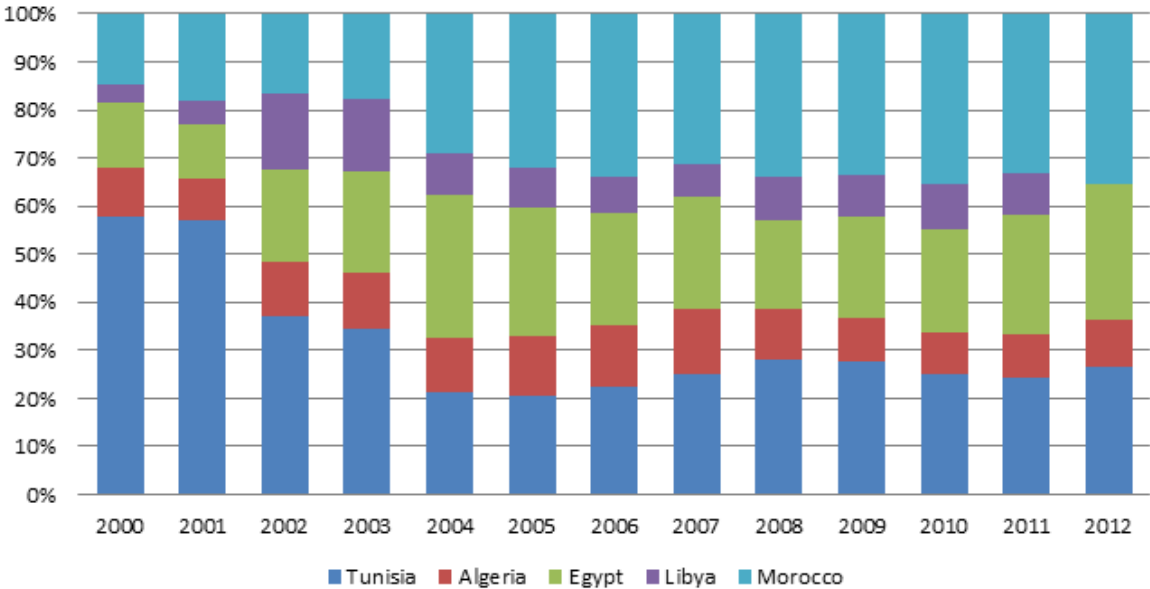
Percentage Growth of the Number of Internet Users - South Asia



### Percentage Growth of the Number of Internet Users - The Middle East



### Percentage Growth of the Number of Internet Users - North Africa







## MEMBERS NEWS

### Etisalat Group CEO lauds UAE's world class Smart Government Initiatives during Mobile World Congress

During his keynote speech at the Mobile World Congress in Barcelona, Ahmad Abdulkarim Julfar, Chief Executive Officer of Etisalat Group and member of the GSMA Board, praised the UAE Government initiative to provide its citizens with world class Smart Government services.

The speech came at an important moment for the Etisalat Group, the leading telecoms operator in the Middle East, Asia and Africa, as they celebrated reaching 150 million subscribers. This milestone was achieved across 15 international markets. Julfar presented the compelling growth journey of the company at the Mobile World Congress in Barcelona, Spain. This also marked the first keynote address to date by the Etisalat Group CEO at this prestigious global event. In the quest to be the leading and most admired emerging markets telecom group, Julfar noted that achieving 150 million subscribers was a great milestone for Etisalat.

Highlighting the growth achieved in Saudi Arabia, where Mobily, Etisalat's operating brand, is the second largest operator in the Kingdom and has one of the world's busiest data networks with 1.3 petabytes consumed daily, Julfar said the company is also actively participating in various Mobile for Development programs in Africa.

### PTCL Group announces impressive financial results, posting record revenue over PKR. 131.2 billion for FY2013

Pakistan Telecommunication Company Limited (PTCL), country's largest integrated telecommunications services provider, has posted impressive financial results in FY2013. According to the PTCL Board of Directors announcement, the PTCL Group's revenue for FY2013 stood at a record amount of Rs 131.2 billion (USD 1.29 billion), while Group's net-profit stood at Rs. 15.8 billion (USD 155.02 million).

The financial results for the year ended 31st December 2013 were announced at the company's Board of Directors (BoD) meeting held on Feb 2, 2014 in Abu Dhabi, UAE. The company posted revenues amounting to Rs. 81.1 billion while a net profit of Rs. 12.7 billion was also reported. The company has also declared a final cash dividend of Re. 1 per share for the year ended, in addition to already paid interim dividend of Re.1 per share in July 2013. Thus the collective dividend for FY2013 stood at Rs 2 per share.

The company's market share in the broadband, wireless and specialized telecom solutions segments has increased significantly during FY2013 through introduction of state-of-the-art products and unmatched affordable services.

## Mobily launches Tejawali promotion during schools mid-term vacation

On the occasion of schools mid-term holiday, Mobily launched a special offer for the international roaming services covering more than 100 countries around the world, to meet the needs of its customers by providing the best services at the lowest possible prices.

Mobily added that the activation of the packages requires sending a text message with the code MTC1D to 1100 to activate the daily package and MTC1W to activate the weekly package and finally MTC1M to participate in the monthly package. Mobily advised its customers to visit its website: <http://www.mobily.com.sa> to know the operators that are covered by the service.

Mobily international roaming services are characterized with high quality, as the company held a number of agreements with the leading operators around the world to offer this service to its subscribers at the lowest possible prices in all countries of the world, in an effort to provide an exceptional customer experience to its customers.

## Etisalat advances debate on Mobile Health Strategies during e-Health conference and exhibition in Kuwait

During a workshop hosted by the GSMA at the e-Health Conference and Exhibition in Kuwait, the Etisalat Group praised the Health Ministers' Council for GCC States' e-health initiatives and announced the company's plans to help patients, children and adults with diabetes to better manage their disease with new applications and services including from a European specialist MySugr ([www.mySugr.com](http://www.mySugr.com)).

The Etisalat Group was represented at the event by Ziad Al Hossan, Vice President International Traffic and Management Services at Mobily and Stephen King, Senior Manager CSR for the Etisalat Group. Ahmed Bin Ali, Senior Vice President of Corporate Communications, Etisalat Group, explained the importance of Etisalat's participation at the workshop: "Arab Health Ministries are facing unprecedented challenges in managing the ever-increasing burden of chronic diseases. The agreement with MySugr is one of several e-Health solutions currently being explored by the Etisalat Group.

## Huawei consumer business group ranked 3rd in global smartphone shipments in 2013

Huawei, a leading global information and communications technology (ICT) solutions provider, was ranked third in global smartphone shipments in 2013, according to the leading market research and analysts firms International Data Corporation (IDC), Strategy Analytics and Canalis. According to IDC's Worldwide Quarterly Mobile Phone Tracker, Huawei retained its number three position worldwide in 2013, with the highest year-on-year increase among the leading vendors at 67.5 percent. Huawei captured 4.9 percent market share in 2013 with smartphone shipments of 48.8 million units, up from 4 percent in 2012.

In the report, global smartphone shipments increased by 38 percent in 2013, with over one billion smartphones sold in 2013. Huawei attained a year-on-year increase of 56.5 percent in Q4 2013 with smartphone shipments of 16.4 million units, up from 10.5 million units in Q4 2012. Huawei shipped 55.5 million mobile phone units in 2013, ranking number five with 3.0 percent global market share.

## PTCL launches corporate SMS service

Pakistan Telecommunication Company Limited (PTCL) has launched an exclusive Corporate SMS Service, first-of-its kind in Pakistan. The service is a complete bulk SMS management system which manages SMS campaigns and offers built-in controls to send web to phone messages to any mobile operator in the country. This service is being offered through a simple to use web based interface enabling corporate customers to log-in from any internet enabled device (computer/laptop/smart phone/tablet) and communicate instantly with individuals or groups via bulk text messaging.

"The Corporate SMS service is a powerful web-to-mobile messaging service that allows organizations to deliver updates & information swiftly and also provides customized modules which can be tailored as per requirements", added Kamal Ahmed. PTCL Corporate SMS Service enables companies, educational institutes and organizations to target wider customer base, notify their target audiences and undertake large scale marketing campaigns.

## STC offers Jood Net for reduced prices starting from SAR

The offer of STC to the new Jood Net subscribers saw a great acceptance of customers. Through this offer STC provides internet services for reduced prices starting from SAR79 for 3 months in addition to free installation and modem and the possibility of adding any of Jood keys to the bundle and enjoy several extra services. As per the new offer 2 mega speed is offered for SAR79, 4 mega speed for SAR 119 and 20 mega speed for a monthly charge of SAR159.

These reductions have been made to meet customers' desires and a consolidation of STC role of spreading internet services at the best prices that ensure that customers enjoy the real internet speeds at the least costs. Customers can subscribe to Jood Net service with its new prices through sales offices or by calling 907 or visiting STC website: [www.stc.com.sa](http://www.stc.com.sa)

## du becomes first in the region and first telecom globally to release Sustainability Report based on GRI-G4 comprehensive guidelines

In continuation of its commitment to sustainability best practice, du is pleased to announce the launch of its third annual Sustainability Report, raising the benchmark for sustainability reporting in the region. The Report meets the new Global Reporting Initiative (GRI) G4 Comprehensive guidelines, which were launched in May 2013 in The Netherlands. In doing so, du has become the first in the region and the world's first telecommunications company

to adopt this standard. In parallel, du announced its revised corporate sustainability commitment, marking the company's progressive outlook in line with the sustainability focus for Expo 2020 and the UAE's Vision 2021.

du's 2013 Sustainability Report has undergone the Materiality Matters check by GRI, which verifies that at the time of the report's publication, the disclosures that cover the process of identifying material issues and stakeholder engagement were correctly reported on and identified in the report. The revised corporate sustainability commitment is guided by the United Nations Global Compact (UNGC) principles and the GRI reporting framework, amongst others.

## ICANN Chairman of The Board to keynote Black Hat Asia 2014

Black Hat, the world's leading family of information security events, announced that Dr. Steve Crocker, Chairman of the Board, Internet Corporation of Assigned Names and Numbers (ICANN) and one of the Internet's pioneers will present the keynote address at Black Hat Asia 2014. Black Hat Asia will take place March 25-28, 2014 at the Marina Bay Sands in Singapore.

Dr. Crocker has been involved with the Internet since its inception. While a graduate student at UCLA, he was part of the team that developed the protocols for the Arpanet, laying the foundation for today's Internet. For his pioneering work and contribution to the creation and development of the Internet, Dr. Crocker was awarded the 2002 IEEE Internet Award and was inducted to the Internet Hall of Fame in 2012.

Today Dr. Crocker is the CEO and co-founder of Shinkuro, Inc., a startup company focused on the dynamic sharing of information across the Internet and on the deployment of improved security protocols. Black Hat Asia will welcome Dr. Crocker to the stage on March 27, 2014. His keynote, "Let's Fix the Mess," will look at how the explosive growth since the development of the Arpanet 45 years ago has led to a myriad of security problems and Internet governance issues.

## Huawei enters Nepal's market

Huawei, a Chinese global information and communications technology (ICT) solutions provider, has officially entered into Nepal's market. Speaking during the launching program held in Kathmandu, Huawei's representative Mr. Li Ji said that the Chinese tech giant in partnership with Nepal Telecom, the country's state owned telecommunication service provider, has the potential to bring a positive change in the lives of Nepalese nationals. Chinese Ambassador to Nepal Wu Chuntai remarked that in the 21st century communicating is the key for productivity and growth of one's country. "The cooperation between Huawei and Nepal Telecom will bring benefits to telecommunications consumers as well as boosting Nepal's economic development," said Wu. Huawei products and solutions have been deployed in over 140 countries, serving more than one third of the world's population. The country office of Huawei Nepal currently employs 200 staff, out of which 70 percent are Nepalese.

## Omantel organizes Makasib contest for Muscat Festival 2014

Omantel is organizing a daily contest of the Makasib loyalty program during the month-long event.

Usama Ahmed al Rawas, manager loyalty and communication at the Consumer Unit said, "The Makasib program enables our customers to identify the benefits that they can gain from subscribing to our services and add more value to our experience. Muscat Festival is considered as one of the biggest events in the sultanate which attracts many visitors. Therefore, this contest was launched with the purpose of providing a new experience to Omantel customers as well as other visitors.

"The Makasib contest allows ten participants every day to win 5,000 points by answering a daily question about the loyalty program. "Customers can participate by sending (M) as a text message to 80588 and answer the question which will give them the chance of entering a raffle draw and earn points," he said.

## Apple CEO visits Etisalat

In his first trip in the region, Mr. Tim Cook, CEO of Apple, made a historic stop to the UAE and held a meeting with Mr. Ahmad Julfar, CEO of Etisalat Group, to discuss how the presence of Apple can be elevated in the region and how the two companies can strengthen their relationship across Etisalat's footprint in the Middle East, Africa and Asia where Etisalat operates in 15 countries including Saudi Arabia, Pakistan, Egypt and Nigeria. This high level meeting took place in the presence of Mr. Saleh Al Abdooli, CEO of Etisalat UAE and Mr. Khalid Al Kaf, CEO of Mobily. Mr. Julfar welcomed Mr. Cook and praised the excellent relationship that Etisalat has had with Apple, a relationship dating back 4 years ago, when the two companies signed a strategic agreement on devices to cover the UAE and Saudi Arabia.

## Huawei becomes world biggest telecom equipment supplier

SinoCast Daily Business Beat via COMTEX) --With the release of financial report for the fourth quarter of 2013 by Ericsson, Huawei Technologies formally declared outpacing of the former telecom equipment supplier.

So far, among global top five, Huawei Technologies, Ericsson and Nokia Solutions and Networks (NSN) have revealed performance for 2013 full year, harvesting prime operating revenue of US\$ 39.3 billion to US\$ 39.6 billion, US\$ 35.3 billion and US\$ 15.2 billion. In consideration of former revenues recorded by Alcatel-Lucent ALU and ZTE Corporation in past years, Huawei Technologies has become world biggest telecom equipment supplier.

## PTCL rewards broadband customers with free EVO dongle

Pakistan Telecommunication Company Limited (PTCL), country's largest Information Communications Technology (ICT) service provider is rewarding its broadband customers by offering EVO 3.1 dongle absolutely free.

The offer adds value to PTCL family experience by providing on-the-go and back-up internet connectivity at a nominal price of Rs 500 per month. PTCL fixed and wireless broadband packages are designed to suit every customer's lifestyle and offer perfect connectivity solutions for Internet surfing, live streaming and downloading. Since its launch in 2009, the company's EVO wireless internet service has grown steadily, and now serves customers in more than 250 cities, while the fast-expanding fixed broadband service now connects more than 2000 cities and town across the country.

PTCL's broadband service is Pakistan's fastest, most reliable internet service and has revolutionized the way people connect with each other and reach out to the world, empowering them to access better learning and development opportunities.

## Nawras' new Maktabi Mobile bundles give SoHos and SMEs even more benefits

Nawras Business customers can now enjoy the new and improved all-inclusive Maktabi Mobile business packages. Small and Medium Enterprise (SME) and Small Office/Home Office (SoHo) businesses can now benefit from super-fast 4G packages, increased data allowances and prepaid options to efficiently manage their business communications.

Said Al-Shanfari, Director - Business Marketing, said "We have revamped our highly popular mobile business bundle for 2014, offering customers everything they need to get talking and get online within minutes. The package is activated in store and provides a solution for any business customer with between 5 and 20 lines. SoHos and SMEs of all sizes will save up to 30% every month compared to purchasing each service separately. The new Maktabi Mobile plans are 4G capable and we now offer a wide choice of eleven different shared data bundles to choose from."

Each Maktabi Mobile package contains a choice of 1GB to 100GB of inclusive shared data, and the option of choosing Ajel post-paid or Mousbak pre-paid services within the bundle in any combination they require.

## STC launches LTE – Advance 4G network

STC has launched the LTE – Advance 4G network as the first operator in the region that provides his customers with broadband services and a diverse range of applications with high speeds almost twofold of the present 4G network speed. With this STC aims at enhancing the user experience and increase the data transiting rate and strengthen network performance to achieve high internet data download speed and other network usages.

These improvements of LTE – A is a beginning of the upcoming service related technologies and easy delivery to customers. By this, we greatly strengthen the experience of our honorable customers. We expect these network developments would continue till it provides data rates of 1 Gigabit/s. STC widely introduced the 4G LTE-TD service early 2013 and the company saw a significant increase in the number of LTE network users and intensive and high network usage. The capacity of the LTE – A network will be doubled in order to cover bigger areas to support more growth and expansions of the usage of these networks.

## Etisalat and Star joins hands in a landmark distribution tie-up in the UAE

e-vision, part of Etisalat, the UAE's leading telecoms provider, has partnered with Star TV to offer 17 new channels as part of its eLife TV Choice Asian Basic package.

The channels, which feature programs in six languages - Hindi, Bengali, Marathi, Tamil, Kannada and Malayalam - will allow customers to view TV content ranging from top rated television shows to Bollywood entertainment and breaking news. In addition to the leading channels - Star Plus, Life OK, Star Gold, Star Jalsha and Star Vijay - the package features six new channels - Movies OK, Jalsha Movies, STAR Pravah, STAR Utsav, Suvarna and Suvarna Plus. The prices for subscriptions for the Asian Choice Basic Package start at AED 30 a month.

Humaid Rashid Sahoo, Chief Executive Officer, e-vision, said: "This is a big step forward for the UAE TV industry and should excite all eLife TV subscribers as we continue to offer more channels, greater choice and flexibility. We have endeavoured to bring the market's favourite Star channels that will provide greater value to our offerings with legitimate access to such content in the UAE."

## NSN Extends "Liquid Applications" to Mobile Base Stations

As the Kingdom's market-leading innovator with the fastest Nokia Solutions and Networks is extending its "Liquid Applications" framework to enable accelerated content delivery and real-time utilization of network information at the base station.

Liquid Applications' new capabilities focus on three areas:

### 1. Building entirely new types of real-time services delivered from the base station.

Examples include instant video replays at sports venues delivered to nearby subscribers, high speed and secure access to corporate intranets, or video surveillance and advanced analytics running in the base station to improve urban transport systems. Liquid Applications' distributed cloud capabilities coupled with NSNs AppFactory allow for agile application development and deployment in very short cycles.

### 2. Accelerating content delivery to improve customer experience

NSN's Liquid Applications run on its Radio Application Cloud Server (RACS) within the base stations. The company is now extending the software capabilities of RACS with advanced content acceleration and optimization as well as enabling storage of third-party content. Serving content directly from the base station cuts time-to-content by up to 80 percent and reduces backhaul traffic by up to 25 percent.

### 3. Improving network operations and gaining new insights into customer behavior

NSN is introducing RACS-based agents in the base station that collect and process network data in real-time. By using tools such as NSN's Service Quality Manager to analyze this data, operators can gain deeper insight into user actions

and preferences. They can pinpoint precisely how to utilize the available network capacity to best effect and tailor services based on user preferences and location.

NSN is also bringing to the market a cloud based IP Multimedia Subsystem (IMS) aimed at Voice over LTE (VoLTE) services. These will be shown at this month's Mobile World Congress in Barcelona.

## BlackBerry boosts its Messenger with voice calling, location-sharing

BlackBerry has taken another step towards revamping itself by releasing a new version of its free, BBM mobile messenger, adding a raft of extra features. Four months ago BlackBerry made BBM go cross platform for the first time, making it available on iPhones and Android phones and swelling its user base to more than 80 million people. Now it's adding voice calling, conversation "channels" for brands and communities, integration with DropBox and a partnership with the location-sharing app Glympse.

The biggest feature in today's BBM 2.0 update is a direct challenge to free, calling apps like Viber and Skype, letting users call their BBM contacts over Wi-Fi or a data connection. The "channels" feature also looks like it could be a route to bringing in ad dollars for BlackBerry: it invites users to follow and converse with brands on the service, not unlike Twitter.

## Google working on 10 gigabits-per-second broadband

Google is working on technology that will provide data transfer speeds over the internet that are many times faster than its current Google Fiber service, an executive at the online search giant says. Google Fiber offers data transfer speeds of 1 gigabit per second currently. But the company is already working on speeds of 10 gigabits per second, chief financial officer Patrick Pichette said during the Goldman Sachs Technology and Internet conference.

Pichette called this the next generation of the internet and said it was part of Google's broader, long-term obsession with speed. Faster speeds will increase the use of software as a service because users will be able to trust that critical applications that are data intensive will run smoothly over the Internet, he explained.

## STC launched new postpaid plans with a new look and feel

In an ongoing strive to offer its customers the best products and services that meet their needs, STC launched new and innovative monthly plans for its postpaid customers after extensive research and analysis. With the plans, customers can enjoy the utmost flexibility by choosing the plan that suits them best. The plans, with the tagline "The way you want it", are designed based on past long-term consumption habits of customers.

All current postpaid customers can benefit from these plans and also upgrade their current plan in the future. The launch of these new and innovative postpaid plans underlines STC's outstanding commitment towards customer care and its

ongoing efforts to offer services that suit its customers' wishes and needs by focusing on studying their needs and, at the same time, realizing its marketing objectives and developing its business.

## du looks to buoyant economy for future growth

du, the United Arab Emirates' second biggest telecoms operator, expects further growth in the business due to a buoyant local economy, its chief executive said after reporting a rise in revenue and a better than expected fourth-quarter profit on Tuesday.

du's market share by revenues is more modest, at 29.2 percent in the third quarter, with Etisalat still having the bulk of the business with corporate customers and wealthy individuals. As a result du's profit for 2013 was little changed at 1.99 billion dirhams (US\$542 million), up from 1.98 billion dirhams in 2012, a bourse filing on Tuesday showed. However, chief executive Osman Sultan said the company would still benefit from overall growth in the UAE's booming economy. Economists polled by Reuters estimate the country's gross domestic product increased by 4.3 percent in 2013 and predict it will expand by the same rate in 2014 and 2015.

du's mobile data revenue increased 34 percent to 2.36 billion dirhams in 2013, with data now accounting for 28 percent of this, up from 23 percent a year earlier. Sultan said he hoped this would top 30 percent in 2014.

## Batelco program to train entrepreneurs

Batelco, Bahrain's leading telecom operator has launched its professional program for Bahraini entrepreneurs. The program, entitled 'Batelco Entrepreneur Program' which is being organized by Batelco's Youth Marketing team in partnership with Tamkeen and BDB, a leading development supporter, is designed to help young Bahraini entrepreneurs start their business.

The five-day course, which will be run over five continuous Saturdays, will feature talks by six Bahraini entrepreneurs and business professionals, interactive lectures and inspirational training session, covering everything from finance and accounting basics, to marketing and business planning. Muna Al Hashemi, Batelco's general manager – consumer division, said: "All young Bahraini entrepreneurs, wishing to start their businesses, are invited to avail of this golden opportunity. In this program, they will learn the secrets of success encapsulated in the invaluable professional insights to be presented by business experts."

Upon completion of the course, candidates will be receive certificates and would be able to gain consultation support provided by BDB.



## REGIONAL NEWS

### Forum to shed light on latest ICT trends

The Bahrain International eGovernment Forum 2014 next month will feature some of the world's leading experts discussing the latest developments and trends in Information and Communication Technology (ICT), organizers announced.

The event is being held under the patronage of Deputy Prime Minister and Supreme Committee for Information and Communication Technology (SCICT) chairman Shaikh Mohammed bin Mubarak Al Khalifa, at the Ritz-Carlton Bahrain, Hotel and Spa and the Bahrain International Circuit from April 21 to 23.

Tailor-made workshops will get underway on the first day of the forum. The second and third day events will include parallel workshops, happening for the first time, properly made in conjunction with several international organizations and in coordination with NGOs plus specialized institutes.

### GSMA supports infrastructure sharing in the Middle East and Africa

After a preliminary meeting in Barcelona during MWC, senior executives from eight MEA-based mobile operator groups have confirmed their support of network infrastructure sharing. Guy Daniels reports.

Executives from eight major mobile operator groups have announced their plans to cooperate on network

infrastructure sharing initiatives. The participating operators say they have made this commitment in order to provide Internet and mobile broadband access to unserved rural communities and reduce the cost of mobile services for all sections of the population. The initial group of eight executives from mobile operator groups who support this initiative are: Christian de Faria, CEO Africa, Bharti Airtel; Ahmad Julfar, Group CEO, Etisalat Group; Sifiso Dabengwa, CEO and President, MTN Group; Nasser Marafih, Group CEO, Ooredoo Group; Marc Rennard, Senior EVP, Africa, Middle East and Asia, Orange; Abdulaziz Alsugair, Chairman and Managing Director, STC Group; Serpil Timuray, CEO, Africa, Middle East and Asia Pacific Region, Vodafone Group; and Scott Gegenheimer, CEO, Zain Group.

They collectively manage 79 mobile network operations across 47 countries in Africa and the Middle East, covering 551 million mobile connections, where many of the unconnected population live in rural areas.

### MEA's mobile data in 2018: Equivalent of 4,105 million text messages per second

The Middle East and Africa (MEA) will post the world's-fastest mobile data traffic growth rate from 2013-2018, according to a new study. The Cisco Visual Networking Index Global Mobile Data Traffic Forecast for 2013 to 2018 reports that mobile data traffic in the region will increase 14-fold by 2018.

The report suggests that mobile data traffic in the MEA region will reach 1.49 exabytes per month by 2018 - the equivalent of 372 million DVDs each month or 4,105 million text messages each second.

Across MEA, mobile data traffic growth is being driven by the world's-fastest uptake of Internet Protocol version 6 (IPv6) -capable smartphones and tablets, with a CAGR of 35 per cent, rising from 133 million in 2013 to almost 598 million in 2018.

In the region, smart wearable devices like watches, glasses, and fitness trackers are also slated to post strong growth from 700,000 in 2013 to 8 million in 2018, the Cisco report estimates.

## eServGlobal signs MoU with BDCOM online for potential Bangladesh JV

eServGlobal Ltd said it has signed a Memorandum of Understanding with BDCOM Online Ltd for a potential mobile financial services joint venture in Bangladesh. The mobile financial services company said the MoU has been signed to allow the firms to explore the possibility of entering into a joint venture to provide a platform for Mobile Financial Services across Bangladesh.

BDCOM, an internet services provider, is already operating in the region; in 2009 the firm acquired SMILE, one of the largest Fiber Internet Broadband Service Providers in Bangladesh. A deal would allow the firm to extend the reach of its services in the region, said the firms' Chairman Wahidul Haque Siddiqui.

Paolo Montessori, CEO and Managing Director of eServGlobal, said, "Bangladesh is an ideal market to build an end-to-end mobile payment ecosystem. BDCOM is an innovative company and we are pleased to be working with them to introduce services which have the potential to significantly improve the lives of people across the country."

## Second subsea cable to boost internet

Bangladesh will sign a contract with a consortium on in March in Kuala Lumpur to install a second submarine cable that will increase internet bandwidth by seven-fold.

The SEA-ME-WE-5 cable that will connect about 20 countries in the Asia-Pacific and Europe is expected to be installed in 22 months from the date of signing. Abubakar Siddique, telecom secretary, and Monwar Hossain, managing director of state-owned Submarine Cable Company Ltd, will sign the deal on behalf of Bangladesh. "Bangladesh will be one of the consortium members as we sign the contract with an objective to get 1,400 gigabits per second of internet bandwidth for the country," Hossain said. For internet connectivity, the country depends largely on the lone undersea cable SEA-ME-WE-4, which was installed eight years ago, with a capacity of 200 Gbps. Separately, six more private international terrestrial cables are connected to global cables through Indian links.

The second cable will serve as a backup for the previous undersea cable as well. The single backbone fibre optic network will link Southeast Asia, Middle East, East Africa and Europe, according to the company's annual report.

## Young Arab inventors showcase life-saving ideas

Several new Arab inventors hope to receive backing soon for their ideas, which include hi-tech tools for the medical sector, after graduating from the i2 Institute course recently. The i2 Institute, which stands for imagination and ingenuity, showcased the work of the inventors at a conference in Riyadh on Monday. The inventors had spent more than eight months at Harvard University and the Massachusetts Institute of Technology in the United States. Hayat Sindi, the i2 Institute founder and chief executive officer, said in a speech that the organization was started two years ago to help young entrepreneurs, scientists and engineers get support to commercialize their work. The conference included various education, research, business and policy experts. The graduates have shown extraordinary talent in their field, in addition to their communication skills in Arabic and English, Sindi said. She urged other inventors and entrepreneurs to apply for fellowships on the website [i2institute.org](http://i2institute.org) soon.

## New technology advisory council formed

IDC has formed a Technology Advisory Council with the fundamental aim of enabling a new wave of IT development across the region.

Research firm International Data Corporation (IDC) has formed a Technology Advisory Council that aims at enabling a new wave of IT development across the region. The main role of the advisory council is to be the voice of the CIO and CxO C-level executives across the board like CIO, CEO, CFO, etc community in the Gulf.

He said the Council will provide a far-reaching source of thought leadership on issues relating to strategic planning, R&D, and technology innovation. It will form part of the largest and most influential social network of CIOs, IT leaders, and technology decision makers in the Middle East. It will also provide a neutral platform for the wider CIO community to network with their peers, share best practices, and keep up to date with the very latest industry trends.

## Solar-powered chargers coming soon to empower your mobile phones

Solar powered mobile phone charger kiosk, solar lantern with mobile chargers, solar candles with mobile chargers and other mobile charging units displayed at the Solar Middle East exhibition is a major attraction at the Dubai World Trade Centre. While mobile manufacturers are planning to bring out self-charging mobile phones, the solar powered mobile chargers offer a solution to the issue of charging mobile phones. Solarway TM, a South African company, who have their offices in Jebel Ali displayed many innovative solar solutions for empowering mobile phones, even when users are stranded in remote locations without any power supply. Mobile phones are now the most important pieces of hardware that are becoming an integral part of modern life. In some remote places, especially in rural areas, where there is no power connection, users tend to keep their mobile phones in switched off mode as they are powerless to charge their mobile phones. In such a situation, a solar powered mobile charging station can be useful.



## REGULATORY & POLICY NEWS

### TRA releases data on UAE registrar market share

TRA has released data on the UAE's registrar market share, showing the .ae domain name registration through January 2014.

As of January 2014, 113,000 .ae domain names have been registered. The data also shows the stake each provider of domain names currently holds in the market. Etisalat continues to have the largest market share of 69.32 per cent followed by Instra Corporation Pty Ltd 9.12 per cent and AEservers 3.61 per cent. There are now 21 accredited registrars with the aeDA registry.

The data also shows that Durraq's "Tasjeel.ae" has the top growth rate of 30 per cent between August 2013 and January 2014, followed by AEservers at 25 per cent, 101Domain Inc. at nine per cent, and both Instra Corporation Pty Ltd and IP Mirror at eight per cent.

### PTA directs to CMOs to stop call set-up fee

Pakistan Telecommunication Authority (PTA) has issued instructions to all Cellular Mobile Operator (CMOs) to immediately stop call set-up fee recently imposed by them. PTA has issued these directions in the light of provision of Telecom Re organization Act and Consumer Protection Regulations 2009.

PTA has accordingly directed all CMOs to implement the order without causing any discomfort to the mobile phone subscribers. It may be recalled that mobile operators have imposed call-setup charges of Rs. 0.10+ tax on each call last week and posted notice on their website about imposition of new charges. PTA's step is aimed at safeguarding customers' interests. PTA has asked the operators to immediately stop these charges and furnish compliance report to it.

### Kenya to release 4G network draft policy

Kenya's Ministry of ICT has announced Kenya will soon have a fourth generation long term evolution (4G LTE) mobile network, with the ministry set to release a spectrum policy for public comment.

The Star reports cabinet secretary at the Ministry of ICT Dr. Fred Matiangi told a special meeting with journalists at the ministry's office in Nairobi: "After receiving the memoranda with various comments on the policy, we will hold a stakeholders' meeting and then present the policy to the cabinet for approval." He said the consultation process should take between three and five months, adding that the public should present their views on how the spectrum should be managed because it is a national resource.

The Communications Authority of Kenya currently gives operators licenses for either second generation (2G) or third generation (3G) networks.



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## FCC approves AT&T's US\$1.2 billion acquisition of leap wireless with conditions

The Federal Communications Commission approved, with conditions, AT&T Inc.'s \$1.2 billion acquisition of Leap Wireless International Inc. in an order. AT&T gains Leap's valuable spectrum portfolio and 4.6 million new subscribers under the low-cost Cricket brand. The merged entity now holds 46-180 megahertz (MHz) of spectrum in overlapping markets that cover 137 million people, or 44 percent of the U.S. mainland population, according to FCC records. AT&T will also assume Leap's \$2.8 billion in net debt as a result of the deal. Leap provides an average of 23 MHz of spectrum capacity in markets along the Mid-Atlantic seaboard--in cities like Washington, Philadelphia, Baltimore and Richmond, Va.--and west of the Mississippi River--in cities like Denver, Houston, Phoenix, Kansas City, Mo., San Antonio, San Diego and Portland, Ore. That spectrum borders some of the valuable 1695-1710 MHz, 1755-1780 MHz and 2155-2180 MHz bands teed up for FCC's AWS-3 auction in later this fall. The FCC March 13 said it was "concerned about the potential for the proposed transaction to result in certain public interest harms," according to the text of the order. However, following certain concessions from AT&T, the commission said that the public interest benefits of the deal "outweigh the likelihood of significant public interest harms, such that overall, the proposed transaction is in the public interest."

## Australia state government calls for cross-agency ICT investment decisions

The New South Wales State Government in Australia has released a new ICT investment policy to help its agencies drive more coordinated ICT investment, and develop cross-agency approaches to problem solving and service delivery. The 'NSW Government ICT Investment Policy and Guidelines' look to ultimately get better value from the state's AU\$2 billion (US\$1.8 billion) annual ICT investment. It instructs

that NSW Government ICT decisions should comply with relevant whole-of-government ICT policies and standards, including information management, data centre reform, corporate and shared services reform, and information security. "It embraces a whole-of-government process to make sure agencies take full advantage of industry trends in consuming ICT 'as a service' or cloud-based delivery models for better value, flexibility and reliability," announced Minister for Finance and Services, Andrew Constance. "The framework is designed to minimise duplication and support common approaches that promote efficiencies across government," he said. Importantly, it will also help ensure that government-held information is managed in a consistent way across agencies. The investment guidelines also ask agencies to consider online access and support the sharing of data, collaborate and reuse by demonstrating that there are no existing ICT solutions that can be leveraged, and demonstrate standardization and interoperability of technologies.

## European net neutrality law clears committee hurdle

Telecommunication operators are closer to losing lucrative roaming revenue after the European Parliament's industry committee approved a contentious package of legislation Tuesday that also establishes net neutrality. The committee voted 30-12 with 14 abstentions to approve the Telecoms Single Market package, which includes an end to roaming charges from December 2015 and new rules for ISPs. While it explicitly bans blocking and throttling of Internet traffic, it leaves the door open for "specialized services." The action moves the legislation along to the European Parliament, which is set to take up the measure on April 3. "The regulation passed today will also improve coordination of the management of the radio spectrum, which will allow for innovative uses of wireless broadband, protect broadcasting and stop interference when several devices are used close together," said French member of the European Parliament Catherine Trautmann. "However, net neutrality is a red line, not only for our group but above all for citizens who have made their views clear. We want a binding reference to the principle of net neutrality," she added in a statement. While consumer groups welcomed the possible end to roaming charges for customers, digital rights groups worried that the proposal could establish a two-tier Internet.

## NBTC panel gives nod to license for Thaicom 8

THE telecom committee of the national regulator Tuesday agreed by a vote of 4:1 in principle to grant a license to Thaicom for the listed company's planned Thaicom 8 broadcasting satellite. Takorn Tantasith, secretary-general of the National Broadcasting and Telecommunications Commission (NBTC), said the panel would officially grant the license to Thaicom 8 after the Information and Communications Technology Ministry confirms that the ministry has the authority to file the satellite at the International Telecommunications Union, and has assigned such a right to Thaicom to launch another satellite in the 78.5-degrees East orbital slot. "We need to confirm whether the filing process requires the Cabinet, the ICT minister or only the ICT Ministry permanent secretary to approve it. If it can be done at the ministry level, we can approve the license for Thaicom 8 immediately," he said.

Thaicom 8 will in fact operate under the same license as that granted by the NBTC to the planned Thaicom 7 satellite in June, 2012, on the grounds that it is a satellite-network expansion project arising from the existing license.

## BTRC moves to craft mobile banking policy guideline

The country's telecom regulator has moved to formulate a new policy guideline to make the rapidly growing transactions through mobile banking more secured and transparent. The Bangladesh Telecommunication Regulatory Commission (BTRC) formed two separate committees in this regard after instructions from the Bangladesh Bank (BB), sources said.

Recently, the BTRC officials sat with the BB officials and later with the mobile phone operators in the policy making issue to build a secure mobile banking system that got already enormous popularity among people due to its flexible nature of money transaction.

The central bank asked the BTRC to be cautious of SIM card replacement and registration issue because mobile banking is totally based on SIM cards. The BB also asked to ensure KYC (know your customers) of mobile phone users.

## PTA wants removal of mobile towers near borders

The Pakistan Telecommunication Authority (PTA) has asked the government to take up with India and Afghanistan the issue of removing cellular towers near the border whose signals are spilling over into the country's territory. The telecom regulator said that these signals emanate from mobile phone towers in India and Afghanistan located close to the border. The PTA has written to the Interior Ministry and law enforcement agencies to take up the matter with their counterparts in India and Afghanistan. "The matter should be taken up with the Indian and Afghan governments to ensure removal of towers along border areas," the PTA said in an official letter.

Some Indian and Afghan operators had set up towers in close proximity to the border. The sale of Indian and Afghan SIM cards in Pakistan's border areas has also been reported.

## Azerbaijan to set up independence telecommunications regulatory

Azerbaijan's ICT Minister Ali Abbasov said works are underway to set up an independence telecommunication regulatory body in the country.

Abbasov went on adding that: "Right now the department of regulation is working under ICT Ministry but we want to make it an independent body with its own authorities." Azerbaijan has made huge progresses in ICT sector. In this regard, 2013 was the most successful year of the country during the last decade. Last year was named the Year of ICT in Azerbaijan. It was marked with a series of significant achievements like launching Azerbaijan's first telecommunications satellite, Azerspace-1, which put the country in the group of countries actively working in space industry.

By launching Azerspace-1, Azerbaijan became the third country in the CIS and the only one in the region that owns its own satellite. Launching of the second telecommunications satellite Azerspace-2 is scheduled for 2017. Meanwhile, in 2015, the country is planning to launch a low earth orbit satellite.

## Bids for the auction of Slovenia's wireless spectrum 4G opened

Slovenia's national electronic communications market regulator opening the bids for the auction of wireless spectrum for fourth-generation (4G) mobile services. The minimum asking price for the entire package of frequencies has been set at nearly EUR 105m.

The auction will include frequencies on the 800 MHz, 900 MHz, 1800 MHz, 2100 MHz and 2600 MHz frequencies, which will be awarded for a 15-year period. AKOS expects all four telecoms operators with infrastructure in Slovenia - Telekom Slovenije, Simobil, Tušmobil and T-2 - to take part in what will be the biggest spectrum auction to date reports Slovenia Times.

## Telecom regulator recommends higher price for 800 MHz spectrum

The Telecom Regulatory Authority of India (TRAI) proposed to set the auction reserve price at 26.85 billion rupees per MHz of spectrum in the 800 band, compared with 18.20 billion rupees set for a previous round of bids in March 2013. The 800 MHz band is used by carriers, including Sistema's local unit, Reliance Communications Ltd, Tata Teleservices Ltd and two state-run companies, to provide services on the Code Division Multiple Access (CDMA) mobile phone technology. But more carriers could be interested in the next auction as the airwaves can now be used to roll out high-speed 4G LTE services after government removed technology restrictions.

A ministerial panel has the final say on the reserve price. The government has yet to set a date for the 800 band auction. India's auction of two other airwave bands this month raised USD 10 billion in total.

## TRA reports high subscriber demand for MNP service

The Telecommunications Regulatory Authority (TRA) of the UAE reported on Thursday that 61,000 mobile number porting requests were received by both telecom operators — du and etisalat — since the official launch of the Mobile Number Portability (MNP) service in December 2013.

"So far the MNP has been good. It is a new start and it will take time to gain momentum. This has generated good attraction by operators and consumers. The operators are trying to retain their customers by good offers and customers have a choice," Mohammad Nasser Al Ganem, Director General of the TRA, told Gulf News. The TRA is responsible for monitoring the service mechanisms, ensuring all the necessary documents and information is submitted to complete the transition and ultimately, ensuring that the switchover process runs smoothly.



## COUNTRY-WISE POLICY & REGULATORY DEVELOPMENTS

### Afghanistan

#### Board Chairman: Mr. Abdul Wakil Shergul

[Afghanistan Telecommunication Regulatory Authority (ATRA)]

Afghanistan's Ministry of Communications & IT (MCIT) has awarded a 3G concession to Afghan Wireless Communications Company (AWCC), the fifth and final operator to be issued with a license. No details were given regarding the cost of the license, or the frequencies included, although all previous 3G authorizations have sold for US\$25 million. Speaking at a press conference, Minister of Communications Amirzai Sangin commented that the government is looking to ensure that internet services are available to 80% of the population and territory of Afghanistan within a year. AWCC's larger wireless rivals Etisalat Afghanistan and MTN Afghanistan were awarded the first and second 3G licenses in 1H 2012, whilst Telecom Development Company Afghanistan (TDCA, operating as Roshan) was handed the third concession in September that year. State-backed Afghan Telecom (Aftel) was the fourth provider to be green-lit for 3G wireless data in late-2013 as part of the telco's transition to providing fully mobile services. (March 20, 2014) telegeography.com

### Algeria

#### Chairperson: Ms. Zohra Derdouri

[Regulatory Authority for Post & Telecommunication (ARPT)]

Algerian mobile operator Ooredoo (Nedjma) has been certified by telecoms watchdog the Autorite de Regulation de la Poste et des Telecoms (ARPT) to deploy commercial 3G services in nine 'optional' provinces, following an evaluation of its coverage and quality of service (QoS) obligations.

According to a press release, Ooredoo can now launch its 3G network in nine additional provinces, namely: Blida, Tlemcen, Boumerdes, Tipaza, Biskra, El Oued Sidi Bel Abbes, Medea, Ain Defla, after fulfilling its coverage and QoS obligations in the mandatory provinces of Algiers, Constantine, Ouargla, Oran, Setif, Bejaia, Chlef, Djelfa, Ghardaia and Bouira. The watchdog issued the final licenses for the provision of 3G services in the country to all three applicants – Mobilis, Ooredoo Algeria (Nedjma) and Djezzy – on December 3, 2013. For its part, Ooredoo Algeria was granted exclusive coverage of Bejaia and Ghardaia, with obligation to cover Ain Defla, Algiers, Biskra, Blida, Bouira, Boumerdes, Chlef, Constantine, Djelfa, El Oued, Medea, Oran, Ouargla, Setif, Sidi Bel Abbes, Tipaza and Tlemcen with 3G by end-2015.

(February 28, 2014) telegeography.com

The Algerian government has reportedly decided to amend certain provisions of Algeria Telecom's (AT's) license, in order to allow the incumbent operator to deploy new wireless in the local loop (WiLL) technologies. AT will be assigned new frequencies for an annual fee of DZD100 million (US\$1.29 million) in order to offer ICT services, including broadband access, across the entire country's territory; the move forms part of Algeria's national strategy for high speed internet access. The amendment will also oblige AT to improve the quality of its fixed telephony services, so that it is 'consistent with the recommended standards by the International Telecommunication Union (ITU) or by recognized international standardization bodies'. If the telco fails to meet the improved standards it could face the cancellation its license, the report adds. (February 27, 2014) Agence Ecofin

**Bahrain****Chairman: Dr. Mohammed Al Amer**

[Telecommunication Regulatory Authority (TRA)]

Bahrain's dominant fixed network operator Batelco has signed an agreement with Bahrain Bay Development to roll out its fiber broadband access network to Bahrain Bay, as part of its initiative to extend its high speed fixed services to new development areas. The US\$2.5 billion Bahrain Bay new development will include a number of hotels, banks and 'high profile enterprise customers' in addition to various residential building projects. Batelco announced that it is investing in the development of a state-of-the-art fiber-optic network supporting its full range of enterprise and consumer products, including voice, private leased circuits, broadband and IPTV. Furthermore, the network will be designed to provide customers with fully redundant services to ensure business continuity, high service availability and uninterrupted services to clients running crucial time sensitive operations. The investment in a GPON network will provide the platform necessary to support future ultra high bandwidth services which are expected to be introduced in the near future. Batelco announced that it has activated 4G LTE mode for its customers with Apple iPhone 5 devices, including the iPhone 5s and other models.

(March 20, 2014) telegeography.com

Bahrain's telecoms regulator is calling for a review of the regulations covering OTT type services over concerns that they may be offering "unfair" competition to the incumbent telcos. The TRA said that OTT messaging apps, such as Viber, WhatsApp and Skype are raising competition against the traditional telecoms networks. It has published a study which found that the OTT providers are eating into the profits at the mobile networks, and calls for a review of price regulations set by the government. The report suggests that in a conventional unregulated market, companies would respond to the arrival of new lower cost competitors, but this has not happened in the telco market, because prices are too tightly controlled. The regulations slow the ability of the mobile networks to respond to price competition, the report concluded. It described competition from free service providers as "unfair" and the reason for what it described as market "malfunction". The report also concluded that the OTT vendors own business models were not sustainable either, and was being supported by investors and high stock market valuations rather than a sound commercial basis. It did not call for the services to be restricted though.

(March 19, 2014) cellular-news.com

**Bangladesh****Chairman: Sunil Kanti Bose**

[Bangladesh Telecommunication Regulatory Commission (BTRC)]

Bangladesh's tax regulator has indicated that a long running dispute over taxes on replacement SIM cards can be resolved. The Chairman of National Board of Revenue met with representatives of the four mobile networks, and has now asked the telecoms regulator to examine the issue. The government imposes a sales tax on SIM Cards, but the mobile networks say that the tax should not also be applied when SIM Cards break and need replacing. There are around Tk 3,000 crore (US\$380 million) at stake, although that is significantly higher than Tk 250 crore in an interim report filed last September. Sunil Kanti Bose, chairman of Bangladesh Telecommunication Regulatory Commission, also confirmed that the heads of the four mobile also met

him after the meeting with the NBR chairman.

(March 8, 2014) cellular-news.com

**Egypt****Executive President: Dr. Amr Badawi**

[National Telecommunication Regulatory Authority (NTRA)]

Vodafone Group has reportedly said that it could consider international arbitration should the Egyptian government approve legislation under which fixed line incumbent Telecom Egypt (TE) will gain access to the country's mobile networks. The British company is cited as saying that 'all outstanding issues to ensure fair and equitable treatment across the industry' should be assessed by the Egyptian authorities prior to granting such approvals. Vodafone has argued that under the proposals not only would TE be unfairly favored, but a conflict of interest could be created. As per the plans, the unified license agreement which TE is expected to be given will allow it to roll out mobile voice services without constructing its own infrastructure; in return Egypt's cellcos will gain access to the incumbent's fixed line network. With final approval for the licensing plan, a company statement by Vodafone added: 'Vodafone looks forward to hearing the government's response to our concerns, in light of which we will assess what steps might be necessary to protect our shareholders' interests, including possible commencement of international arbitration proceedings.' Meanwhile, an unnamed person familiar with the matter was cited as saying that complaints regarding the plans relate in part to the fact that the unified license will only offer limited access to TE's older copper network, with no provision for access to its fiber infrastructure. Further, it has been claimed that the rules lack clarity on TE's control over international calling traffic and the rates the incumbent would pay for a mobile license. In response to such claims, Executive President of Egypt's National Telecommunication Regulatory Authority, noted: 'We aren't discriminating against any company, they will have equal rights and duties ... We are putting plans for the whole market to grow.' (March 5, 2014) Bloomberg

**Iraq****CEO: Dr. Burhan Shawi**

[Communication &amp; Media Commission (CMC)]

Iraq's Communications and Media Commission (CMC) is set to hold fresh talks with the country's Council of Ministers, to discuss long-gestating plans to award 3G licenses via an open, public auction. According to TMT Finance, quoting sources familiar with the matter, the CMC favors a two-step process, which would see a quick, closed 3G auction, followed by the introduction of a new mobile player further down the line. Meanwhile, the government is determined to combine the two processes, potentially delaying the country's introduction of 3G technologies even further. The Council refused a request from the CMC to automatically grant the 3G licenses to the three existing mobile operators – Zain Iraq, a unit of Kuwait's Zain Group, Ooredoo subsidiary Asiacell and Orange affiliate Korek – because to do so would be contrary to the regulator's statutes. Plans for the auction of a fourth mobile license in Iraq received final cabinet approval in May 2010, by which time 15 firms had reportedly expressed an interest in entering bids, including US-based Verizon Communications, South Africa's MTN Group, Turkcell of Turkey and the UAE's Etisalat. However, in January 2012 Saudi Telecom Company (STC) reportedly pulled out of the running for the concession, citing the severe delay in awarding the license, which had been valued at as much as US\$2 billion by the Iraqi government.

(March 17, 2014) telegeography.com

**Jordan****Chairman of the Board of Commissioners/CEO:  
Mr. Mohammad Al Taani**

[Telecommunication Regulatory Commission (TRC)]

Jordan's government has committed US\$209 million to complete the National Broadband Network project within the next two years. Tenders for the supply and construction of the network are expected to be completed in May, ICT Minister Azzam Sleit said, adding: 'All projects under the tenders that the government floated will be completed in two years after which the scheme will be ready. This will greatly boost e-services, e-health and e-education in the Kingdom.' The project, which aims to connect all public schools and universities, government agencies and hospitals to a nationwide fiber-optic network was launched in 2003 but has stalled several times due to lack of funds.

(March 19, 2014) telegeography.com

The Jordanian government has rejected applications for 4G spectrum from broadband provider Kulacom and US-backed firm Ameriphone after the duo failed to meet the terms of the tender. Mohammed Taani, Chief Commissioner of the Telecommunications Regulation Commission (TRC), announced at a meeting with the press that Kulacom had been unable to provide the necessary financial guarantee. Ameriphone, meanwhile, provided a financial guarantee but from a foreign bank whereas the tender calls for a guarantee from a licensed bank in Jordan. The US Company also violated the terms of the auction by providing a certificate of registration from 2009. ICT Minister Azzam Sleit has called for the TRC to take measures to ensure the provision of 4G services as soon as possible, and announced that the government is: 'ready to look into any official requests we receive for providing 4G in Jordan from local telecom companies or those working abroad.' The minister went on, encouraging the nation's trio of incumbent cellcos to enter offers for the spectrum: 'We will be happy if the three existing operators submit requests to acquire the frequencies to provide 4G.' Orange Jordan, Umniah and Zain Jordan boycotted the sale in protests against the doubling of taxes on the telecom sector in mid-2013: in July 2013 the special tax on mobile phones was increased to 16% from 8%, whilst the tax on mobile subscriptions – both pre- and post-paid – rose to 24% from 12%. The trio had also argued against the TRC's efforts to introduce a fourth player into the already near-saturated market. Even without these considerations, it is unclear whether the cellcos would have bid for the 4G spectrum, with several senior officials commenting that the market is 'not yet ready' for 4G services.

(February 25, 2014) the Jordan Times

**Kuwait****Minister of Communication: Mr. Eissa Ahmed Al-Kanderi**

[Ministry of Communication (MOC)]

Kuwait's National Assembly has passed the first stage in legislation that will see the creation of the country's first independent telecoms regulator. At the moment, regulatory decisions are taken by the Ministry of Communications, but as the government also owns the country's sole landline operator and the international gateway -- that had been seen as a conflict of interest. The Assembly has passed the first stage of the bill creating the regulator, and it now passes to a second reading. If passed, the regulator will have control of all the telecoms services, although the exact nature of its powers and limits are still to be debated. The Ministry has also proposed previously to privatize the landline network, although those plans were put on hold until the regulator is set up. (March 11, 2014) cellular-news.com

Kuwait's National Assembly has approved the first reading of a bill to establish the country's first independent telecoms regulator, tentatively called the Telecommunication Regulation Authority (TRA), in a move that could lead to further liberalization of the sector. 38 members of parliament (MPs) approved the first reading of the bill, while two MPs abstained. In a second statement, parliament speaker said that he hoped a second and final reading of the bill would be passed at the parliament's next hearing, which is scheduled for March 18, 2014. The new commission will regulate the mobile, wireline and broadband sectors; although the exact scope of the supervisory powers that it will be given remains unclear. Kuwait is the last country in the Gulf region to establish such a regulatory body, and the draft law has reportedly been the subject of much deliberation by the government and the previous assemblies for the past decade. Back in November 2010 the MoC announced that it intended to establish an independent telecoms regulator as part of its ongoing intention to privatize the country's fixed line telephony market. No date was given for the introduction of a separate regulator, but the MoC claimed that no further internet service provider (ISP) licenses would be issued in the interim period. (March 7, 2014) Reuters

**Morocco****Director General: M. Azzine El Mountassir Billah**

[Agence Nationale de Reglementation des Telecommunications (ANRT)]

Moroccan telecoms regulator ANRT has announced that the country's Prime Minister has approved the launch of a Long Term Evolution (LTE) tender. However, the watchdog stopped short of providing a timeframe for the process. In September 2013 ANRT announced that 4G LTE technology will be available in the country by early-2015. The award of LTE-suitable spectrum to Moroccan cellcos is long overdue, with local media reports originally claiming that auction would take place in early 2013. (March 20, 2014) telegeography.com

**Oman****Chief Executive Officer: H.E. Dr Hamed bin Salim Al Rawahi**

[Telecommunication Regulatory Authority (TRA)]

Oman's telecoms regulator has warned that plans by the OTT app WhatsApp to offer voice calls over its service will still need regulatory approval. Just after the announcement of its US\$19 billion acquisition by Facebook, the messaging app announced plans to offer voice calls as well as text messages. The service will almost certainly be VoIP based which could put the company into regulatory face down in a number of countries that ban such services, or at least tightly regulate them. "It depends on the technology and how they are going to implement in Oman. We will take a call once they launch their services," a senior TRA official said. "The companies' regulations should meet the conditions related to the national security requirements of the Telecommunication Regulating Policy," the official added. "The provider of the service should confirm all the legal requirements." It's not clear what would happen if the service launched without approval, but some regulators have in the past attempted to block unregulated VoIP services from working. (March 13, 2014) Times of Oman

## Pakistan

### Chairman: Dr. Syed Ismail Shah

[Pakistan Telecommunication Authority (PTA)]

The federal government has given major concessions to mobile cellular companies, allowing them to pay the price of 3G and 4G in Pakistani rupee instead of US dollars, besides agreeing to an 18-month freeze on any new auction. The crucial decisions were taken during a meeting between the Spectrum Auction Advisory Committee and Chief Executive Officers of cellular mobile operators. The government also extended the auction date by two weeks to April 23, aimed at facilitating the companies to plan their resources and seek necessary approval of their boards. After the government had unveiled the draft of the Information Memorandum – the policy document describing terms of the upcoming auction – representatives of telecom companies had expressed reservations over the terms, which they described were in favor of the government. Pakistan plans to issue three licenses of 3G, two licenses of 4G and one license of defunct Instaphone, meant only for a new bidder. It has estimated receiving the minimum US\$1.6 billion. However, according to the revised terms, the bid price will be in dollars terms but successful bidders have been given the option either to pay in dollars or the equivalent to Pakistani rupee, which will be determined on the basis of the exchange rate on the given day. The officials said the move will also avert any pressure on exchange rate markets as the companies had refused to bring dollars from abroad and instead decided to raise them from the domestic market. The acceptance of the demand may hurt the government's projections for foreign exchange reserves, which has recently increased to US\$9.7 billion on the back of US\$1.5 billion contribution by a friendly Muslim country in the Pakistan Development Fund. This is for the first time that a payment mode has been designed in a way that gives wider choices to bidders but restricts them to pay either upfront or in five years with an interest rate equal to London Inter-Bank Offered Rate plus 3%. Caving in to another demand, the government agreed with the telecom operators that it would not hold another auction for one-and-a-half years from the date of the upcoming auction. The telecom operators had demanded a five-year freeze but the government agreed to only one-and-a-half year. MoIT minister said the condition would not apply to a license that remains unsold in the upcoming bid. She said the one-and-a-half year time was quite reasonable as, during this period, the successful bidders will be busy in laying infrastructure and rolling out the services. The companies had also demanded that instead of selling new licenses, the government should sell only the spectrum. The move was aimed at avoiding annual license fees but the government did not agree. They had unanimously presented their demands and the government accepted most of them. The ASC approved amendments to the Information Memorandum and the revised IM will now be issued soon. The auction is scheduled on April 23, while the sealed bids will be submitted to PTA on April 14. The finance minister said that the PTA should ensure that best international standards. He emphasized that the consumers should get state-of-the-art next generation mobile services in line with the international best practices.

(March 14, 2014) tribune.com.pk

The Spectrum Auction Advisory Committee noted that government is all set to hold the auction of 3G and 4G telecom licenses next month, as all timelines given to complete the process are being followed. The Spectrum Auction Advisory Committee, which held under the chairmanship of Finance Minister, has reviewed the process of auction of 3G and 4G telecom licenses. The government had announced to hold the auction of 3G and 4G telecom licenses next month (April), which would generate minimum US\$1.6 billion to the national kitty. Finance Minister had claimed in its press conference last month that revenue from auctioning 3G and 4G would go beyond the level of US\$1.6 billion on the completion of the auction process. The government will offer three licenses for the third generation telecom (3x10 MHz licenses in the 2100MHz spectrum band) at minimum base price of US\$295 million each. Similarly, auction of two licenses of 4G (2x10MHz paired spectrum in 1800 MHz band) would be offered at base price of US\$210 million each. According to official handout, Secretary Ministry of Information Technology briefed the Committee on the progress made so far on the auction of licenses. He informed the Committee that all the timelines given to complete the process are being followed. He also informed the Committee that a Turkish Telephone Company Turk Cell will be visiting Islamabad for due diligence in this regard. The Finance Minister emphasized that the whole process should be completed with transparency and diligently. He expressed his satisfaction over the progress made so far. He expressed the hope that PTA will conduct competitive auction for deployment of next generation mobile network. He concluded that with the introduction of new technology the local telecom industry will benefit from transfer of technology and users will also have new features. Minister of State Information Technology, Finance Secretary, and Advisor to Finance Ministry and senior officials of Ministries of Information Technology and Finance also attended the meeting. (March 7, 2014) nation.com.pk

Turkcell is considering entering the Pakistani mobile market by participating in its upcoming spectrum auction, the government revealed. A group of executives from the Turkish mobile operator, including CEO Sureyya Ciliv and Chairman of the board Ahmet Akca, met with a delegation from Pakistan, headed by minister of state for IT and telecoms Anusha Rahman Khan, at Mobile World Congress in Barcelona, Pakistan's IT ministry announced. "[The] top brass of Turkcell showed keen interest in visiting Pakistan very soon in [the] context of [the] forthcoming spectrum auction," the ministry said in a statement. Akca considers Pakistan to offer huge potential for investment in the telecoms sector, the ministry said, noting that the company will visit Pakistan to study the market in more detail. The minister, meanwhile, pointed out that 98% of the Pakistani population has yet to be connected to mobile broadband, either via 3G or LTE. It is as yet unclear exactly what spectrum will be sold off in Pakistan and when the sale will take place. In January the country's finance ministry announced that three "next generation" spectrum licenses would be sold this month raising as much as US\$2 billion for government coffers. IT ministry said it has reserved 850-MHz spectrum for new market entrants, and will sell off additional 1800-MHz frequencies to speed up the rollout of 4G services in the country. Pakistan had 132 million mobile subscribers at the end of November, according to the Pakistan Telecommunication Authority's (PTA's) latest figures. Its population is around 180 million. (March 5, 2014) totaltele.com

The Pakistan Telecommunication Authority (PTA) has issued its Information Memorandum (IM) for its planned sale of spectrum in the 2100MHz, 1800MHz and 850MHz bands, which it dubs the 'Next Generation Mobile Services Award' (NGMSA). The watchdog is auctioning 2x30MHz in the 2100MHz range, 2x20MHz in the 1800MHz band and 2x7.38MHz in the 850MHz range. Reserve prices for each 2x10MHz block were set at US\$295 million for the 2100MHz band, US\$210 million for the 1800MHz frequencies and US\$291 million for the 850MHz range. Participants are required to submit offers for a minimum of 2x10MHz in the 2100MHz range, but may bid for more in multiples of 2x5MHz. Only successful bidders of 2100MHz spectrum will be qualified to obtain 1800MHz frequencies. In terms of the timetable for the sale, the consultation process for the IM will last until March 10, and on March 17 the PTA will publish any changes to the NGMSA rules. Prospective bidders will have until 25 March to submit their application along with their pre bid deposits and sealed-bid offer, with pre-qualified bidders being announced on March 28. A mock auction will be held on April 3, followed by the auction proper on April 7. The IM also sketches out new rules to smooth the way for the newcomers to enter the market, including requiring existing operators to provide national roaming on their networks, and more lenient rollout obligations.

(February 27, 2014) telegeography.com

Pakistan's Prime Minister approved a plan to auction 2100MHz and 1800MHz mobile licenses for 3G and 4G services by mid-April this year. Finance Minister said in a press conference that investors from Turkey, Saudi Arabia and Qatar were expected to take part in the auction, the Tribune newspaper reports, while confirming that the government has approved the draft information memorandum prepared by consultants, and that the license term will be set at 15 years. The government also confirmed that base prices are set at USD295 million per 10MHz for 3G 2100MHz licenses and USD210 million per 10MHz for 4G 1800MHz spectrum, while a total of 30MHz in the 2100MHz band and 20MHz in the 1800MHz range is on offer. (February 24, 2014) telegeography.com

## Qatar

### Minister ICT: H.E. Dr. Hessa Al-Jaber

[The Supreme Council of Information and Communication Technology (ictQATAR)]

Ooredoo Qatar has reported that its domestic annual revenue grew by 5.9% last year to QAR6.6 billion (US\$1.8 billion), up from QAR6.2 billion in 2012, while its Qatari consolidated fixed, mobile and broadband customer base reached 2.9 million, up from 2.7 million twelve months earlier. Qatar-only EBITDA showed a slight increase of 0.7% year-on-year to QAR3.3 billion in 2013 despite re-branding and network modernization programs generating higher costs. The operator's investment in a nationwide fiber broadband access network in Qatar resulted in it announcing the milestone of 100,000 fiber broadband customers around the end of 2013, while it says its 4G LTE mobile broadband network covered all major urban areas by the end of the year. In the wider Ooredoo Group, the Qatari firm reported a 13% year-on-year drop in net profit to QAR2.6 billion despite consolidated revenue rising 1.1% to QAR33.9 billion, driven by Qatar, Algeria and Iraq, but weighed down by competitive and economic challenges in Kuwait and Tunisia, while one of its growth-engine

subsidiaries, Indosat in Indonesia, posted healthy revenue growth in local currency but was impacted by currency depreciation. Ooredoo Group's consolidated customer base increased by 3.5% in the fourth quarter to reach 96 million at the end of December 2013. Indosat's subscribers alone rose by 2% to 59.7 million, but the Indonesian unit's revenue in reported currency dropped by 5% to QAR8.4 billion while the division's EBITDA declined by 13% to QAR3.9 billion. Total Ooredoo group EBITDA fell 6% to QAR14.6 billion, giving an EBITDA margin of 43% in 2013, lower than 47% the previous year. Extra costs have been incurred by the gradual group rebranding to Ooredoo, so far reaching Qatar, Algeria, Tunisia and the Maldives. Ooredoo's Iraqi cellular unit Asiacell reported a 3% rise in revenue to QAR7.1 billion in 2013, while its subscribers increased by 7% to 10.7 million, although it too saw a fall in EBITDA, albeit marginal, to QAR3.6 billion for the year. Newly licensed Ooredoo Myanmar will launch its mobile voice/data services 'within six months' in major areas of the country before expanding its network to 97% of the population. Start-up costs in the developing south-east Asian state further dragged at Ooredoo's margins in 2013. (March 5, 2014) telegeography.com

## Saudi Arabia

### Governor: Eng. Abdullah A. Al Darrab

[Communications and Information Technology Commission (CITC)] Saudi Arabia's telecoms regulator has issued a MVNO license to Virgin Mobile's Middle Eastern group the company announced. It had applied for the license some time ago, and has been hiring staff for the local operations since last October. Sir Richard Branson, founder of Virgin Group commented that he was delighted that they are able to bring the Virgin Mobile experience to Saudi Arabian customers. The award of this license further consolidates our position as the market-leading MVNO in the region, positioning Virgin Mobile Middle East and Africa perfectly for future growth. Virgin Mobile Middle East Africa (VMMEA) was formed from the merger of Virgin Group and Friendi Group's local operations in the region back in 2012. Virgin Group remains the largest individual shareholder of the combined group holding a significant (if unspecified) minority stake. (March 16, 2014) cellular-news.com

Saudi Arabian telecoms operator Etihad Etisalat (Mobily) has signed an agreement with UAE-based Emirates Telecommunications Corporation (Etisalat) to provide 4G Long Term Evolution (LTE) roaming to subscribers in the two countries. According to a joint press release, Mobily will connect its subscribers via Etisalat's SmartHubIPX, which offers roaming services, voice, messaging and GRX data exchange between mobile network operators, fixed operators, applications service providers and over-the-top (OTT) content players through a single connection. According to Mobily the partnership with Etisalat's SmartHub-IPX will boost communication services between both countries, especially with the increasing [number] of subscribers travelling for both personal and business needs. The growing proliferation of 4G devices in the region has also made it imperative to provide the best network and services to our large subscriber base in the country.

(March 5, 2014) telegeography.com

## Sri Lanka

### Director General: Mr. Anusha Palpita

[Telecommunication Regulatory Commission (TRC)]

Sri Lanka Telecom (SLT) has launched a range of cloud computing services under the 'akaza' banner, providing end-to-end cloud computing for businesses/organizations including an infrastructure as a service (IAAS) platform that provides shared computing resources, eliminating the need for clients to invest in infrastructure and equipment, with the aim of achieving 'enhanced agility, quick service delivery, and cost efficiencies whilst providing maximum return on investment (ROI) as well as improved scalability.' Through akaza, customers will be connected to SLT's enterprise block storage, 'the largest cloud storage space in Sri Lanka', and will gain access to akaza's web-based management interface, which gives clients control over creating and managing their own virtual data centre and virtual servers. akaza is hybrid cloud enabled, and has a reserved network performance up to 500Mbps, a reserved storage performance up to 5,000 input/output operations per second (IOPS) and also provides support for sharing disks between multiple virtual memories. Dedicated firewalls and load balancers enhance security and distribute traffic among customers' dedicated cloud servers. SLT also has a dedicated 'Cloud Expert team' to assist customers around the clock. In the near future, SLT plans to enhance its cloud computing service to offer a range of other services such as platform-as-a-service (PAAS), software-as-a-service (SAAS) and desktop-as-a-service (DAAS). (March 12, 2014) [telegeography.com](#)

## United Arab Emirates

### Director General: Mr. Mohamed Nasser Al Ghanim

[Telecommunication Regulatory Authority (TRA)]

The Telecommunications Regulatory Authority (TRA) has released data on the UAE's registrar market share, showing the .ae domain name registration through January 2014. As of January 2014, 113,000 .ae domain names have been registered. The data also shows the stake each provider of domain names currently holds in the market. Etisalat continues to have the largest market share of 69.32 per cent followed by Instra Corporation Pty Ltd 9.12 per cent and AEservers 3.61 per cent. There are now 21 accredited registrars with the aeDA registry. The data also shows that Durraq's "Tasjeel.ae" has the top growth rate of 30 per cent between August 2013 and January 2014, followed by AEservers at 25 per cent, 101Domain Inc. at nine per cent, and both Instra Corporation Pty Ltd and IP Mirror at eight per cent. (March 16, 2014) [zawya.com](#)

The telecoms regulator TRA says that it has completed a technical survey that measures mobile radiation levels across the Emirates. The results revealed that mobile services including GSM, UMTS and LTE within the measured sites in Dubai have emission levels well below the international ICNIRP guidelines for exposure, including the levels of exposure for the general public and Non-Ionizing radiations. All recorded readings at all locations in Dubai were well within limits with the International ICNIRP standards. Such field studies are regularly carried out by the TRA to affirm the commitment of national service providers with the safety standards set by the International Commission on Non-Ionizing Radiation Protection and aligned with international best practices. The survey measured radiation levels of 50 chosen base stations in Abu Dhabi, Dubai, Al Ain and the Northern Emirates for both UAE licensed

telecom operators to ensure that both the regulatory policy and the international ICNIRP standards are met. Their emissions policy is in line with the regulations laid down by the International Commission for Non-Ionizing Radiation Protection (ICNIRP). (March 11, 2014) [cellular-news.com](#)

Etisalat Group's aggregate subscriber numbers grew by seven per cent on an annual basis to 148 million in 2013. The net addition of nine million subscribers in the year was mainly a factor of good subscriber growth in the UAE, Saudi Arabia, Egypt, Nigeria, Benin and Togo markets. In the UAE, the active subscriber base grew to 10.4 million subscribers in 2013 representing a year-on-year growth of 16 per cent and quarter-on-quarter growth of two per cent. The eLife segment had a growth rate of 30 per cent for the year to 0.7 million customers. The total active mobile subscribers in the UAE in the fourth quarter stood at 17.64 million, registering a growth of 16.13 per cent compared to 15.19 million in the third quarter. Du had a mobile customer base to 7.24 million in the fourth quarter. The subscribers are expected to soar this year as many blue- and white-collar workers are entering UAE as the economy is growing and property sector is getting uplift. (March 4, 2014) [Gulf News](#)

The Telecommunications Regulatory Authority (TRA) of the United Arab Emirates has revealed that Etisalat and Du have together received 61,000 requests from subscribers to switch provider since mobile number portability (MNP) was introduced in December. 'So far the MNP has been good. It is a new start and it will take time to gain momentum,' the TRA's Director General Mohammad Nasser Al Ganem told adding: 'This has generated good attraction by operators and consumers. The operators are trying to retain their customers by good offers and customers have a choice.' According to Al Ganem, out of the total requests more than 23,000 mobile subscribers have transferred their number to a rival network, while many requests were resubmitted in order to obtain the required documents for the switchover.

(February 21, 2014) [Gulf News](#)





## REGULATORY ACTIVITIES BEYOND THE SAMENA REGION

### Australia

The Australian Communications Consumer Action Network (ACCAN) has prompted the Australian Competition and Consumer Commission (ACCC) to impose SMS termination rates in order to squash price inflation. In its submission to the ACCC's Domestic Mobile Termination Access Service Declaration Inquiry, ACCAN said the undisclosed wholesale SMS prices which Telstra, Optus, and Vodafone charge one another are resulting in unreasonable charges to consumers. Thus far, Optus has called for the charges to be reduced. "It's time the ACCC stepped in and set the scene for some real competition," ACCAN deputy chief executive officer (CEO), Narelle Clark, said. "Telcos are currently setting whatever outrageous wholesale price they want and then that gets passed onto consumers." According to Macquarie Telecom, it costs less than \$0.01 to send 100 SMS, although ACCAN claims some telcos charge customers on non-included value plans around 15 cents for one SMS. ACCAN also said that if the ACCC declares SMS termination rates, it will be able to set a lower wholesale rate and create an environment "for some real competition." The same wholesale declaration was made for voice calls to mobiles in 1997. While there are other factors involved, the cost of a mobile service has dropped by at least 51 per cent according to ACCAN pricing information. (February 24, 2014) [arnnet.com.au](http://arnnet.com.au)

### Brazil

Brazilian telecom regulator ANATEL will scrutinize any merger that could result in a smaller number of mobile phone carriers and will only approve those based on strong economic reasons, President Joao Rezende told. Brazil's mobile phone market will continue to have four

big independent carriers through the next two or three years, which is a positive scenario as it fosters competition, Rezende said. "ANATEL will not come up with any policy to concentrate the Brazilian market, even though we cannot rule out this outcome," Rezende said. "We would need to know if a foreign group is losing strength overseas, jeopardizing its ability to keep investing here. But we haven't seen concrete signs of that so far." Since late last year, persistent media reports have suggested the possible breakup and sale of TIM Participações, the nation's second-largest wireless operator. Such a deal could ease antitrust issues facing Telefonica in Brazil as it tightens its grip on TIM's parent, Telecom Italia. The companies involved in the reports have denied any such negotiations. Brazil's crowded wireless market has slowed sharply from a recent boom, when falling prices and low unemployment resulted in growth to more than 270 million mobile connections in a country of nearly 200 million people. The slowdown, stemming from tighter credit and eroding consumer confidence, is reinforcing expectations among some analysts that Brazil might soon lose one mobile carrier. But Rezende said that instead of losing competitors, Brazil's mobile phone market could gain a fifth big carrier with the expansion of NII Holdings Inc's Nextel or the arrival of a foreign company in the 4G market through an auction in August. (March 10, 2014) [reuters.com](http://reuters.com)

Brazil's telecoms regulator ANATEL has announced that it will be reducing interconnect fees for fixed-to-mobile calls from next month, resulting in an average 13% drop in the cost of calls for end users. The average price of local calls will fall from BRL0.45 (US\$0.19) per minute to BRL0.39, while the cost of intra-region long-distance calls will decrease to BRL0.80 from BRL0.93 and national calls will see average

tariffs drop from BRL1.05 a minute to BRL0.92. The watchdog says it expects the move to save consumers up to BRL2.1 billion a year. (February 26, 2014) [telegeography.com](#)

## Bulgaria

Bulgarian telecoms regulator the Communications Regulation Commission (CRC) is set to gain more power, as draft amendments to the Communications Act – which could force domestic network providers to abide by the watchdog’s rulings even if they intend to appeal them in court – are tabled for discussion in parliament on March 13, 2014. The proposed amendments were prompted by a reminder from the European Commission (EC) that Bulgaria does not currently apply the existing European legislation in full. Under the current regulatory regime, operators are not obliged to apply CRC rulings if they disagree with them, and can appeal them in court. If the new amendments come into force however, operators will have to apply the CRC regulations immediately; the watchdog’s decision will only be discontinued once a court has ruled in favor of an operator that has appealed a ruling. (March 12, 2014) [Daily Novinite](#)

## Canada

Two of Canada’s largest mobile networks have been blocked from buying a block of radio spectrum that was offered by a smaller player in the latest move by the government to try and curtail the power of the big three telcos. Last October, the regulator, Industry Canada received a request to transfer a total of 83 WCS spectrum licenses from NextWave to Inukshuk, which is owned by Rogers Communications and Bell Canada. WCS consists of 30 MHz of spectrum in the 2300 MHz band. Looking into the request, the regulator found that if approved, the transfer would represent a significant shift in spectrum concentration in the WCS band. Bell and Rogers, through Inukshuk, would increase their combined WCS spectrum holdings from 29 percent to 77 percent. Additionally, because there is only one paired block of WCS spectrum, only one licensee can hold a license in a given geographic tier. As such, if this request was approved, 95 percent of the WCS spectrum would effectively be held by Bell, Rogers and Telus. In a statement, Industry Minister said that “this license transfer would lead to unacceptable levels of concentration of spectrum in the hands of incumbent carriers that negatively affects competition in our wireless sector.” He ordered that the transfer request be rejected.

(March 3, 2014) [cellular-news.com](#)

## Chile

Chile’s three main mobile network operators all picked up spectrum in the country’s recently concluded 700-MHz auction, but Entel and Telefonica spent considerably more than America Movil’s Claro. Chile raised a total of 11.53 billion pesos (€15 million) from the sale, regulator SUBTEL announced. Entel’s bid was the largest. The former incumbent secured spectrum block B at a cost of CLP6.88 billion (€9 million), while Telefonica won A block for CLP4.25 billion (€5.5 million). Claro, the smallest of the big three, agreed to pay CLP404 million (just over €500,000) for the remaining block. The licenses come with certain coverage obligations. For example, the winners are required to provide coverage in 1,281 rural or isolated locations and along 13 highways totaling 854 km within 18 months. They are also required to provide Internet connectivity to educational establishments. In addition, licensees must

offer access to their networks to MVNOs at capped rates, as well as providing roaming access. These conditions “will directly benefit the rollout of local services, which will translate into lower broadband costs for end users,” Chile’s undersecretary of telecommunications said in a statement. According to SUBTEL’s latest statistics, Movistar leads the Chilean market with 9.14 million subscriptions as of the end of June 2013, but Entel is extremely close behind with 9.13 million. Claro lags the top two with 5.9 million subscribers.

(March 3, 2014) [totaltele.com](#)

## European Union

Telecommunication operators are closer to losing lucrative roaming revenue after the European Parliament’s industry committee approved a contentious package of legislation that also establishes net neutrality. The committee voted 30-12 with 14 abstentions to approve the Telecoms Single Market package, which includes an end to roaming charges from December 2015 and new rules for ISPs. While it explicitly bans blocking and throttling of Internet traffic, it leaves the door open for “specialized services.” The action moves the legislation along to the European Parliament, which is set to take up the measure on April 3. “The regulation passed will also improve coordination of the management of the radio spectrum, which will allow for innovative uses of wireless broadband, protect broadcasting and stop interference when several devices are used close together,” said French member of the European Parliament Catherine Trautmann. “However, net neutrality is a red line, not only for our group but above all for citizens who have made their views clear. We want a binding reference to the principle of net neutrality,” she added in a statement. While consumer groups welcomed the possible end to roaming charges for customers, digital rights groups worried that the proposal could establish a two-tier Internet. “Specialized services should be limited to services provided by ISPs, such as IPTV, and should not be confused with services on the open Internet, like YouTube or Spotify,” said Raegan MacDonald, European policy manager at human rights group Access. “Under the current overly broad definition, industry giants will be able to consolidate their control over the telco market while hampering competition, innovation and freedom of expression in Europe.” Some groups believe that softer rules on net neutrality are a trade-off for telecoms companies for their loss of roaming revenue. “Vote is a sign of the massive lobbying influence of big telecom operators over the European legislative process. The regulation’s big loopholes will have to be corrected when the European Parliament casts its final vote,” said Miriam Artino, legal and policy analyst at La Quadrature du Net. (March 18, 2014) [pcworld.com](#)

The European Broadcasting Union (EBU) has expressed what it says is “serious concern” at a Swedish government decision to reallocate the 700MHz spectrum band to “other forms of use” from 2017. It said that such a fast switchover will jeopardize the integrity of television services in Sweden. Around 2.8 million customers use the current digital system for terrestrial television services. EBU Technology & Innovation Director Simon Fell, said: “Digital terrestrial television can’t move out of the 700MHz in Sweden in the government’s proposed timeframe without substantial disruption to Swedish consumers. A smooth transition involves detailed planning and engagement with all sectors of the television industry.” Details of the latest move are currently being debated under International

Telecommunication Union (ITU) preparations for the decisive WRC-15 conference. The EBU and others use this forum to highlight the importance of minimizing any interference to broadcasting by any future mobile services that operate in the 700MHz band. This process has yet to be completed, and there are currently more than 60 TV services operating in Sweden in the 700MHz band that would need to be moved elsewhere to make room for the government's plans. The EBU said that the shift will require new technologies, such as DVB-T2, whose launch will require a substantial financial investment by the broadcast industry and will disrupt digital terrestrial television reception for many Swedes without DVB-T2 compatible decoders. (March 4, 2014) [cellular-news.com](#)

The European Union's ambitious plans to scrap roaming charges for mobile phones users across the continent could become a reality, as it is preparing to implement the plan from October, according to The Telegraph. Two member states who support the plans participated in high-level meetings with EU leaders at Mobile World Congress (MWC) in Barcelona. A vote on implementing the measure is anticipated in mid-March, even though conversations of the measure have been postponed by Brussels' bureaucracy, with expected implementation from October. The new measure would offer any of the UK travelers to other member states with the same charges for calls, texts and data use as there in home country. Originally suggested by the EC as an extension of current actions that have already reduced roaming charges, several industry and government insiders feared they would be impractical to implement. The latest transformations would also include single national regulators being authorized to approve firms to operate services across the single market, similar to the existing regulatory procedure for web firms. The European Commission's call for ending roaming charges comes after a report revealing that around 25% of European citizens switch off their mobile devices when travelling aboard. The report noted that nearly half of mobile users did not use internet while travelling, with 94% of them avoiding using services like Facebook and Twitter when in other an EU nation than their own. (March 3, 2014) [cbronline.com](#)

## France

Following a consultation covering mobile frequency assignments in the 700MHz, 800MHz, 900MHz, 1800MHz, 2100MHz and 2600MHz frequency bands in a number of French overseas territories, telecom regulator ARCEP has decided to launch 4G Long Term Evolution (LTE) license awards procedures in Reunion, Mayotte, Guadeloupe, Martinique, Guiana, Saint-Martin and Saint-Barthelemy in 1H 2014. France's Minister for Industrial Renewal, France's overseas minister, the country's Minister of Digital Economy, and ARCEP will be issuing calls for applications in the first half of 2014. Further, the regulator pointed out that in Saint Pierre and Miquelon the required spectrum can be allocated as requested without a call for application, in accordance with CPCE Article L42-1. The following mobile operators are active across the various French overseas territories: Orange Caraibes, Digicel Antilles Francaise Guyane and Outremer Telecom (all French Guiana, Guadeloupe, Martinique); UTS and Dauphin Telecom (Saint-Martin and Saint-Barthelemy); Orange Reunion-Mayotte, Outremer Telecom and SRR/SFR Mayotte (all Reunion and Mayotte); and SPM Telecom (Saint Pierre & Miquelon). (February 24, 2014) [telegeography.com](#)

## GSMA

After a preliminary meeting in Barcelona during MWC, senior executives from eight MEA-based mobile operator groups have confirmed their support of network infrastructure sharing. Executives from eight major mobile operator groups have announced their plans to cooperate on network infrastructure sharing initiatives. The participating operators say they have made this commitment in order to provide Internet and mobile broadband access to un-served rural communities and reduce the cost of mobile services for all sections of the population. The initial group of eight executives from mobile operator groups who support this initiative are: Christian de Faria, CEO Africa, Bharti Airtel; Ahmad Julfar, Group CEO, Etisalat Group; Sifiso Dabengwa, CEO and President, MTN Group; Nasser Marafih, Group CEO, Ooredoo Group; Marc Rennard, Senior EVP, Africa, Middle East and Asia, Orange; Abdulaziz Alsugair, Chairman and Managing Director, STC Group; Serpil Timuray, CEO, Africa, Middle East and Asia Pacific Region, Vodafone Group; and Scott Gegenheimer, CEO, Zain Group. They collectively manage 79 mobile network operations across 47 countries in Africa and the Middle East, covering 551 million mobile connections, where many of the unconnected population live in rural areas. "We are greatly encouraged by the shared vision of mobile operators and the common urgency to find solutions that will drive down the cost of mobile and Internet services and help connect the unconnected," said Anne Bouverot, Director General, GSMA. "Unique mobile subscriber penetration is only 40 per cent in Africa and the Middle East, lower than the global average of 47 per cent, so we need to work together to expand the reach of mobile." The GSMA says that its position is that telecom regulatory frameworks should encourage flexible commercial sharing arrangements and facilitate access to government-owned assets at preferential rates to help speed up the roll-out of new networks and support the business case to extend mobile networks into rural areas. "This cooperation demonstrates that the industry is committed to innovating in order to serve the billions living in the rural areas," said Manoj Kohli, Managing Director, Bharti Enterprises and Chair of the Public Policy Committee of the GSMA board. "We call on governments to support and encourage the commercial infrastructure sharing arrangements that we aim to propose." The GSMA last released a report on mobile infrastructure sharing back in September 2012, although only one of the country examples in that report, Jordan, is in the MEA region. Infrastructure sharing takes many forms, although the most common are the passive sharing of cell sites and masts, together with network roaming. The sharing of radio access networks (RAN) is only just gaining commercial interest, and core network sharing is not getting much traction. The GSMA's research in 2012 found that mobile network operators in developing markets would be primarily interested in infrastructure sharing to expand coverage into previously un-served geographic areas – a spot-on prediction. It said that this is facilitated via national roaming or by reducing subscriber acquisition costs by sharing sites and masts or the RAN. Infrastructure sharing is also increasingly being used in congested urban centers where new site acquisition is difficult. However, the report warned that regulators must weigh the positive impacts of decreased costs, greater coverage, and improved

environmental impact against competition concerns arising from a decrease in network competition. The next steps in this initiative are unclear, although we have asked the GSMA for further details and will add them as and when they are received. (March 19, 2014) telecomtv.com

The GSMA announced the launch of an industry initiative to allow mobile customers to use their accounts with mobile operators for secure access to other digital services. The Mobile Connect project is initially supported by the operators Axiata, China Mobile, China Telecom, Etisalat, KDDI, Ooredoo, Orange, Tata Teleservices, Telefonica, Telenor, Telstra and VimpelCom, as well as digital service providers Dailymotion, Deezer, Gemalto, Giesecke & Devrient, Morpho, Oberthur and VALID. By managing their digital identity through Mobile Connect, customers are expected to gain improved privacy protection, simpler access to services and reduced risk of identity theft. They will no longer need to create and manage multiple user names and passwords as the authentication and identification solution will use their mobile phone number or mobile user name and information contained in the secure SIM card. Mobile Connect is based on the OpenID Connect protocol to ensure broad interoperability. The GSMA, Orange, Morpho and the Catalonian healthcare service are testing Mobile Connect authentication mechanisms in a live environment at Mobile World Congress in Barcelona. Orange intends to provide Mobile Connect-based services across its footprint in Europe, Africa and the Middle East by 2015. Ooredoo is also aiming to provide similar services in South East Asia around the same time frame. The GSMA expects to see additional operator launches of Mobile Connect in 2015.

(February 24, 2014) telecompaper.com

## Honduras

The National Telecommunication Commission (CONATEL) will introduce Mobile Number Portability (MNP) in the country from 30 April 2014. CONATEL's president Ricardo Cardona disclosed to the media that the new service will be an incentive for companies to improve their services, adding: 'It is very difficult to say, but we estimate that initially 10% [of subscribers] could change [their network providers], or maybe a little more ... What this law generates is an attractive [level of] competition between [operators]'. In September 2013 CONATEL approved the Number Portability Act; after the official publication of the Act in the national gazette, a technical committee was selected to establish the regulations and define the basis for the tender to contract a database management company. It was not until December 2013, however, that Norway's Syster Trondheim, which won a MNP contract in Ecuador in 2009, was selected to take charge of the operation, administration and management of a central MNP database in the country. Nine companies expressed an interest in the auction, with four of them submitting bids. (March 6, 2014) El Herald

## Hungary

The Hungarian telecoms regulator National Media and Telecommunications Authority (NMHH) is preparing to issue a tender for an auction of wireless spectrum in the 800MHz, 900MHz, 1800MHz and 2600MHz bands. The government is expecting to raise HUF120 billion (USD531 million) through the sale of frequencies, which are suitable for 2G, 3G or 4G services. The 800MHz 'digital dividend' band was freed up in

October last year when the country completed the switch-off of analogue TV transmissions. Hungary is currently home to three mobile network operators – T-Mobile, Telenor (formerly Pannon) and Vodafone – which served a total of 11.2 million subscribers between them at the end of September 2013. (February 25, 2014) Daily Napi Gazdasag

## India

Full mobile number portability (MNP) was UPA II's dream project. However, it remains a non-starter even as the UPA II is on its way out. The Communications Minister Kapil Sibal has announced it on a number of occasions. A number of letters have been exchanged between telecom regulatory authority of India (TRAI) and the department of telecommunications (DoT). It is now clear that it will not be implemented during the tenure of the existing government. Under full mobility the consumers would be allowed to retain their numbers even when they shift from one service area to another. Currently, MNP is limited to a circle. For example, a mobile subscriber in Delhi can change his operator while retaining his number. However, he has to change his number, if he relocates to another state. If full mobile number portability is implemented, a subscriber can retain his number even if he shifts to another circle and migrates to any operator. Earlier, the regulator had written to the DoT, early last year that: "The Authority telecom service providers (TSP) may be given six months' time to implement full MNP in the country." However, nothing has happened as of now. "Full mobile number portability should have been implemented long before. It will also force the operators to improve the quality of services as the consumers will have a choice," said B. K. Syngal, former chairman and managing director of Videsh Sanchar Nigam Ltd (VSNL). The regulator also said that once full MNP is in place, subscribers should be educated to dial numbers in the '+91' format which is the standard dialing format, so that the calls get connected across the country without any trouble.

(March 21, 2014) telecomtiger.com

India's total telephony base grew to 922.04 million in January, up by 6.85 net addition. The country's fixed-line base slipped by 170,000 to 28.72 million, but the mobile base went up by 7.02 million new customers to 893.31 million. Figures from regulator TRAI also show that mobile number portability requests in the month stood at 2.56 million. There were also 56.90 million broadband subscribers in January, up from 55.20 million a month earlier. This included 14.55 million fixed-line broadband subscribers, versus 14.54 million in December, and 42.35 million mobile and wireless broadband subscribers, up from 40.66 million a month earlier.

(March 13, 2014) telecompaper.com

Cellular operators in India may soon get the option to acquire spectrum in 700MHz band, which is considered as one of the most efficient bands currently used worldwide. The Department of Telecommunications (DoT) is currently discussing details of the auction of 700MHz spectrum band, said a top DoT official. Details of technology, process of allocation, availability, and tentative time for the auction are currently being worked out. "Discussion on 700MHz auction is going on. The timing of the auction is to be decided," said the official. However, the DoT may need to seek recommendations from the Telecom regulatory Authority of India (TRAI) on reserve price of 700MHz spectrum like other bands. Last month, TRAI Chairman Rahul Khullar said that the auction of 700MHz spectrum

band is unlikely before 2015-16 as the government has yet to decide on what technology should be adopted for 700MHz airwaves. Unless the technology is decided, the ecosystem will not develop. At present, many countries like the US, Latin America and Australia are either using or are setting up long-term evolution (LTE) networks on 700MHz spectrum. There are more than 280 devices available in the market that can be used for 4G or LTE services on 700MHz spectrum. The Government has about 100MHz of spectrum available in the 700MHz band that can be auctioned. The government was earlier looking at offering up to 10 MHz in each circle, in eight blocks, with no restriction on operators for the number of blocks they want to bid. Its likely 2x45 MHz would be auctioned, while 10 MHz would be kept in between as guard band. Earlier, TRAI had recommended that spectrum in the 700MHz band be priced at four times the 1,800-MHz base price. Considering the price of 1800MHz spectrum in the February auction, the base price for 1MHz of pan-India spectrum in 700MHz band would be about Rs 9,000 crore, and more than Rs 45,000 crore for 5MHz of pan-India spectrum. The limit for operators' spectrum acquisition in this band would be 50 per cent of that assigned in their respective circles and 25 per cent of the total spectrum assigned in all bands in all service areas put together. As part of the plan, a large part of the 700-MHz spectrum, used by analog and digital broadcasting services, will be shifted to a new band. Earlier, the industry has asked the Government to give the option to switch 2300MHz band spectrum with 700MHz band for LTE or 4G services. While this has been discussed, the plan seems to be in the backburner. If the swap option was permitted, the broadband wireless access (BWA) spectrum holders like Reliance Jio, Bharti Airtel and Tikona Digital would have been benefitted. According to industry experts, the 700MHz band, one of the most efficient spectrum bands, requires just about half the number of towers for offering the same quality of service as 2300MHz spectrum, at a much lower capital investment for rollout. (March 7, 2014) [business-standard.com](#)

The Telecom Regulatory Authority of India (TRAI) proposed to set the auction reserve price at 26.85 billion rupees per MHz of spectrum in the 800 band, compared with 18.20 billion rupees set for a previous round of bids in March 2013. The 800MHz band is used by carriers, including Sistema's local unit, Reliance Communications Ltd, Tata Teleservices Ltd and two state-run companies, to provide services on the Code Division Multiple Access (CDMA) mobile phone technology. But more carriers could be interested in the next auction as the airwaves can now be used to roll out high-speed 4G LTE services after government removed technology restrictions. A ministerial panel has the final say on the reserve price. The government has yet to set a date for the 800 MHz band auction. India's auction of two other airwave bands this month raised US\$10 billion in total. (February 24, 2014) [post.jagran.com](#)

## Kenya

Kenya's Ministry of ICT has announced Kenya will soon have a fourth generation long term evolution (4G LTE) mobile network, with the ministry set to release a spectrum policy for public comment. Cabinet Secretary at the Ministry of ICT told a special meeting with journalists at the ministry's office in Nairobi: "After receiving the memoranda with various comments on the policy, we will hold a stakeholders' meeting and then present the policy to the cabinet for approval." He said the consultation process should take between three

and five months, adding that the public should present their views on how the spectrum should be managed because it is a national resource. He said: "We have proposed we go by the public private partnerships ownership model so as to avail the broadband in wholesale basis but there are actors who think we should auction licenses after grouping the spectrum into two or three bands." The Communications Authority of Kenya currently gives operators licenses for either second generation (2G) or third generation (3G) networks. The National Treasury approved the proposed ownership model last year, requiring the government to provide frequencies and interested stakeholders to invest in order to begin the development of the network. The operators were Safaricom, Airtel, Orange, yu, Liquid Telecom and MTN Business. However, the rollout failed as Safaricom pulled out citing that the government was sluggish in getting shareholders to agree. (March 20, 2014) [humanipo.com](#)

The Communications Commission of Kenya (CCK) is thought to be examining proposals from no less than four would-be mobile virtual network operators (MVNOs). The companies that have requested a reseller concession from the watchdog are said to be: mobile payments duo Mobile Pay Ltd and Zioncell Ltd, financial institution Equity Bank (Finserve Africa) and Nakumatt Holdings, which is said to be Kenya's largest retailer. (February 28, 2014) [mvnodynamics.com](#)

## Macau

Macau's telecoms regulator has said that it is working on plans to issue 4G licenses and expects to have the auction details finalized sometime this year. The regulator said that it has been monitoring international developments in the market as it develops its own plans. However, the expected date for a 4G license auction was not stated. The local mobile network, CTM said that it was ready to deploy 4G services, as soon as the licenses are granted. The Bureau of Telecommunications Regulation also confirmed that all four companies that run mobile phone networks in Macau had applied to renew their licenses for 3G services, but that such renewals would still be subject to verification by the regulator first. (February 27, 2014) [Business Daily](#)

## Mexico

Mexico's new telecoms regulator IFETEL announced it has completed an investigation that shows there are dominant players in the telecoms and broadcasting sectors, although it will not name the companies in question until they have been informed. IFETEL has established rules requiring Mexico's dominant telecoms network operator to share parts of its network and set out other unspecified conditions to impose on the company in order to boost competition. It is certain that the telco in question is America Movil, the Carlos Slim-owned outfit whose Telcel mobile unit claims a market share of around 70% and fixed-line business Telmex an even greater hold on its market. Just under a year ago, the state decreed that any company with a market share of more than 50% could be identified as dominant, with regulations applied accordingly. Indeed, in December IFETEL warned America Movil – and Grupo Televisa, which has a similar hold on the broadcasting space – that it could be declared dominant in its sector and as such have regulatory measures imposed upon it. Both America Movil and Televisa are now doubtless waiting to receive notices to that effect from IFETEL. (March 7, 2014) [Bloomberg](#)

## Nigeria

The Nigerian Communications Commission (NCC) says an auctioned 2.3GHz spectrum band license will set the stage for broadband internet revolution in Nigeria. After auctioning the license, the Executive Vice Chairman of the NCC, Mr. Eugene Juwah, said the 2.3GHz spectrum band was designated for commercial use on a national basis. Bitflux Communications Limited won the deal, beating national mobile carrier, Globacom with a bid of 23.25 million dollars. Mr. Juwah urged the new licensee to ensure that Nigerians would feel the impact of this new revolution as soon as possible. Bitflux has 14 working days to pay-up the cost of the bid as well as 155 million Naira for wholesale wireless access service license. Globacom's 23.05 million dollars bid was not enough to seal the deal for the telecom giant in an auction key player in the industry said was both transparent and revolutionary. The successful bid by Bitflux brings in the much needed variety and competition to broadband in Nigeria and the new license, when operational, will provide retail service providers and other users with the requisite wholesale wireless access and bandwidth to provide service to their subscribers in line with the National Broadband Plan of 2013. The management of Bitflux expressed optimism that the deal would give Nigerians a better internet services and would also improve broadband penetration which is currently low. (February 25, 2014) [channelstv.com](http://channelstv.com)

## Norway

The Norwegian Post and Telecommunications Authority (NPT) says it has received an application for a license in the 800MHz band for use offshore. With a view to ensuring that any and all interested parties have an opportunity to apply for vacant frequencies in the band in question, the regulator has called for any competing applications to be submitted by 14 March 2014. In announcing the development the NPT noted that a total of 2x30MHz in the 800MHz band (791MHz-821MHz/832MHz-862MHz) is currently available for use offshore. It also highlighted the fact that a frequency cap restricts the amount of spectrum any single operator may acquire, noting that for the 800MHz band, when used for offshore services, a general frequency cap of 2x20MHz will apply. (February 24, 2014) [telegeography.com](http://telegeography.com)

## South Africa

The Independent Communications Authority of South Africa (ICASA) has announced a high level inquiry into the state of competition in the country's ICT sector, citing the need to gauge the impact of rapid technological changes on local and international industry. ICASA said the advances in technology are particularly impacting on electronic communications, broadcasting and the postal sector, encouraging the assumption that greater competition decreases the cost of communications. The regulator also hopes to consider the effect of market consolidation on communications costs and efforts to bridge the digital divide. ICASA said the matter of assignment of spectrum for broadband expansion will also impact on the ICT ecosystem in the country. "It is against this background that the authority is embarking on a wide ranging inquiry to develop a full appreciation of the implication of these unfolding changes and developments on the regulation of competition in the ICT sector," ICASA said. A meeting for stakeholders and media was to be held to officially launch the inquiry. (March 12, 2014) [humanipo.com](http://humanipo.com)

South African regulator ICASA has changed the date for introduction of new wholesale mobile termination rates (MTRs) yet again, after postponing the tariff implementation by two months, to May 1, 2014. The watchdog has now decided to bring forward the rate cut date by a month, to 1 April. 'After further consideration and consultation with [our] legal counsel, ICASA's council has decided that the commencement of the 2014 regulations need only be delayed by one month', the watchdog stated, adding: 'The council of ICASA is also of the view that a delay of one month is sufficient to ensure that the affected parties have sufficient time to properly prepare their answering papers.' In January 2014 ICASA announced higher asymmetry in MTRs, effective March 1, 2014. The new rules favor smaller network operators Cell C and Telkom Mobile. However, in February ICASA's representative confirmed that MTN South Africa had sent a letter to the watchdog demanding the 'immediate removal of recently published regulations'. Subsequently, on February 17 the regulator announced that the MTR cuts would be pushed back with two months, to May 1, as the legal proceedings introduced by MTN South Africa are 'complex' and parties affected by the litigation are 'afforded very little time to respond'.

(February 21, 2014). [MyBroadband](http://MyBroadband)

## Sweden

Sweden's National Post and Telecom Agency (PTS) ruled in an arbitration case regarding mobile network termination rates between Tele2 and Hi3G Access Sweden (3 or 'Tre'). PTS determined the backdated maximum cost-oriented price that Tele2 and 3 can charge each other for wholesale call termination from July 1, 2009 to June 30, 2010 (SEK0.355 [US\$0.05436] per minute, SEK0.035 higher than the price level in the arbitration case's previous repealed injunction). (February 23, 2014) [telegeography.com](http://telegeography.com)

## Switzerland

Swiss regulator the Federal Office of Communications (Ofcom) has revised Telecommunications Services Ordinance (TSO) relating to access to the incumbent's network to take into consideration technology developments. The price competitors must pay Swisscom for access to its network will continue to be based on the costs incurred during construction of a new network, featuring modern technology. Noting that the existing pricing system was out of date, Ofcom explained: 'until now the costs for accessing the last mile were based on a copper network and traditional switching equipment. Today, an operator would not construct a new copper network but would instead lay optical fiber.' The TSO revisions will come into force on 1 July 2014, although they will be phased in over a period of three years, in order to allow the incumbent to adapt to the new conditions. For calculating costs, Ofcom noted that it is not appropriate to apply the network construction model for all components of the network, as it would not make economic sense for each provider to construct its own, independent cable ducts; it should be possible for existing ducts to be used efficiently by all providers. As such, the pricing will not be calculated on the basis of the cost of constructing new ducts, instead, the long-term maintenance and the needs-based expansion will be the main factors. Ofcom added that it expects to see a moderate reduction in regulated access prices amongst telecom providers in the medium term, although 'this is unlikely to lead to large price fluctuations on the retail telecommunications services market, because the adjustments to the current cost calculation model are only gradual.' (March 17, 2014) [telegeography.com](http://telegeography.com)

## Thailand

Thailand's telecom regulator is mulling whether to reduce the amount of 4G spectrum up for grabs in the country's upcoming auction in order to encourage a more competitive bidding process. The National Broadcasting and Telecommunications Commission (NBTC) was planning to auction 25MHz of 1800MHz spectrum this August. However, the watchdog now plans to auction 20MHz of spectrum in two 10 MHz lots, and combine the remaining 5MHz with a separate 50MHz chunk of 1800MHz spectrum due to be auctioned in September 2015. A final draft of the 4G auction plan is expected to be agreed upon by the NBTC this month. Telenor, the controlling shareholder of Thai operator DTAC, has objected to the proposal. Sigve Brekke, head of Telenor Asia, told that obtaining only 10MHz of spectrum would not be sufficient to offer 4G services. The NBTC plans to allocate 4G spectrum via three separate auctions between August 2014 and September 2015. First on the block will be the aforementioned 1800MHz spectrum, which may or may not be reduced to 20MHz from 25MHz, and in November it plans to auction 17.5MHz of 900MHz spectrum. In September 2015, a separate chunk of 1800MHz spectrum will be up for grabs. As it stands, 50MHz will be auctioned, but if the NBTC carries out the idea mooted, it will increase to 55MHz. (March 11, 2014) *The Bangkok Post*

Thailand's telecoms regulator has approved the timeframe for the country's next batch of radio spectrum auctions that are due to start in August. The two 1800MHz licenses currently held by TrueMove and Digital Phone are being offered as was originally expected, although the auction will take place in August rather than September. The licenses expire in September, so the slightly earlier auction may offer some clarity to the winner during the handover period. A second auction will then take place in November for the 900MHz of spectrum currently being used by AIS under its concession from TOT. That spectrum is not due to be released until next year though. Currently, there is 17.5MHz of 900MHz spectrum held by AIS, but that may be topped up to 20MHz by the regulator, who could then auction off two large blocks. The winner of the 900MHz spectrum won't be able to use it until the AIS license expires, but the regulator said it would grant equipment permits to allow the winner to start early network construction. (March 5, 2014) *cellular-news.com*

Thailand's telecoms regulator is planning to hold three separate auction later this year for radio spectrum expected to be released for use by 4G services. The auctions which had been expected for September will now be staged across both August and September. The auction for 25MHz of 1800MHz spectrum being vacated by True Move and Digital Phone will take place earlier than expected, in August. The licenses expired last September, but were given a conditional one year extension. True Move still has 11 million customers on this spectrum, down from 17 million last October. DPC has 40,000 users, down from 70,000. A block of 17.5MHz worth of 900MHz spectrum currently used by AIS and due to expire in March 2015 will be auctioned in September. A third auction will offer 50MHz of 1800MHz spectrum that is currently used by DTAC, and will also take place in September. The details of how that spectrum is to be released are still being finalized. Although DTAC only uses half of the spectrum block, the license is not due to expire until 2018. The NBTC's vice-chairman said that there will also be a spectrum cap applied to "encourage fair bidding". (February 24, 2014) *cellular-news.com*

## Ukraine

Chairman of the Ukrainian telecoms regulator is quoted in an interview as saying the change of government in Ukraine will have the by-product of releasing the long-delayed commercial 3G (UMTS) 2100MHz frequencies from Ukrainian military control. Chairman indicated that the fact that a new Defense Ministry regime had entered power meant that the 3G spectrum could be transferred from the military by the end of 2014 (whereas 2100MHz frequencies are currently held by only one operator, Ukrtelecom). (March 7, 2014) *Kommersant Ukraine*

## United Kingdom

The U.K has taken a tentative step closer towards allowing spectrum sharing between public and private sector organizations as part of broader plans to double its economic benefits. The government is four years in to a 10-year plan to release 500MHz of sub 5GHz spectrum currently held by the likes of the Ministry of Defense (MoD), emergency services, and the Department for Transport (DoT) for commercial use. "Spectrum is hugely valuable. In economic terms it is already worth over £50 billion a year to the U.K economy. We are confident that we can grow that value," said Ed Vaizey, minister for culture, communications and creative industries, in a white paper published by the Department for Culture Media and Sport (DCMS). So far, 62 MHz has been released, and another 305 MHz is scheduled for release before the end of 2015. The MoD is exploring the possibility of sharing access to 75 MHz of that 305MHz. "We will continue to explore other opportunities for sharing in public sector bands, which offer the potential to generate 'quick wins,'" said the DCMS. This also includes TV white spaces spectrum. Looking longer term, the government has identified a further 135MHz in various bands that it hopes to release between 2014 and 2020. In order to squeeze more value out of spectrum, the government also said that where it makes sense it will support changes to frequency allocation that bring the U.K into line with other countries, or vice versa, in order to drive greater spectrum harmonization, particularly in Europe. The updated strategy was published after U.K. Prime Minister David Cameron earlier said he wants to double the annual economic contribution of spectrum to the U.K to £100 billion by 2025. He also pledged an extra £45 million in funding for research into the Internet of Things (IoT), bringing the total to £73 million. (March 13, 2014) *totaltele.com*

The auction of 4G spectrum last year has been commended by the UK's public spending watchdog for maintaining competition. But the National Audit Office report said it was too early to judge whether the complex process was economically efficient. OFCOM, the telecoms regulator, achieved its objective in maintaining a competitive market in the first significant sale of radio spectrum in 10 years. The rules of the 4G auction set out by OFCOM caused some worries among participants because of their complexity, while the fiercely contested sale did not raise as much money for the Treasury as some experts predicted. The £2.4bn paid for airwaves needed to carry 4G mobile services compared with £3.5bn that had been factored into the government's accounts for the year. However, OFCOM said its objective was to create a competitive mobile market, rather than raise money for the Treasury. The complex auction system was designed to ensure the smallest operators and new entrants could participate, as well as prevent misconduct.

The spending watchdog found that proceeds raised were within the range achieved in other European auctions. In the auction, all four of the UK's mobile operators bought parts of the lower bandwidth suited for 4G coverage, while BT also acquired spectrum to support its plans for a mobile service. The watchdog said it was too early to conclude whether the auction was economically efficient, "because it is not yet possible to assess whether those who were allocated spectrum during the auction are able to make the most effective use of it". It added that this will start to become apparent only after the spectrum is brought into use by the winning bidders. The Smith Institute think-tank calculated that the proceeds were £159m lower than they would have been if the radio spectrum won by Three had not been reserved for it or new entrants to the market. OFCOM said: "We are pleased the NAO recognizes the auction achieved its objective of promoting competition in the 4G market. Consumers are now enjoying the benefits, with coverage rising fast and operators competing on price."

(March 12, 2014) ft.com

## United States

U.S. satellite operator Dish Network has taken a notable step forward on its journey towards offering high-speed wireless Internet services after it emerged victorious in the FCC's H Block spectrum auction. The process ended and Dish's successful bid was not a cent over the \$1.56 billion reserve price. The reason for this stems from a deal struck late in 2013 between Dish and the Federal Communications Commission. Dish already owns AWS-4 spectrum, the uplink portion of which lies in a band adjacent to the downlink portion of the H Block spectrum. In September it offered to bid the reserve price in return for permission to align the H Block and AWS-4 downlink frequencies into contiguous spectrum. The FCC consented in December and the auction kicked off in late January. "With this successful auction, the commission makes good on its commitment to unleash more spectrum for consumers and businesses," said FCC chairman Tom Wheeler. So far there has been no official word from Dish about the outcome of the auction and the bearing it has on its plans to offer mobile broadband services. Meanwhile the proceeds will help the U.S. government to fund a public safety mobile network. Wheeler said the auction delivers "a significant down payment" towards funding the initiative.

(March 3, 2014) totaltele.com

The USA's Department of Defense has announced plans to reform its use of radio spectrum in order to release more of its allocation for use by private companies. The strategy follows the release of a memorandum issued in 2010 by President Obama which requires 500 MHz of spectrum be made available for commercial use by 2020. The Federal Communications Commission (FCC) has previously estimated that wireless broadband providers would need an additional 275 MHz of spectrum by 2014 to meet conservative data demand estimates. At the moment, about 18% of the spectrum between 300 MHz and 3 GHz (the spectrum most highly desired by the wireless community) is for Federal exclusive use. The US President mandated that federal agencies free up a significant portion of wireless spectrum so that it can be used by individuals and businesses to spur domestic economic growth. "The Department's Electromagnetic Spectrum Strategy addresses the ever increasing need for spectrum to achieve national security

goals," said Teri Takai, DoD chief information officer. "This strategy also addresses short and long-term spectrum challenges as it relates to the growing US demand for wireless broadband services."

(February 21, 2014) cellular-news.com

## Vietnam

Vietnam's ICT Ministry has formally revoked the mobile operator licenses of two dormant mobile networks S Fone and EVN Telecom. EVN Telecom was taken over by Viettel in early 2012, while S-Fone mothballed its operations following a slump in subscribers, although it is still technically active. S-Fone is a joint venture between SK Telecom and Sai Gon Postel (SPT), but was put on hold following the decision by SK Telecom to effectively walk away from the project in 2011. The government will now have access to blocks of 450MHz and 850MHz spectrum that it can sell to the incumbent mobile networks. The Vietnamese telecom market is dominated by VinaPhone, Mobi-Fone and Viettel, which hold a combined 95 percent market share.

(March 17, 2014) cellular-news.com

Vietnam's ICT Ministry has said that it won't be holding any spectrum auctions to permit 4G services until next year at the earliest. Currently three mobile networks VNPT, FPT Telecom and Viettel have been granted temporary licenses to test LTE services in selected areas. Country Manager at Qualcomm for Vietnam, Laos and Cambodia, said that the company has also recommended the Ministry to award 4G licenses in 2015. That is actually an improvement on the situation back in 2012, when the government was talking about 4G license auctions no earlier than 2018, due to the then slow uptake of 3G services. Sales have since raced ahead, and in fact the biggest problem is lack of network capacity. The deputy head of the Central Institute for Economic Management also called for the Ministry to relax the restrictions on which services could be offered on the 900MHz spectrum in order to boost 3G performance while they wait for the 4G licenses to be auctioned.

(March 11, 2014) Vietnamnet

"Information contained herein has been obtained from sources, which we deem reliable. SAMENA Telecommunications Council is not liable for any misinformed decisions that the reader may reach by being solely reliant on information contained herein. Expert advice should be sought."

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## SATELLITE NEWS

### Qatar's second satellite to be launched by 2016

Es'hailSat, the Qatar Satellite Company, announced yesterday that a Request for Proposals (RFP) has been issued for the design and manufacture of the company's second satellite, Es'hail 2. The new satellite will be positioned at the 26 degrees East hotspot position for TV broadcasting and significantly adds to the company's ability to provide high quality, premium Direct-To-Home (DTH) television content across the Middle East and North Africa. Es'hail 2 will have Ku-band and Ka-band capabilities and will provide TV distribution and government services to strategic stakeholders and commercial customers who value broadcasting and communications independence, interference resilience, quality of service and wide geographical coverage. Es'hail 2 will also provide the first Radio Amateur Satellite Corporation (AMSAT) geostationary communication capability that links Brazil to India in one single hop and in real-time. It will also allow the AMSAT community to validate and demonstrate their digital video broadcasting standard. Proposals for Es'hail 2 are due no later than April 30, 2014, and Es'hailSat will manage the tender and contract process which will be awarded through full and open competition. Es'hail 2 is expected to be launched at the end of 2016. Ali al-Kuwari, CEO of Es'hailSat, commented: "With the success of our first satellite - Es'hail 1 - we are delighted to move forward with our satellite procurement program."

### Arianespace Prepares for Astra 5B and Amazonas 4A Dual Launch

Arianespace is preparing for the launch of SES' Astra 5B satellite and Hispasat's Amazonas 4A satellite aboard an Ariane 5 launcher on March 21. The launch was previously delayed twice in order to allow Hispasat to conduct additional checks to its payload. Astra 5B, the first of six telecommunications satellites SES plans to launch in 2014, will be deployed at 31.5 degrees east and will provide extended transponder capacity in Ku- and Ka-band with geographical reach over Eastern European and neighboring markets for DTH direct-to-cable and feeding to digital terrestrial TV networks. It will also carry a hosted L-band payload for the European Commission's European Geostationary Navigation Overlay Service (EGNOS). Astra 5B is the eighth Airbus-built Eurostar E3000 satellite in the SES fleet to be placed in orbit. The next Eurostar E3000 satellite for SES, the Astra 2G, is currently in its final integration phase and tests at the Airbus facilities. The Amazonas 4A will be placed at 61 degrees west and will provide voice, wireless backhaul, Internet, and media applications services to South America. The spacecraft, built by Orbital Sciences based on its GEOStar 2 bus, is equipped with 24 Ku-band active transponders. Hispasat will use it to reinforce the satellite capacity during the 2014 FIFA World Cup in Brazil and the Rio de Janeiro Olympic Games in 2016.

## EC to Rely on Satellite Phones to Foil Maoists in Bengal

In the wake of the recent deadly ambush by the Maoist ultras in Chhattisgarh, the Election Commission (EC) is planning to use state-of-the-art satellite phones as well as mobile telephony in West Bengal's Left-wing extremism-hit (LWE) districts to stay in touch with the poll officials as well as security forces. And the move by the poll panel was also prompted by the intelligence tip-off on likely bid by the extremists to disrupt the polling process. However, the main hurdle faced by the EC in implementing the plan was the region's poor mobile connectivity. Hence, a meeting of the mobile service providers was convened and they were asked to do the needful to provide seamless coverage in the shadow zones. "We held meetings with all the mobile service providers and asked them to ensure smooth communication and mobile telephone coverage in all parts of the state. They will identify the shadow zones and we have asked them to take adequate steps," said Amitjyoti Bhattacharji, Assistant Chief Electoral Officer. "We have also asked senior district officials to assess the situation both in terms of law and order and also mobile connectivity. Information from polling stations is communicated through text messages and as such mobile connectivity is very important," he added. Besides, the EC is planning to obtain permission from the Department of Telecom (DoT) for providing the satellite telephones, which are otherwise banned in the country, to its staff as well as the senior security officials during polling. Bhattacharya said the issue of using satellite telephones was being centrally dealt with by the commission.

## Kratos to Provide Command and Control System for NewSat's Jabiru 1 Satellite

NewSat Limited has awarded Kratos Defense & Security Solutions with a contract to provide the satellite command and control system for the Jabiru 1 satellite. As Australia's first commercial Ka-band satellite, Jabiru 1 is currently under construction and is expected to launch in 2015. Jabiru 1 is a Lockheed Martin A2100 satellite that will be used to provide coverage over Southeast Asia, the Middle East and North Africa. The satellite's ground system program will be based on Kratos' Epoch IPS satellite fleet management system that has the ability to simultaneously control multiple satellites from one consolidated system. "Kratos' deep experience with LM A2100 satellites was a significant factor in our decision to select Epoch IPS," said David Ball, CTO of NewSat. "Jabiru 1 is Australia's first commercial Ka-band satellite and NewSat's first satellite. Kratos' ability to operate satellites from all major manufacturers is very important to NewSat as we grow the Jabiru fleet."

## Turksat 4A healthy following ILS Proton launch

Turkey's newly launched Turksat 4A Ku-, C- and Ka-band telecommunications satellite is healthy in orbit and is expected to be transferred to its owners by mid-March after initial testing, satellite builder Mitsubishi Electric Co. (Melco) said. Tokyo-based Melco, whose two-satellite Turksat contract win in 2011 represented a breakthrough in its efforts to build an export market for its DS2000 satellite

platform, said Turksat 4A's launch by an International Launch Services (ILS) Proton rocket will give the satellite more than 30 years of in-orbit maneuvering life. The spacecraft's contracted design life is 15 years. The launch occurred from the Russian-run Baikonur Cosmodrome in Kazakhstan on Feb. 15. Ankara-based Turksat said the 4,850-kilogram Turksat 4A would be operated at first at 50 degrees east longitude before being moved to its permanent slot at 42 degrees east. The Melco-built Turksat 4B is scheduled for launch, also aboard an ILS Proton, late this year. Melco's win of the Turksat contract was valued at the time by Turksat at \$571 million including the construction and launch of the two satellites. Besting U.S. and European competitors for the deal was considered as a partial validation of Melco's strategy of broadening its market beyond the Japanese government.

## SES books Falcon 9 for 2016 launch

Satellite fleet operator SES, which was launched in December, the first geostationary-orbiting satellite on Space Exploration Technologies Corp.'s Falcon 9 rocket, has selected that vehicle to launch two larger geostationary satellites in 2015 and 2016. SES said its 5,300-kilogram SES-10 satellite would launch atop a Falcon 9, whose performance has apparently improved, in 2016. After early confusion about which rocket would be used — the Falcon 9 or the Falcon Heavy, still in development — SES said the satellite would be launched aboard the Falcon 9. SpaceX spokeswoman Emily Shanklin said Feb. 20 that the Falcon 9 is capable of placing a 5,300-kilogram satellite into geostationary orbit. The vehicle's advertised capacity ceiling of 4,850 kilograms does not include a 450-kilogram reserve that SpaceX has kept for its own purposes. On Feb. 21, SES disclosed that it has purchased an additional launch from SpaceX, this one for the SES-9 satellite scheduled for launch in the first half of 2015. SES said this Boeing-built spacecraft is expected to weigh 5,330 kilograms at launch and will be placed into a "sub-synchronous" transfer orbit by Falcon 9. SES-10 will be built by Airbus Defense and Space and will operate at 67 degrees west, an orbital slot SES gained access to from the Andean Community of Nations in an unusual arrangement with satellite slot and frequency regulators at the International Telecommunication Union. The satellite network for regulatory purposes is known as the Simon Bolivar 2 network.

## Broadcom powers NTV-PLUS live satellite broadcast of 2014 Sochi Winter Olympics

Communications chip vendor Broadcom said it supported Russian pay-TV player NTV-PLUS to deliver a live satellite broadcast in Ultra High Definition (Ultra HD) of the opening ceremony of the 2014 Sochi Winter Olympics. Broadcom, Elemental and NTV-PLUS designed and deployed an 4K HEVC workflow leveraging Broadcom-enabled real-time decoders, Elemental Live video encoders, NTV-PLUS satellite uplink and signal receiving systems and Sony PMW-F55 Cine Alta 4K Digital Cinema cameras for playback on Panasonic 65-inch 4K TVs. The special broadcast is the first to provide real-time Ultra HD TV via a satellite link on a single set-top box chip, said Broadcom. Oleg Kolesnikov, chief technology officer of NTV-PLUS, said: "Building on our broad sport programming and satellite offerings,

broadcasting the Winter Olympics in 4K resolution shows what can be accomplished when operators and silicon vendors work together to deliver Ultra HD content.”

## Maritime Satellite Communications market to average 7% growth over next decade

Euroconsult, the global consulting firm specializing in space markets, forecasted that satellite capacity revenue in the global maritime market will nearly double over the next decade, with a compound annual growth rate of 7%. According to the firm’s recently-published research report on Maritime Telecom Solutions by Satellite, growth is expected to be driven mainly by increasing data consumption across all major maritime segments and the adoption of new generation broadband satellite services. “Onboard bandwidth requirements keep growing which is driving the maritime market in a direction quite beneficial to satellite communications,” said Wei Li, Senior Consultant at Euroconsult and Editor-in-Chief of the research report. “We have observed growth in both ARPU and installations. Over the next year, a number of High Throughput Satellite (HTS) systems will become available in the maritime market, aimed at delivering three times more capacity by the end of 2014 and six times more capacity by the end of 2016. This additional capacity will drastically change the relationship between supply and demand in the market, and enable a range of new applications for the maritime community.” Euroconsult confirmed the number of terminals used for global maritime satellite communications grew at around 4% in 2013, while revenues at the satellite operator level increased by over 10%. The total size of the market reached about 348,000 active terminals in 2013 that generated more than \$760 million in revenues at the satellite operator level.

## Spirent adds software solution that simulates legitimate GNSS constellations and hoax signals

Telecom test and measurement (T&M) vendor Spirent Communications launched its software solution that concurrently simulates legitimate Global Navigation Satellite System (GNSS) constellations and spoofed or hoax signals to evaluate receiver resilience and help develop countermeasures. Spirent says SimSAFE has been developed in association with Qascom, a vendor of GNSS signal security and authentication. The company claims that SimSAFE is the first tool to help develop systems that will detect and counter spoofing attacks. This is significant as often affected receivers do not recognize when they are receiving fake signals and continue to operate normally, but provide false time or position information. John Pottle, marketing director of Spirent’s Positioning Division, said: “This solution is unique in being able to provide a means of both emulating a spoof attack and monitoring a receiver under attack to evaluate mitigation strategies and countermeasures.” SimSAFE is a fully controllable laboratory based, non-radiated test solution to evaluate a receiver’s response to a range of spoofing attacks.

## SSL-built ABS 2 Satellite launch successful

Space Systems/Loral (SSL) has announced the successful launch of Asia Broadcast Satellite’s (ABS) ABS 2 satellite. Launched aboard a Arianespace’s Ariane 5 rocket from the European Spaceport in Kourou, French Guiana, the satellite is performing its post-launch maneuvers according to plan. ABS 2 is a multi-mission C-, Ku- and Ka-band satellite designed to provide services including direct-to-home (DTH), VSAT services, data networks and telecommunications services across four continents. The satellite has 89 active C-, Ku- and Ka-band transponders across 10 beams. “When it enters into service, ABS 2 will extend the reach of affordable and reliable communications and broadcast services to a broad swath of underserved regions,” said Tom Choi, CEO of ABS.

## All systems go for Satellite Operator

Satellite operator Asia Pacific Telecom has opened the door for gamemaker Hong Kong Gameport to build its data center and receive support and data storage. APT owns five satellites covering regions that are home to 75 percent of the world’s population. A media tour of its satellite control center monitoring the five satellites was held recently. Staff monitored dozens of TV channels and control panels to check transmissions. A spokesman for APT said the TV screens virtually show the quality of transmission while a system records the transmission signals. Established in 1992, APT Group sent up its first satellite in 1994. It provides one-stop-shop transponder, satellite telecommunications and satellite TV broadcasting and transmission services to broadcasters and telecommunication customers in Asia, Europe, Africa and Australia.

## Telecom panel unable to consider license for Thaicom 8

The telecommunications regulator has been unable to consider awarding a license for the planned Thaicom 8 satellite, pending the establishment of a new government to oversee satellite policy in conjunction with the National Broadcasting and Telecommunications Commission. Settapong Malisuwan, chairman of the NBTC’s telecom committee, said that in December, it had asked for the Information and Communications Technology Ministry’s opinion on two issues. First, the panel wanted to know if the ministry would permit Thaicom 8 to orbit in the 78.5 degrees east longitude slot and whether that would create a legal problem, as that slot is also occupied by the existing Thaicom 5 and 6 satellites, which are under the ministry’s concession. The second issue was whether the ministry would allow Thaicom to talk with the International Telecommunication Union according to the company’s filing to the ITU on its plan to launch Thaicom 8 into that slot. Settapong said the ministry had yet to provide opinions on these issues to the telecom committee, as it is in caretaker status. The company has requested that the ITU reserve the 78.5 degrees slot for positioning Thaicom 8 and was given two years to show progress towards its launch, of which half a year was passed. The Thaicom 6 broadcasting satellite went into service after the completion of in-orbit testing. The company has transferred ownership of the satellite to the ICT Ministry.

## NBTC gives nod to Thaicom 8 satellite

NBTC secretary-general Takorn Tantasith said that the Thaicom 8 satellite is awarded the approval, under the concession which will expire in the next 18 years. It is conditional that the ICT Ministry, which was the original concession owner, extend an official confirmation that the NBTC is legally empowered to approve the launch. Without the ICT Ministry's confirmation, this would be reviewed, Takorn said. In a related story, the NBTC telecom committee also agreed to reply to BBL Asset Management's plan for a telecom infrastructure fund by commenting that it should be open to all operators to lease the network.

## Jabiru-1, Australia's first commercial Ka-band satellite

Satellite operators are looking for innovative solutions NewSat presents Jabiru-1, Australia's first commercial Ka-band satellite, will deliver over 7.6 GHz of "new" capacity, providing high-powered Ka-band coverage to meet the growing demands from government and enterprise sectors across the Middle East, Asia and Africa. Jabiru-1 will provide enterprise and government customers with "raw" capacity, not managed services (megahertz, not megabits). The open architecture enables Jabiru-1 customers to have complete control over their own network implementation, rather than having to constrain their communication requirements to fit within the limits of a pre-defined managed service solution. Jabiru-1's three regional beams will provide coverage over South West Asia, the Middle East and East Africa. The regional beams will essentially act like traditional C- and Ku-band capacity beams, but will provide much needed "new" capacity to meet the expanding demand for connectivity in these regions. Jabiru-1's two steerable Ka-band beams can be independently located anywhere within Jabiru-1's footprint.

## Azerbaijan satellite to carry Georgian digital channels

Azerbaijan satellite operator Azerkosmos has started testing the transmission of Georgian terrestrial TV channels over its Azerspace satellite, reports Trend. Obieqtivi TV, 2 TV, Comedy Arkhi, Vip TV, Trialeti, TV 3, GDS TV and Quality Channel channels are broadcast. In total, over 80 TV channels and radio stations are transmitted over the Azerspace/Africasat-1a satellite. The satellite is based at the orbital position 46 degrees East.

## Alticast enables KT's satellite-based on-demand

Korean Telecom (KT) is using Alticast's Media Cloud Platform to enable its new satellite-based on-demand service. The vendor characterized this as the world's first large-scale deployment of a cloud-based personal video recorder (PVR) service. SkyLife's olleh TV SkyLife service – which combines direct-to-home (DTH) television programming with KT's video on demand (VOD) services – was launched in August 2009 and today offers multiscreen TV Everywhere services. SkyLife decided to expand its TV service with the on-demand service, called SkyLife on Demand (SOD), enabling each subscriber to record multiple channels simultaneously using

Cloud storage. At the heart of SkyLife's SOD service is the Alticast Media Cloud Platform, which is comprised of four major components: a Cloud content ingest/delivery system, a Cloud service system, a Cloud media storage system and a Cloud streaming system. Each component is optional and interoperable with any existing pieces of a service provider's Cloud-based PVR system.

## G&H target telecom technology for space

Satellite operators are looking for innovative solutions to allow high data rate downloads without violating the resource constraints on micro-satellites. This opens a new market for optical communications solutions, focusing on providing higher data rates with lower or comparable on-board resource requirements compared to RF solutions. The objective of the OPTEL- $\mu$  product is to establish a robust direct detection lasercom system for space-to-ground communications from low earth orbit (400 to 900km). OPTEL- $\mu$  closes the gap in the market between RF and existing lasercom products and directly addresses new demands. OPTEL- $\mu$  aims at developing a high performance, micro sized optical terminal for small/micro-satellites. The OPTEL- $\mu$  miniature laser terminal provides access to optical frequencies for communications at minimized on-board resources. This will enable small/micro-satellites to provide downlink capabilities similar to larger platforms, but equally in line with their limited resources. The project TESLA targets the development of an OPTEL- $\mu$  Engineering Model of the space terminal and of a prototype of the ground terminal. The main parameters were established together with ESA in the preceding START study. The TESLA EM hardware of the space terminal implements the full functionality and performance but has minor deviations to the flight design with respect to form and fit. The main goal is to demonstrate the entire system and to test the required performances.

## Outernet wants to beam down free Internet from satellites

A group of individuals in New York are trying to give the world free global internet via a network of miniature satellites broadcasting Wi-Fi down from space. Outernet, formed by Aaron Rogers, Branko Vukelic, Edward Birrane and Syed Karim, has been working since December 2013 to bring their technology to life, with the aim of bridging the global information divide. The project would like to provide free access to international news, crop prices for farmers, educational courseware such as Teachers Without Borders, Wikipedia, OpenStreetMap, and even access to the free downloadable Linux computer operating system Ubuntu. Outernet's Wi-Fi solution works by using hundreds of tiny 10cm cube-shaped satellites called "cubesats", which are cheap to produce and can be towed into space on the back of International Space Station resupply missions, then tossed into space and left to orbit around the earth. Along with being compliant with the wireless computer networking standard IEEE 802.11, the constellation of cubesats would use standardized radio protocols as well as Wi-Fi multicasting.



## ROAMING NEWS

### Roaming mobile charges to be axed

Making a call or sending an email from a mobile phone is set to cost the same across the whole of EU as it does in France from December 2015. Under proposals adopted by the European Parliament's industry committee, mobile phone companies will be obliged to offer 'roam like at home' packages across whole of the EU or allow customers to subscribe to other service providers without changing their SIM card. Scrapping the unpopular mobile phone roaming charges was approved by Parliament's Industry, Research and Energy Committee, but will still have to be approved by both the European Parliament on April 3. That, however, is expected to be little more than a rubber-stamping exercise. It will then have to clear one final hurdle - a meeting of the council of EU ministers - in the autumn.

A coalition of mobile phone operators - including Free and Three, which operate in France - who represent some 45m consumers across Europe has warned that the cost of domestic calls could rise to pay for the abolition of roaming charges.

### NBTC endorses new draft on interconnection charges

The NBTC board endorsed the draft of these new reference rates yesterday, and fixed-line operators such as TOT and CAT Telecom will be obliged to adopt them. The operators will use these rates if they fail to reach a mutual agreement among themselves on the interconnection rates. The new

call-termination rate for mobile and fixed-line operators will be Bt0.45 per minute, and will drop to Bt0.34 per minute next year. The termination rate is what the caller's network pays the network receiving the call. The transit interconnection rate for fixed-line and cellular operators will be Bt0.16 per minute for the next two years. The transit rate is what the caller's phone company pays the network routing calls to another telecom provider. These new interconnection rates might prompt the fixed-line telecoms to adjust their call rates from the present flat Bt3 per call to any other fixed-line telephone. The present interim termination rate for mobile phone calls, which was announced last May, is Bt0.45 per minute.

### Vodafone to charge AU\$1 per minute flat rate for global roaming

Vodafone Australia customers will be able to travel to more than 200 countries, including India, Vietnam, Fiji, and Canada, and be only charged an AU\$1 fee for a 1-minute call or 1MB of data. Vodafone chief marketing officer Kim Clarke said this new deal will eliminate any complicated charging structures that previously existed, including being charged different call rates depending on a customer's destination. "Customers have enough to think about when travelling and we'd rather their phone bill not be on the list. With Vodafone's simple AU\$1 fee for a 1-minute call or 1MB of data, you can enjoy your trip without fear of arriving home to an excessive bill," she said. The company also announced it will extend its AU\$5-a-day international roaming plan that is available in 46 countries to all of its current post-paid

plans from next week. Also, from April 23, Red Roaming will automatically be on for all new customers connecting its current post-paid plans. The plan was launched last year as part of its Red plans, in a move to push back against global roaming bill shock. "We're opening this up to all our current post-paid plans, because we want them to experience truly worry-free international roaming," Clarke said. "You shouldn't have to adjust three different settings in your phone or buy a new SIM card to enjoy using your phone like you would at home."

## Optus lone supporter of roaming cost regulation

SingTel-Optus has split from the other major mobile carriers in supporting the federal government's plans to introduce regulations governing international mobile roaming, but warned of potential over-reach in the plans. The government has consulted with the telecommunications industry on a draft bill which would give the Australian Competition and Consumer Commission greater powers to monitor mobile roaming costs, and impose restrictions on the wholesale prices international mobile carriers charge one another to allow mobile roaming for each other's customers. The proposed bill, which is largely focused on mobile roaming for Australians travelling to New Zealand, would also allow the ACCC to impose restrictions on the prices mobile carriers charge their own customers for roaming overseas. Where key rivals Telstra and Vodafone Hutchison Australia outright opposed any regulations governing roaming, Optus general manager of interconnect and economic regulation Andrew Sheridan said the company supported moves to lower the prices mobile carriers commercially negotiate with one another. "We've acknowledged and accepted that roaming prices have been too high," he told The Australian Financial Review. "Fundamentally we've always seen that our retail pricing flexibility is limited by the wholesale input cost which is set by overseas carriers. Those charges are unregulated, they're often quite high, and you've got very limited ability to drive those prices down."

## Orange extends 4G roaming to six new destinations

French incumbent's customers now able to access high-speed mobile broadband in 11 countries.

Orange has extended 4G roaming to six new countries, bringing the number of destinations up to 11 in total. Since February, the French incumbent has been offering 4G roaming to customers who travel to the Netherlands, Portugal, South Korea, Spain and the U.K. From April it will also be available in Belgium, Canada, Germany, Italy, Luxembourg and Switzerland. The telco aims to extend 4G roaming across its European footprint by the end of 2014. In a statement last week, Orange said 4G roaming is included at no extra cost for customers on Origami Play or Open Jet tariffs, which come with annual roaming allowances. Customers on its various other Origami and Open plans, as well as its Let's Go 4G/H+ plans and rolling 4G contracts, will have to pay extra. 4G roaming is getting underway in earnest in Europe.

Last week the U.K.'s EE launched outbound LTE roaming in France and Spain and announced plans to extend it to Germany, Italy, the Netherlands, Switzerland and the U.S. by the summer.

## Wireless Broadband Alliance and Wi-Fi Alliance® to demonstrate Wi-Fi® roaming at WBA Carrier Wi-Fi Summit at Mobile World Congress

Wireless Broadband Alliance (WBA) and Wi-Fi Alliance® will co-host a demonstration of Wi-Fi® roaming at Mobile World Congress next week in association with the WBA Carrier Wi-Fi Summit hosted onsite. Visitors to the demonstration will be able to experience seamless network authentication where a number of the latest Passpoint devices will be made available for attendees to roam on to the demonstration network. Supported by 18 operators, the demonstration offers an exclusive look at a live WBA Next Generation Hotspot network using Wi-Fi CERTIFIED Passpoint™ equipment from seven vendors, and reflects significant momentum toward industry-standard easy-to-use Wi-Fi hotspots and roaming.

With data traffic pressure on wireless networks expected to increase more than 400 percent in the next four years, industry support for Wi-Fi roaming services leveraging NGH Guidelines and Passpoint is coalescing. Recent research conducted by Maravedis-Rethink on behalf of WBA indicates that more than half of operators surveyed have become "more confident" about investing in public Wi-Fi than in the previous year. More than 27 global operators have participated in three phases of WBA NGH trials, and to date, more than 400 devices have obtained Passpoint certification, including a wide range of smartphones and tablets.

## Bangladesh government to cut international termination rates to tackle illegal calls

Bangladesh's telecom ministry has slashed the international incoming call rate by 50 percent to US\$0.015 a minute, to discourage illegal call trafficking, on a test basis for the next six months.

Currently, some service providers carry international calls through grey channels using voice over internet protocol (VoIP) technology. Abubakar Siddique, telecom secretary, said the decision was sent to the finance ministry on Wednesday for consent, as it may hurt the government revenue, which is Tk 1,100 crore a year. The approval may take up to four weeks. The government currently gets 51.75 percent revenue from incoming international calls, but it will get 40 percent with the declaration of the new regime, Siddique said. The telecom operators have accepted the matter positively, while some IGWs have said that it will not change the current scenario. Bangladesh Telecommunication Regulatory Commission (BTRC) proposed to reduce the call rates a couple of months ago, Siddique said.

The numbers of both legal and illegal international call volumes are almost the same, according to market insiders. In January, the country received more than 4.5 crore minute calls on average from other countries a day, according to BTRC data.

## TRA hosts the 9th meeting of the GCC Mobile Roaming Working Group

The Telecommunications Regulatory Authority (TRA) hosted the ninth meeting of the Mobile Roaming Working Group in Abu Dhabi between 10 and 13 February. The group includes members from each of the telecommunications regulators telecommunications in the Gulf Cooperation Council (GCC) countries. The purpose of the meeting was to discuss the regulation of international mobile roaming services within the GCC.

During this meeting, a range of significant topics relating to mobile roaming services was discussed, and work continued on developing a consultation paper that assesses the potential regional impact of expanding the scope of the existing regulations of intra-GCC mobile roaming services. All mobile operators within the GCC will be invited to share their insights and views on this consultation paper. The meeting also discussed the impact of the current roaming regulations.

H.E. Mohamed Nasser Al Ghanim, Director General of the TRA commented: "This was an important meeting for the GCC. Back in 2011 and 2012, the TRA UAE worked closely with the other telecommunications sector regulators in the Gulf, and with the licensed mobile operators in the UAE, to implement the intra-GCC voice roaming regulations. I believe that these regulations have been a tremendous success and have reaped substantial benefits for consumers. To build on that success, the TRA is now working once again with the licensed mobile operators and GCC regulators to determine whether the regulations should be extended to other roaming services."

## European Commission calls to 'eliminate roaming charges'

The European Commission has called for an end to roaming charges following a report revealing that around 25% of European citizens switch off their mobile devices when travelling abroad.

The latest report added that about 47% of the survey respondents did not use mobile internet while travelling, with 94% of them avoiding using services such as Facebook and Twitter when in other an EU country than their own. European Commission vice president Neelie Kroes said that consumers are limiting their phone use in extreme ways and this makes no sense for the companies either. "I am honestly shocked by these figures," Kroes said. "It shows we have to finish the job and eliminate roaming charges."

The EC argues that such actions are damaging other businesses, including the app developers travel guides. Networks have also been losing out on revenue by not reducing their prices to a comfortable level.

The survey added that only 10% of respondents use emails in the same way they do at home, with millions of them diverting to SMS rather than pay for making calls. Last September, the EC revealed plans to completely scrap roaming charges by 2016, with the final proposals yet to be approved by the 28 EU members and European lawmakers prior to its commission.

## GCC telecoms authorities look at standardizing Gulf roaming rates

Telecoms authorities across the GCC are looking at standardizing a host of roaming charges across the Gulf. The issue was discussed at the ninth meeting of the Mobile Roaming Working Group, which was hosted by the Telecommunications Regulatory Authority (TRA) in Abu Dhabi.

The group includes members from each of the telecommunications regulators in Gulf Cooperation Council (GCC) nations. The TRA said the purpose of the meeting was to discuss the regulation of international mobile roaming services within the Gulf. In February 2012, regulations were implemented that established the maximum prices for outgoing calls while roaming within the GCC. This led to price reductions of up to 70 per cent.

Now the Mobile Roaming Working Group is considering whether the regulations should be extended to cover other roaming services, such as incoming voice calls, SMS, MMS and data. A consultation paper that assesses the potential impact of expanding the scope of the existing regulations of intra-GCC mobile roaming services is being drawn up. All mobile operators within the GCC are being invited to share their views as part of the process.

## SAP secures new LTE roaming peering hub agreements to further connect mobile operators across the world

To meet heavy demand for 4G/LTE connectivity around the world, SAP AG announced new LTE roaming peering agreements with MTT Russia, Orange and Telenor Global Services. These new relationships demonstrate the strong commitment of SAP Mobile Services, a division of SAP, to quickly expand the LTE roaming community in order to provide a seamless global roaming experience for mobile subscribers. The announcement was made at Mobile World Congress 2014, held February 24-27 in Barcelona, Spain.

SAP Mobile Services is a global leader in mobile interconnection and mobile consumer engagement services. It provides mobile operators with unparalleled capabilities in global messaging interconnect, data roaming and an array of IPX-based services and enables enterprises to engage with their consumers through innovative mobile marketing and engagement solutions. SAP Mobile Services helps businesses process 1.8 billion messages per day, reaching more than 1,000 operators and 6.1 billion subscribers across 210 countries.



# TECHNOLOGY NEWS

## Pearson, IBM collaborate for digital classrooms

Pearson, the world's leading learning company, has selected IBM as its strategic technology partner to deliver customized e-learning solutions to more than 22,000 classrooms across India. The strategic partnership with IBM will help advance Pearson's strategy to become the leading provider of innovative e-learning solutions of India's educational system, the company said.

To expand its reach and introduce new functionalities into its solutions, Pearson India has teamed up with IBM India to collaborate, build, install and manage a scalable, flexible and more responsive IT infrastructure that will support its growing network of classrooms impacting nearly 3 million students across the country. In the coming years, Pearson India plans to exponentially grow its footprint in the K-12 segment by enhancing and creating new digital classroom offerings for Indian schools.

## Anite to accelerate lab-based Virtual Drive Testing for 4G and 5G technologies

Anite, a global leader in wireless equipment testing technology, announced its participation in a project initiated by Intel, a world leader in computing innovation, to develop

"virtualized" testing environments in order to accelerate 4G and 5G technology development and testing. Project Virtuoso (Virtualized environment for communication system development and optimization), subsidized by the Danish High Technology Foundation, will run for four years and other partner companies include Telenor, one of the world's major mobile operators, and Aalborg University Department of Electronic Systems, who will bring valuable operator and research knowledge.

Within this project, Anite aims to enhance its Virtual Drive Testing Tools (VDT) to utilize data measured in the field to "virtually" recreate the field test environment in a laboratory. This enables quick, realistic and repeatable benchmarking of devices or base stations as well as simplifying the debugging of errors found in the field.

## Belgacom to deploy AriesoGEO for 4G optimization

Belgacom, a leading provider of telecommunications solutions in Belgium, has chosen to implement the JDSU ariesoGEO platform across its Proximus mobile networks in Belgium. Belgacom will use ariesoGEO to plan and optimize its 2G, 3G and LTE networks, to ensure an optimum VIP experience for its mobile users and to enhance management reporting and network visibility. Belgacom is a leader in mobile coverage with a 2G network that reaches 99.98 percent of the population and a 3G network that reaches



97 percent of the population. Belgacom's decision to use the ariesoGEO platform was driven by the ease of use and flexibility of the platform, in addition to a strong and existing relationship between Belgacom's mobile network team and JDSU.

## FiberHome selects Lantiq for LTE broadband gateway

Lantiq, a leading supplier of chips and software for broadband access and home networking, announced that the information and telecommunications solution leader, FiberHome Technologies Group, selected Lantiq for its next generation LTE gateway. The new gateway is a high performance and cost effective fixed LTE broadband service solution for the China market.

The new FiberHome LTE gateway is powered by the field proven and widely deployed Lantiq GRX288 Broadband network processor. With market leading routing performance based on the Lantiq Direct LTE approach, the gateway's innovative design, engineering and cutting-edge features address what consumers and the market are expecting from 4G/LTE technologies.

The LTE Broadband Gateway market segment benefits heavily from the rapid growth of 4G deployment in China and globally, bringing high speed data access to homes where adequate wireline broadband service is not available.

## The world's most advanced 3D activity tracking device launched during Car Free Day in Dubai

mymo, the world's most advanced 3D activity tracking device was launched during the Dubai Municipality's Car Free Day in the presence of Humaid bin Mohammed Obaid Al Qattami, Minister of Education, Abdul Rahman bin Mohammed Al Owais, Minister of Health, Dr. Rashid Ahmed bin Fahad, Minister of Environment and Water, Major General Khamis Mattar Al Mazine, Commander-in-Chief of Dubai Police, Hussein Nasser Lootah, Director General of Dubai Municipality. The ministers and senior officials tested the device.

Tupelo, a regional mobile health and technology innovation company, headquartered in UAE, showcased "mymo" at Dubai Municipality's Car Free Day. Tupelo, in partnership with Tekha Group, is joining Dubai Municipality as part of its initiative to encourage Dubai residents to put their green foot (print) forward.

As Dubai Municipality is encouraging everyone to go car-free, Tupelo will be encouraging people to go the 'extra mile' via the introduction of their flag ship activity tracking device "mymo".

## Ericsson readies mobile unified communications push

Enterprises will in the future get hosted unified communication services via mobile networks, according to telecom vendor Ericsson, which has developed the underlying platform to make that possible.

Like many IT systems, unified communications is increasingly

offered as a hosted service. Ericsson wants mobile operators to take advantage of their networks to offer these services to enterprises by using its Mobile Unified Communication platform. It will offer voice and HD video conferencing services combined with presence irrespective of what device a user has. Users will also be able to switch between devices without interruptions, Ericsson said.

One of the technologies Ericsson has based its unified communications platform on is RCS (Rich Communication Services), which was developed to let operators compete with Web apps such as Skype and WhatsApp. It is a set of features originating from IP Multimedia Subsystem (IMS) standards, which is a framework for delivering IP-based services in fixed and mobile networks.

## Cavium to support Telkomsel in LTE network trials

Telkomsel, Indonesia's largest wireless network operator, has announced the commercial deployment of 4G LTE services in Indonesia commencing in 2014. In anticipation of the service launch, Telkomsel demonstrated LTE services for the APAC CEO Summit in Bali, Indonesia in October 2013 and soon will conduct field trials to assure an optimum user experience for all subscribers. Cavium OCTEON Fusion®-enabled small cell base stations will play a central role in Telkomsel's Buaran trials. The Cavium-supplied small cell eNodeB systems and Cavium's LTE stack and management software will help Telkomsel in their heterogeneous network (HetNet) deployment activities.

## Visionary Solutions to demonstrate PackeTV IPTV solution at the 2014 NAB Show

At this year's NAB Show, Visionary Solutions will demonstrate a complete IPTV ecosystem, featuring its new PackeTV modular, end-to-end IP video network and asset management solution. The PackeTV platform can be easily deployed in virtually any IT environment, including entertainment, government, enterprise and worship.

It enables secure scheduled or on-demand delivery of live and recorded HD/SD video and MPEG-2/H.264 video content to TVs, set-top boxes, PCs, tablets, smartphones, and other IP-connected devices, across LAN, WAN, WiFi, cellular, and Internet networks. Visionary Solutions will highlight key browser-based modules, including PackeTV Portal, which provides a familiar administrative interface for video asset creation, management, protection and distribution; and PackeTV Player, which provides CPU-efficient, high-quality playback of live, scheduled, and on-demand streams up to full HD (1920 x 1080p60), as well as integrated IP STB and EPG functionality.

## Telekom Austria migrates fixed net telephony to VoIP

Telekom Austria has announced that its domestic brand, A1, has fully migrated its fixed net telephony to VoIP, claiming to be the first to do so in the EU.

The firm said that although the migration caused interruptions to the telephone service, they lasted just a few minutes and took place at night, outside of peak hours.

The group also made temporary call forwarding available without any extra charges for emergency services during the switchover. Following the integration, the IP network was supplemented by two new network components: the multi-service access node (MSAN), which was provided by Chinese kit vendor Huawei and an advanced IP-softswitch (AIPS) delivered by system integrator Kapsch CarrierCom.

The group explained that the rollout was carried out across the country from west to east with a total of 50 switching centers migrated each week.

## Boingo launches Hotspot 2.0 at 21 airports in US

Boingo Wireless, the leading DAS and Wi-Fi provider that serves consumers, carriers and advertisers worldwide, announced it has launched Hotspot 2.0 networks at 21 airports in the United States, providing seamless access to a secure Wi-Fi network for monthly subscribers and roaming partners using the industry's latest technologies.

The 21 airports, which serve more than 415 million passengers annually, include seven of the top 20 busiest airports in the United States and key airports in all regions of the country. The launch includes the addition of a new Passpoint-enabled network – "Passpoint Secure" – in each of the airports that provides instant access to users on IOS 7 devices with a Passpoint profile installed. Passpoint-certified mobile devices – such as smartphones and tablets – can automatically identify and authenticate to Passpoint-enabled hotspots associated with their Wi-Fi provider without the need for login pages. Once the user downloads a Passpoint profile, their device will establish a secure, WPA2 encrypted connection whenever they're in range of a supported hotspot.

The Hotspot 2.0 networks are also now available for mobile operators that want to leverage seamless Wi-Fi authentication for carrier offload. Boingo's existing roaming agreements include 5 of the world's top 10 mobile operators and three of the four tier one mobile operators in the U.S.

## Tilgin strengthens flexible premises portfolio with launch of advanced home gateways

Tilgin, a leading provider of solutions for multi-play and next-generation broadband access, announced the launch of new Home Gateways at the FTTH Council Europe Conference, from 18 - 20 February 2014, at Stockholmsmässan, Stockholm.

Tilgin's flexible premises solution is an all-encompassing concept that offers operators a simplified option for the deployment and maintenance of their FTTH strategy. The launch of the HG2370 and HG2330 home gateways as part of this solution will now take the customer experience of broadband services around the home to a new level. The HG2370 is a pioneering new home gateway offering the latest generation Wi-Fi standard 802.11ac, the fastest available on the market today. The new Wi-Fi standard is designed to take wireless transmission to the gigabit level and caters for the explosion in streaming of high quality video around the home.

This will give customers a streaming experience that is flicker free in parallel to the use of other services that are accessing Wi-Fi around the home. The HG2370 can also be combined with the Tilgin MSA931 to create a wireless bridge to transmit to multiple IPTV set top boxes at any one time.

## Lancaster University to reduce Video-on-Demand (VoD) service costs for network operators

Lancaster University has been granted about €80,000 (£66,000) of EU funding to reduce the cost of delivering Video-on-Demand (VoD) services for network operators.

The university's OpenFlow VoD development was one of the 21 networking research projects chosen to be funded by the GÉANT Innovation Program, which was launched to bring new ideas for network connectivity. The use and popularity of VoD services are increasing, according to Nicholas Race, a senior lecturer within the School of Computing and Communications at Lancaster University, as are cost implications for operators because of the size and quantity of data that has to be transferred.

The university had already designed and built a prototype architecture that provides VoD caching with the use of OpenFlow at a single physical site.

## Ready to use: Philips Smart All-in-One Displays

MMD, the leading technology company and brand license partner for Philips Monitors, announces a brand-new touch-controlled monitor powered by Android for exciting multimedia, gaming and quick Internet access. Available in 21.5-inch and 23-inch models, the Smart All-In-One displays, with their inbuilt computing power, are set to provide ease of use and a seamless display experience into living spaces at home, and public-accessed areas such as web cafés, schools and hotel lobbies.

## Telstra unveils fast internet devices, 4G plans

Telstra has launched five high-speed mobile broadband devices and changed the way it expands its 4G network in preparation for using its US\$1.3 billion radio spectrum holdings.

But the company cannot confirm when customers will be able to use the valuable 700 MHz radio spectrum, which will help deliver mobile broadband speeds up to 12 times faster than the Coalition's national broadband network. Telstra head of networks Mike Wright said the company changed the way it expanded its network after it hit its baseline of 3,500 base stations, covering 85 per cent of the population. The company will now expand its 4G network and build extra towers depending on demand, he said.



## ROBUST ALLIANCES WILL BOOST REGIONAL POTENTIAL



**Dr. Mustafa AYKUT**  
Group Representative

Turk Telekom.

Today's digital evolution characterized by ubiquitous high-speed connections and smart devices continues to revolutionize traditional business models.

As customer demand becomes increasingly global, a transition towards smarter strategic solutions is inevitable. Given the level of complexity and the diversity of competitive advantages in this transient environment, a single market is rarely in a position to provide these integrated end-to-end solutions on its own. Furthermore, local regulations as well as standards along with technology harmonization are seldom applicable across regions.

In this context, M2M might just be the panacea. With 200 million global device connections at the end of 2013, accounting for nearly three quarters of total connections worldwide, and generating \$10 billion in revenue, M2M offers immense potential in reshaping business models. Though M2M has been on operators' agenda for some time now, its fragmented value chain as well as industry and market dynamics have hindered it from being used to its full potential.

Strategic partnerships and alliances are, therefore, a critical aspect of the M2M ecosystem as they not only lower barriers to entry but also expand market reach and footprint. This is why operators are now looking into ways to build collaboration and maximize the benefits of M2M to offer customers value-added services, innovation and state-of-the-art connectivity through joint commercial offers.

Collaboration in the form of partnerships is opens the door

“ As customer demand becomes increasingly global, a transition towards smarter strategic solutions is inevitable. ”

not only for co-operation but can also spark innovation and foster commercialization. In a partnered M2M ecosystem multiple stakeholders are each responsible for an assigned task such as connectivity, platform, integration, consultation, activation, and deployment. Some of the areas where collaboration yields effective results are marketing, customer care, vertical services, and platforms. Joint-operations in standardization, R&D studies, inter-working tests and field trials bear fruitful outcomes for all parties involved.

In this new ecosystem of service providers, software developers, network operators and hardware manufacturers, M2M applications can now be designed and developed at lower costs with increased efficiency. M2M collaborations will also enhance customer experience by developing tailored solutions for enterprises. Significant business potential lies in the M2M ecosystem because it expands operators' foothold across regions; contributing to overall efficiency and creating new and viable revenue streams.

Aside from collaborative partnerships which strengthen the entire value chain, operators can take maximum advantage of M2M's potential by forming strategic alliances. Alliances can deliver integrated management solutions in the energy, healthcare, education, finance, transportation as well as consumer and commercial product industries. Their advantages include activating and monitoring devices across regions and offering a single point of contact for consumers and gadgets. Operators can also centralize their control and management mechanisms, lowering operational costs associated with such deployment projects. From a more macro perspective, alliances permit operators to benefit from economies of scale.

Several examples of strategic alliances are already active around the world. The Global M2M Alliance (GMA) initiated by Deutsche Telecom and Orange in 2011 and later joined by Teliasonera and Telecom Italia. By synchronizing their M2M solutions and module certification processes, one carrier modules can be deployed across the networks of the other three. The GMA is looking for ways to enhance seamless customer experience and drive cross-sector partnerships. At the end of 2013, the M2M World Alliance - an entity formed by Etisalat, KPN, NTT Docomo, Rogers,

Singtel, Telefonica, Telstra and VimpelCom - introduced its new solution to simplify and promote the adoption of M2M communications across the globe. Such thriving global alliances will lead the way for regional alliances to join forces and expand their spheres of influence, leveraging operators' global know-how to the service of customers worldwide.

Customized regional alliances across the SAMENA region will be better equipped to fulfill the needs of customers in South Asia, the Middle East and North Africa through optimized inter-operability solutions. Take for instance, location based M2M solutions during the Hajj in Mecca, or applications to increase the efficiency of trade transactions in Dubai. Such services can best be provided by operators with regional know-how, precision and familiarity. It is with these assets that regional alliances can strengthen new business ventures, improve performance and reduce costs.

“ Strategic partnerships and alliances are a critical aspect of the M2M ecosystem as they not only lower barriers to entry but also expand market reach and footprint. ”

The emergence of regional M2M ecosystems both in terms of stronger operator alliances and robust stakeholder partnerships is becoming a more reliable and efficient avenue for multinational companies. Strategic consortia are keys in unlocking the great promise of M2M in the delivery of uninterrupted, customized, sustainable and cross-regional solutions.



## OPEX TRANSFORMATION: A RECIPE FOR LASTING PERFORMANCE IMPROVEMENT

Analysys Mason has fine-tuned an approach to bringing lasting benefits from opex transformations, reducing opex by 10% or more while making your organization stronger, faster and less error prone.

Operators in emerging and mature markets increasingly face a common challenge: as the competitive environment shifts from a period of one or a few operators to a market with multiple challengers and only modest growth through new subscriber acquisition, improvements in performance must increasingly come from within. After operators have trimmed capex, they have to address perhaps the most delicate question of all: how to best trim opex?

### Effective root-cause analysis is essential to opex transformation

The traditional starting point has been opex benchmarking, whereby operators assume that any area in which they are above the peer benchmark is an area where they should cut cost. This sounds logical and sensible, but unless repeated cost cutting is combined with performance improvement, you may replace a cost problem with a quality problem, as some budget operators have learned the hard way. Next came the era of process improvement, whereby each process is meticulously mapped and then improved upon – often by advisors. Unfortunately, organizations seldom behave according to prescribed processes, and any process designed for a particular business task quickly becomes outdated. More importantly, many opportunities for organizational improvement are not process-related at all so, in isolation, this method risks missing the mark.

Analysys Mason has fine-tuned a methodology for lasting opex performance improvement as a result of recent client work, building on experience we have gained over the past two decades. This methodology is holistic at its very core. It is centered on a root-cause analysis that looks broadly at multiple elements of an organization, including its people, processes, services, systems, incentives and key performance indicators (KPIs). Cost benchmarking and process mapping may support the overall diagnostics and improvement program, but these aspects are only two of many means to an end. The reason for this is simple: just as an overly simplistic medical assessment may lead to the wrong diagnosis and a course of treatment that could harm the patient, a narrow cost or process focus could result in misguided efforts to transform opex that fail to deliver the desired effect – and may even be harmful to the operator.

Effective root-cause analysis begins with an open mind, no assumptions, and an active and creative approach by experienced professionals. By posing questions to an organization's frontline and back-office staff and complementing these views with verdicts from customers and other stakeholders, symptoms of problems can be traced back to their original source – which might not be obvious at first. Quite often, we find that the causes of high costs are upstream from the symptoms in an operator's value chain.

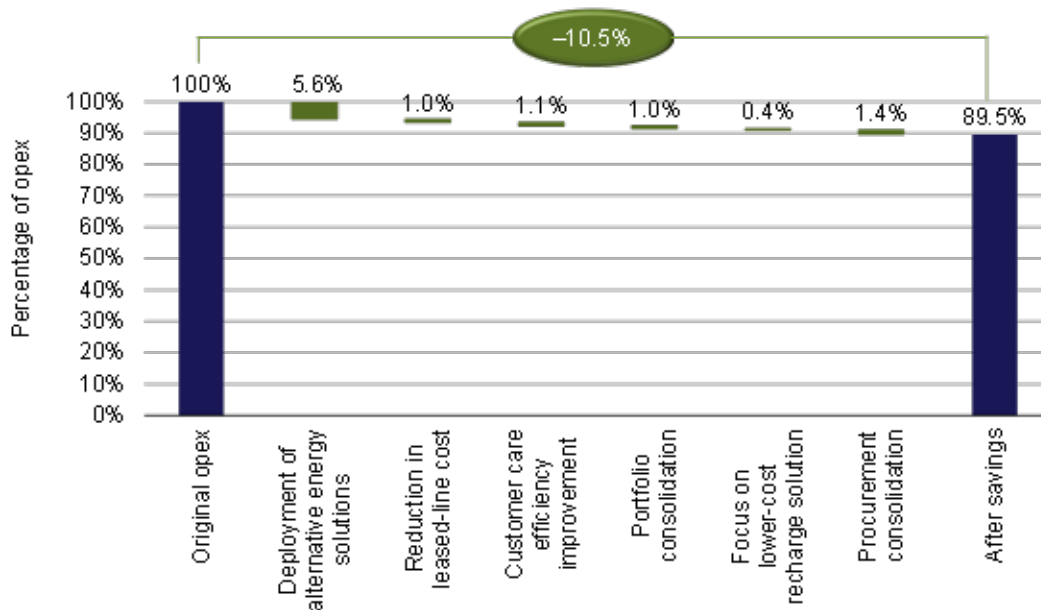
For example, in recent work on customer care units, we have found that high costs are as likely to stem from complexities in the product portfolio as from inefficiencies in the customer care units themselves. In such cases, a simple cost benchmarking exercise might result in arbitrary

headcount reductions in customer call centers to reduce costs, without addressing the underlying causes of those costs. By contrast, an effective root cause analysis would identify the source – that is, abnormally high call volumes – and address these first. Any efficiency improvements in the contact centers themselves would then come as an added bonus, and the combination of these measures could lead to both cost savings and quality improvements.

When we have identified the actual root cause, we can help design a program for resolving or removing it. Thus, rather than treating many symptoms, the cure focuses on the root causes where, over time, it will have a more-lasting effect. It is also easier to secure the organizational

We deliberately constructed an index that included many successful competitors in the peer group, to make it easier to identify savings areas. This helped our client to recognize areas (structural, tactical and strategic) where real improvements can be made.

In parallel to the qualitative evaluation, we carried out an extensive root-cause analysis to identify true sources of inefficiencies that led to the identified performance gaps. As part of this process, the Analysys Mason team conducted discussions with more than 70 personnel within the organization, including CxOs, functional heads and other important team members across various departments.



buy-in that is essential to the program's success because it targets root causes rather than false cost cuts that might backfire, and the organization has been involved from the outset. The solutions suggested will typically encompass a broad spectrum of organizational aspects – such as people, processes, services, systems, incentives and KPIs – which radically improves their chances of success.

### Case study: our holistic approach identified a potential 10% reduction in opex for an operator in Africa.

In a recent case for an African mobile network operator (MNO), we identified an annual opex savings potential of 10.5%. The MNO had been experiencing a period of rapid growth since its inception, but was anticipating an increase in competition as the market saturated. As a result, operational excellence would be essential to improving the company's financial performance. With this objective, the MNO entrusted Analysys Mason with the task of identifying areas for driving operational efficiency and reducing opex. As a starting point, we identified key functions within the organization and associated driver costs. We then benchmarked the identified functions with a set of global, regional and local peer operators. The peer group for benchmarking was carefully selected based on economic, environmental, market and operator-related parameters to ensure comparison between like-to-like operators.

This helped us in developing recommendations across different functions to improve the MNO's operational efficiency and financial performance. There were multiple addressable factors for this operator, but the largest savings stemmed from energy use, procurement consolidation, customer care efficiency, product portfolio consolidation and reduction in leased-line costs. The sum of these factors added up to more than 10% on an annual, recurring basis (see Figure 1).

Specific factors may vary by operator, but the holistic methodology of combining traditional benchmarking and process efficiency measures with thorough root-cause analysis acts as guarantee for clients to arrive at both short-term results and real long-term improvements in efficiency. Finally, a recipe for lasting opex improvement has arrived.

**Erik Almqvist**  
Partner  
Global Head of Operational Consulting





## TECHNOLOGY-ENABLED “DIGITAL CITIES” CAN HELP MEET THE CHALLENGES OF URBANIZATION

One of the greatest challenges facing governments today is urbanization, which is leading to the creation of mega-cities around the world. According to the United Nations, more than half the global population currently lives in cities and this number will likely reach 70 percent by 2050. Such a large demographic shift poses challenges for developed and developing regions alike. Faced with expanding populations, municipal governments are already struggling to meet the demands on infrastructure, services, and resources (including water and energy). Governments must also promote economic growth and deal with growing environmental issues—often in a context of fiscal restraint. Digital technology is among the most promising means to help meet these multiple challenges. The right digital tools can enhance the quality of life in cities by enabling

governments deliver services more efficiently. Digitization can also create jobs in promising, tech-driven areas such as data analysis and app development, and reduce the environmental impact of mega-cities by, for example, making urban transport more efficient.

The next step is to apply digitization more directly to urban planning, with the goal of creating “digital cities,” or intelligent ecosystems that are better able to meet the challenges of growth and sprawl. Unlike traditional cities, which have developed haphazardly, digital cities are purposely designed around integrated infrastructure, leaving them better equipped to deliver integrated value-added services such as e-health, e-government, and e-transport, among others.

The “Smart Dubai” initiative is one promising example. The five-year plan aims to transform the emirate using digital technology, allowing it to offer a range of online government services to citizens, local businesses, and government entities. In addition to quality-of-life benefits, the project will add US\$5.5 billion to Dubai’s GDP, along with 27,000 jobs.

Other cities are launching similar programs. Singapore is currently implementing a 10-year master plan (called “intelligent nation 2015”) that relies heavily on digital technology. As part of the initiative, Singapore developed a city-wide smart transit system that collects and processes traffic data from the location and speed of moving cars, through crowd-sourcing, and gives residents real-time traffic data on a public television channel. Singapore also has a large telemedicine initiative—some 3 million patients, or 60 percent of the population, are seen by medical doctors through remote consultations on digital media.

Similarly, Busan, a city in South Korea, built a 10-gigabyte IP network that connects all government agencies and private-sector companies. The network covers 319 organizations and nearly 1,300 kilometers of fiber, enabling fast data connections across all organizations. To support its data management, Busan is building the largest global cloud data center in South Korea, a 133,000 square-meter, earthquake-resilient facility. Busan’s municipal government believes that the data center could create up to 30,000 new jobs.

The message for policymakers in cities throughout the Gulf region is clear. Instead of taking a piecemeal approach to technology, they should create a more expansive agenda and create “digital cities” that can tackle the economic, social, and environmental problems of urbanization.

These efforts require significant infrastructure, namely a backbone of fiber-optic cable that connects city agencies, residents, and businesses. They also require a central integration layer that can coordinate data among multiple applications and services, and connect to end users through multiple access points, such as smartphones, tablets, urban transit elements, and other devices.

Once these components are in place, the potential applications are virtually limitless. For example, a city-wide monitoring system equipped with intelligence could detect suspicious behavior on public premises and proactively prevent crimes; the result is a better allocation of law-enforcement resources and lower crime rates. Similarly, teachers and students could more easily exchange learning materials and assignments.

Of course, digital transformations are long, complex, and expensive. Given the political or economic obstacles that will inevitably arise, the process will require city leaders to work with all stakeholders to establish right objectives and development efforts. This is particularly true in older cities that already have dense infrastructure in place and often require expensive, complex retrofits to accommodate digital technology.

However, governments that take steps—even small, incremental measures—to strengthen their information and communications technology and offer enhanced and integrated e-services across all sectors will reap sizable benefits. As the urbanization trend gathers momentum over the coming decades, the advantages of digital cities will only grow larger.

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## CLOUD SERVICES FOR SMALL AND MEDIUM GOVERNMENT ENTERPRISES

Small and medium government agencies should consider greater use of cloud services and applications to access ICT capabilities to sustainably boost innovation and cut costs. The ICT capabilities of government agencies are under increasing pressure from fiscal constraints, ageing assets, and skills shortages. For smaller and medium sized government agencies, this problem is exacerbated due to limited in house technical staff to develop and manage ICT solutions. Meanwhile, cloud computing is emerging as a practical ICT sourcing alternative. Cloud services are maturing rapidly, with early adopters reporting positive experiences with cloud adoption. This provides an option for smaller government agencies to viably access leading ICT services and solutions.

Government agencies across all jurisdictions face a perpetual challenge as they seek to develop and maintain the ICT capabilities needed by governments to support policy and service delivery innovation. The opportunities for technology to drive innovation in citizen service, education, healthcare, and internal productivity are limitless, but have always been constrained by limited resources available to build and operate the new systems.

The balancing of demand and supply for services is an eternal challenge throughout the public sector, but the issue of over-stretched ICT capabilities is starting to become a critical problem. ICT has become integral to virtually all public services. The ability of governments to drive innovation in society is increasingly dependent on the ICT capabilities of their agencies. The UAE has launched

numerous mobile-enabling and e-applications for various government activities.

However, the troubling observation is that the ICT capabilities of agencies are under increasing stress. For most agencies the management of ICT is like a game of Snakes and Ladders. Progress is good some years when experienced staff is present, when major projects are under way, and when new methodologies and technology assets are rolled out. In other years, however, progress is stymied by legacy complexity and the diversity and fragmentation of the agency ICT environment, and hard-won gains are lost in ageing assets, budget cuts, staff turnover, skill shortages, and project failures.

It is very difficult for individual agencies to make consistent upward progress in the development of the maturity and sophistication of all of the ICT capabilities required to deliver their policy and service outcomes, and to meet the growing expectations of ministers and citizens. For smaller and medium sized government agencies, the delivery of ICT solutions can often be critically dependent on only a few staff and sometimes a single person.

This situation leaves many agencies caught in an innovation/efficiency dilemma. Expectations that ICT will enable policy and service delivery innovation are rising ... but budget pressures constrain agency's ability to sustainably develop and maintain the required ICT capabilities. Efficiency strategies such as shared services and common systems offer a potential solution to budget constraints ... but are

empirically high risk and also tend to constrain agency flexibility and ability to innovate.

The innovation/efficiency dilemma means that agencies at all levels of government in the UAE, need better ways to source ICT capabilities in ways that sustainably enable flexibility and innovation, while also costing less than dedicated ICT capabilities for each agency.

The cloud provides a new way to source shared world-class ICT capabilities as a service. The primary driver for cloud adoption is to take advantage of the evolution of large-scale shared ICT service models as an alternative to sub-scale, fragmented, and duplicative agency-by-agency investments in applications and infrastructure.

The benefits of the cloud model revolve primarily around a range of attributes, which distinguish cloud providers from the internal ICT capabilities of all but the very largest and most capable agencies. This can be thought of as the cloud innovation edge. The key attributes of the cloud innovation edge are scale, focus, multi-tenancy, resilience, and iterative evolution, use of SOA, social and mobile technologies, Internet age security, self-service, usage-based charging, and vendor ecosystems.

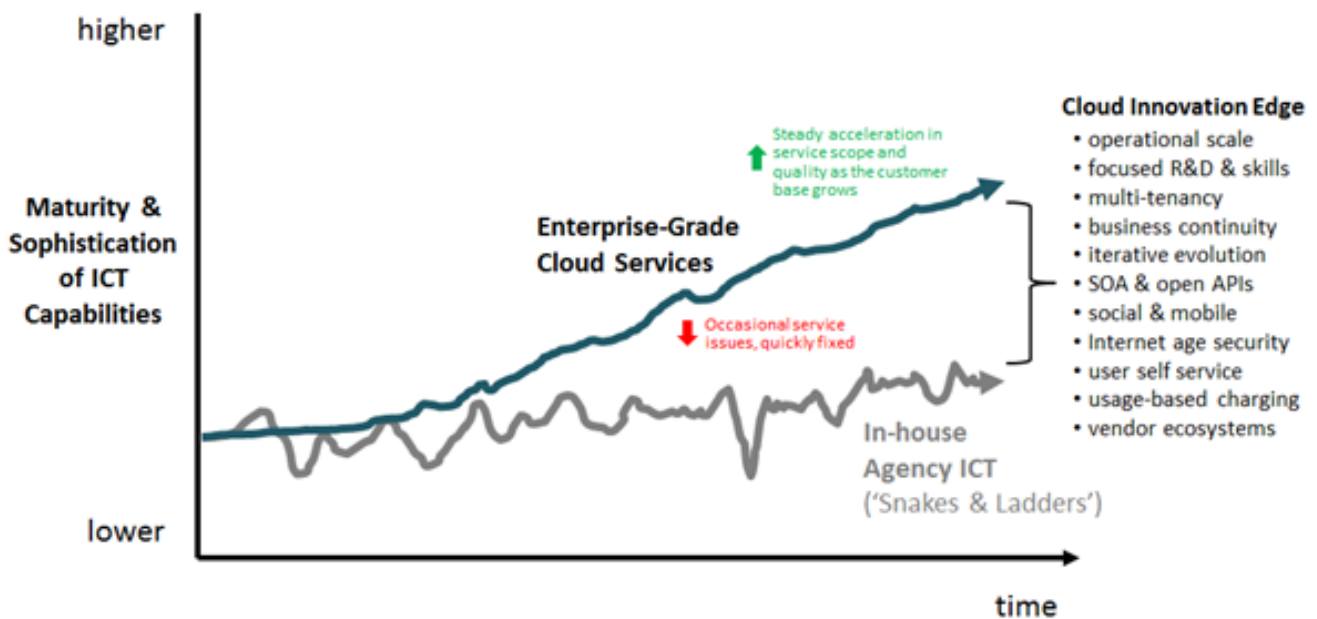
The figure below depicts the cloud innovation edge as an alternative to the ICT Snakes and Ladders game within agencies. The graph is for the purpose of illustrating broad trends based on practical observations, and should not be taken literally as generated from empirical data.

The cloud innovation edge

The large-scale and focused architectures of the leading cloud providers like du mean that they are capable of sustaining a rapid and continuous development in their capabilities. They are making the biggest investments in technology, can attract and retain the best skilled staff, can focus on optimizing the functionality, security, and performance of their services, and can attract the most vibrant ecosystems of vendors to “value-add” their core services.

To summarize, Government agencies can take the following five steps to prepare a path to the cloud:

- Include cloud services in the agency ICT strategy;
- Discover the cloud services available from trusted suppliers;
- Analyse application and data portfolios to identify cloud services opportunities;



Cloud-based software-as-a-service solutions allow organizations to gain the ability to run applications without the burden of a significant upfront capital investment. SaaS options effectively bundle the software license, hardware and ongoing management into a complete solution provided in a cost-effective, as-a-service model. The service model allows government agencies and their suppliers to avoid capital expenditure and lower the total cost of ownership.

- Get hand-on experience with cloud services; and
- Don't compromise on enterprise-grade compliance requirements.

Agency ICT departments aspire to many of these attributes but can seldom achieve or sustain all of them due to resource and skill constraints and the challenges of supporting diverse and fragmented legacy infrastructure and applications. Cloud service providers have the advantage of being able to define a catalogue of services that are optimized to run in a standardized infrastructure to world-class best-practice levels of performance.

**Fahad Al Hassawi**  
**Chief Commercial Officer**  
 du





## BY THE NUMBERS: THREE BIG DATA OPPORTUNITIES FOR TELECOMS

### Crunch the numbers to increase marketing effectiveness, improve customer experience excellence, and lift revenues.

When it comes to Big Data strategy, the telecom industry has an advantage over others due to the sheer breadth and depth of data it collects in the course of normal business. For example, an operator serving 8 million prepaid mobile subscribers generates around 30 million Call Data Records (CDRs) daily, equaling 11 billion records annually. If the same operator also provides postpaid and fixed lines services, then there is even more volume and variety of data at the ready.

Data collection, storage, and dissemination are built into the everyday operations of most communications companies. And a majority already staff many data scientists and analysts to cull the information into insight. But few are using that valuable information to its fullest potential.

There are many types of data and information that can be optimized with a sound Big Data strategy (see Figure 1). So what should an operator do with all this information? Looking at Big Data through a customer lens offers three strong opportunities: improve marketing effectiveness, enhance customers' experiences, and develop new sources of revenue.

**Marketing effectiveness:** Big Data helps telecom operators improve their marketing effectiveness in a number of ways. Personalized, relevant actions can be taken based on real-time information without the need to wait for data extraction or manual data mining. Targeted campaign performance can be streamlined with the help of advanced analytical models, such as churn prediction or next best offer. These models provide valuable proactive customer insights that can be utilized for cross-sell, up-sell, or retention campaigns, based on analysis of the customer's preferences and behavior. And Big Data helps to reveal preferred channels for targeting customers, which enhance response rates and have an incremental positive impact on the overall campaign performance and efficiency.

### Figure 1: Telecom Data Snapshot

Here is a list of common data sources and information operators can use to improve relationships.

#### Common telecom data sources:

- >Product usage
- >Network performance
- >Call performance
- >Billing/Revenue
- >Customer information
- >Device information
- >Call center/Point-of-sale
- >Campaign performance
- >Social media data

#### Common insights gathered:

- >Number of subscribers
- >Geographical spread of subscribers
- >Socio-economic environment
- >Types of services (*landline, mobile, data*)
- >Plans used
- >Category of calls (*network, international, roaming*)
- >Types of devices (*budget phone, smartphones, tablets, etc.*)

**Customer experience:** Big Data can help gather real-time customer satisfaction information through social media listening or Voice of the Customer analysis, for example. This can be done at the customer level in order to address a specific customer complaint, or at the entire subscriber base level to detect macro customer themes. Operators can get feedback about a new product launch, a major brand announcement, or a simple network issue, for example. Big Data also facilitates the transition toward better self-service systems. Furthermore, analytical models, such as segmentation, can also improve customer experience by identifying the most valuable customers who would benefit from dedicated treatment and better services.

**Revenue impact:** Once mastered by the telecom operator, Big Data can be utilized to create new products. With so much insight at their fingertips, operators can use the knowledge they possess to help their B2B clients address their Big Data challenges. Or they can enter into partnerships with third parties to share aggregate or subscriber-level data. For example, retailers may be interested in the operators' customers' location-based data in order to target them with specific promotions when they are close to a store. And over-the-top (OTT) players like Google, Skype, and Netflix may be interested in behavioral data to target consumers with specific content.

Such opportunities hold promise, but keep in mind there are many legal, ethical, and reputational effects of Big Data initiatives. They must be coupled with a serious reflection about the different ways to acquire and share data, or entice the customer to allow such scenarios. This is where the customer lens is vital to success.

**ROI of Big Data**

Peppers & Rogers Group recently worked with a mobile operator to improve its marketing effectiveness and ROI. The client did not have detailed data for its mobile subscribers, and the average time to market for a targeted marketing campaign was one month. It was simply not interacting with customers fast enough or with the right messages.

The team constructed a data mart containing a summary of all detailed international usage information for each mobile subscriber and used this data mart to determine target subscriber groups. The team then designed and launched several below-the-line campaign waves based on best practices in the industry to the relevant customer groups. For example, some campaigns were designed to boost revenues by adjusting product offerings based on customer usage patterns by country.

Over the course of one year, the operator launched more than 250 targeted outreach campaigns, which achieved a 33-percent response rate, on average. The time to market for those campaigns dropped from 30 days to one week. And the biggest improvement was seen in customer interactions. Network traffic increased by 64 percent, daily active subscribers jumped by 17 percent, and revenues grew by 2 percent.

**Is your data mature?**

These results are not unusual for companies with a keen balance of data strategy and the customer experience. Yet many operators are at different points along the data maturity spectrum. In our experience, most operators fall into one of three data environments:

- Info-archive: Operators that have yet to start initiatives to leverage Big Data. They have limited or no analytics capabilities.
- Info-familiar: Those who have already embarked on the data journey but have not implemented a full-fledged solution. Any analytics they do have are ad-hoc and not coordinated.
- Info-smart: Operators that have created a robust Big Data environment. Customer information is aligned and shared across the business and advanced analytics are used.

At each point on the maturity spectrum, telecoms can identify their main Big Data issues and pain points, and then create a roadmap tailored to their right path of customer interaction evolution. Even info-smart companies can uncover new

Figure 2: Three Levels of Big Data Maturity

Operators should assess their position on the data spectrum and develop a roadmap to move forward.



opportunities and areas of improvement. Projects within the roadmap can range from small, specialized quick-wins (broadband dashboard, international usage data mart, etc.) that address pressing business needs to major overhaul programs (data warehouse setup, business intelligence tool revamp, etc.) aiming at establishing key Big Data capabilities within the organization.

Regardless of maturity level, there are common issues that must be addressed by operators with developing Big Data strategy. Peppers & Rogers Group outlines some key recommendations across its OPIT framework:

**Organization:** One key requirement is to have a top-down governance team to direct all initiatives related to the overall data strategy of the organization. This requires a major cross-organizational effort to be led by a central team that owns the topic of Big Data. Members will define and prioritize Big Data strategy initiatives and work with teams from around the company to implement them.

**Key lesson:** The governance team must extend its primary responsibilities beyond just design to take a hands-on ownership role that actually drives progress and aligns different groups within the organization. This role cannot be underestimated.

**Processes:** Often, integrated operators have specific procedures and operations for each service line, making alignment across business units tricky. We recommend all departments follow the same methods for enterprise wide key tasks such as planning, target fixing and reporting.

**Key lesson:** Relationships between business and IT functions need to be streamlined and closely monitored. This enables the organization to transition from a silo structure where each department relies on its proper IT teams and procedures to a transversal approach that standardizes the IT function and the methods used to obtain, process, and analyze data.

**Information:** As with processes, there can be major challenges when each department's information is independent of one another. We have witnessed success when operators align the key moments of truth across different departments: the definitions of a new sale, a churner, or an inactive subscriber should be determined at the corporate level and aligned among different teams in charge of reporting and performance planning.

**Key lesson:** Often overlooked, it is vital to standardize definitions of KPIs, such as revenue, active subscribers' count, traffic, and ARPU. And we recommend that traditional KPIs such as voice, SMS and data usage be replaced by more granular KPIs that result from a thorough slicing and dicing of the existent transactional data.

**Technology:** Processing and analyzing Big Data is enabled by a wide variety of technical platforms. However, these technologies ought to complement Big Data strategies, not define them. Complex Event Processing (CEP), for example, provides powerful processing engines capable of analyzing in real time thousands of events issued by diverse source systems and short-listing actionable items based on a predefined set of rules. CEP systems are not independent architecture items, however. They must fit into the larger data architecture to be effective at driving relevant, consistent customer interactions.

*Key lesson: More often than not, acting on technology is required, yet should be the last element of the data value chain to be considered.*

When tasked with finding effective ways to use data, look to customer experience improvements. In both the short and the long term, operators can uncover new or better ways to interact with customers and deliver real ROI.

Peppers & Rogers Group



# WTDC-2014

UNITED ARAB EMIRATES  
DUBAI, 30 MARCH - 10 APRIL



## ITU World Telecommunication Development Conference will meet in Dubai, UAE, from 30 March to 10 April 2014 Focus on Broadband for Sustainable Development

Highlighting the overarching theme, Broadband for Sustainable Development, the sixth **World Telecommunication Development Conference** will take place in Dubai, United Arab Emirates, from 30 March to 10 April 2014.

WTDC-14 will focus on development priorities in telecommunications and information and communication technologies (ICT) and agree on the programmes, projects and initiatives to implement them.

It will assess progress in implementing the Hyderabad Action Plan set in motion in 2010 along with other key areas of activity such as the World Summit on the Information Society, the series of Connect the World Summits held since 2007, and strengthening ITU's regional presence.

The expected outcomes of the WTDC-14 are the Dubai Declaration, the ITU-D contribution to the Strategic Plan of ITU, the Dubai Action Plan, as well as resolutions and recommendations. In particular, the Dubai Action Plan – which will be built on results based management principles – is expected to set the agenda for telecommunication and ICT development over the next four years.

The dialogue, which will shape the future of the ICT sector and its contribution to social and economic development, will focus, among others, on creating and maintain an enabling telecommunication/ICT policy and regulatory environment; facilitating the development and improving access to ICT-based applications and services, particularly in underserved and rural areas; building human and institutional capacity in the field of telecommunications/

ICTs and fostering digital inclusion; and providing assistance in emergency telecommunications.

In preparation of WTDC-14, six regional preparatory meetings were held in 2013.

This year, WTDC will be preceded by an Executive Strategic Dialogue on Broadband for Sustainable Development. This Dialogue will take place on Saturday, 29 March, from 2:00 p.m. to 3:30 p.m., at the Dubai World Trade Centre and will provide an opportunity to exchange views on the trends, challenges and opportunities of the telecom/ICT sector.

The keynote speaker will be Mr. Gerd Leonard, Futurist and CEO of The Futures Agency (Switzerland). Panelists include H.E. John Nasasira, Minister of Information and Communication Technologies (Uganda), H.E. Mohamed Nasser Al Ghanim, Director General, Telecommunications Regulatory Authority (UAE), Mr. Wonki Min, Director-General, Ministry of Science, ICT and Future Planning, (Rep. of Korea), Ms. Kathryn C. Brown, Chief Executive Officer, Internet Society (ISOC), Mr. Samer Halawi, Chief Executive Officer, Thuraya, Mr. Luigi Gambardella, Chairman of Executive Board, 'European Telecommunications Network Operators' Association (ETNO) and Ms. Lobna Smida, Policy Expert in Accessibility (Tunisia)

The event will be followed by an information session on strategic planning and results based management and an informal meeting of Heads of Delegation.

Additional information can be found at [itu.int/itu-d/WTDC](http://itu.int/itu-d/WTDC).



# Beyond Connectivity

## 2014

### Four Pillars for Telecom Sector to Foster Economic Growth & Sustainable Development...

Taxes Optimization – Smart Governance  
Spectrum Harmonization & Pricing – Revenue Streams Diversification

## Post Event Report

16th & 17th March, 2014 - Kuwait

## SAMENA Council – Beyond Connectivity

Day1: 16<sup>th</sup> March

### Setting the Scene: The Threat of Commoditization in Mobile Markets – Booz & Co.

Differentiation is increasingly hard to achieve in the mobile space. We define commoditization as convergence of market share and ARPU spread in the market, revealing 52% markets to be in or near the commoditization zone. Operators can choose from three potential plays to tackle the adverse effects of commoditization: Escape & Challenge: Defy gravitational pull of commoditization by investing in differentiation - requires proactive resistance to natural pull towards commoditization by acquiring/ reinforcing ARPU leadership Accept & Adapt: Accept commoditization as an inevitable event and adapt your way of work accordingly - entails acceptance of commoditization as grounded reality and adapting to win in new realities Consolidate to Scale: Disrupt industry fundamentals by partnering with, merging or acquiring your competition - play involves bold inorganic moves to attain efficient scale operators' business



### Taxes Reduction Policies: Impact on the overall nation economy development

The issue of excessive taxation was reinforced by the publication in February 2014 of: Mobile taxes and fees – A toolkit of principle and evidence. Some of the major findings and recommendations of the study are: The mobile telecom sector is faced with a disproportionate tax burden, High taxes restrict the growth of mobile services and the economic benefits they offer, While telecom sector taxes increase, comparable taxation is not applied to OTT players, The complexity of mobile taxation is not only increasing the burden on the industry but is deterring investment, High mobile taxation raises service costs and reduces sector growth, There is a potentially negative impact even in highly penetrated markets where such taxes slow the adoption of new services such as mobile broadband or adversely affect low income customers.

Other points that were raised in the panel reflecting the study in the French market are: Telecom's investment level is high, often far above that of other private infrastructure networks, Telecom has a multiplier effect on the economy, as telecom investment yields 6 times the amount invested for the French economy, The contribution of telecom operators to the economy is more important than the contribution of other players of the digital ecosystem, Legal and regulatory cycles are not in line with the long cycles of telecom investment



**Infrastructure Sharing: A mean for efficient CAPEX reallocation**

Due to economy of scale property of the telecommunication industry, sharing of telecom infrastructure among service providers is becoming more important. The degree and method of infrastructure sharing can vary in each country depending on regulatory and competitive climate, but everywhere the ultimate objective is to achieve efficient CAPEX reallocation.

**Pricing and fair competition: Nature of regulatory intervention**

With the emergence of new technologies and the increasing number of service providers, competition in the telecommunication industry is increasing both within the SAMENA region, and beyond. The role of regulatory bodies has therefore become more decisive, for then need to come up with market friendly regulations and initiatives to support the growing completion in the best interest of the operators as well and the end users of the services.



The emphasis of the Regulator's activity is to ensure that all the players, large and small get fair treatment. In some countries, the interconnection between networks is critical to the success of new entry and to the creation of a healthy competitive market.

**International roaming regulations: The need to reassess wholesale pricing and termination rates**

International roaming, a hot issue for operators and regulatory bodies is catching attention with the growing competition induced by market forces. International roaming rates and mobile termination rates has finally begun to drop as a result of new regulations such as unified roaming rates as well as the growing competition. As mobile operators search for new revenue streams, attention is turning to increasing usage of international roaming services. It is important for operators to consider innovative approaches to attract the roaming customers by providing attractive data packages and solutions as well as enhancing the customer service experience and make it easy to get in contact with his home network support.



**Telecom licensing framework: Can unified licensing regime lead to a healthy competitive market?**

Licensing regime vs. Authorization regime: The difference between the Licensing Regime and the Authorization regime is that all communications providers will only need to look to one set of general conditions to ensure they are complying with the law. There will not be different licenses containing different conditions any longer. This also means that communications providers are responsible for ascertaining which of the general conditions applies to them and their operations they will not be issued with a personal license, which sets out their obligations. The obligations themselves are similar to those contained in current licenses, although they have been redrafted in line with the new EC Communications Directives and the Communications Act.

Status of Unified Licensing in the SAMENA Region: Jordan has introduced a unified license regime, Egypt has announced it, Oman, Qatar, Bahrain is considering it; in KSA it is a possible later step.



Day2: 17<sup>th</sup> March



**Diversification of Revenue Streams: Potential opportunities with OTTs**

SAMENA region has shown strong commitment toward telecommunications development and has leveraged the markets' potential in terms of broadband and over-the-top content-based services. As the OPEX and CAPEX are mounting, operators are looking for news revenue streams and are contemplating questions such as, In today's revenue-less content what perspectives do operators need to gain in order to make local content creation and delivery work out well for them?

The question is what if there is no revenues from voice and sms? Telecom operators should be ready for tomorrow by adopting truly partnership models with OTTs that are based on revenue sharing. Operators should not act as dummy pipe for OTTs, however, this is to be reversed to be a SMART pipe where all the customer information can be used effectively especially those related to billing and charging.

**Strategies to overcome Spectrum Challenges (allocation - pricing)**

Spectrum, an important issue in the SAMENA region's regulatory agenda, has been one of the major challenges for industry. This

trend is mainly driven by the introduction next generation spectrum centric technologies. It is important to consider above 1GHz bands while not ignoring the consideration of the harmonization for 800-700MHz. Although there are some challenges facing the 800-700MHz allocations for mobile services, the coordination with media broadcasters and governments entities to vacant the spectrum is becoming a need. In addition, crucial technical aspects need to be considered like the Out of Band-Emission.



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