

# SAMENA TRENDS

EXCLUSIVELY TO SAMENA TELECOMMUNICATIONS COUNCIL'S MEMBERS

BUILDING DIGITAL ECONOMIES

A SAMENA Telecommunications Council Newsletter

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September 2011

## Convergence to Doha 2011

An overview by: **Bocar A. BA**



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# EDITORIAL



The weather here in Dubai is beginning to change, albeit slowly. The skies are beginning to clear a bit, with the humidity index beginning to decrease to what we would call bearable limits on the human body, thereby allowing for the clouds to actually have some form of definition. The evenings are beginning to become more tolerable and folks are starting to actually sit outside on the late evening sidewalk tables scattered all across the walk along Jumeirah Beach's "Walk". Change is upon us and I am fairly certain that I am not alone when I am declare, we are looking forward to even more change with cooler weather.

Once upon a time, someone said Change is opportunity and that the telecommunications industry is always changing! The ICT environment is rapidly changing and for those that do not change with it, they will most certainly be left behind. The advent of FTT(x) along with new spectrum plans (allocations, re-farming, movement, auctions and etc.) has created a catalytic environment for what seems multiple concurrent mini-environs with regard to new applications within the network operator ecosystem. This adaptation or evolution of the operator's environment creates a situation where survival of the fittest means survival of those who adapt and grow and are creative in services.

Just as Mr. Osman Sultan said at a recent ITU – AICTO IPTV and Content workshop "stating that the time has come for the user defined experience", where the consumer, client or customer themselves create an individual personalized user experience through use of the internet via broadband network access, rather than simply waiting for someone else's content which may be scheduled at a certain time and place. The time is now where the dynamics are changing rapidly and if the stakeholders in the same environment do not adapt to this ever changing demand set by the paying customer, there will be troubled waters soon arriving.

The context of Broadband Infrastructure policy must contain a multiplicity of environs where all participants, including the investors are able to work together toward a vibrant future. The growth of IPTV is currently around 64% in the MEA region, which is amongst the fastest in the world. However this statistic does not tell the whole story. The MEA region falls way short of global numbers, where average uptake of IPTV is a very small percentage (slightly above 1% or so), however the growth number is still great to see. IPTV, along many other broadband applications and services will help ARPU statistics and in some cases, its a rather impressive number. PCCW's ARPU for Broadband services has increased 44% (courtesy of Booz) since the days of pre-IPTV. Mobile Broadband is definitely helping Broadband ARPUS for mobile operators. The consistent common issue here is Broadband.

This month's primary focus point in TRENDS is FTT(x). This is a critical element amongst transport mediums along the broadband platform. It is only one of five major interface types, the others being wireless (Fixed), Wireless (mobile), copper, coaxial (cable) and I would consider satellite Television another. The region has only one choice and that is to develop broadband infrastructure. Policy makers and regulators must create an environment that supports operator investment as well as other investment models such as the public private partnerships that seem to be sprouting up in many locales. Qatar has recently used a PPP framework to develop a national FTTH network plan that will target around 95% of all households nationwide. Broadband should be developed so that all have access to the wonderfulness of the internet. A very basic statement but one of great impact on a socio economic basis. This goes for all economic ecosystems, whether rich or poor. Some operators are using innovative means to get broadband access and the Internet into mid to lower income individuals hands, by offering twelve months of wireless CDMA EVDO high speed broadband access along with a brand identified tablet free of cost. This tablet is chock full loaded with clever applications which bring use of the internet even closer to the user as well as making it easier for internet novices. One such carrier doing this is PTCL in Pakistan. Very innovative indeed. The major driving force among content on the internet is entertainment. I am hoping however that M-Health, E-Inclusion and E-Education also are adopted and brought along the Broadband highway, for they produce very important socio economic benefits to society which are long lasting and of importance to humanity itself, bringing equivalence of opportunity to all.

# EDITORIAL

The global economy is faltering and anyone that is not missing a heartbeat knows that Europe is very much experiencing some strong debt issues. The SAMENA region operator base has an opportunity to expand and quite possibly into realms never seen before, such as in Europe itself. The fact that many of the larger multi-national aggressive operators have already built large high speed broadband networks does not escape many, for new revenue derived from these networks shall fuel further accelerated growth into potential new markets which until recently, were really not thought of as possible candidates. Tie ups between carriers already signal such next steps may be not so unheard of in the near future, such as perhaps that of Telefonica and Etisalat, and others.

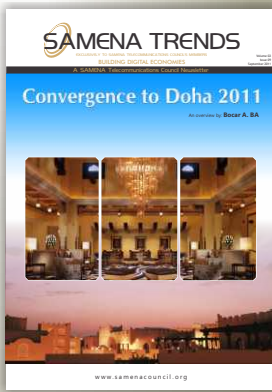
Yes change is upon us, and our very desired Arabian Winter is coming soon, but also the Broadband revolution is upon us now. There is no waiting. Operators must be ready as well as the policy makers and regulators as well as all stakeholders to clearly make steps to facilitate the advantage of all stakeholders making Broadband for all a reality.

Truly Yours,

**Thomas Wilson**

CEO & Managing Director

SAMENA Telecommunications Council



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## TOP REGIONAL & MEMBER NEWS

### ZTE Signs IT Infrastructure Agreement with Burundi BBS

ZTE Corporation has announced that it has signed an agreement with Burundi Backbone Systems Company (Burundi BBS) for building Burundi's first national backbone network. This step is taken in response to rapid growth in both mobile and data service needs in the country. The ZTE network will cover 17 provinces and cities in Burundi, dramatically reducing broadband costs. It will also link Burundi with eastern and central African countries such as Tanzania, Rwanda, and Congo, connecting it to The Eastern Africa Submarine Cable System. According to the ZTE General Manager "The development of the backbone network in cooperation with Burundi BBS will help achieve that objective, while also assisting to improve the nation's telecommunications infrastructure."

### Qtel Rolls Out Fiber Services in Doha

Qtel has started connecting its customers to the country's new fiber-based broadband network. Qtel's field teams have laid out over 1,200 kilometers of fiber cable throughout the capital city of Doha, capable of connecting more than 60,000 homes. So far, around 2,000 homes have been connected by Qtel, enabling them to receive high-speed Internet access and high-definition content on its IPTV service 'Qtel Mozaic TV'. The Qatari government has appointed the Qatar National Broadband Network Company (Q.NBN) to oversee the construction of an open-access fiber broadband network which will provide very high-speed broadband services to 95% of households and 100% of businesses in the country by 2015. Both Qtel and Vodafone Qatar have signed agreements with Q.NBN to participate in the project, and Qtel has already committed itself to investing QAR 600mn (US\$ 165mn) in the network.

## Batelco to Launch Broadband Television

Batelco has announced that it will soon introduce broadband television to its customers in two newly developed areas, Gulf Daily News has reported. Batelco's IPTV service will be capable of delivering comprehensive content with FTA (free to air) channels and all subscription-based bouquets such as Orbit Showtime Network and Abu Dhabi. In addition, a free video on demand (VOD) library will offer approximately up to 200 movies, series, documentaries, with monthly updates to the programmed menu.

## Mobily Introduces 4G Services in Saudi Arabia

Etiad Etislat (Mobily) and Saudi Telecom have introduced TD-LTE (4G) in Saudi Arabia, taking leadership in launching state of the art services in the kingdom. Saudi Arabia's second-largest telecoms operator has launched the services through its subsidiary Bayanat Al oula. Mobily's first phase of coverage will include the cities of Najran, Jazan, Al-Kharj, Ras Tanura, Al-Gurayat and Al-Dudamy.

## STC Launches 1st 4G Network in the Middle East and North Africa

STC has announced the launch of LTE 4G network in the region making 4th generation technology within reach of its customers. The new LTE technology provides attractive features such as high quality performance especially for mobile telecommunications at very high speeds and assists operators to enhance network capacity and strengthen network performance. STC CEO said, "The Company is introducing the latest in LTE 4th Generation technology which is the revolution in information technology providing a quantum leap in data transfer speeds wherever the customer is reaching more than 100 mb/s."

## Huawei wins Bangladeshi WiMAX Network Expansion Contract

Bangladesh based WiMAX network, Augere Wireless has signed a network expansion contract with Huawei, to expand its Qubee branded wireless broadband service. Under the agreement, Augere Bangladesh will deploy WiMAX base transceiver stations (BTS) across Bangladesh using SingleRAN solutions. The SingleRAN WiMAX solution features a co-platform of hardware and software, software upgrading, and parallel transmitting, able to support dual modes of WiMAX and LTE TDD at the same time.

## du Awarded ISO 9001-2008 Certification for Its Network Development Program

du has been awarded a further accolade after receiving a ISO 9001-2008 certification for the Quality Management System, developed as part of its Network Development programme. ISO 9001-2008 is the world's most widely used standard for quality management systems. du received the certificate from David Cowie, Managing Director, DQS LLC in an official ceremony at the telecom's headquarters. "We are dedicated to constantly improving upon our network, which reflects directly on our customers' experience. Our Process Development and Governance Team have put their utmost dedication into achieving this success, and their hard work has most certainly paid off." Said, Senior Vice President, Network Development and Operations, du.

## Turk Telekom at Top of Brand value List

According to the latest report by Brand Finance, Turk Telekom has become the country's most valuable brand worth \$2.39 billion. The total value of Turkey's top 100 brands reached \$33 billion, growing 10 percent as compared to the last year. Turk Telekom was followed by Isbank, one of the country's biggest lenders, who brand was worth \$2.28 billion, according to the "Turkey's Most Valuable Brands List" report. Meanwhile, the country's largest mobile operator Turkcell ranked third, worth nearly \$1.89 billion.



# CONVERGENCE TO DOHA 2011

An overview by:  
**Bocar A. BA.**

**Q.** How do you look at the emergence of spectrum allocation for 4G Networks, in the region?

**A.** With the onset of 4G networks, the emergence of spectrum allocation is becoming more challenging in a multimedia content environment than for traditional voice networks. The services offered by service providers to different market segments are expected to vary considerably. The emergence of cloud environment and content industry has resulted in rising traffic that will demand the operators to further upgrade and optimize their networks for higher speeds. This will ultimately give rise to the need for more investment to back infrastructure upgrades, and to acquire more spectrum. For many emerging markets, the spectrum allocation symbolizes a unique prospect to quickly roll out 4G networks and thus overcome the growing demand for mobile broadband. Mobile penetration growth leads to an increase in GDP; we believe that augmenting mobile broadband will have even better socioeconomic impact.

SAMENA looks upon digital dividend spectrum and other bands for 4G as an imperative catalyst for mobile broadband with a major impact on the content industry. Globally, the digital switch over is taking place at a strategic point for the broadband landscape, offering a unique opportunity to expand the availability of broadband services to a much broader range of subscribers, bridging the digital divide. The technological divide has been an area of concern which needs to be solved through stake holders' intervention, such as offering subsidies to operators for rural deployment as well as exploring into alternate methods, such as, allocation of digital dividend spectrum for 4G networks.

“The technological divide has been an area of concern which needs to be solved through stake holders' intervention, such as offering subsidies to operators for rural deployment as well as exploring into alternate methods, such as, allocation of digital dividend spectrum for 4G networks”



**Q.** With the evolving trends in the multimedia and broadband industry, how do you look at the need for a sustainable internet model? Is that really needed for the ICT industry's growth?

Keeping in view the emergence of the content industry and the growing bandwidth demand, the need for a sustainable Internet model has become an essential aspect of the telecoms & ICT industry. Over the past few years, there has been an enormous increase in the usage of multimedia content that has resulted in the need for a win-win model between the service providers and over the top providers. We feel that there is an urgent need to focus on the need for a sustainable Internet model and collaboration among industry stakeholders.

SAMENA Council believes in the significance of such a model and is therefore accentuating the significance of the issue while prompting the need for a collaborative approach to have mutually beneficial business model for all the stakeholders. This is important for both, the operators' community and OTTPs, because operators are, and will be, evermore driven by the demand for content in general and local content in particular.

“Over the past few years, there has been an enormous increase in the usage of multimedia content that has resulted in the need for a win-win model between the service providers and over the top providers”

**Q.** What is SAMENA Council's stance on region-wide broadband infrastructure policy?

**A.** SAMENA Council is on top of developing and promoting the implementation of policies, standards, regulations and collaborations that facilitate expansion and improving the efficiency in the telecommunications sector in SAMENA region. SAMENA is actively putting its efforts to support digital content and develop the road map for next generation broadband networks and get to



the bottom of key subject matters that includes, infrastructure sharing, public private partnership, and local loop unbundling among others. Because the telecoms and broadband industry is looking forward for evolving ICT policies as an essential catalyst that serves them as a central channel to discuss ICT issues. SAMENA has a keen focus on region-wide digitization policies; hence it keeps detailed observations on major issues on broadband networks deployment of 3G networks, deployment of subsea cable, e-inclusion, e-health, m-payments, region-wide FTTH implementations and broadband infrastructure investments.

The anticipated advancements in broadband technology have resulted in a vital boost in convergence, and hence have been very fruitful with respect to the growth of the broadband sector. SAMENA region is very rich in terms of latest broadband technologies that are empowering as well as supporting the high-tech applications. There has been an increasing demand of interests indicating the drive for broadband infrastructure, net neutrality, content and a sustainable internet model. Meanwhile, the region's broadband market is constantly making its significant headway and the surge in subscriptions is increasingly becoming the nexus of emerging applications and digital content. The mounting customer base indicates a high demand for digital content and hence opens a new door of opportunities for industry stakeholders that must be in their notice to contemplate this issue to overcome the necessary hazards that could be in terms of infrastructure, bandwidth or any other technological vulnerability.

**Q.** What is state of ICT and its respective implications in the context of SAMENA region?

**A.** ICT has been associated with as a vehicle for economic growth and ICT has been attracting increasing attention from several different governments around the world. ICT drives innovations in internet computing and impacts citizen's quality of life. The impact may be directly through ICT sector or through ancillary industries and sectors that are powered by ICT advances. ICT further also helps in the economic growth by increasing worker and organizational productivity and through proliferation of ICT into national economic activities. Appropriate national strategic planning and promoting competition in telecom sector have been able to help bridge the digital divide. Countries in SAMENA region have varying levels of ICT development but there are overall around 165 million plus internet subscribers and around 690 million mobile subscribers in the region. There is a high degree of mobile access which signifies that potential access to communication is significant. Incidentally countries with high mobile coverage show relatively high earning potential. UAE e.g. has one of the highest penetrations and one of the highest GDP's in the region. Fostering growth of ICT therefore should be prioritized in countries which have lower GDPs and income. Several countries have established Universal Service Fund and Universal Access policies to help promote ICT development in un-served and underserved areas. Properly designed, managed and implemented, USFs can accelerate investment in un-served and underserved regions, and can stimulate innovative technological solutions. In short ICT can lead to economic growth and prosperity however ICT policies have to provide an enabling environment and not a hindrance to implementation of ICT.

“ ICT drives innovations in internet computing and impacts citizen's quality of life. The impact may be directly through ICT sector or through ancillary industries and sectors that are powered by ICT advances ”

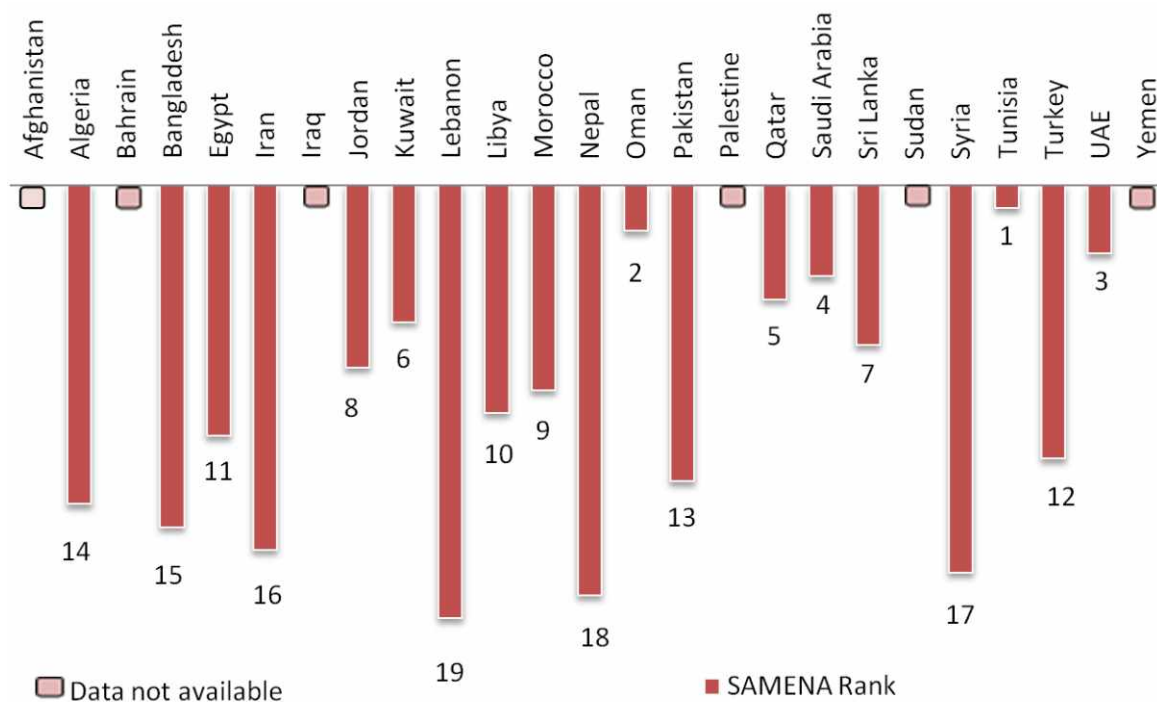
**Q.** What is the role of infrastructure sharing in reducing operator CAPEX?

**A.** Costs for a telecom operator are of paramount concern, reducing ARPUs because of competition puts pressure on margins. Operators are actively considering opportunities that help in reducing costs. Infrastructure sharing is one such option that has been successfully applied in many countries. Active infrastructure sharing, in which operators share antennas and exchanges is still relatively rare; however passive infrastructure sharing, in which telecom towers are shared, is quite common. Telecom infrastructure provisioning represents significant costs to operator and by sharing much of this cost is defrayed and operator can start using the already built up infrastructure – saving both roll out time and money. Lower cost of services and deployment over wider areas can help operator in expanding quickly and helping bridge the digital divide. Shared infrastructure also helps reduce costs of electricity and maintenance and helps reduce carbon footprint. Some estimates suggest that operators may spend up to 20 percent of their revenues on new sites roll out, in the Middle East and Africa, and related activities so there is significant saving possibility if sharing towers concept is widely adopted. Infrastructure sharing thus poses very high potential for managing operator costs. There are other models where civil works and infrastructure is managed by independent company which leases out services to operators. In this case operators which might hesitate in sharing infrastructure from other operator directly may do so if the same was available through an independent company.

“ Some estimates suggest that operators may spend up to 20 percent of their revenues on new sites roll out, in the Middle East and Africa, and related activities so there is significant saving possibility if sharing towers concept is widely adopted ”



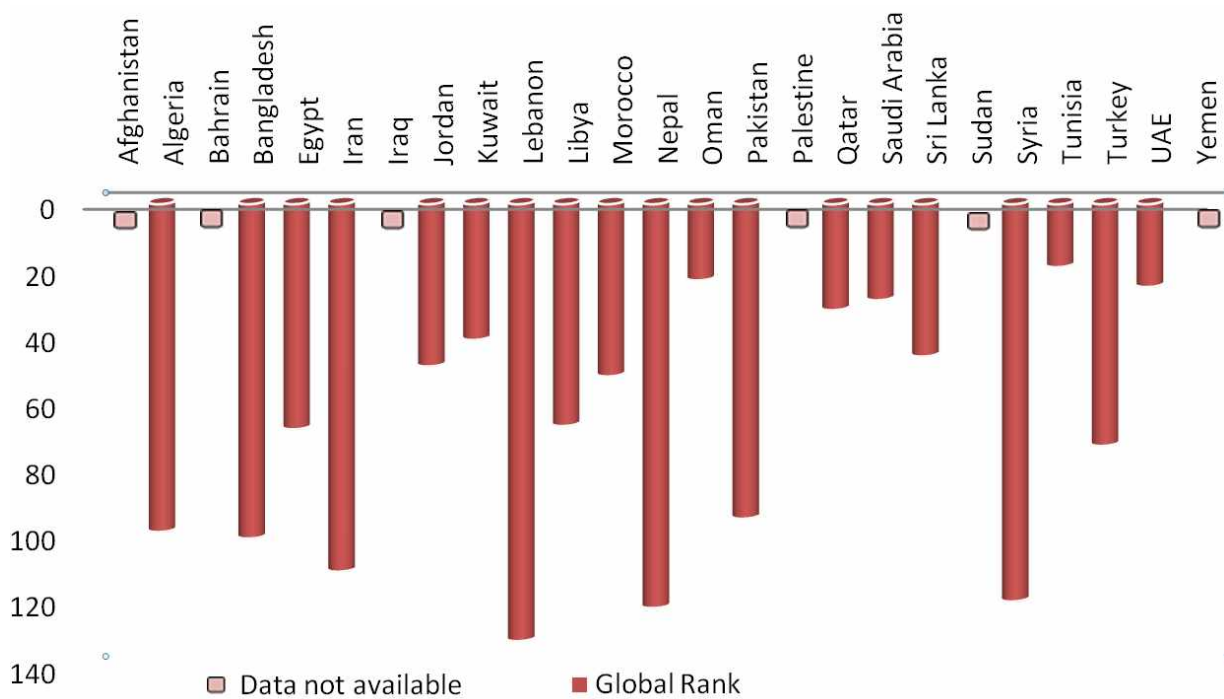
## Efficiency of Legal Framework in Challenging Regulations (SAMENA Rank)



**Research Note:** Ranking done by SAMENA based on data from The World Economic Forum. Within the SAMENA region, Tunisian government appears to have the most efficient legal framework in terms of challenging regulations. Oman is 2nd to rank among top five regional markets, while there is no country from South Asia among the top 5 in terms of “Efficiency of legal framework in challenging regulations”. Countries at number 3, 4, and 5 are UAE, Saudi Arabia and Qatar has a strong legal framework as well.

**Data Source:** The Global Information Technology Report 2009–2010 by World Economic Forum & INSEAD  
Image Source: SAMENA

## Efficiency of Legal Framework in Challenging Regulations (Global Rank of SAMENA Countries)



**Data Source:** The Global Information Technology Report 2009–2010 by World Economic Forum & INSEAD

**Image Source:** SAMENA



# REGULATORY NEWS

## **Bahrain TRA Releases 2011 Update of Retail Price Benchmarking Study**

The Telecommunications Regulatory Authority (TRA) has released the 2011 update of the retail price benchmarking study of telecommunications services in Arab countries. According to the study fixed voice tariffs in Bahrain is one of the cheapest in Arab countries compared with other Arab and OECD countries in terms of the cost of a basket of fixed voice services. Similarly, mobile prices in Bahrain have fallen by up to 25% since 2010 and broadband prices in Bahrain have fallen by up to 40% between the 2010 and 2011. Mobile broadband prices in Bahrain have amongst the lowest prices for mobile broadband in Arab countries. Over 2010-2011, prices for telecommunications services in Arab countries have generally declined, although as prices have also been falling in other parts of the world, there remains an often substantial difference between prices in Arab countries and prices in OECD / European countries. By studies, it is obvious that competition in the telecommunications sector in Bahrain is delivering benefits to consumers through a variety of telecommunications services and increasingly competitive prices.

## **FCC Calls for More Tests on LightSquared Network**

The US Federal Communications Commission has ordered more testing of LightSquared's LTE and satellite network, amid continuing concerns it may interfere with GPS services. The FCC earlier this year granted the company a waiver on certain satellite communication requirements for its network, pending the outcome of tests on avoiding GPS interference. Test results presented to the FCC in June by LightSquared show that one of its 10MHz blocks of frequencies poses interference to many GPS receivers. LightSquared has proposed using another 10MHz block of the spectrum that does not create such an interference risk; this block is lower on the spectrum band and located further away from the GPS frequencies, reducing the risk for interference. The FCC said the results thus far from testing the lower 10 MHz showed "significant improvement" compared to tests in the upper 10 MHz, "although there continue to be interference concerns, e.g., with certain types of high precision GPS receivers, including devices used in national security and aviation applications". As a result, additional tests are necessary.

## UAE Mobile Number Portability on the Line

According to Telecommunications Regulatory Authority (TRA) spokesperson, "TRA has finalized the technical tests in cooperation with Etisalat and du, where all parties including Etisalat and du have conducted intensive testing of the service. They are currently finalizing and fine tuning their systems for launch of the mobile number portability service. He added Mobile Number Portability will be launched in the third quarter in to allow for several performance and functionality enhancements to the number portability system. The service is expected to benefit the consumers as the two operators will compete to hold onto their customers. According to TRA, the active mobile subscriptions as of June were 11,179,767, of which 1,284,539 are post paid and 9,895,228 are pre-paid users.

## Operators Seek Changes to Licence Renewal Rules

Four mobile operators in Bangladesh have asked the regulator to reconsider certain rules for 2G licence renewal. Grameenphone, Banglalink, Robi, and Citycell met with the Bangladesh Telecommunication Regulatory Commission (BTRC) to discuss the VAT, service introductions, and loan regulations of the licence renewal rules, the Daily Star reports. The operators are concerned by the VAT on top of the spectrum charges. Currently, operators do not include VAT in the fees they pay to the BTRC. Another concern is that spectrum charges are to be paid in US dollars. Further concerns include the rule that operators need to seek permission from the regulator for taking out loans and provide loan related information to the BTRC. Additionally, licensees need to obtain written approval before introducing any service, offer, or package. Mobile operators will also not be allowed to have more than 50 percent of their employees in each tier come from other countries.

## IctQatar Issues Two New Class Licenses

IctQatar has issued two new class licences, one for the resale of telecommunications services, and the second for owning and operating private telecommunications networks within a closed user group. Both licences went into effect upon publishing. The class licence for resale of telecommunications services enables hotels, public call offices, internet cafes and wireless internet zones, to resell telecommunications services on a non-exclusive basis. The parties can resell all types of telecommunications services from any Individual Public Telecommunications Operator licensed in Qatar; however they must notify IctQatar prior to offering such services. The class license for owning and operating a private telecommunications network allows corporations to operate a private, closed user group network for internal, non-commercial purposes.

## Ofcom outlines plans to safeguard future supply of landline numbers in UK

The plans will avoid the need to change existing phone numbers and will mean consumers and businesses continue to enjoy the widest choice of providers. Currently, Ofcom allocates 01 and 02 telephone numbers to around 300 communications providers free of charge in large blocks. These companies then use the numbers to provide services to homes, businesses and other organisations. Ofcom has confirmed that it will manage future demand for phone numbers from new and existing communications providers by introducing local area code dialing in places where numbers are very scarce. Ofcom proposes to launch the pilot in autumn 2012 and review it around two years after implementation. Ofcom will also improve the application process for phone numbers and is working to reclaim numbers not being used by communications providers.

## AMC Wins Albania's Second 3G Licence

Albanian Mobile Communications (AMC) has announced that it has won the tender for the country's second 3G licence. The licence grants the use of 2x15MHz paired spectrum (1935MHz-1950MHz paired with 2125MHz-2140MHz) and 5MHz in the 1905MHz-1910MHz band. The regulator set the minimum price at EUR12.5 million (USD17.6 million); AMC, part of the Greek Cosmote group, reportedly entered a bid of EUR15.1 million, trumping its rival Eagle Mobile which offered EUR12.9 million. According to TeleGeography's GlobalComms Database, Vodafone was the first operator to offer 3G services in Albania, over a W-CDMA network which launched in January 2011. At the end of the June 2011 it had signed up an estimated 50,000 customers to data services.

## UAE Telecom Industry Undergoing Rapid Changes

The UAE telecommunication sector is witnessing rapid changes especially with the Telecommunications Regulatory Authority (TRA) liberalizing VoIP technology in the UAE and adding new fixed-line licences, according to a top official of Gigaset Communications. A Gigaset Communications official has said the telecom industry in the region is witnessing rapid changes, especially with the Telecommunications Regulatory Authority (TRA) liberalizing VoIP technology in the UAE and adding new fixed-line licences, Khaleej Times has reported. Shahzad Ahmed, the chief executive officer of the Munich-based company's Middle East, Africa and India division, said he views Dubai and the UAE as very important markets.



## A SNAPSHOT OF REGULATORY ACTIVITIES IN SAMENA REGION

Looking at the market dynamics and thirst for ultra high speed data transfer, the service providers are relentlessly upgrading their networks to provide the ultra-fast broadband access, which is expected to grow steadily in the coming years, and according to a reliable research study by the end of year 2014 to reach close to 153 million subscribers globally. Obviously, the rate of progress will not be uniform ever where, as each national market will be shaped by the country's inherent features and the capacity of its players. Regardless of the economic downturn the number of FTTx subscribers is rising rapidly. FTTx has greater advantage over ADSL and has the potential to cover the future needs of consumers and increase service ARPU. A careful estimate by the sector pundits reveal that this trend will prevail at even greater pace; and smelling its importance the incumbent carriers and national regulatory authorities are deeply involving them in it. FTTx service providers are trying to implement new strategies for the growth of their networks. Their business model revolves around population density, technical architecture, penetration rate and the ARPU. The incumbent operators, alternate operators and the new entrants are altogether adopting different approaches. The operators are strategizing their priorities regarding backhauling and fixed mobile convergence and how the transport network can evolve around the migration to all IP networks and for that the operators are adopting different choices to meet the ever increasing demand for more bandwidth. The evolution of new transport networks, its investment control and essential accomplishment with the legacy infrastructure is the major achievement of the equipment suppliers and manufacturers.

Regulations are important factor regarding FTTx deployment and the national regulatory authorities with the active collaboration of all stake holders are structuring new regulatory frameworks for the FTTx industry. Due to large capital cost of deployment of the networks, the tendency of the operators is to remain in metropolis. Therefore, the multi-fiber regulatory framework in highly dense areas still remains to be clarified with the regulator and the operators. In lower density area regulatory framework must be defined allowing increased network and investment sharing.

# Country-wise Regulatory Activities

## Afghanistan

The Afghanistan Ministry of Communications and Information Technology and Telecom Regulator have selected sites for 110 base transceiver stations (BTS) in under-supplied regions to be developed next year. The BTS will be paid for with the Telecommunication Development Fund (TDF), which was established in 2003 to ensure telecoms access in rural areas and collects 2.5% of telcos' gross revenues. The stations will be deployed by one of the existing operators which will expand its network into the areas outlined by the ministry and regulator, funded by a subsidy drawn from the TDF. The ministry told that the operator will be chosen by a 'competitive bidding process'. Ministry and regulator chose sites in 107 districts of the lowest-ranked 31 provinces of the telecommunications development index, none of which has any existing network coverage. The development will grant 200,000 people access to telecoms services. According to local news, telecommunications services have not been functioning at night in six provinces, including Kandahar and Helmand. The regulator told that the issue of security was of utmost importance, and steps would be taken to prevent the stagnation of the industry in those provinces. At the end of March 2011 Afghanistan had 18 million wireless subscribers, representing a population penetration of 59.6%.

## Algeria

The Algerian telecommunications ministry has confirmed the long-awaited 3G tender for the country is to be made available in September. The Telecom Minister said that the government plans to auction the new 3G spectrum next month. Analysts believe that the new move will help push Algeria into being one of the top telecom-based economies on the continent. It is believed that this licensing will create a lot of possibilities for the country and should drive further IT development in the country. According to the minister, the tender will most likely be held in early 2012 and will be open to Algeria's three mobile operators, Orascom Telecom Algeria, Algerie Telecom and Wataniya Telecom Algeria. Local reports say the licenses will cost approximately US\$40 million individually. Nedjma is the first company to declared interest in the auction and CEO said his company is committed to increasing its investments to fulfill all the license obligations as would be set and decided by the Algerian government.

## Bahrain

The Telecom Regulator told that there were 1.6 million mobile phone subscribers in the country by the end of 2010, and the telecoms industry as a whole saw revenue grow by 6.5%. In its annual report, regulator said almost 81% of mobile customers were using pre-paid services.

There were 1.4 million mobile subscribers in 2009 and 300,829 in 2002 and the mobile penetration increased from 45% in 2002 to 127% in 2010, which is one of the highest rates in the world. The number of broadband subscribers surged from 15,000 in 2002 to 200,000 last year. There were an 11% increase in mobile subscribers and a 27% increase in broadband subscribers during the year. The trends have been supported by decreasing broadband prices and faster speeds, as well as the launch of the third mobile operator. Number portability and local loop unbundling will encourage more competition in the local market. Users may have a considerable personal and business investment in their telephone number, making them reluctant to lose it despite potentially more attractive deals from other players. The Regulator published its 2010 Annual Report which covers the achievements and activities for the year 2010. As per report, year 2010 witnessed a 6.5% growth in revenues of the telecommunications sector, an 11% increase in mobile subscribers and a 27% increase in broadband subscribers. These continued positive growth trends were supported by decreasing prices for broadband services accompanied by the launch of the third mobile operator and the introduction of faster broadband services. These represent key measures of the success of the Kingdom's regulatory policy. The regulator also issued 'Fixed Broadband Analysis Report.' The objective of the Broadband Quality of Service monitoring platform was to conduct a pre-defined set of tests each hour of the day, 7 days a week and 52 weeks of the year using standard fixed network broadband connections supplied by each of the Kingdom's ISPs. The results of these tests are transmitted in near real time to, and stored in a centralized database server. Regulator aim at providing consumers with data relating to the actual quality of service achieved by each of the monitored ISP Services to allow consumers to make informed decisions with respect to understanding what is likely to be provided by each ISP on the specific measured packages.

## Bangladesh

The Bangladesh Telecommunications Ministry plans to finalize guidelines for a 3G spectrum auction by 2012. The auction would be open to domestic and overseas companies. State-owned telecommunications firm Teletalk will get a 3G license first and the company plans to test the system by the end of the year. The Bangladesh government finalized the process of how it will charge four mobile operators for renewing their licenses for the next 15 years. A high-profile meeting presided over by Prime Minister decided the rate for per megahertz of airwave. The meeting also decided to give 3G technology licenses through auction. However, the regulator and the ministry will calculate and disclose the spectrum allocation charges for the operators. The regulator also proposed a 'utilization



factor' (UF) to determine the spectrum assignment fees for the operators. However, this time the UF comes as the 'market competition factor', according to telecom ministry officials. The meeting also supported the regulator's proposal of 5.5% revenue sharing for the mobile operators, instead of 5% proposed by the ministry. However, now the operators will pay 1% of their revenue to Social Obligation Fund, a new idea to help implement the government's vision for a 'digital Bangladesh'. The meeting suggested opening voice over internet protocol (VoIP) for all who are interested. Bangladeshi mobile operators ended July with a combined total of 78.075 million mobile subscribers, up from 76.434 million in June, according to figures from the regulator. Bangladesh's government has finalized the license fee structure that will be set based on the subscriber base held by the mobile networks. Operators with a larger market share pay a premium per MHz compared to the smaller networks.

## Egypt

Egypt's three mobile network operators Mobinil, Vodafone Egypt and Etisalat Misr have requested the National Communications Committee (NCC) to reimburse the lost revenues from services that they were forcibly required to shut down during the country's uprising in February 2011. The Egyptian government having already promised to offer some recompense to the operators for the enforced switch-off, all three have now presented a report detailing their respective financial losses. The NCC has confirmed that it is now evaluating the report presented by the three cellcos. No date for a final decision on the matter has, however, been detailed. According to a new report the use of mobile phones in Egypt will exceed 100% by the end of 2012, as subscriptions climb to outnumber the country's actual population. The report issued by Business Monitor International has added that the high growth in mobile use will be driven by the appearance of new operators in the market which will serve rural areas. It also forecasts 15% of mobile subscribers will be using 3G by the year 2015.

## Iran

According to report published regarding Iranian Telecom Sector, despite a difficult operating environment and various restrictions on the operators' ability to develop their infrastructure, Iran has one of the highest SIM penetrations in the Middle East, reaching 98.27% at end-1Q11. The country's high penetration is partly due to its multiple-SIM uptake, but is also due to the demand for mobile telephony services in a majority-youth market. The lack of data services is still the main obstacle for growth with TCI and MTN aggressively trying to provide data services. However, promotional activity is limited and the operators are not able to provide a varied and attractive range of data services due to their technological constraints. More attractive local content is needed as only local content is allowed and there are very few content providers in Iran. In addition to this, what content is available is not compatible due to low quality (low speeds

and lack of infrastructure); therefore the speed of content production is not keeping up with the demand. This situation is mainly due to the lack of 3G services in the market and the delayed launch of Tamin Telecom's operations. Faced with various difficulties, Tamin Telecom has been unable to pilot its services and has had to delay its commercial launch until 1Q12. The operator, which has been granted Iran's only 3G license, has seen its board members replaced four times and is struggling to find the financial backing to launch its 2G and 3G network. It has not been able to secure enough vendors to roll out its network and the sanctions on the country and the lack of foreign investment make it difficult to source the necessary equipment. Although the regulator is pushing for a launch, it is aware of the difficulties that Tamin Telecom is facing and therefore has not imposed any fines for a late launch. No complaints have been made from the other operators in Iran due to the changes in the exclusivity agreement. The other operators can now look to launch 3G services two years after the provision of the license rather than the launch of commercial services. Due to the delayed launch of WCDMA services, the regulator has started to play more of a role in the development of the country's ICT industry in order to spur competition in the market. It is considering mobile payment services after a successful pilot by TCI and is studying the possibility of having an MVNO in the Iranian market.

## Iraq

The Iraqi Parliament decided that Iraqi mobile network operators shall pay their entire license fee within a month, instead of having payments staggered over a five-year term as originally intended. Although confusion still remains as to whether this law is binding order for the regulator, or just a recommendation by the Parliament to the government. If implemented, the country's three mobile license holders will need to find US\$ 2.85 billion in license fees and outstanding regulatory fines within 30 days. The nominally independent regulator said the vote was not binding but an affiliate of the Ministry of Communications said that it would be. The mobile networks have come under criticism from the regulator, which has imposed fines on them for poor coverage and quality of service. The operators cite attacks on their infrastructure by terrorists as the reason for their unreliable service. Iraq's three main mobile operators are unlikely to meet their upcoming deadline to list on the Iraq Stock Exchange, it emerged this week, but authorities have yet to specify what action will be taken against them. Zain Iraq, Asiacell and Korek Telecom are required to launch an initial public offering by the end of August under the terms of their operating licenses, but none has yet taken the key step of becoming a shareholding company. Iraq Stock Exchange (ISX) chief executive Taha Abdulsalam told the newswire that it will now be impossible for the three operators to meet their obligations, due to the steps they need to take before listing. Once they have become shareholding companies, the telcos will require the approval of the ISX board and Iraq's securities commission;

a decision from the former could come within 24 hours, but the latter could take up to a week, he said. Once those approvals are in place, it will be a further two or three weeks before the companies are ready to trade. However, despite the fact that the telcos are on a clear course to miss their deadline, Iraqi authorities remain tight-lipped on what action will be taken against them. "We still insist that they have to reach the license conditions within the deadline of August 31," Ahmed Alomary of Iraq's Communications and Media Commission told Reuters. He added that failure to do so would result in "penalties", but a decision has not been reached on what form those penalties will take. Reuters quoted Zain Iraq CEO Emad Makiya as saying that the IPO process is on track but it is complicated and taking longer than expected. Meanwhile in June, Korek Telecom insisted that it would abide by its license conditions, but had yet no date for its IPO, Dow Jones Newswires reported. Zain Iraq, Asiacell and Korek Telecom each paid US\$1.25 billion for their 15-year operating licenses in August 2007. The licenses stipulate that their owners must sell off a certain percentage stake, via IPO, within four years. Korek Telecom recently said it was planning to offload a 25% stake, while Zain Iraq said it would sell 20% of its shares. The country is home to around 24 million mobile customers. Market leader Zain reported having 12.3 million subscribers at the end of June, while second-placed Asiacell had 8.5 million. Korek Telecom, which saw France Telecom come on board as a shareholder in March, has around 3 million customers. The country's population is estimated by various sources at around 31 million, giving it mobile penetration of 77%.

## Jordan

The Arab Advisors Group concluded a ground breaking survey of cellular users in Jordan probing smartphones adoption and usage. The survey revealed that Symbian leads with 62% share of smartphones operating systems. iOS and BlackBerry share the second place while Android came in third. Smartphone users also prefer the English language for their applications. The Arab Advisors Group concluded a new major survey of cellular users in Jordan in July 2011. The survey report, Jordan Smartphone Survey 2011, provides the results of a major comprehensive survey of cellular users in Jordan. The survey covers general cellular usage habits; smartphone adoption and usage habits; smartphone awareness, cellular handsets' brands and models in addition to tablets availability among respondents. The final survey report and cross tabulation analysis are ready for delivery. The survey report has 62 pages and 70 exhibits. Please contact us to get a copy of the survey questions and table of contents. The survey revealed that 95.8% and 87.5% of iPhone and BlackBerry users, respectively, reported using applications through their smartphones, while 57% of Symbian smartphone users use applications. 91.4% of those who use applications prefer the applications in the English language, where only 8.2% of the respondents prefer the Arabic language. Respondents were randomly called

through a randomly generated table of cellular of phone numbers for each cellular operator. The survey results encompass answers from 750 respondents that passed rigorous quality control checks. The survey yields a confidence level of 99% with a margin of error of less than 5%. The Arab Advisors Group will conduct two other similar surveys in the UAE and Saudi Arabia in the coming 3-4 months.

## Kuwait

Representatives of Kuwait's Internet Service Provider companies and ministry officials have reached an agreement on reducing subscription fees on consumers by 42%, an official from the Ministry of Communication said. A decree on this regard will be announced within the week, "The Ministry of Communication has agreed to reduce the tax that Internet Service Provider companies pay by 42%, on the condition that the companies reduce their subscription fees to consumers by the same rate. The ministry went as far as to threaten to revoke the licenses of any ISPs that fail to comply with the new policy. The Internet bandwidth cap crisis escalated in June, when companies applied a fair usage policy on users. Representatives of the Internet Service Providers stressed that they were forced to take such measures in order to avoid straining their servers. By putting a daily download bandwidth limit on consumers, the companies guaranteed that their servers are never exhausted. A customer service representative of an ISP company noted that companies are in the process of putting together a mechanism to refund subscribers who paid fees before prices were slashed. Details will be announced within the coming weeks. Kuwait-based telecoms group Zain has reported consolidated revenues of KWD659.4 million (US\$2.4 billion) for the six months ended 30 June 2011. This figure represents an increase of 2% compared to the same period one year earlier. Meanwhile, the company's consolidated EBITDA reached KWD293.1 million during the period, a 6% improvement on the figure generated during 1H10. Elsewhere, net income for the first six months of 2011 rose 17%, to reach KWD140.2 million. The Zain group has described the results as 'gratifying' in light of currency fluctuations which saw the firm's net profit impacted by around USD75 million. In operational terms, Zain reports that customers across its network have increased by 16% year-on-year, to reach 39.6 million by 30 June 2011, equivalent to around 5.4 million net new additions. Kuwait's National Mobile Telecommunications (Wataniya) has reported that its second-quarter revenues jumped by over a third (35/2%) to reach KWD 182.3 million (US\$665.6 million), while net profit also rose, from KWD 19.6 million last year to KWD23.3 million (US\$85.2 million) in the three months to the end of June. Wataniya is a subsidiary of Qatar Telecom. "Year-on year revenue increase of 15.4 percent in Kuwait and 30.6 percent in Algeria shows that investments of previous periods are starting to pay off and that we are capable of driving progress in competitive markets," Chairman Sheikh Abdullah bin Mohammed al-

Thani said in a statement. The total customer base rose 6.8 percent to 16.9 million at the end of June. Wataniya has mobile networks in Kuwait, Algeria, Tunisia, Saudi Arabia, Palestinian Territories and the Maldives.

## Lebanon

As per figures released by the International Telecommunication Union (ITU) indicate Lebanon ranked in 100th place among 222 countries at the end of 2010 in terms of fixed broadband penetration, which is the number of subscribers to the service per 100 inhabitants. Lebanon's fell seven spots from 2009. It also came in fifth place among 20 Arab countries and ranked in 31st place among 47 upper middle income countries included in the survey. Lebanon's rank among UMICs fell five spots from the previous year and was unchanged in the Arab world. On a global basis, Lebanon ranked ahead of Tunisia, Jamaica and Vietnam, and came behind the Maldives, Georgia and Kazakhstan. It also ranked ahead of Jamaica, the Dominican Republic and Albania, and came behind Kazakhstan, Venezuela and Azerbaijan among UMICs. Lebanon had 4.73 fixed broadband subscriptions per 100 inhabitants in 2010, below the global average of 10.2 subscriptions per 100 inhabitants and the UMICs' average of eight subscriptions per 100 inhabitants. Fixed broadband penetration in Lebanon grew by a compound annual growth rate of 0.5 percent during the 2006-10 period compared to a CAGR of 40 percent in Arab countries, 31.7 percent in UMICs and 23.6 percent in developing economies. In parallel, Lebanon ranked in 100th place in terms of Internet penetration last year, which represents the number of Internet users per 100 inhabitants. Lebanon also ranked in 11th place among Arab countries and in 30th position among UMICs. Its rank improved by 12 spots worldwide and by three places among UMICs year-on-year. On a global basis, Lebanon tied with Mexico, ranked ahead of Cape Verde, Guyana and Nigeria, and came behind Suriname, Belarus and Grenada. Also, it tied with Mexico, ranked ahead of Jamaica, Mauritius and Cuba, and came behind Suriname, Belarus and Grenada among UMICs. Lebanon had 31 Internet users per 100 inhabitants in 2010, below the global average of 35.4 users and the Arab average of 31.8 users but similar to the UMIC's average of 30.6. Internet users in Lebanon grew by a CAGR of 20 percent during the 2006-10 period compared to a CAGR of 22.4 percent for developing economies, 21.9 percent for Arab countries and 11.7 percent for UMICs. Telecoms Minister Nicolas Sehawi pledged last week to take Lebanon into the next century once the fast Internet and broadband is launched in the coming weeks. The minister said a draft law calling for wide Internet price cuts and faster connection will be sent to Cabinet for approval in two to three weeks. According to other figures released by the International Telecommunication Union indicate that Lebanon ranked in 144th place among 210 countries at the end of 2010 in terms of mobile cellular phone penetration, which is the number of subscribers to the service per 100 inhabitants. Lebanon's rank fell by two spots from

2009. Lebanon also came in 15th place among 20 Arab countries and ranked in 43rd place among 46 upper middle income countries included in the survey, as reported by Lebanon This Week, the economic publication of the Byblos Bank Group. Lebanon's rank was unchanged among UMICs and in the Arab world from the previous year. On a global basis, Lebanon ranked ahead of Namibia, Senegal and Costa Rica, and came behind Canada, Montserrat and Palau. Also, it ranked ahead of Namibia, Costa Rica and Cuba and came behind Palau, Bosnia & Herzegovina and Mexico among UMICs. Lebanon had 68 mobile subscriptions per 100 inhabitants in 2010, below the global average of 78 subscriptions per 100 inhabitants and the Arab average of 88 subscriptions per 100 inhabitants. Mobile cellular penetration in Lebanon grew by a compound annual growth rate (CAGR) of 26 percent during the 2006-2010 period compared to a CAGR of 23.4 percent for developing economies and 22.3 percent for Arab countries. In parallel, Lebanon ranked in 92nd place among 218 countries in terms of fixed telephone lines penetration last year, which represents the number of subscriptions to fixed telephone lines per 100 inhabitants. Lebanon also ranked in first place among Arab countries and in 24th position among 48 UMICs. Lebanon's rank improved by 15 spots worldwide, and by four places among UMICs and Arab countries year-on-year. On a global basis, Lebanon ranked ahead of Czech Republic, Romania and Kuwait, and came behind Brazil, Trinidad & Tobago and China. Also, it ranked ahead of Romania, Chile and Macedonia, and came behind Brazil, Lithuania and Turkey among UMICs. Lebanon had 21 fixed telephone lines subscribers per 100 inhabitants in 2010, above the global average of 17.2 subscriptions and the Arab average of 9.8 subscribers per 100 inhabitants. Fixed telephone lines penetration in Lebanon grew by a CAGR of 6 percent during the 2006-2010 period, compared to a CAGR of -2.2 percent for developing economies and 0.5 percent for Arab countries.

## Morocco

Morocco's Finance Ministry plans to sell a 7% stake in Maroc Telecom on the Casablanca bourse. The Moroccan government holds a 30% stake in the biggest telecom company, with Vivendi holding 53%. The ministry said in a statement the call to bid is aimed at selecting an investment bank that is required to advise it on the best way to maximize the amount of the eventual sale and protect the company's stock market price after the operation. The ministry noted, however, that the operation will only take place if the market conditions are set fair and the operation's goals achieved, to avoid a repeat of last year's planned 8 percent stake sale, which was ultimately scrapped. According to the Regulator Morocco saw a 4.79% increase in mobile subscribers in the second quarter, reaching a total of 34.98 million. Of all the mobile subscribers, 33.56 million were prepaid. The penetration rate grew to 108.66% from 104.78% at the end of March. Maroc Telecom's customer base rose to 16.99 million from 16.66 million, Medi Telecom's grew to 11.35 million from

11.12 million, and Inwi's surged to 6.63 million from 5.6 million. Their market shares stood at 48.6%, 32.46% and 18.95% at the end of the second quarter. The Moroccan government cancelled the sale of part of its 30% stake in Maroc Telecom, the second time it has done so in less than a year. The proposed sale of a 7% stake prompted opposition parties to summon the country's finance and economy minister to parliament for an explanation, and on Friday the finance ministry confirmed that the tender had been cancelled.

## Nepal

According to the figures issued by the regulator Nepal had 13.16 million telephony users on July 14, up from 12.83 million in mid-June. The total comprises 11.60 million mobile subscribers, 839,317 fixed-line subscribers, and 721,518 other telephony users (satellite and limited mobility services). Furthermore, Nepal counted 3.11 million internet users. The number of mobile customers grew from 11.30 million in June to 11.60 million in mid-July. Of the total, 10.74 million were GSM users, up from 10.44 million a month earlier, and the remainder use Nepal Telecom's CDMA service called Sky Phone. Spice Nepal (Ncell) led with 5.61 million GSM subscribers, up from 5.42 million, followed by Nepal Telecom with a customer base of 5.12 million, up from 5.01 million a month earlier. The number of fixed telephony users in Nepal rose to 839,317 from 837,705 in mid-June. Of the total, 608,979 were PSTN users and 230,338 were WLL users. Nepal Telecom grew its PSTN base to 603,291 from 601,452, followed by STM Telecom Sanchar with 5,090 customers, and Smart with 598 PSTN subscribers. Nepal Telecom also had 157,095 WLL users, United Telecom had 70,741 customers, and Nepal Satellite Telecom had 2,502 WLL subscribers. Furthermore, the country counted 3.11 million internet users, up from 2.94 million reported in mid-June and the penetration rate stood at 10.89 percent. Some 2.83 million people connect to the internet using GPRS, followed by 154,548 internet users that connect through CDMA 1X. Some 68,343 internet subscribers use ADSL and there were also 15,629 cable internet users, and 20,355 dial-up users. Also, 22,288 internet users connect through other wireless or fiber optic technologies. The regulator is planning to shift frequency carrier of United Telecom Ltd (UTL) from GSM band to CDMA. Currently, UTL is using frequency under CDMA 800 band and 1900 band. "Of which, CDMA 880-890 band can be used for both CDMA and GSM technology," the source said. Currently, UTL is using three carriers 824-827 MHz paired with 869-872 MHz (2x3 MHz) and 840-841.25 MHz paired with 885-886.25 MHz (2x1.25 MHz) under CDMA 800 band and 1855-1860 MHz paired with 1935-1940 MHz (2x5 MHz) under CDMA 1900 band. Due to the fairness of procedure the Public Accounts Committee (PAC) of Nepal, the parliamentary special committee which provides the oversight of public funds, has directed national state-owned PTO Nepal Telecom (NT) to scrap a planned 'bridging project' designed to add around 1.5 million GSM and CDMA mobile lines in the country, and re-launch the

tender from scratch. The regulator reported that the number of mobile phone users in the country reached 10.7 million at the end of the fiscal year (July 15). Approximately 3.9 million new subscribers were added during the year, with Ncell attracting 2.7 million of those and partially state-owned Nepal Telecom accounting for the remainder. The regulator noted that declines in tariffs, increased competition between the two operators and changing lifestyles led to the rise in subscribers. Sub-committee of Public Accounts Committee under Legislature Parliament is concerned over the recent decision of the regulator that has proposed to allow existing and new telecom operators to operate almost all types of telecom services with a single license. In the latest series of dispute regulator proposed Ministry of Information and Communication to grant the license to operate all telecom services charging a license fee of Rs 295 million. The authority has dubbed it 'unified licensing policy'. The amount of the license fee is even lower than the authority's earlier proposal fixed forth four years ago.

## Oman

The Telecom Regulator is considering plans to link mobile phone SIM cards of expatriates to their resident card. The SIM card will automatically get cancelled along with their resident card upon their exiting the country at the end of their service contract. The number of subscribers in Oman's fixed phone service dipped slightly to 279,257 at the end of June 2011, compared with 281,755 at the end of December 2010, constituting a 0.9% drop. Subscribers of billed fixed phone service in the Sultanate stood at 205,970 at the end of June 2011, from 200,467 subscribers at the end of 2010. Subscribers of pre-paid fixed phone service (Sahl) stood at 27,694 at the end of June 2011, against 37,523 in 2010.

## Pakistan

According to a document 'Vision 2020' prepared by the telecom regulator the total telecom investments in Pakistan will reach US\$ 2.4 billion by 2020, telecom sector revenues would cross Rs. 620 billion by the same year and mobile subscribers are expected to be around 161 Million, approximately 89% of the total population. According to the "Vision 2020" document, owing to the continued trend towards mobile services, the fixed line subscribers would more or less maintain the 5 million average till 2020 while the broadband subscribers are expected to be 19.5 million. The PTA "Vision 2020" document says that, during the next ten years, improved quality of telecom systems and services would become a critical determinant of competitiveness in ICT. The growth and development of ICTs today has led to their wide diffusion and application, thus escalating their economic and social impact across the countries. Realizing the importance of upcoming convergence era where both information and communication technologies would be offered through a same platform, it is also fostering its efforts to promote the ICT sector by its proactive initiatives. PTA sticks to its mission of envisaging new and emerging technologies and their implications in a comprehensive

regulatory framework to continue to provide fair and competitive market for the stakeholders, as well as to ensure high Quality ICT services. The next ten years would bring in a ubiquitous personalized communication lifestyle where any service can run on any device, on any network and in any location over a Broadband connection. Only 0.47% of our population has attained subscription to broadband. Broadband 2.0 networks will eventually replace the current broadband networks. Moving to these new networks offers the chance to increase efficiency and reduce operating costs in the longer term for network operators and Broadband is a key tool to achieve these remedial actions, the document added. e-Pakistan is a unique concept that has been envisioned for the next ten years. The notion aims to employ the substantial telecommunication infrastructure both in terms of fixed and wireless for resolving the nation's social issues like literacy and health. These well built communication highways could be utilized to outreach a large segment of masses unable to encompass basic health and education services. The concept also focuses for knowledge sharing in different domains of ICT for development and facilitates multi stakeholder partnerships and networking among governments, industry, academia and civil society organizations of Pakistan. A huge wave of local content and applications is to be provided through this infrastructure enabling it to bring apposite values to people of Pakistan way beyond than the basic voice and data services. Document says that, Mobile cellular technology has been primarily focused on the consumer market, acting as a substitute for often unavailable wired telephony. Now visions of 4G and beyond, including established technologies such as WiMAX are heralding the age of convergence. The most prominent example of convergence is TV over telecom networks. Mobile phones are now capable of running sophisticated applications and have become an important platform through 3G platforms. Mobile payments would stand as the most demanding service; the present effort by PTA to shape up mobile banking regulations in collaboration with State Bank of Pakistan is result of this foresee approach towards smoothening regulatory framework for mobile payments. Agriculture as a primary sector of the economy also encompasses huge potential to offer mobile agriculture services to farmers and food production companies. The "Vision 2020" Document further said that the most business models of telecom sector currently still rely upon subscriber line rentals and usage charges. Increasingly, new revenue streams are appearing in the form of either access (usually to a Web-based service) or carriage charges (usually paid by content provider) or revenue-sharing with the providers of content and application services. This new revenue streams are expected to come into play especially for fixed line telecommunication market. Moreover, with the emergence of all-IP Next Generation Networks (NGNs), Internet Protocol Virtual Private Networks (IPVPN) will integrate voice and non-voice communications for enterprises. It may be kept in mind that most profitable business for fixed line operators is the enterprise data

market yet voice traffic remains a cash cow, a continuing source of liquidity that makes the efficacy aspect of the larger telecom companies, the document added. The year 2020 will witness Pakistan as a country with 100% NGN infrastructure. The divisions between voice & data, circuit switch or packet or cellular and fixed- line, telecom or broadcasting would be a thing of the past, and operators will providing a host of services on a converged infrastructure platform. The Foreign Direct Investment (FDI) inflows for telecommunication sector stood at US\$ 15 million in the first month of current fiscal year 2011-12 (July), State Bank of Pakistan (SBP) reported. The telecom sector's share for FDI remained second highest after oil and gas sector, which got a total of US\$ 29.8 million in the month of July 2011-12. Month of July 2011 showed 14,800 percent growth as compared to mere US\$ 0.1 million in same month during last fiscal year. Analysts predicted that FDI in telecom sector is likely to rebound its growth in the coming years the way it recorded huge investment in flow during recent years owing to development and advancement in cellular phone and broadband sectors. In the 2005-08, the telecom sector attracted US\$5.086 billion in the country which is considered a boom period of telecom industry as cellular and wireless operators continued to invest huge capital on infrastructure expansion, maintenance and marketing. In 2005-06 the telecom sector FDI landed recorded US\$ 1.905 billion that is the highest share of 54% in overall FDI. Value added services such as 3G and Mobile-Banking will be major areas for telecom operators, banks and content services providers to invest millions of dollars to launch latest technology in Pakistan. The broadband sector has potential to attract million dollars investment in the upcoming months due to massive expansion of their service network and physical infrastructure in the big untapped market. Moreover FDI may land through various potential sectors including LDI operators, MVNO, class value service providers such as vehicle trackers, satellite and wireless communication services. The FDI in the telecom sector has fell by 79% in the closing financial year of 2010-11. The overall telecom sector including LDI, cellular, broadband and various class value-added service providers have brought merely US\$ 79.1 million FDI in the closing fiscal year 2010-11 as compared with US\$ 374 million in the previous fiscal year 2009-10. The Foreign Direct Investment (FDI) inflows for telecommunication sector stood at US\$ 15 million in the first month of current fiscal year 2011-12 (July), State Bank of Pakistan (SBP) reported. The telecom sector's share for FDI remained second highest after oil and gas sector, which got a total of US\$ 29.8 million in the month of July 2011-12. Month of July 2011 showed 14,800 percent growth as compared to mere US\$ 0.1 million in same month during last fiscal year. Analysts predicted that FDI in telecom sector is likely to rebound its growth in the coming years the way it recorded huge investment in flow during recent years owing to development and advancement in cellular phone and broadband sectors. In the 2005-08, the telecom sector attracted US\$5.086 billion in the country which is considered a boom period of telecom industry as cellular and wireless operators continued to invest huge capital on

infrastructure expansion, maintenance and marketing. In 2005-06 the telecom sector FDI landed recorded US\$ 1.905 billion that is the highest share of 54% in overall FDI. Value added services such as 3G and Mobile-Banking will be major areas for telecom operators, banks and content services providers to invest million of dollars to launch latest technology in Pakistan. The broadband sector has potential to attract million dollars investment in the upcoming months due to massive expansion of their service network and physical infrastructure in the big untapped market. Moreover FDI may land through various potential sectors including LDI operators, MVNO, class value service providers such as vehicle trackers, satellite and wireless communication services. The FDI in the telecom sector has fell by 79% in the closing financial year of 2010-11. The overall telecom sector including LDI, cellular, broadband and various class value-added service providers have brought merely US\$ 79.1 million FDI in the closing fiscal year 2010-11 as compared with US\$ 374 million in the previous fiscal year 2009-10. According to the figures released by the Regulator, Pakistan ended May with 1.40 million broadband subscribers, up from 1.35 million subscribers in April. The number of DSL subscribers rose to 654,707 compared with 635,551 a month earlier, while the number of WiMAX internet users slumped to 397,155 from 406,498 WiMAX users in April. Some 294,161 people connect to the internet via EV-DO, up from 255,803 in the prior month, and 42,490 people used HFC to access the internet, compared with 41,621 HFC users in April. Furthermore, there were 6,222 FTTH users in May, up from 6,087 a month earlier, and 1,873 broadband subscribers used other technologies. Pakistan also ended June with 108.89 million mobile subscribers, up from 108.59 million in May, and total mobile teledensity stood at 65.4 versus 65.2. Ministry of Information Technologies, its affiliated companies and departments are looking forward to amicable solution of all the issues faced by telecom operators within the framework of rules and regulations. In a meeting with CEO of different telephone companies Secretary Information Technology assured that government will welcome guidance and suggestions from the industry for settlement of all outstanding issues. The meeting focused on financial, legal and administrative issues besides matters of outstanding Universal Service Funds (USF) contributions including APC for USF and Spectrum charges. Moreover the issues related to grey trafficking in telecom sector, cancellation of licenses of telecom operators and late fee charges on outstanding payable amount were also discussed in the meeting. While highlighting the importance and contributions of telecom industry in the social and economic sectors, the representatives of telecom companies stressed to revisit the telecom policy of 2004 for ensuring better facilitation of telecom operators. According to the regulator authorities and network operators can't detect over 70% of illegal telephony traffic, due to limited resources and non-up-gradation of equipment. Chairman PTA told this to Senate's Standing Committee on Information Technology and Telecommunication, which expressed concerns over

the illegal grey traffic issue. Chairman told that the existing monitoring system is capable of detecting limited number of Voice over Internet Protocols (VoIPs) whereas a VoIPs protocol evolves continuously. Therefore, the monitoring capability of Pakistan is limited. He said both legal and illegal operators had been involved in gray trafficking and even some people installed VoIP equipment in their homes. The existing monitoring system is capable of checking only 30% international voice traffic while the 70% passed without check. The up-gradation of equipment requires about US\$10 million, which could save at least US\$137 million per annum. Now the problem is not that the equipment is costly and Pakistani authorities and operators can't afford it. It's APC rate that's set so high that it becomes unviable for legal operators to terminate the calls on their network through legal means. In simple words, for each international incoming call if an operator has to pay 5 rupees per minute as APC, then isn't it more viable to illegally terminate this same minute for mere 3 rupees or even less? The issue is set as unresolved. Operators are competing with low priced VoIP telephony companies which they can't if APC is there. In the presence of APC, operators decided not to upgrade their equipment at all to save some money that they can. Wireless Local Loop (WLL) sector has witnessed significant recovery in the growth of subscriptions amid day-to-day basis charges, lower call and short message service (SMS) rates for domestic and international destination. The wireless phone subscription increased 213% in the outing fiscal year (FY) 2010-11 with the addition of 132,924 or (0.13 million), which shows an average 11,077 monthly growth in subscribers' base. However, the growth in connections in the closing fiscal year did not equalize the impressive increase of base in the past years. The wireless sector subscribers based widened by 376,655 in 2008-09 as against a mere 42,417 in 2009-10. The wireless phone operators suffered cutting-edged competition with six players in the market and two of them have left to join broadband sector in past years while they are more operators, who may shift their services from wireless telephony to broadband internet services. WLL services are mostly used for commercial purposes in the form of public call office, particularly in rural areas whereas some operators have introduced these services through handset as mobile phone set to push up users' growth in industrials sector as well. The total revenue of Rs 2.3 billion have been generated by the WLL companies during the first two quarters of FY 2010-11 compared with Rs 1.8 billion during the previous two quarters (Jan-Jun10), showing 27% growth in revenues.

## Qatar

The Telecom Regulator issued 'Qatar Digital Media Landscape Report 2011'. The report is an in-depth review of the digital media ecosystem in Qatar, measuring the impact of the Internet on individuals and businesses, and identifying trends in usage, attitudes and preferences associated with digital content in the country. The Digital Media Report gives an overview of the digital media ecosystem in Qatar, details usage across segments,

addresses how digital content is generated in Qatar and what the growth drivers are in the digital media sector. Among individual users, Internet penetration stands at 82% overall in Qatar, with emailing, downloading music and movies, watching videos, and researching goods and services representing the most popular usages. Not surprisingly, younger users make-up a large portion of overall Internet users and represent the most active group. The majority of Internet users (89%) access the Internet from home, and 24% of users in Qatar access Internet on their mobile devices. The report found that Internet users in Qatar primarily accessed websites in English, with only 29% accessing the Internet in Arabic, despite 42% of the population having Arabic as their first language. For both English and Arabic speakers, search engines were the most frequented websites, with social media sites such as Facebook being the second most popular online usage. Online newspapers were also accessed by 38% of Internet users in Qatar, with the Gulf Times being the most popular local online English language newspaper, and Al-Sharq being the most popular online Arabic newspaper. In terms of international online news outlets, BBC was the preferred choice for English speakers, while Al Jazeera was the preferred choice for Arabic speakers. The Digital Media Landscape report also highlighted efforts by Qatar's government and private institutions to enhance its communication infrastructure, citing this as a major driver for future growth in the digital media sector. This included the Qatar National Broadband Network, the Es'Hail Satellite Program, and the international submarine cable project. The report also sites some challenges facing the development of digital media in Qatar, including privacy, the security of data and personal information, and the protection of intellectual property rights. Forty-three percent of survey respondents stated they were not very confident about the security features available on the Internet. ictQATAR has taken the lead to address some of these concerns, including the development of the National Information Assurance Framework, investing in building IT skills among its people, introducing a Digital Content Incubation Center to support entrepreneurship in the sector, and establishing a Creative Commons affiliate in Qatar as one way to address digital content rights.

## Saudi Arabia

The Telecom regulator hold a second consultative meeting with the heads of telecommunications and information technology services providers to discuss a number of issues related to developments in the sector and removing obstacles for companies to provide better services to the users and to discuss the agreement signed between the service provider on mobile number portability (MNP). The broadband plans of the participating companies were also discussed. The consultative meeting with the CEOs of the service providing companies is held periodically at CITC under the chairmanship of the Governor of the Board.

## Sri Lanka

The Sri Lanka Telecom recently released the interim results for the second quarter, period to end-June 2011, of its financial year ending June 30, 2012, in which it showed virtually flat, 1% year-on-year (YoY) group revenue increases, for both Q2 (second quarter, April to June 2011), to Rs. 12,443 million, and H1 (first half, January to June 2011), to Rs. 24,853 million. This was despite significant YoY climbs, 387%, to Rs. 219 million, in Q2, and 162% to Rs. 286 million, in H1, in other income for the group in 2011. At the same time, SLT also indicated YoY group net profit for the period jumped 49% in Q2, to Rs. 1,142 million, and 77% in H1, to Rs. 2,437 million. Financials also showed line items for a receipt of a refund pertaining to the Telecommunication Development Charge (TDC), amounting to Rs. 151 million in 2010's Q2, and a Voluntary Retirement Scheme (VRS) payment of Rs. 188 million in 2010's Q1. Additionally shown, 2011 H1 line items including: "Acquisition of property, plant and equipment," at Rs. 6,773 million (up from 2010's Rs. 2,716 million), "Acquisition of intangible assets," at Rs. 271 million (up from 2010's Rs. 71 million), and "Purchase of short term investments," at Rs. 770 million (down from 2010's Rs. 1,756 million). Further, according to the segmental analysis included, 2011 H1 revenues for SLT's fixed line (including CDMA) and external gateway operations business segments fell to Rs. 7,924 million (from 2010's Rs. 8,265 million) and Rs. 3,911 million (from 2010's R. 5,400 million), respectively, while mobile revenue rose to Rs. 8,375 million (from 2010's Rs. 7,522 million). However, also shown, operating profits for all segments in 2011 H1 went up compared to the corresponding period in 2010, with a significant increase (Rs. 201 million) also attributable to SLT's fixed line business. Meanwhile, a SLT statement noted: "Cost optimization initiatives together with reduction in volume driven costs have resulted in a significant reduction in operating cost by 8% compared with the same period of last year at company level. In terms of revenue, the company is currently engaged in expanding its non-traditional revenue streams such as Broadband, PEO TV and wholesale, while focusing on sustaining traditional revenue streams such as fixed voice. Strategic initiatives taken to improve the non-traditional revenue by promoting double play and triple play have shown encouraging results. Despite the pricing pressures, the fixed wired line customer base continued to grow by 4% to 918,200 year on year." Also revealed, "Mobitel recorded revenue growth of 12%, mainly contributed by the increase in subscriber base by 650,000 to exceed 4.4 million" and "Mobile Broadband has also grown rapidly and its contribution to overall revenue is increasing steadily."

## Sudan

The Telecom Regulator during the month invited bids to install and operate, the Mobile Number Portability Clearing System. The dead line for submission is September 11, 2011.

## Tunisia

During the reporting month, Tunisie Telecom launched a major marketing campaign to promote its new 3G++ service. The faster data service at up to 42Mbps is available in nine provinces, including the greater Tunis area, Nabeul, Sfax and Sousse, covering 40 percent of the population. The operator expects to cover the entire country by the end of this year. Prepaid customers can access the service at a cost of TND 0.10 per 10KB, or buy a daily pack of 500MB for TND 2 or monthly pack of 1GB for TND 30. A postpaid plan of 6GB at TND 30 per month is also available. The operator also offers plans for access from a computer with a new USB modem.

## Turkey

According to a recent report published during the reported period, Turkey's mobile communication sector will offer many business opportunities for both domestic and foreign investors as information technology (IT) becomes the fastest growing sector in the country by the end of 2011. Some important indicators of a country's level of development are the number of mobile phone users, how many people have their own computer and Internet access, and the availability of broadband Internet. These indicators have been growing at a very fast pace in Turkey over the past few years and have created millions of jobs. Leading mobile operator Turkcell's profits were up by 4% to TL 1.8 billion in 2010 as a result of the growing mobile Internet market. Avea saw the highest increase in profits in the industry, with a 508% rise in the past year over 2009. Its profit rose to TL 332 million, while those of Vodafone, formerly known as Telsim, were recorded at TL 447 million, reflecting almost 12% growth. According to the Deloitte report, there are 61.8 million mobile phone users in Turkey, which puts the extent of mobile phone usage at 85%. Considering that the EU average is 126%, with Finland having the highest rate in the region at 156%, there is still room for development in Turkey's mobile telecommunication. "2011 will be a year for maturity in the Turkish IT sector. Turkey will match global growth in this sector," the Deloitte report noted. "The speed of development in the mobile telecommunication market has slowed down in 2010, but the quality of voice and data transfer via the mobile network has increased tremendously. Forecasts show that voice transfer will lose its top position in mobile communication to data and visual transfer in the mid-term." According to International Telecommunications Union (ITU) data, there were 500 million households with Internet access in the world, and Internet users doubled between 2008 and 2010 to 2 billion. It is expected that in five years time, mobile traffic around the world will increase to 66 times its current volume. Seventy-five percent of this traffic will be data transfer and the remaining 25% traditional voice calls. Recent research conducted by the Yankee Group shows similar results. By 2013, revenues from mobile Internet will account for 26% of mobile operators' total revenues, which is in line with the huge interest in smart phones and tablet PCs. To keep up

with these developments, GSM operators should pay more attention to changing technology and allocate more investment to mobile data connections. Despite the growth in the Turkish IT sector and especially in the sub-sector of mobile communication, foreign interest in this sector so far is limited to Vodafone's (UK) acquisition of mobile operator Telsim and the 55% interest in Turkey's fixed line operator Türk Telekom that is held by Oger Telecom (Dubai). To increase the attractiveness of this sector to foreign investors, Turkey should lower its mobile taxes, which are currently at a level of about 60 percent, whereas the world average is between 5 and 20%, and should also offer more standardized mobile fees to consumers, the report noted. The huge increase in mobile data traffic seems to have been triggered by the development of high-tech products such as tablet PCs and smart phones. Since the trend toward using these products cannot be stopped, GSM operators should restructure their growth strategies in line with a shift to data and visual traffic.

## United Arab Emirates

During the reported period the Telecom regulator released its business survey entitled "ICT in UAE; Business Survey - 2011". The survey focuses on business usage of ICT services in the UAE with the aim to better understand business perception on their usage, and demands for, ICT services. A total of 1,500 businesses across the UAE participated in this Survey. The survey was limited to businesses with 10 or more employees. The Survey spanned multiple services including fixed telephony, mobile telephony, Internet, advance telecommunication services and E-commerce. Across these services, the survey examined the access to, and the use of ICT by businesses in the UAE along with their engagement in E-commerce and their satisfaction levels. The Telecom Regulator discussed best practices relating to the role of the telecoms sector during emergencies and crisis situations in a recent meeting held with UK Cabinet Office representatives. The main objective of this meeting was to develop the existing plans and capabilities of the regulator in relation to emergency management and to benchmark best practices with the UK Cabinet Office concerning this sector. The meeting covered major topics including the resilience of the telecom sector in the UK, the role of the UK telecom regulator during emergencies, cyber security, and how to deal with critical infrastructure. The British delegation shared experiences from several crises they have faced during the past few years; discussing how the telecommunications sector reacted to them. The UK Cabinet Office also organized a meeting for the UAE delegation with one of the telecommunications operators in the UK, in addition to arranging a meeting with OFCOM, the UK telecommunication regulatory authority. The regulator awarded Al- Maisan Satellite Communications Company (YahLive) a ten-year satellite services license for Broadcasting Satellite Transmission of Services. This license enables YahLive to transmit direct-to-home satellite television services from the UAE. YahLive's services will be available throughout the Middle East, North Africa, Southwest Asia and Europe. The license states that the



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## PPP AS A MECHANISM FOR GREATER EFFICIENCY- SINGAPOREAN CASE

After years of domination of the planned economy strategies, most of the countries in the MENA region, and especially the developing ones, are moving towards applying market economy plans. In a market economy system the state opens the market for competition and doesn't interfere enforcing specific commercial schemes, it mainly sets up policies and regulations frameworks. When moving to open market strategies the term "public-private partnership" proves strong capabilities in restructuring the role of governments as used to be seen the sole service provider. PPPs present a framework that—while engaging the private sector—acknowledge and support the role for government in ensuring that social obligations are met and successful sector reforms and public investments are achieved. In order to achieve an efficient PPP model, the partnership should be structured in a way that ensures cost minimizing, risk management, and performance improvement. There are many reasons that encourage government to go for PPP especially in infrastructure development projects, such as attraction of private capital investments, increase efficiency, and reforms sectors via relocation of roles, incentives, and affordability[1]. Telecom industry is one of the crucial pillars of nation's economy; therefore, the development of the telecom

sector will directly affect the progress of the overall economy. PPP adoption on infrastructure development, such as broadband, proved marvelous results in terms of increasing the penetration rates, improving quality of service, and cutting costs.

Service contracts; management contracts; lease contracts; build-operate-transfer (BOT) and similar arrangements; concessions; and joint ventures are different types of PPP structures. There are various factors that affects the decision makers in selecting which structure is the most suitable to implement, one size does NOT fit all. The public authority (government) must study intensely and carefully the local capacity available to implement options that are more complex. PPPs with complicated financial structures and/or extensive contractual or monitoring requirements will necessitate hiring and/or training staff, a process that has to be accomplished in advance of the need. In case of broadband "Concessions" is considered to be the most appropriate structure for PPP. A concession makes the private sector operator (concessionaire) responsible for the full delivery of services in a specified area, including operation, maintenance and collection.

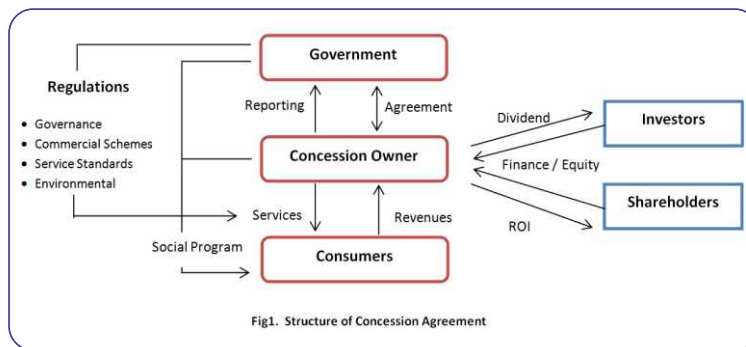
The public sector is responsible for forming performance standards and ensuring that the concessionaire meets them. In essence, the public sector's role shifts from being the service provider to regulating the market by monitoring the pricing, quality of service, licensing, and fair competition. A concession contract is typically valid for 20–25 years so that the operator has sufficient time to recover the capital invested and earn an appropriate return of investment. On the other side, the public authority may contribute to the capital investment cost if necessary. This can be an investment "subsidy" (viability gap financing) to achieve commercial viability of the concession. Otherwise, the government can be compensated for its contribution by receiving a commensurate part of the tariff collected in some cases it will be a fixed percentage from the net profit of the operators on a yearly basis.

public places – it is a global leader in terms of provision of access to broadband Internet nationwide. In the 1980s, the government started to focus on the private sector uptake of IT by creating a software development industry, encouraging universities to bring in teachers with IT backgrounds, and updating laws on intellectual property rights. In the 1990s, the government conducted a study of how broader uptake of IT could be encouraged at the national level and – with extensive consultations with the private and public sectors – formulated the IT2000 Master Plan. A few years after the Master Plan was issued, the Internet arrived in Singapore through its universities.

Through the government-led initiative, Singapore ONE (One Network for Everyone) launched in 1996, Singapore became one of the first countries in the world to have a fully

digital telecommunications network. Singapore ONE was planned to provide a test bed for future IT applications and to position Singapore as the regional hub for ICT innovation. The effort was led by five public agencies: the

As stated earlier, the public authority should make an extensive study before proceeding with the application of PPP. Legal, regulatory, and policy frameworks; technical issues; institutional and capacity building; commercial, financial,



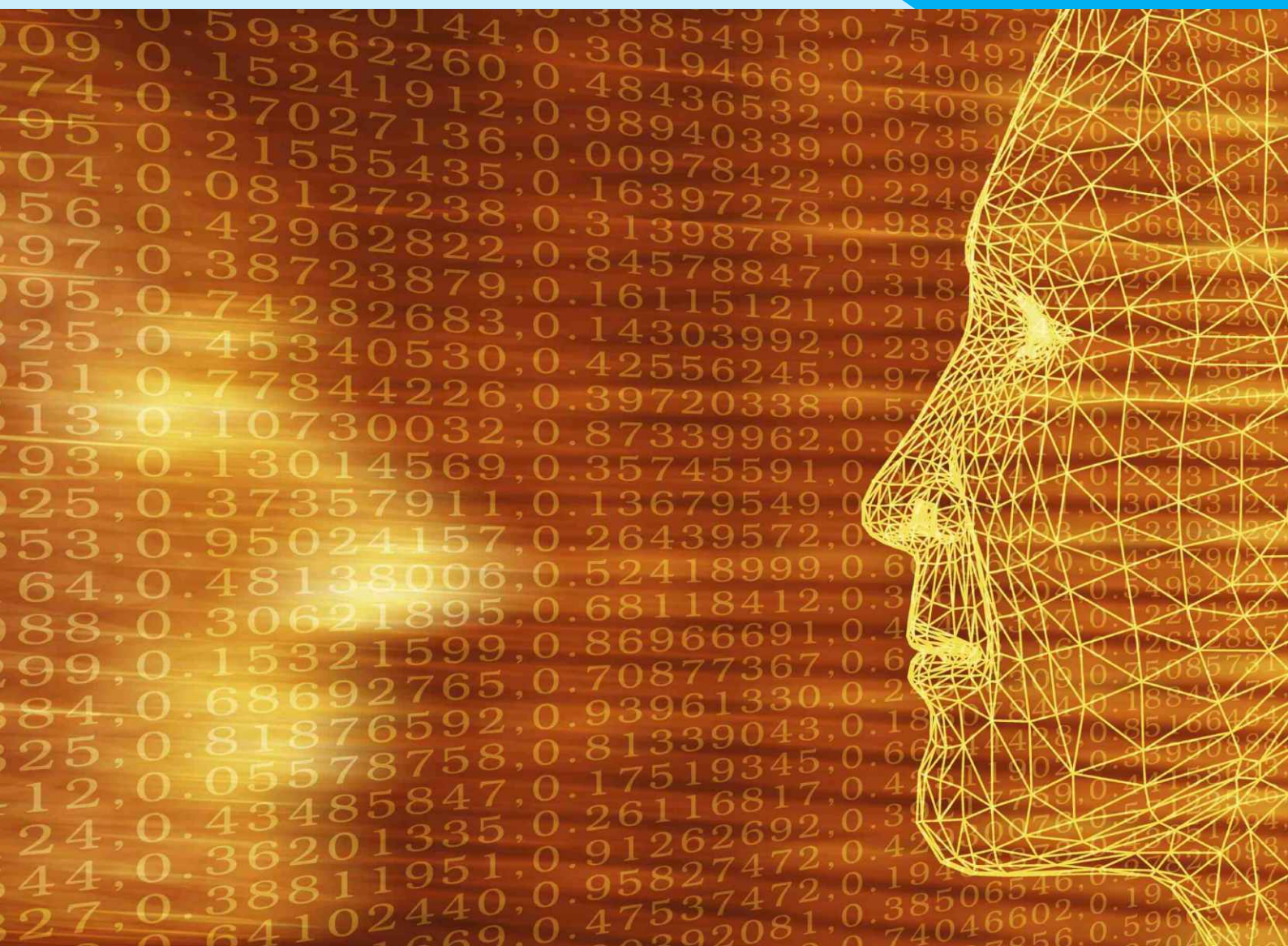
and economic issues should be explored deeply in the preparatory stage as this will culminate in the achievement of an environment conducive to sustainable reform and in a well-defined, documented, and agreed-upon PPP process. Focusing on regulatory and policy frameworks will end up by reviewing existing laws, regulations, and contracts in a way to identify gaps and obstacles to apply PPP mechanism, which may require in many cases setting new laws and legislations. In general, implementing a specific PPP structure often forces concrete reform steps to support the new allocation of sector roles such as the passage of laws and establishment of new regulatory bodies. Also, the service provider from its side should revisit internally the way the PPP structure will affect its corporate strategy, taxation system, dispute resolution procedures, and labor laws.

Authority of Singapore (TAS), the National Computer Board (NCB), the National Science and Technology Board, the Economic Development Board, and the Singapore Broadcasting Authority. While Singapore ONE started up the broadband industry and established the platform over which local Internet traffic is exchanged today, the second nationwide infrastructure initiative "Next Gen National Broadband Network (NGNBN)" comes into sharper focus with the objectives of deploying and upgrading the infrastructure into a nationwide ultrahigh-speed fiber access infrastructure and a complementary persistent wireless network. It is part of the Intelligent Nation 2015 (iN2015) masterplan, and the broad objective is for the new infrastructure to support new industries like the digital media and the biomedical sciences industry as next engines of growth for Singapore's economy. It is inferred from what is mentioned above that PPP in the Singaporean case is clearly represented since the early stages of ICT sector development mainly in functions separation practices.

Singapore represents an obvious example where PPP played a crucial role in enhancing the broadband development nationwide. The Singaporean Government has undertaken two significant policy initiatives aimed at achieving nationwide infrastructure deployment that provide lessons learned for other countries. Lessons learned include those of approaches to increase competition in infrastructure in a limited market environment, and the use of new technologies and value-added services to foster competitive behavior. Singapore has had an island-wide fiber optic network since 1999 and ADSL broadband service has been available since 2000 and – with the government's recent wireless initiative to extend broadband access beyond homes, schools and offices to

**George Victor Salama**  
Senior Manager, Public Policy  
SAMENA Telecommunications Council

*Klaus Felsinger, Asian Development Bank, PrivateSector Development Section. "Public-PrivatePartnership Handbook" management, and construction and rehabilitation of the system. Notably, the service provider is in charge of all capital investments.*



## TOP TECHNOLOGY UPDATES

### SaskTel Plans to Launch LTE Services in 2012

SaskTel has announced plans to deploy Long Term Evolution (LTE) technology in 2012. The current SaskTel 4G wireless technology has a download speed of about 21 Mbps while the LTE technology is expected to have a download speed of 100 Mbps and an upload speed of 50 mbps. Sources claim that according to Bill Boyd, Minister Responsible for SaskTel, the LTE technology will have a major significance in improving the customer experience by providing customers with faster data speeds than the existing 4G network. The initial deployment of the LTE technology is expected to begin in the fall of 2012 to Regina and Saskatoon, and surrounding areas. Reports also suggest that LTE will be deployed to other urban and rural areas starting in 2013 based on the demand for incremental data services.

### Marvell Launches LTE World Modem Technology

Silicon products developer Marvell has launched its PXA1801 single-chip LTE world modem for global mobile communications. The PXA1801 single-chip LTE world modem combines Marvell's communications and silicon expertise to enable the design of an array of internet-connected devices, including smartphones, tablets, laptops, automotive, set-top-boxes and TVs. The PXA1801 is a Mobile Multi-RAT design combining 3GPP R9 Cat 4 FDD-LTE and TDD-LTE with R8 DC-HSPA+ for both WB-CDMA and TD-SCDMA standards and EDGE delivering the data rate available in any given geography. Marvell has integrated advanced R8 WCDMA HSPA+ (42 Mbps DL) and R8 TD-SCDMA HSPA+ (8.4 Mbps DL) capacity enabling that consumers have access to their data regardless of infrastructure availability in any one location.

## Worldwide UMTS - HSPA Subscriptions surpass Three Quarters of a Billion

Latin America saw remarkable uptake of mobile broadband in Q2 2011 with an annual growth rate of more than 90 percent, close to double the number of mobile broadband subscriptions, for UMTS-HSPA, reports 4G Americas. Compared to a total base of 29.5 million UMTS-HSPA connections reported in the second quarter 2010, there were 56.1 million UMTS-HSPA connections reported at the second quarter of 2011. In the Americas region, 3GPP technologies (GSM-UMTS-HSPA-LTE) grew by 19.26 million new subscriptions, of the total (net) 19.4 million mobile subscriptions in Q2 2011. Similarly, in the USA and Canada, 3GPP technologies added a net 3.1 million new subscribers of the net total 4.7 new subscriptions and Worldwide, there are 412 commercial networks in 157 countries that offer HSPA, including 163 HSPA+ commercial networks in 80 countries.

## RCOM Woos 3G Subscribers with New Plans

Reliance Communications is offering a special scheme for its 3G subscribers by offering triple data download for the cost of a single plan. The offer allows Reliance 3G customers to download three times more than the existing download limit without any extra charges. The users can buy the 3G weekly pack worth Rs. 65 and avail of data usage up to 195 MB with a validity of three days. The offer is available in 333 towns of the 13 3G circles of the company and customers can subscribe to it through R World, retail outlets, or by SMS. Reliance also launched cheapest 3G enabled tablet model priced at Rs 12,999 and runs on the Android 2.3 (Gingerbread) operating system. The tablet comes with number of pre-loaded applications like R World Online, You Tube, Google Map & Google Search and Gmail among others.

## O2 Germany Offering Low- Cost LTE Services for Rural Customers

Telefonica O2 Germany is lowering the cost of LTE services for rural regions by offering a discounted rate for the first year of the customer's contract. Telefonica Germany is also reducing the minimum contract term to just 12 months. There will also be a four-week test period, during which customers can cancel the contract at any time. Customers can thus try the high LTE bandwidth for themselves without making a long-term commitment. O2 LTE for home is a data flat rate with transfer speeds of up to 7.2 megabits per second. Managing Director Marketing Telefonica expressed that "O2 LTE for home is priced the same as our most affordable DSL flatrate Alice light."

## Brazil Will Have 4G Phones by 2014

Brazil will have access to high-speed internet via the latest generation of cell phones before the country hosts the 2014 World Cup. Brazil's 4G cell phones will be available in time to watch the matches. President of Brazil authorized the national telecommunications company, Telebras, to invest \$119 million to bring high-speed internet to underserved parts of the country. The government plan aims to make high-speed connections available for \$21 a month, less than the average current cost of \$42. President also says that she wants more than 70 percent of homes to have internet connections by 2014. About 27 percent of homes are currently wired for high-speed internet.

## Vodafone Czech Republic increases 3G coverage

In August, Vodafone Czech Republic provided the fastest 3G connection of all mobile operators in the country. According to statistics of the independent server DSL.cz the average speed was 2.667 Mbps, which is 3 percent higher than in July. At the same time, Vodafone increased 3G coverage since June by 10 percentage points to 61 percent of population. In addition, Vodafone customers can also use CDMA connection provided by Ufon, accessible to 90 percent of population.

## Telkom Kenya Launches 3G Network

Telkom Kenya has officially launched its Orange 3G network, allowing customers to access speeds of up to 21 megabits per second. Telkom Kenya is 51% owned by France Telecom and 49% by the Government of Kenya. The company will also be cooperating with a number of firms and partners to launch an E-solutions Suite that will run on the newly launched network. The E-Solution Suite will include Orange Money that is an e-business application and other ongoing e-government and e-health initiatives. Eddy Njoroge, Telkom Kenya chairman, said: "The new era that we usher in today, will see Orange solidify its position in the data market. To that end, we are also introducing new products and accessories to ensure that we meet our customers' needs effectively."

## CAT Delays 3G Prepaid Launch

Thai state-owned telecommunications provider CAT Telecom is pushing back the launch of 3G prepaid services until early next year. CAT is delaying prepaid 3G services as the firm lacks the backup software to perform billing and real-time charging, the Bangkok Post reports citing CAT president Jirayuth Rungsrithong. The company initially planned the commercial launch of its 3G service under the 'My' brand next month. Postpaid services will still be launched in September while the company is preparing to hold a tender for a software system worth THB 250 million.



# THE 3G EVO TAB

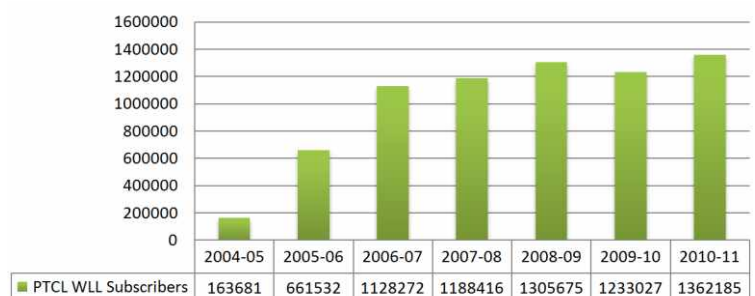
## PAKISTAN'S FIRST SMARTPHONE ANDROID TABLET

Pakistan's first 3G-enabled smartphone and Android-based Tablet PC, the 3G EVO TAB, is Pakistan Telecommunications Company Limited's latest innovative offering to a market of 113 million mobile subscribers. Pakistan Telecom Company (PTCL) ranks among the largest fixed-line operators in the region and is one of the few telecom operators in the world to have implemented Very-High-Speed DSL (VDSL2) access technology to realize innovative use of the existing network, among other innovations. PTCL is the largest enabler of broadband services in Pakistan, with a near-future goal to increase EVO TAB's penetration rate among students. In the context of education and academic participation, PTCL is increasingly playing a key technology facilitator's role to help realize academic reform and technology integration in the education section of Pakistan.

Powered by Google Android Froyo2.2 OS, PTCL's 3G EVO TAB is a seven-inch touch screen tablet PC, with features of both a tablet and a mobile phone. The device allows the user to access broadband Internet and carry out basic telephony activities in more than 100 cities across Pakistan on PTCL's wireless-local-loop network. PTCL is using CDMA-EVDO (CDMA 2000) technology that provides peak data transmission download speeds that reach 3.1 Mbps.



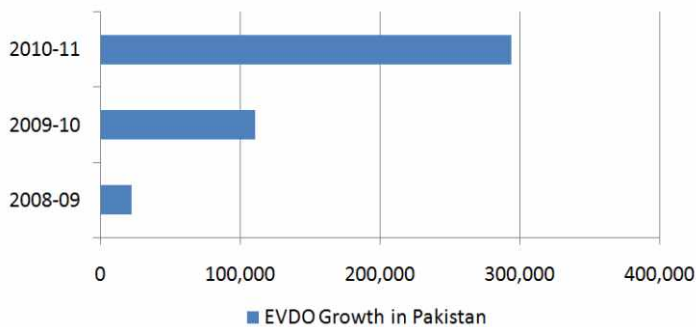
PTCL WLL Subscribers



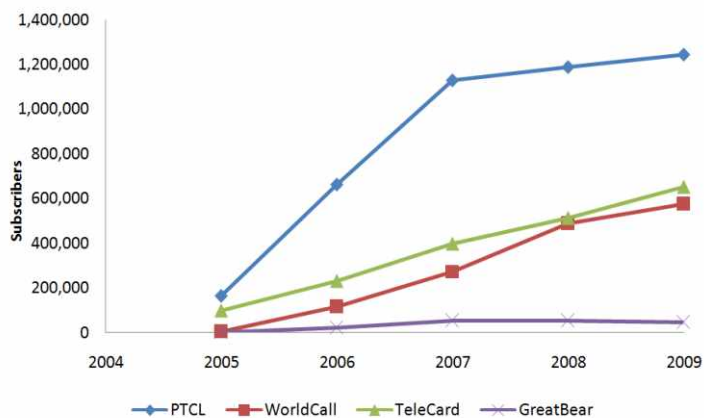
region where CDMA is being used in the local loop. The shift to CDMA, again, has been a reflection of PTCL's innovative strategy.

Although this particular wireless broadband service has primarily been in existence in the urban areas, it is currently being extended to other areas throughout Pakistan as a part of PTCL's national broadband strategy.

**EVDO (CDMA 2000) Growth in Pakistan**



**Historical CDMA Growth Trend**



Initiatives taken by PTCL have had a direct, long-term impact on the socio-political development in Pakistan. Currently, in line with the vision of PTCL's CEO, Walid Irshaid, PTCL is bringing broadband technology integration into the education sector.

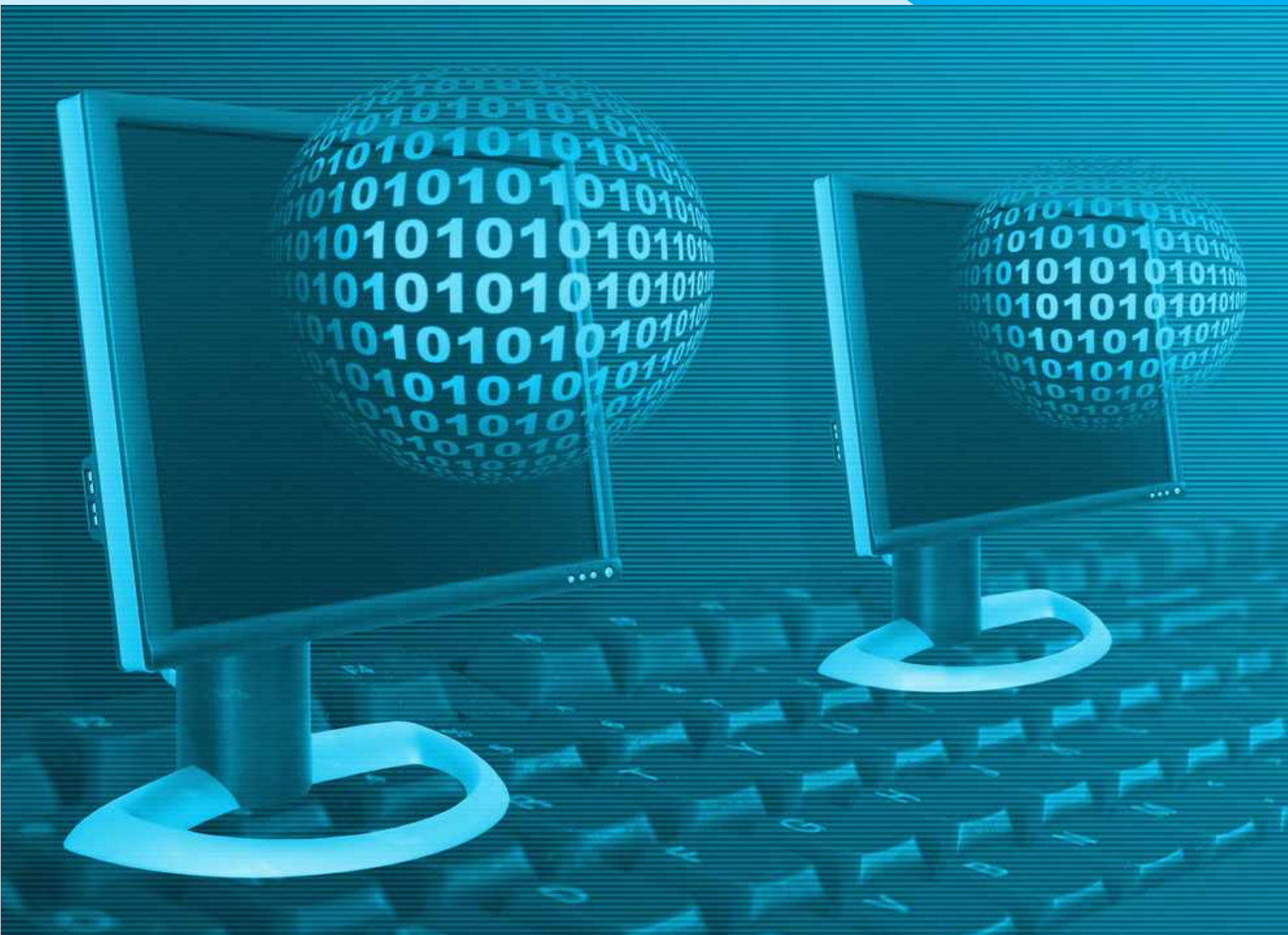
The company is aiming to make its 3G EVO TAB an integral part of the students' learning experience. While making the transition to a "tablet" environment will take some time, PTCL has envisioned that the tablet approach will yield dividends to Pakistan and will actively help to enhance capacity-building of the younger population.

PTCL's TAB approach is similar to what other organizations are doing in other parts of the world, to empower their younger population with tablet PCs and smart handhelds. Some examples of such initiatives include:

- ❑ OLPC (One Laptop Per Child), an organization that aims to provide each child with a rugged, low-cost, low-power, connected laptop. To this end, they have designed hardware, innovative content and user-friendly software for collaborative, joyful, and self-empowered learning. This idea has so far been implemented in a number of countries worldwide including Nicaragua, Madagascar, Paraguay, India, Gaza and Ramallah, Nepal, Afghanistan, Peru, Kenya, and Uruguay.
- ❑ Thailand's government is also pushing for "one-tablet-per-child policy." With this, a tool such as an e-book or a computer tablet would be given to every child providing access to substantial amounts of information.
- ❑ a4cwsn.com (Apps for Children with Special Needs) raises money to Change 50 Lives in a day. With their new initiative, 50 Children across 50 States are to be given an iPad to help with their development and education.

The size, shape, and weight of PTCL's 3G EVO TAB are excellent. The ergonomically-designed device is thin and has a multi-touch capability, and is finely finished product. These features make it a user-friendly smart handheld, best for viewing content and encouraging the reading culture in Pakistan.

While PTCL's EVO TAB initiative carries a commercial dimension as an innovative revenue-generation tool stream for the company, it carries positive ramifications for Pakistan, especially with regard to capacity-building, education planning, enhancement in the academic experience for students, improved socio-political participation, and overall growth of technology awareness—and, ultimately, improvement in the standard of living of the citizens of Pakistan.



## FTTX DEPLOYMENTS: DRIVEN BY THE NEED FOR SPEED

*SAMENA region has a range of broadband access technologies that are capable of supporting bandwidth hungry applications*

SAMENA region has a range of broadband access technologies that are capable of supporting bandwidth hungry applications. There has been a constantly growing demand of interests to drive broadband, convergence and content in the region. Operators have been deploying next generation technologies to overcome the bandwidth demand. Traditionally speaking, PON based FTTX access networks are considered to offer very high bandwidth.

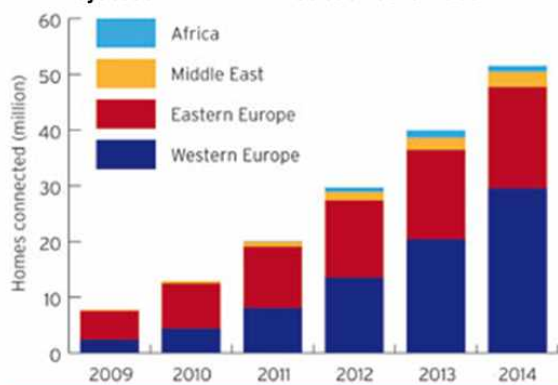
Several of the SAMENA region's markets now have next generation broadband access technologies in the shape of DSL, FTTX, WiMAX, HSDPA, and EvDO etc. This allows for the development of new revenue streams, which are increasingly being driven by content delivery, ranging from streaming video to other data intensive content media. Such markets include Nepal, Sri Lanka, UAE, Oman, Saudi Arabia, Egypt, and Morocco, though Mobile TV is readily available in only about ten markets of the region. Even where there are no 3G networks currently operating, Mobile TV offerings are available, for example, in Pakistan. So, as it appears, the availability and growth of content can be encouraged and supported by deploying high speed broadband access networks especially FTTH, since optical fiber delivers much higher data rates as compared to the copper cables, as well as offers very little attenuation to the signal limiting the performance based on the distance. This allows the delivery of bandwidth and data-rate intensive services such as IP-TV to be delivered to the end-user.

Introduction of fiber has paved the way for networks of increased capacity capable of delivering multiple bandwidth intensive services. With continual growth in technology and demand for higher network capacity and data rates, ADSL is a candidate to lose ground.

“Network operators are following a rapid evolution towards the next generation networks to be able to support multimedia applications”

Network operators are following a rapid evolution towards the next generation networks to be able to support multimedia applications. The growth optical networking technologies such as GPON, EPON can be attributed to high demand for multimedia services such as data, and video, games, and other bandwidth hungry applications. Many countries in the region now have the supporting optical infrastructure i.e. FTTH. These technologies are allowing for the development of new revenue streams, which are increasingly being driven by content delivery, ranging from streaming video to other data intensive content media. Competing broadband technologies such as DSL and ADSL have been in the market for a long time and take up a major portion of the broadband services market, while wireless broadband using WiMAX has also been making ground. However, increasingly improved data rates and the need for improved bandwidth availability would result in seamlessly increased transition to fiber.

Projected EMEA FTTX subscribers 2009-14

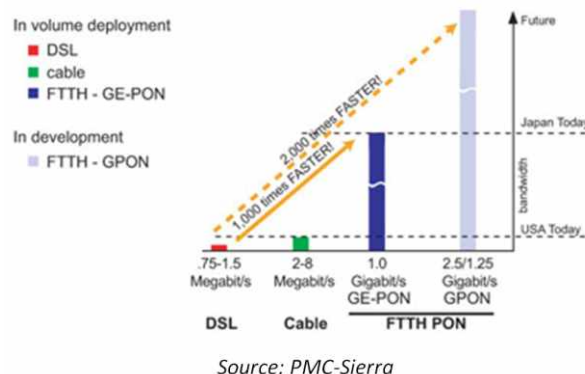


Source: digitaltveurope

In terms of solutions, GPON FTTH has been a widely adopted means to deliver IPTV and HDTV services. GPON enables higher bandwidth and efficient data rates with a point to multipoint scheme. Combined with the high-bandwidth delivery capacity of the fiber, GPON FTTH has been the answer to bringing bandwidth intensive IPTV and HDTV services to the customer.

“broadband technologies such as DSL and ADSL have been in the market for a long time and take up a major portion of the broadband services market”

FTTH, DSL, Cable Bandwidth Comparison



Mostly regulations and policies covering traditional copper telecom networks usually do not cover FTTX networks. This uncertainty in regulatory and policies is caused due to lack of encouragement in the competition and telecom market, investors with service providers are not certain of a return on their investment based on the regulatory models. However, even increasing broadband demands will eventually result in a wide spread deployment of FTTX.

“GPON FTTH has been a widely adopted means to deliver IPTV and HDTV servicesmarket”

One of the main encouraging factors behind FTTX implementation is TV-oriented services which is the main driving force behind current FTTX rollouts. IPTV can be used to generate revenue through each end user in various new ways which were not implementable through the previous technology. This could compensate for the added cost of fiber roll-outs, hence implementing improved technology in a cost effective manner is the name of the game. Since bandwidth demands are increasing with the introduction of emerging TV-oriented services, FTTH links are capable of





As far as FTTX development and regulations on fiber access are concerned, FTTX is developing based on the economic implications pertaining to the deployment of the fiber. While the cost of fiber is comparable to the copper and the cost of end equipment, which converts optical signals to electrical signals, has also decreased considerably, the cost of laying the fiber and replacing the copper continues to be a major deterrent. Hence, optical fiber has largely replaced copper from the core networks while its deployment in the local end loops is limited for the time being.

**Bocar A. BA.**  
President  
SAMENA Telecommunications Council

delivering data rates of up to 2.5Gbps. IPTV and further inclusion of HDTV would require data rates of at least 25Mbps. Hence for simultaneous provision multiple video streams using IPTV and in HDTV, the use of FTTH platforms is necessary. IPTV may be among the key services capable of stimulating investments in FTTX networks. IPTV is a bandwidth and data rate intensive service. Continual improvement in terms of Television service provisions warrants the need to find methods to ensure IPTV to evolve as the fundamental method of delivery of television content. To ensure that user demand towards progression is addressed, investments in FTTX are eminent as it is the most capable method for provisioning IPTV.



## GROWING DEMAND FOR HIGH BANDWIDTH AND FTTX TECHNOLOGY

FTTx is a future proof technology providing theoretically unlimited bandwidth capacity, thus supporting the emerging bandwidth-intensive applications. Access networks, by and large are evolving due to the increasing bandwidth demand prompted by more and more bandwidth hungry application such as VoD, IPTV, Video Conferencing, Online Games, and other multimedia and content rich services. Operators need a resilient and future proof access network to dwell the growing bandwidth demand. FTTx is considered to be one such technology that can easily support high bandwidths. To ensure that users demand towards progression is addressed, investments in FTTx are eminent as it is currently the most advanced technology for provisioning content rich applications.

With the recent development in the FTTx domain, it can definitely be said that the market is "attractive" as well as "growing", and all the major countries are adopting the

solution and the up-take rate has also gone up substantially. The next revolution in the FTTx domain will be through an innovative "Business model" and through government initiatives. The number of global FTTx subscriptions will almost triple between now and the end of 2013, according to research firm Informa, but operators face some key challenges. In SAMENA regions, FTTx appears to be catching attention based on the economic implications pertaining to the deployment of the fiber. While the cost of

*“The number of global FTTx subscriptions will almost triple between now and the end of 2013.”*

fiber is comparable to the copper and the cost of end equipment, which converts optical signals to electrical signals, has also decreased considerably, the time and cost laying the fiber and replacing the copper continues to be a major constraint. Hence, optical fiber has largely replaced copper from the core networks while its deployment in the local loops is limited for the time being. GPON based FTTx links are capable of delivering data rates of up to 2.5Gbps. Hence for simultaneous provision multiple video streams using IPTV and in HDTV, the use of FTTx platforms is necessary. In 2009, worldwide PON equipment revenue hit US\$2.18 billion, up 35% from 2008, and is projected to be more than double by 2014.

*In 2009, worldwide PON equipment revenue hit US\$2.18 billion, up 35% from 2008, and is projected to be more than double by 2014.*

Regulations covering traditional copper telecom networks do not cover FTTx networks, in general. Supporting regulatory initiatives are needed to encourage competition and investment as providers are not certain of a considerable return on their investment based on the regulatory models and the market status. However, even increasing broadband demands will eventually result in a wide spread deployment of FTTx. Broadband access technologies such as DSL and ADSL have been in the market for a long time and take up a major portion of the broadband services market, while wireless broadband using WiMAX has also been making ground. However, increasingly improved data rates and the need for improved bandwidth availability would result in increased transition to FTTx which is expected to grow by more than 50% in the next couple of years<sup>3</sup>.

The number of global FTTx subscriptions will almost triple between now and the end of 2013, according to Informa, but operators face some key challenges.

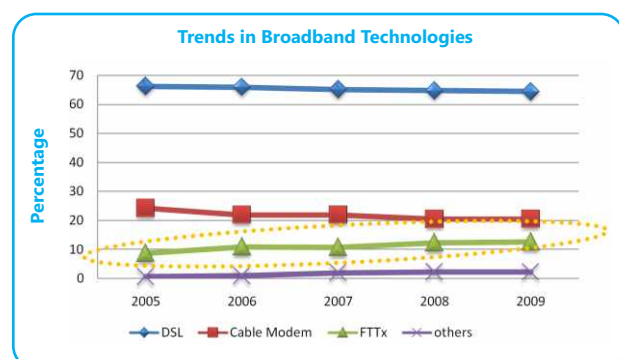
## Global FTTx Stats

- ❑ Worldwide passive optical network (PON) equipment revenue jumped 26% sequentially in 2009, mainly driven by increased spending on Ethernet PON (EPON) equipment in China.
- ❑ In 2009, worldwide PON equipment revenue hit US\$2.18 billion, up 35% from 2008, and is forecasted by Infonetics Research to become even more than double by 2014

- ❑ GPON deployments shot up in 2009 as a result of major increases in shipments to China Mobile, China Telecom, and BSNL. Similarly, Ethernet FTTH and PON FTTH subscribers are forecast by Infonetics to top 100 million worldwide by 2014.
- ❑ The total number of homes connected to fiber will grow from about 11 million at the end of 2006 to about 86 million at the end of 2011 in the USA, representing about 5% of all households worldwide.
- ❑ Fiber to the home (FTTH) will grow by more than 50% in the next couple of years according to researchers, "Render Vanderslice and Associates".
- ❑ The total number of fiber-connected homes will grow from about 20 million at the end of 2007 to 89 million at the end of 2012, representing 5% of all households worldwide. This growth will be dominated by deployment in Asia.
- ❑ GPON technology will dominate FTTH deployments in the U.S., since it is now certain to be used by the major incumbent telcos as well as by many independent telcos.

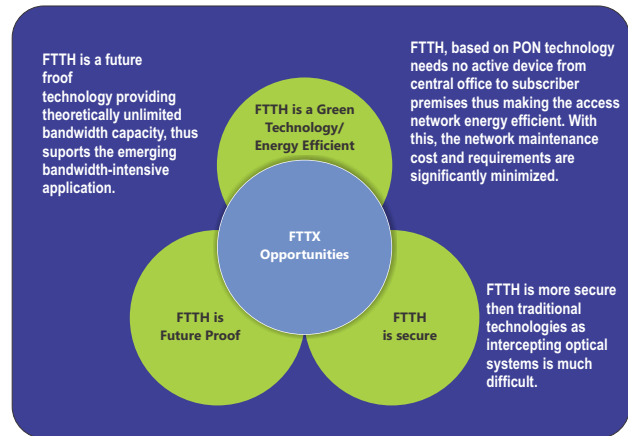
Traditional copper access networks worldwide are largely being replaced by a fiber access network because these networks will soon no longer be able to meet the ever-growing consumer demand for bandwidth, driven mainly by the convergence and innovative applications. At the same time, the convergence of telecoms and media is leading the service providers to conclude that they must be first to deploy fiber, anticipating imminent competition. FTTH is emerging into the mainstream and is set to transform the telecom landscape in the Middle East over the next decade.

*FTTH is emerging into the mainstream and is set to transform the telecom landscape in the Middle East over the next decade.*



## Regional FTTx Updates

- ❑ IDATE forecast rollouts in the Middle East will more likely be initiated by incumbents and private players.
- ❑ Among this last category, real estate owners will rapidly find a high interest in fiber as value-added for their new housing programs.
- ❑ According to IDATE, UAE is the main FTTH/B market, totaling more than 1 million homes/buildings passed and nearly 63,000 subscribers.
- ❑ R&M forecasts that FTTH networks will be increasingly deployed in Egypt, the UAE, Saudi Arabia, and Qatar over the next five years.
- ❑ Competition is driving carriers to become triple play providers in the region.
- ❑ Alcatel-Lucent recently announced that it has been selected by Etisalat, to speed up the deployment of its nationwide FTTH network. Etisalat will utilize Alcatel-Lucent's award-winning gigabit passive optical network (GPON) technology to connect 50,000 households and business customers.
- ❑ Etisalat's FTTH roll-out in the UAE – branded eLife – positions Abu Dhabi to become the first capital city in the world with 100% fiber deployment. UAE will be one of the first countries in the world to have nationwide fiber optics coverage by 2011.
- ❑ Recently PacketFront received a contract for supply of FTTH equipments to the homes in five residential areas in UAE. These areas are in the Gardens district, which is 4000 meters wide and 6000 meters long in Dubai. The FTTH cables will deliver triple play services to the home through du's network.
- ❑ Qtel recently launched the first phase of its FTTH project, aiming to link homes across Qatar with fiber connections over the next three years. The company has allocated QR600 million (US\$165 million) for the first phase of the roll-out, which will be executed in collaboration with ict Qatar.
- ❑ STC has introduced a qualitative and remarkable breakthrough by launching, for the first time in the Middle East and North Africa "MENA" a package which secures the highest Internet speed "100 megabytes per second" through the FTTH technology.



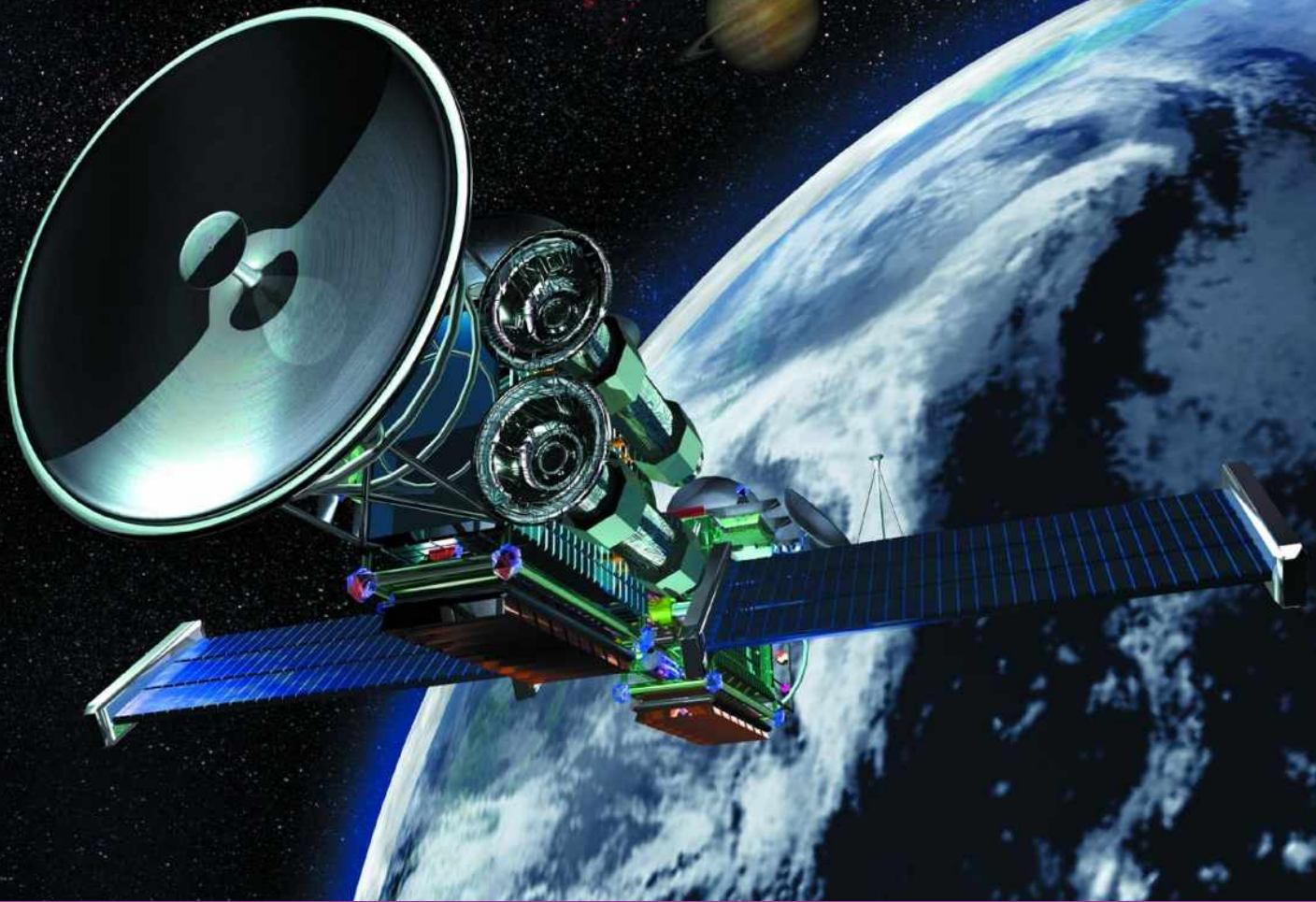
It appears that an increasing deployment of FTTx in the Middle East, fuelled by the region's growing trend towards smart cities and requirements for high bandwidth will enable triple play services. FTTx is a viable technology deployed throughout the world; Middle East is leading in both broadband and FTTx deployments. Population demographics, cultural and national imperatives are helping stimulate the move towards FTTx. An encouraging regulatory environment together with competitive pressure will accelerate FTTx growth. Regulatory measures are needed to encourage competition and investment as providers are not certain of a return on their investment based on the regulatory models and the market status.



*An encouraging regulatory environment together with competitive pressure will accelerate FTTx growth*

**Zakir Syed**  
 Research Analyst (Telecoms & ICT)  
 SAMENA Telecommunications Council

1. [http://www.pmc-sierra.com/ftth-pon/ftth\\_overview.html](http://www.pmc-sierra.com/ftth-pon/ftth_overview.html)
2. Forecast by Infonetics Research
3. Render Vanderslice and Associates
4. FTTH Worldwide Market & Technology Forecast 2006-2011



## SATELLITE NEWS

### **Thuraya Launches Smallest IP Antenna for Enhanced Speed and Portability**

Thuraya has launched a new compact antenna manufactured by the antenna specialist, SCAN Antenna. Thuraya IP is the smallest in the market and provides 384 Kbps uplink and downlink streaming speeds reliably. This antenna is ideal for many market segments including the broadcast and defense which require portable solutions when streaming from the field and wish to fit this compact unit in their gear. Thuraya's Senior Manager said, "The new SCAN Active antenna provides connectivity through Thuraya IP ensuring customers have high quality streaming performance in an extremely portable solution. Users can access 384 Kbps streaming speeds in the uplink or downlink without having to worry about using.

### **Inmarsat named Global Satellite Operator of the Year**

Inmarsat has achieved award in Paris at World Satellite Business Week. The award is based on a performance analysis of the market players, and assessment of key performance indicators. The judging panel, consisting of experts from Euro consults, Space News, and Satellite Finance, uses rigorous quantitative and qualitative standards to determine the winning company from across the mobile satellite services (MSS) and fixed satellite services (FSS) sectors. Inmarsat's chairman said, "I am honored and delighted to collect the award for Global Satellite Operator of the Year, This award, recognizing Inmarsat's record revenues and profits, is a tribute to the strength and effort of our whole team"

## China Launches New Communication Satellite

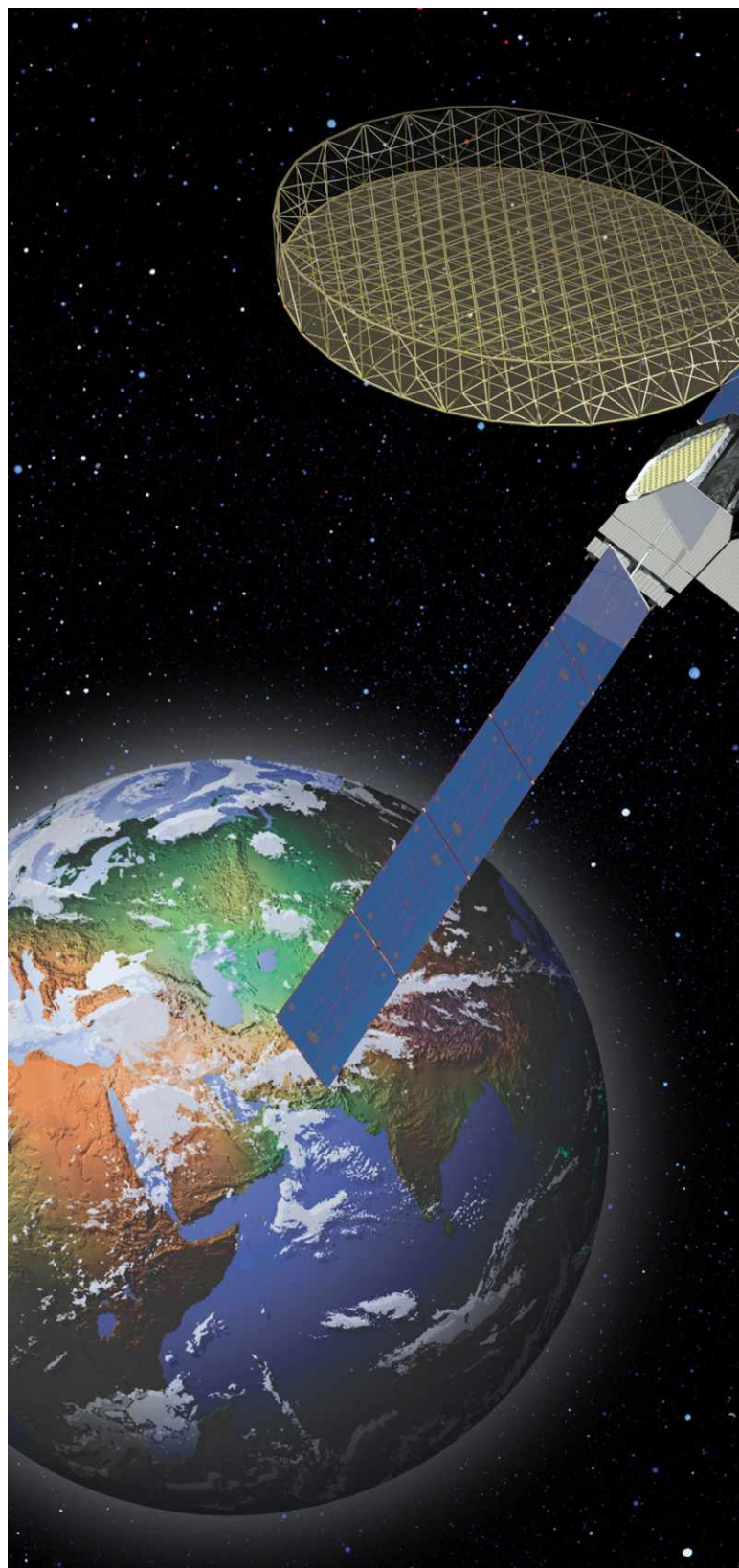
China's Long March rocket successfully launched a new communication satellite, first time after its previous mission failed last month. The Long March-3B rocket carrier put the satellite, Zhongxing-1A after its launch from Xichang Satellite Launch Centre in southwestern Sichuan Province, official Xinhua news agency reported. Zhongxing-1A was designed and manufactured by the China Academy of Space Technology under the China Aerospace Science and Technology Corporation, it said, adding that the satellite will provide high-quality voice communication.

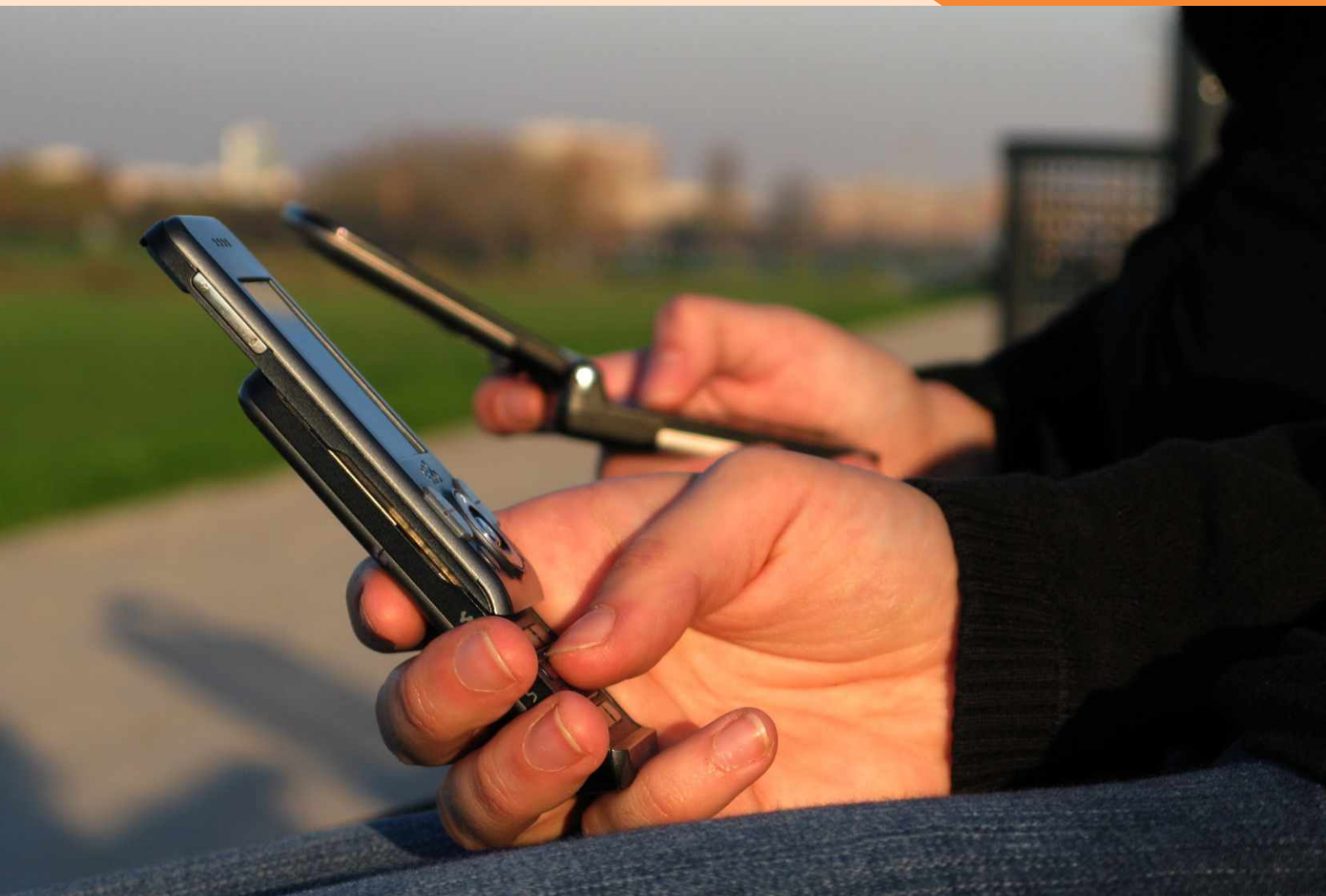
## Iridium Launches New Phone, Hotspot for Connecting Anywhere

Iridium has announced a new satellite phone and mobile hotspot designed to connect users in even the most remote locations. The Iridium Extreme is the one of the most advanced, rugged satellite phones currently on the market. It's the smallest and lightest handset model. The Extreme also offers online tracking portals, with fully integrated GPS and location-based service capabilities for Web-based location identification and tracking. Iridium also announced the AxxessPoint, a Wi-Fi mobile hotspot that connects BlackBerry and Android devices to the Iridium network using an Iridium Extreme or Iridium 9555 satellite phone. In addition to the AxxessPoint, Iridium is launching AxxessPoint Connect, which effectively turns any Windows laptop into a global Wi-Fi hotspot when connected to an Iridium Extreme or Iridium 9555.

## Global Satellite USA... Bring On the Bluetooth (SATCOM)

Global Satellite USA has announced the launch of ISAT Shadow, the first Bluetooth-enabled device that is compatible with a satellite phone, BGAN terminal, and other mobile phone. This tiny device just measuring 2¾-x1½-inches is an excellent satellite shadow for the Inmarsat ISAT Pro and Iridium 9555 (Bluetooth supported docks only). With Bluetooth technology the connection does not require cables or be in the line of sight; the two handsets just need to be within 30ft of each other. The ISAT Shadow replaces the need for a docking station and supports caller's telephone number and caller ID display, the first letter searching of contacts, phone call history, call vibration, call ring tone, key pad lock, phone book synchronization and comes complete with echo cancellation and noise reduction for perfect sound.





# ROAMING NEWS

## **Optus Brings Near Real-Time Alerts to International Data Roaming**

Optus has introduced near real-time usage alerts for mobile customers. Optus postpaid mobile customers can now receive notifications on their handsets when they're overseas. Notifications will be sent within one hour of when a customer first uses their handset abroad for data downloads. Customers can then choose to disable their data roaming service if they don't want to be charged for anymore. Optus has plans to roll out a similar system in Australia. It is looking to send SMS alerts to post-paid mobile customers when they exceed 80 per cent of their included money usage value which covers voice, text messages and data.

## **Cell Phone Termination Rates Reduced**

The Malta Communications Authority said that it had reduced the mobile phones termination rate by 32%. Mobile termination rates (MTRs) are the charges that mobile operators charge other network operators to terminate calls on their respective mobile networks. The Authority said that its decision followed a thorough review of feedback received from stakeholders, including the European Commission as part of a consultative process on the subject. The decision brings the current rate down to 4.18c per minute. "This decision reflects the MCA's efforts to keep reducing the MTRs in line with the principles laid out by the recommendations of the EU Commission to base such rates on efficient costs which avoid competitive distortions for the ultimate benefit of end-users at large," the MCA said.

## High Charges Loom in Planned Review of Mobile Phone Tariffs

Safaricom Kenya's top telecoms operator has announced that it could soon increase its voice call tariffs to cater for increased operational costs. Safaricom chief executive said that the company was carrying a huge burden in increased network maintenance costs that require a response on the revenue side of the business. He also expressed that the cost of running diesel-driven base stations rose by 27 per cent since January, especially in areas with no electricity and in western Kenya where frequent power outages mean the stations must run on diesel for up to four hours a day. Safaricom reported Sh13.1 billion in net profits in March, a 13.2 per cent drop from Sh15.1 billion the previous year. Mr Collymore did not disclose the exact margins of the planned tariff increment but said net tariffs would not go beyond six shillings. Safaricom charges Sh4 for calls to other networks and Sh3 within its network, meaning the margin of tariffs increment will not be more than Sh2.

## Bulgaria to Halve Mobile Termination Rates from Early 2012

Bulgaria's Communications Regulation Commission (CRC) plans to halve mobile termination rates from early 2012. This will be the second wave of compulsory reduction of mobile termination or interconnect rates since 2009, when CRC lowered the wholesale mobile prices to meet the European Commission's requirement. The regulator plans a three-stage price cut. The first reduction will start from January 1 2012 when termination rates will fall by 50 per cent to 0.065 leva a minute from 0.13 leva at present, the official said. The next decrease to 0.060 leva will start from July 1 2012 and the maximum allowed termination charge will reach 0.0475 leva from January 1 2013. The Bulgarian regulator further plans to lower the interconnect prices for calls between fixed-line and mobile networks to 0.014 leva per minute in peak traffic from 0.02 leva at present.

## Geocell Offers Mobile Internet Roaming Discount

Georgian mobile operator Geocell has introduced a mobile internet roaming discount in 24 European and Asian states. The rate per 1MB starts from GEL 0.99. The list of foreign operators under the offer includes numerous companies belonging to the TeliaSonera group, Geocell's main shareholder. The operator also reduced the monthly subscription rate for its Geocell Connect service from GEL 22 to 15. The plan includes 1GB traffic.

## Zoom in Hot water over Unpaid Interconnection Fees

Nigerian Communications Commission (NCC) has warned CDMA operator Reliance Telecom, which provides wireless services under the brand Zoom Mobile, that it could face disconnection from rival telecoms networks if it does not settle its unpaid interconnection fees. Zoom has been given 21 days to pay its debts to five operators: Airtel Nigeria, Glo Mobile, MTN Nigeria, Multilinks and Visafone Communications. If it fails to do so, the quintet have been granted regulatory approval to partially cut interconnection with Zoom, meaning that its subscribers would only be able to receive calls from, but not make calls to, customers of the five rival cellcos. According to the latest figures from the NCC, Zoom accounted for just over 1% of Nigeria's total mobile subscribers at the end of March 2011, with a customer base of 939,225.

## Bangladesh Sets New Radio spectrum Fee

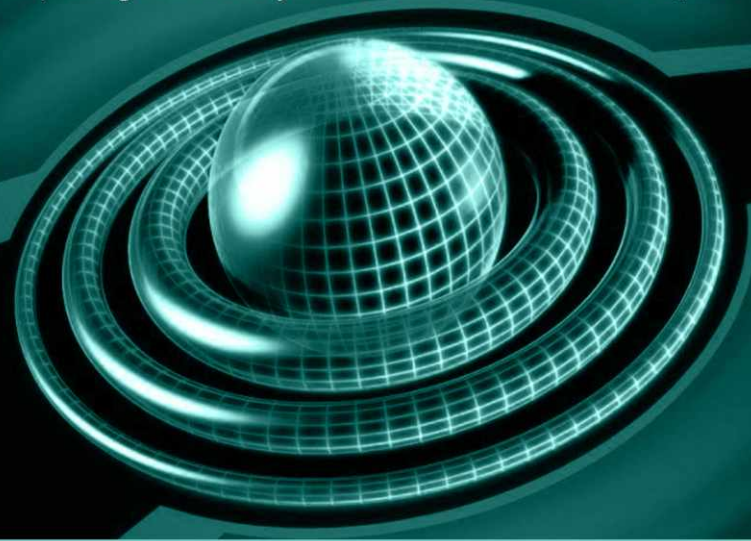
Bangladesh's government has finalized the license fee structure that will be set based on the subscriber base held by the mobile networks. Operators with a larger market share pay a premium per Mhz compared to the smaller networks. The spectrum charges are: Grameenphone (14.6 MHz): Tk 3,241 crore; Banglalink (12.4 Mhz) Tk 1,971 crore; Robi (12.8 Mhz) Tk 1,900 crore and Citycell (10 Mhz) will pay Tk 450 crore. The government has also set a revenue share level at 5.5% of revenues along with a further 1 per cent to be paid into the rural Social Obligation Fund. The four private networks will also pay Tk 10 crore each to renew their licenses which expire in November. The renewed licenses will last for another 15 years. The mobile networks will have to pay 49% of their spectrum fees when their license is renewed, with the remainder in three installments in May 2012, November 2012 and finally in May 2013.



# “ Role of the ICT in driving Economic Growth”

## Convergence to Doha 2011

1st & 2nd November 2011, Sharq Village & SPA by Ritz Carlton Hotel, Doha, Qatar



### SAMENA AWARDS 2011

1st November, 2011



Request for Data

Please fill out an online nominations form at this following link:  
[http://www.samenacouncil.org/event/convergence\\_doha\\_2011/nominations.php](http://www.samenacouncil.org/event/convergence_doha_2011/nominations.php)

Please contact for any other details at: [awards@samencouncil.org](mailto:awards@samencouncil.org)

### SAMENA Council's Board of Directors Election-2011

1st November 2011, Convergence to Doha, Qatar

Please contact for any other details at: [election@samencouncil.org](mailto:election@samencouncil.org)



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