

June 2013

CONNEXION

steering telecom ahead

3G

A Catalyst for Mobile Broadband





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Bangladesh's mobile telecom industry is undergoing a critical phase amid the journey to implement a 'Digital Bangladesh' through embracing new technologies such as 'Third Generation' (3G) to spread the benefit of broadband Internet to the mass people.

A major contributor to the national exchequer as well as Foreign Direct Investment, the telecom sector is playing a vital role in moving forward the economic progress of the country to the next level of accomplishment.

Broadband needs to be widely available and affordable, as Bangladesh wants to achieve the full economic benefits of mobile broadband. Broader policies and investment framework should be in place to help achieving 'Digital Bangladesh'. It will enable to deliver the telecom sector government services, health, education, industry, agriculture and so forth.

Bangladesh has never fallen back to adopt new technology and the first 3G trial license was awarded to a European vendor in 2008. Unfortunately 3G is still under process in Bangladesh. The auction date has been delayed once again, this time for one month, as the operators demanded resolution over certain disputes. The auction would be now held on September 02, 2013 after being postponed from June 24 to July 31.

On the other hand, the proposed budget for the fiscal year 2013-14 has spurred a fresh wave of disappointment for the country's mobile telecom industry. The sector has been already exposed to tough regulatory framework and overburdened with various taxes at multiple stages. The industry was expecting a meaningful support from the government in terms of fiscal measures in the budget for the year 2013-14.

When the MNOs were expecting a reduction in taxes, government has levied the sector with further taxes. The raise of corporate tax from 35 percent to 40 percent for publicly traded mobile phone operators will discourage the fresh listing of Mobile Network Operators from the floating of Initial Public Offering (IPO) with the country's bourses. The move is an unfortunate one.

Only one incentive was announced in favor of the mobile telecom industry and that is reducing 'Supplementary Duty' (SD) on SIM card import to 20 percent from 30 percent.

Mobile telecom industry commended the government's earlier decision to reduce the SIM card tax to BDT 300. It however, was assured by the concerned authorities that SIM Tax will be fully eliminated. As absent in many countries around the world, it has proven to be counterproductive and affecting the growth of mobile telecom industry.

VAT rebate has been a persistent demand of the telecom sector. The inter-ministerial meeting held on July 26, 2012 and several subsequent meetings have attached due credence to the issue. The National Board of Revenue (NBR) through the issuance of General Order has introduced a "Reduced Tariff Value" with regard to issuing or renewing of 3G license. Unfortunate though, such mechanism of reduced tariff value, outright denies the provision of any VAT rebate and blocks any scope of getting such rebate in future.

The operators have also demanded that the NBR should totally withdraw VAT on 3G mobile service licenses before the Bangladesh Telecommunication Regulatory Commission (BTRC) holds the auction for awarding four licenses.

T I M Nurul Kabir

ABOUT AMTOB

Association of Mobile Telecom Operators of Bangladesh (AMTOB) is a national trade body representing all mobile telecom operators in Bangladesh. AMTOB has emerged as the official voice of the Bangladesh mobile industry to interact with relevant government agencies, regulators, financial institutions, civil society, technical bodies, media and other national & international organizations. It provides a forum to discuss and exchange ideas between the stakeholders and the industry actors for the development of mobile telecom industry through public private dialogue. AMTOB facilitates an environment which is conducive for its members and industry stakeholders with a view to establish a world class cellular infrastructure for delivering benefits of affordable mobile telephony services to the people of Bangladesh to bridge the digital divide.

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DID YOU KNOW?

Mobile tariffs in Bangladesh are the lowest in the world;

India is in the second position. Countries with the highest mobile tariffs include Austria, Venezuela, Greece, Portugal, Australia, Japan, Spain, Switzerland, France and Brazil.

Bangladesh was the **first country in South Asia** to launch mobile phone in 1993 by adopting **AMPS (Advanced Mobile Phone System)** technology.



Mobile technology has enabled **over 30 million people to access Internet in Bangladesh**, which makes up for about **95 percent** of all Internet users.



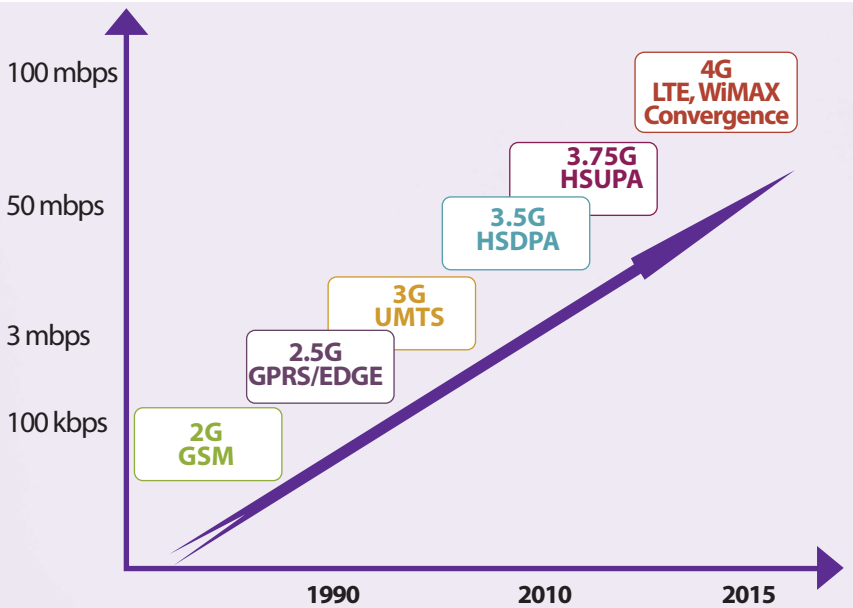
Tele-density in Bangladesh **has doubled** in the last **four years** to **67 percent** while the internet density has increased to **25 percent**.

In Bangladesh, as many as **2 million purchase orders** have been sent to farmers over SMS for sugarcane purchase which is commonly known as "Purjee".

3G

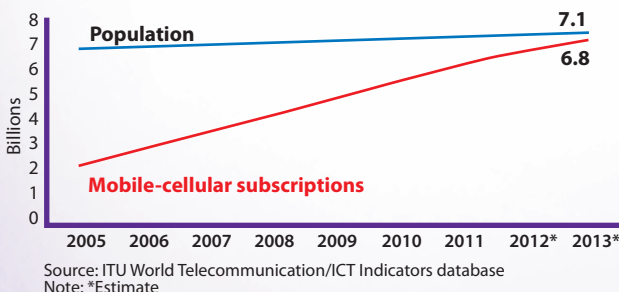
A CATALYST FOR MOBILE BROADBAND

The digital age is a fact of the 21st Century. Digitalization is present in all aspects of our lives including communication, information, collaboration, media, entertainment, banking, e/m-commerce and payments, advertising, dating and socializing to mention a few. We believe that 3G/4G/LTE would be the main catalysts for Bangladesh's journey towards a fully digital nation.



Mobile telecom technology evolution

The growth of global mobile phone subscriber number has been impressive. Between 2005 and early 2013, according to ITU, the figure stood at 6.8 billion and is rapidly approaching towards the 7.1 billion of the world population. The graph shows that as world mobile-cellular penetration approaches 100 percent, market saturation grows and the growth rate decreases.



Number of mobile-cellular subscription almost touching the number of world population

According to an estimate, an amount of around 3.3 billion smartphones will be globally in use by 2018. Video contents will continue to drive traffic in mobile networks. However, there are a lot of different factors that decide how much traffic is carried over the mobile networks. Markedly, it is a combination of what data plan the user has, the screensize and resolution, the handset functionality and the quality and performance of the network that is altering traffic demands.

A study by Ericsson shows that data traffic doubled between Q1 2012 and Q1 2013. The trend is expected to continue by doubling each year. The access of internet through dedicated apps will primarily drive the trend of mobile traffic development. The growth in mobile data is forecast to be around 12 times by the end of the year 2018.

Our world today is at an inflection point. Today; people, enterprises, markets and societies are all benefiting more and more from real time connectivity and networking enabled by broadband. These days, connectivity to the network everywhere is something more or less taken for granted in much of the world. Digitalization has been

extended into all possible areas of society and mobility supported interaction is possible whenever desired. With the practices of today's digital life expanding into more and more areas of society and business, the Networked Society will take shape and benefit from fundamental transformations across industries, public services and in private life.

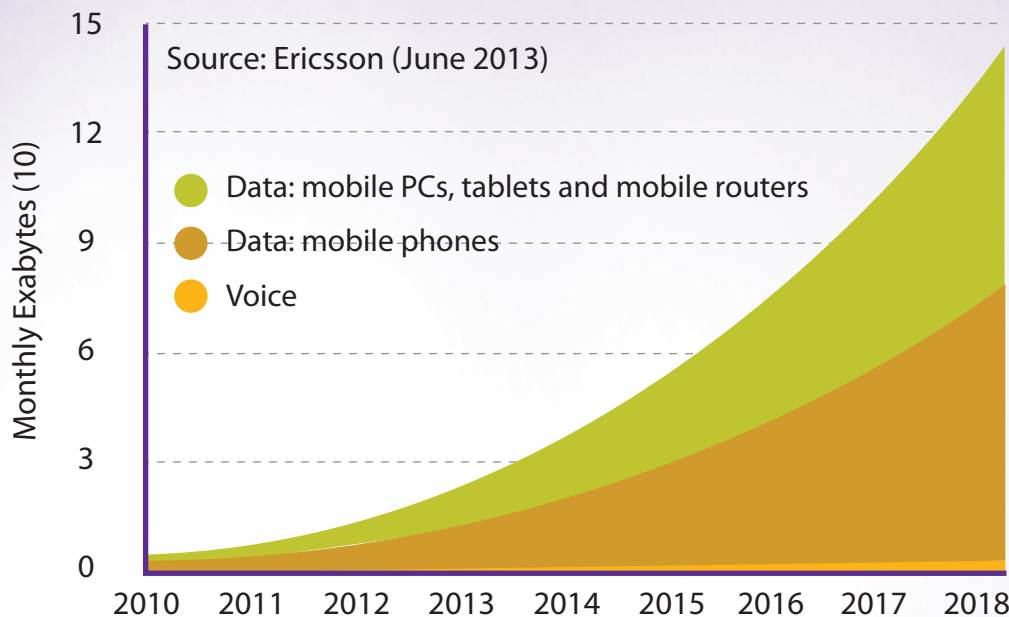
ECONOMIC IMPACT OF BROADBAND

"A 10 percent increase in broadband household penetration boosts GDP between 0.1 and 1.4 Percent" and "that broadband could have significant impact on overall societal welfare as it helps boost human capital, improve healthcare and create new opportunities in the poorest and most

remote parts of the world," according to a study by McKinsey & Company.

There have been many proof points to underline the economic impact of broadband e.g. 1000 new connected broadband users' correlates to about 80 new jobs. For every 10 percentage point increase in broadband penetration there is, on average, a 1 percent growth in GDP, stated a 2011 joint study conducted by Chalmers Institute of Technology, Arthur D. Little & Ericsson, it was shown that a doubling of the average achieved broadband speed yields a 0.3 percent increase in GDP. Further, that a 4-fold increase of Internet speed contributes 0.6 percent GDP additional growth, according to the same study.

In fact we have already observed the impact of telecommunication on the GDP growth of Bangladesh. A study made by Deloitte & Touche in 2007 found that mobile communication has raised GDP growth in Bangladesh by 0.12 percent for 1 percent increase in mobile penetration.



Global mobile traffic: voice and data, 2010-2018

According to a study by the Boston Consulting Group (BCG) in 2010 titled, "Towards a Connected Bangladesh: Socio-economic Impact of Internet in Bangladesh Economy", in terms of overall GDP contribution in 2020 for Bangladesh, the report stated that Internet is expected to contribute 2.6 percent of total GDP and suggests that a 10 percentage in Internet penetration is correlated with a 1 percent increase in the annual rate of new business formation; calculating the creation of over 129,000 jobs in Bangladesh by 2020. The bulk of the GDP contribution coming from the increased productivity that Internet users enjoy in services, manufacturing, including agriculture, as well as increased diversification of sources of income.

Mobile services have the greater potential to impact economic development with the high value 3G services delivering data services to business and consumers. Countries with higher level of mobile penetration tend to be countries with higher level of capital investment in the mobile sector. Mobile penetration is regarded as an input of the aggregate GDP production function since higher level of investment in the mobile sector generates more employment and more activity in the wider economy.

Wider access of mobile penetration reduces transaction costs, promotes efficiency and with the advent of 3G allows faster information flow and dissemination. The increase in Total Factor Productivity leads to the increase in GDP through the maximum utilization of capital and labor inputs and as a result increasing the productivity of a nation like Bangladesh.

For Bangladesh to achieve these economic benefits, broadband needs to be widely available and affordable. Aligning on globally harmonized spectrum enables consumers to benefit from economies of scale, through

lower cost devices, and operators can deliver high performing networks based on equipment and software used in many markets. Availability of sufficient spectrum enables operators to deploy networks most cost effectively.

Broader policies and investment designed to drive the realization of 'Digital Bangladesh', to enable delivery of government services, health, education, industry, agriculture etc. via broadband will help achieve the momentum needed to fully realize the

economic, environmental and social benefits.

Mobile telecom industry appreciates the initiatives taken by the government so far towards the affordability of internet service in Bangladesh by reducing international bandwidth cost, but yet to see the effect in mass level, reducing SIM Tax which MNOs expect to be eliminated fully and bring down the spectrum fees to a rational level. Despite being one of the largest tax contributors to the government exchequer, MNOs have been facing many challenges e.g. settlement of 15 percent VAT rebate issue of 2G license renewal, 3G VAT issue, etc.

There are reasons to believe that once 3G is launched at mass level, the government with its tax authorities would give effort to bring down the Tax/VAT on the 3G enabled handset/dongle in order to make 3G affordable and attractive to realize the dream of 'Digital Bangladesh'. Last but not the least, the mobile telecom industry believes that other than receiving complete and positive resolutions to the industry concerns, it would be difficult for MNOs to be able to arrive at a positive and decisive business case for participating in 3G licensing process.



3G

ENABLING BROADBAND IN BANGLADESH

The introduction of 3G in Bangladesh is likely to change the data and broadband landscape giving customers access to high speed mobile internet and enabling them to use bandwidth demanding services. Success of 3G would depend on how effectively this new technology and the services will be made available to the people of the country ensuring a favorable business environment for investment and innovation. By now we have realized that in absence of the fixed network, mobile is going to be the primary access medium for internet and data services in Bangladesh.

We estimate, there are roughly 6 million PCs in the country and the average sale of PC/laptop is around 350,000 per year. Mobile handset and devices have outnumbered the growth of PC/laptop long back by a big margin; currently there are 100 million mobile subscriptions and per year sales of mobile devices is roughly around 10 million. Should we not then take the advantage of such a large base to increase the internet penetration and build a broadband ecosystem around this? Today, 95 percent of our total internet users are accessing internet through the mobile networks.

In the economics research findings, it has been established that mobile communication plays a vital role in improving the economic condition with a significant direct contribution to the GDP. Mobile communication and especially ICT solutions built over the mobile network can play a vital role almost in all the sectors to meet our societal and economic goal.

There is at times a debate if we can leapfrog 3G and go directly to LTE! In theory it is very much possible. But taking into consideration the current internet penetration rate, the price of LTE handset/terminals and yet to be proven mobile broadband business case, it would be wise to take a step approach rather than leapfrogging. However, the time gap between 3G and LTE can be rather very short depending upon the technology adoption rate and proliferation of multi band/technology terminal devices. It is now obvious that most of the 3G smart phones these days support both 3G and LTE, so increase of the 3G base will automatically push the number of LTE devices in the market.

The point to note is that to materialize the full potential of 3G, fresh investment would be required in the network and service infrastructure which is even more in case of 4G/LTE. So, as long term country vision, regulatory certainty and predictability have to be in place through implementation of a proper regulatory and legal framework. As mentioned before, it is not advisable to leapfrog the technology, but what can be a realistic approach is actually to leapfrog in upgrading the telecom policy, law and regulation. We can modernize and reform our policies, laws and regulations to take a big leap ahead of others in light of the international experiences and by conducting an objective assessment of the current regulatory framework. So that we can claim a forward looking and modern telecom environment that is pro innovation and investment friendly.

Content is the king of broadband services! New innovative services and rich content would drive the broadband usage, our customers are already demanding for high speed internet and contents that suit their life style and professional needs. Any creative piece of work which can be distributed digitally is considered as content in the digital world; it can be an artwork, a photograph, a piece of music or, a software tool that keeps note of the daily tasks. Unfortunately, in Bangladesh, the ecosystem around content and application has not been developed to meet consumer demands to the fullest. Moreover the content space these days is dominated by mostly the handset vendors and availability of the content is limited within the boundaries of Apple iOS, Android and Blackberry. Most of these handsets are expensive and out of the reach of mass population. To promote content we need to address some of the major practical challenges: create a content market both supply and demand side, IPR of the content, right incentive for the developers, payment mechanism and adaptation of content across all types of user devices.

Vertical integration with other industries' different type of network and platform would be essential to launch new services. For example, m-commerce services that extend over online transaction, money transfer, bill payment etc., would require integration of the banking system and payment system with the mobile operators' platform. In case of other mobile based services like m-health, m-education etc.-similar type of integration would be needed. Usually these integrations are quite complex and need customization to meet specific market requirements making it even more challenging. It is important to streamline the interfaces and adopt particular standard, if possible, for such interfaces to facilitate faster enablement of the new services.

Once we open the possibilities of this new technology for our customers, we have to accept the increasing demand. In reality, this means that we have to keep on

satisfying our customers by offering their desired quality of services. We believe that all tiers of customers be it an individual, an SME or, a big enterprise, 3G has something to offer for everyone. High speed access in the hands of people would empower everyone by increasing productivity and efficiency. We already have examples around, how simple mobile services like SMS based college admission have simplified the process, removing lot of administrative hassles and saving time both for the authorities and the candidates. At the same time it has ensured fairness and transparency of the admission process. Imagine a time when we have all the public services digitalized and we can access them conveniently through our mobile devices.

Spectrum availability, especially in the harmonized IMT-2000 bands will be extremely crucial to succeed in mobile broadband. The country needs to adopt an appropriate mechanism for spectrum assignment to the most deserving candidates by ensuring timely availability, adequate choices and a fair price of the scarce natural resource. The designated synchronized IMT spectrum bands at the international level and regional level like APT (Asia Pacific Telecommunity) should be reserved for the mobile industry. Bangladesh can be forward looking by allowing full technology neutrality and service neutrality in all bands so that the operators could choose optimum technology and spectrum for providing the broadband services. Technology neutrality will make the best use of the spectrum and give operators the flexibility for faster roll out of services. Which methodology to follow for spectrum award especially to decide upon the price? The price of the spectrum should factor in country specific socio-economic parameters and the return on investment. A reasonable approach can be to rely on the market forces and let the market decide the price; open auction is an example of such a process.

Handset and user devices to access internet and other broadband services are to be made available and affordable to our consumers. Handset bundling by the operators and payment in easy installments at the initial stage shall ease the cost burden on the consumers. Once the critical mass of 3G customer base is reached, we expect to see a sharp fall of the devices' price in the local market. Tablets will gradually become very popular and will substitute the laptops as this phenomenon is now

being observed in the developed markets. Cloud computing, where much of the processing power and storage will reside in cloud, would give further boost for the tablet sales. Because in that case, people will be able to leverage on the cloud infrastructure without needing to invest in expensive user devices.

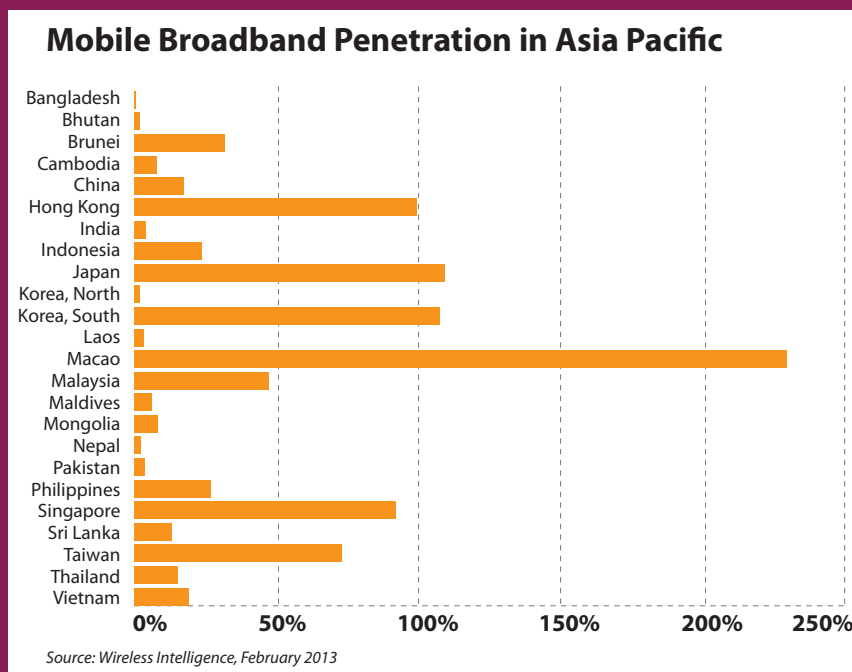
Seamless experience across devices has to be ensured. Many of our consumers are expected to use same or, similar applications like email, internet etc. across multiple devices: phone, tablet, PC and multiple operating systems. The service platforms should be designed in a way that the customers can get a ubiquitous experience. Easy and secured portability of data, information across these devices and convenience in interaction would ultimately enhance the overall usage.

Internet security, data security and customer privacy protection are going to be the new challenges we shall encounter more and more in the future. With the advent of mobile broadband through 3G we expect

that usage of many new services dealing with sensitive customer information like personal, banking, financial and others would transmit over internet and data networks. If proper security cannot be ensured, these services will not be sustainable and hence uptake of 3G services will be hampered. For ensuring end to end security a joint solution has to be developed

and implemented across the full value chain. There has to be also proper legal remedy for breach of such security measures and violation of relevant laws.

Last but not the least; we envisage becoming a digital nation in this digital age of automation, instant access to information, collaboration and entrepreneurship. 3G will fulfill our dreams provided that the awareness and adoption of internet are made quicker following the introduction of this new technology. Special programs and initiatives are needed to make people aware of the benefits of broadband services, removing the fear of adoption and extend the services to the remotest corners of Bangladesh.





Mehboob Chowdhury
Chief Executive Officer
Pacific Bangladesh Telecom Limited (Citycell)



Mehboob Chowdhury, Chief Executive Officer, Pacific Bangladesh Telecom Limited (Citycell), shares his views on mobile telecom sector in Bangladesh with "ConneXion".

What is the contribution of mobile ecosystem in sustainable development of Bangladesh?

Mobile telecom industry has emerged as the key contributor for socio-economic development of the country as it is generating huge direct and indirect employments and adding a big sum of money to the national exchequer. So telecommunication is playing a vital role in the economic development and poverty alleviation for this nation. This industry is the largest contributor to Foreign Direct Investment (FDI). In 2001, the contribution of mobile phone operators in FDI was 0.9 percent whereas in 2010 it increased to 60.4 percent. There is a strong relationship between economic growth and FDI as larger inflow of foreign investments ensure sustainable growth in the economy. Mobile telecom operators are the highest contributors to government's tax revenue which in turn is increasing nation's revenue. The telecom sector has grown massively in the country; the subscription growth increased from 3 percent in 2004 to 65 percent in 2012. The total number of mobile subscribers in the country has reached at about 10 crores in March 2013. According to the World Bank, an extra 10 mobile phones per 100 people in a typical developing country adds 0.6 percentage points of growth in GDP per capita, and this impact is about twice as large in developing countries than in developed countries. So, this sector is contributing to the growth of the country's GDP. Increasing use of mobile internet service, M-Commerce services, Value Added Services have facilitated the path of creating a digital Bangladesh. Digitization of business activities reduces operating costs and increases efficiency that further enhances competitive edges of Bangladesh in the world market. As a whole, Bangladesh has experienced the most updated mobile technology with quality service, substantial employment with economic development of the mass and remarkable progress in bridging the digital divide by virtue of the mobile ecosystem persisting in the country.

Do you think that a Telecom Road Map/long term perspective plan is required to support for achieving the Digital Bangladesh?

Certainly. A clear cut Road Map will facilitate the operators to set up their long term operational goals and strategies. Road Map is essential to formulate proper development plan ensuring utmost utilization of limited resources. The long term Road Map will help the market become more mature and take proper decisions without difficulty. Points to ponder would be that the Road Map must incorporate policies that are made based on stakeholder consultancy and are consistent enough for a longer period of time to yield the best result out of them.

Information and Communication Technology are vital tools for building a 'Digital Bangladesh'. Telecom operators are playing important role in spreading the benefits of ICT to every corner of the society. A long term telecom Road Map through a proper consultation

process with the industry and concerned think tanks is essential to facilitate the operators in the industry to prepare their future business and investment plans in this area. We are hopeful that by truly harnessing the power of internet and ICT based services

The big challenge for mobile telecom operators of the country is high level of taxation. Telecoms are a major contributor to national fiscal revenues and so it is of the interests of the Government to keep the sector expanding. The reduction of SIM (Subscribers Identification Module) tax will increase mobile penetration as the poor and marginal population of the country has started using this technology.

depending on the proper long term telecom Road Map, the country will go a long way in achieving great results in creating a digital nation.

What are the key opportunities and challenges in Mobile Telecom Industry?

When we started the first cellular operation, our objective was to empower our customers with access to information through instant mobile communication. As a logical evolution to voice communication, we have extended the horizon of services by making internet service available to the country. Our 'Zoom Ultra' has been the pioneer mobile broadband among individuals and corporate houses till today. We all know that mobile internet has revolutionized communication process in Bangladesh. Day by day, mobile internet is becoming a necessity from luxury and we believe, with the introduction of 3G technology, our customers will get more advanced data experience in the coming days.

Talking about key opportunities, we have recognized that M-Commerce plays an important mode for propagation of financial inclusion. The coverage of

mobile phones and the use of such instruments by all section of the population can be exploited for extending financial services to the excluded population. A mobile based product for extending financial inclusion allows the customer to carry out majority types of transactions. Mobile Banking has made revolutionary positive changes in the banking sector of the country through which banking service has reached at the doorsteps of the deprived section of the society. Citycell has already partnered with Dutch Bangla Bank Limited for mobile banking service. DBBL is operating this service through approved agents all over the country. Moreover, Citycell is working together with DBBL & other financial institutions for establishing mobile ATM and other banking services at customers' door-steps through the country's fastest wireless internet service, 'Zoom Ultra'. We feel honored that due to its data throughput efficiency, Bangladesh Election Commission also preferred and chose 'Zoom Ultra' for their nationwide election monitoring related communication purpose. Thousands of corporate companies including Financial Institutions, Press & Media, MNCs, Large Local Companies, SMEs, NGOs, Pharmaceuticals, Donor Agencies, Embassies, Law Enforcement Agencies etc. are keeping their trust on 'Zoom Ultra' as their key communication device. You will be happy to know that most of the Secretaries, DCs, UNOs and other Govt. officials and other professionals are experiencing Zoom Ultra for its convenient data speed and mobility. Citycell is working hand in hand with Education Ministry, ICT Ministry, Computer Council and A2I Project of Prime Minister's Office to achieve government's 'Vision 2021' which is to establish 'Digital Bangladesh' by providing data connectivity to the nationwide educational institutions, clinics, union information centers etc. Citycell is happy for getting the opportunity to support "Access to Information Project" of PM Office for taking strategic steps like data entry initiative from nationwide UISC for inviting interested applicants through online registration for Malaysia.

Citycell is also offering Trust Bank Mobile Money Service. Our Moneybag Remittance Service is offering Citycell as well as non Citycell users to get inward foreign remittance coming from Middle East and UK via AB Bank. The mobile VAS market has been growing at an increasing rate- a number of innovative VAS are being introduced in this market. Citycell is a customer-driven organization which delivers a wide variety of Value Added Services to its customers in order to facilitate them.

One of the major initiatives in the country's telecom sector is infrastructure sharing agreements between the operators. Infrastructure sharing helps to reduce marginal costs for the operators. We expect this trend to continue as partly enforced by the regulator but also as a matter of practical necessity. Another big opportunity, I believe, lies with the local application and content development industry that can be a huge success if properly nurtured and patronized and nevertheless governed with appropriate and consistent policy.

The big challenge for mobile telecom operators of the country is high level of taxation. Telecoms are a major contributor to national fiscal revenues and so it is of the interests of the Government to keep the sector expanding. The reduction of SIM (Subscribers

Identification Module) Tax will increase mobile penetration as the poor and marginal population of the country has started using this technology.

How do you assess the telecom market in Bangladesh and its future?

The Mobile Telecom Industry has made significant contribution to the country's socio-economic development within 20 years of its journey. Along with data services, different types of Value Added Services have changed the lifestyle of people. With 3G and provision of data services, this sector will continue to be the highest contributor to FDI. Mobile phone growth will be hindered as the market is close to be matured. Average Revenue Per User (ARPU) may decline further as rural mobile penetration growth will dominate the next phase of subscriber growth. But declines in ARPUs should be moderated by growth of VAS and data services. Facilities of advance technologies like 3G, 4G, LTE will be introduced in the country. As of Citycell, we have launched our flagship data brand 'Zoom Ultra' with network services across the country that has been and still pioneering the market of mobile broadband internet meeting the ever-growing need of the customers. Various services of mobile money platform have also changed the lifestyle of a large number of our subscribers. Lifestyle web portal, Webshohor, has been a key to a web-social change agent for all of us.

Again, from an industry point of view, the market will see more opportunities for the financially constraint segment, more of infrastructure sharing need to be achieved along with the achievement of economies of scale to be a sustainable business.

What is your vision for 2013 to 2015?

Our vision is to provide world-class and affordable products and services through innovative communication, information and technology solutions. Citycell is a customer oriented brand. Our ongoing initiatives are focused on meeting changing needs of our valued customers both in voice and data services. With the introduction of 3G technology, we will focus on enhancing faster customer experience in data services. Over and above all, we envision to continue delighting the customers with unmatched service delivery and satisfaction.



Citycell's internet service 'Zoom Ultra' won award in the category of Emerging Market Initiative in the Asia Communication Awards, held in Singapore.

NATIONAL BUDGET 2013-14

MNOs Perspective

The proposed budget for the fiscal year 2013-14 came as a big frustration for the country's mobile telecom industry which has already been overburdened with various taxes and tough regulatory framework.

The industry was expecting a meaningful support from the government in terms of fiscal measures in the budget for the year 2013-14 to survive in a tough business situation but there have been almost no incentive for the telecom sector.

Moreover, the government plans to raise corporate tax for publicly traded mobile phone operators to 40 percent from 35 percent. The move will discourage fresh listings of Mobile Network Operators (MNOs) through floating of Initial Public Offerings (IPOs) to go listing with the country's bourses.

Considering the prevailing scenario of the capital market, many MNOs did not feel much encouraged to be listed as five such companies out of six are still counting losses.

Currently, only one company is listed in the capital market while at least another mobile operator is taking preparations to go for a public offering.

Tax incentive is offered to bring companies to the stock market and the same benefit was given to the lone listed company back in 2009 at the time of listing.

But now, the government has narrowed the scope and increased corporate tax for listed operators to 40 percent from 35 percent, while the non-listed operators will pay 45 percent.

Finance Minister Abul Maal Abdul Muhith said that the provision was made to reduce the gap in tax rates between the listed and non-listed mobile operators.

The proposed provision will also affect Grameenphone, the lone listed telecom operator of the country.

The move is an unfortunate one. When the MNOs are expecting a reduction in taxes, the government has imposed more taxes on the sector, one of the biggest tax revenue contributors to the government exchequer and a huge source of Foreign Direct Investment (FDI).

Only one incentive was announced in favor of the mobile telecom industry and that is reducing 'Supplementary Duty' (SD) of SIM card import.

The Finance Minister said considering the importance of SIM cards for the expansion of the telephone industry, its Supplementary Duty was decreased to 20 percent from 30 percent.

Mobile telecom industry commended the government's earlier decision to reduce the SIM card tax to BDT 300. However, it was assured by the authorities concerned that SIM card tax will be fully eliminated. In many countries around the world, there is no such tax. The SIM card tax is counterproductive and affecting the growth of mobile telecom industry as the operators sell SIM card as low as BDT 100 but would require to pay BDT 300 in taxes against each SIM.

Country	Marginal Corporate Tax Rate (Telcos)
Bangladesh	40.0 - 45.0 %
China	25.0 %
Malaysia	25.0 %
Vietnam	25.0 %
Thailand	20.0 %
Ukraine	19.0 %
Singapore	17.0 %
Serbia	15.0 %

**Source: Ernst & Young Corporate Tax Guide 2013*

At the same time, through promulgating a General Order, the National Board of Revenue (NBR) has introduced a "Reduced Tariff Value" only with regard to the License or Spectrum Fees or Charges or Royalty or Renewal Fee only applicable in respect of issuing or renewing 3G license.

Unfortunate though, such mechanism of "Reduced Tariff Value" outright denies the provision of any VAT rebate and blocks any scope of getting such rebate in future, which (VAT rebate) has persistently been the industry demand and which had been given due credence by the Inter-Ministerial meeting held in July 26, 2012 and several subsequent communications thereafter.

The concept of "Reduced Tariff Value" contradicts the concept of calculating VAT on "Total Receivables" as per the provisions of VAT Act 1991. Our understanding was that the reduced rate of 7.5 percent VAT on 3G Licensing Payments as proposed by NBR, would be calculated on the "Total Receivables" on 3G Licensing Payments. Further, such contentious introduction would also render unfavorable impact on the proceedings of the ongoing court cases on the applicability of 15 percent VAT rebate on 2G Licensing Payments. Clearly such attempt is not at all desirable at this stage.

The operators have also demanded that the NBR totally withdraw VAT on 3G mobile service licenses before the Bangladesh Telecommunications Regulatory Commission (BTRC) hold an auction for awarding four licenses.



ROBI ILLUMINATES THE DARK NIGHTS

Tajel, age 11, and her brother Shahidul, age 8, live with their parents in 'Kaluar Char', a village lying 40 kilometers northeast of Rangpur District. Tajel goes to a primary school which is a one hour walk from their home and Shahidul goes to a nearby Madrassa. Their father, Juran Miah, is a day laborer who earns barely enough to feed the family.

Everyday after coming back from Madrassa, Shahidul has to line up with other people of the village to buy kerosene so that life doesn't have to stop when the sun goes down. Tarabanu, mother of Tajel and Shahidul, wants to do something to support her husband but she can hardly manage time as she has to complete all her household chores before sunset. When night falls, the family only has the dim glow of an old kerosene lamp to live by and when the oil runs out they are left in complete darkness.



Mega Solar Panel at Kaluar Char, Kurigram

Fifty-five year old Primary School Teacher Mohammad Ali's story isn't any different. He passes a busy day with his students till the evening and because there is no electricity, has to crawl into his shell once night falls. He has to finish preparing his lessons, notes and checking exam copies before 5:00pm. He hardly can manage time to study more through the day to improve himself as a teacher. Using a kerosene lamp is not only expensive for him but also harmful for his health. He gets a headache within an hour and his eyes start burning due to the smoke from the lamp. Charging the mobile phone is another hassle for him; everyday he has to walk 3 miles and pay to have his phone charged.

Kaluar Char is one of many Bangladeshi villages without electricity. These villages go to sleep soon after sunset. Life in these villages moves with the movement of the sun. Though any modern society and economy require good supply of energy for development and prosperity in Bangladesh approximately 80 million people do not have access to electricity. The unmanageable gap between supply and demand for electricity hinders socio-economic growth. Bangladesh is losing at least 3.5 percent of its Gross Domestic Product (GDP) due to the shortage of power, according to a research report of Centre for Policy Dialogue (CPD).

Today, according to Energypedia, only 45 percent of the Bangladesh population is connected to the electricity grid and in the rural areas, where 80 percent of the population live, only 22 percent have electricity. However, where Bangladesh is lacking energy supply, it is blessed with abundant solar energy, which can provide a clean solution to this shortage. While electrification is still many years away from these remote villages, Robi has come forward to illuminate the dark nights of these villages and connect them to the modern world under its corporate social responsibility (CSR).

ROBI'R ALO

The nights at Tajel's village 'Kaluar Char' are no more silent. Robi has dispelled the darkness of their nights. Two thousand inhabitants of this village can now do their work at night. All 180 homes of Kaluar Char are now covered under a solar power grid.

Instead of individual home solar systems, in Kaluar Char, Robi has established 20 mega-panels through which power is distributed to the entire village. Each of these houses receive 7 watts of power for more than 4 (four) hours daily as per respective household's time demand. To maximize illumination utilizing only 7 watts of power conventional light bulbs were not an option. Therefore, custom light fixtures had to be used, employing LEDs, each of which provides the illumination of approximately a 100 Watt incandescent bulb while consuming only 4 watts of power.

Considering the requirements of the villagers, electricity is being supplied for three different purposes - 4 watt LED lights for reading or sewing purposes, 2 watt LED light for household chores and 1 watt for a universal mobile charging outlet. The children of Kaluar Char now can prepare their lessons at night while their mothers complete household chores. They do not have to walk miles to charge their cell phones anymore.



A student of Kaluar Char studying with solar powered light.

The uncared and neglected 'Kaluar Char' is now an inspiring success story for all. Taking Kaluar Char as the model village, Robi is spreading light to other off-grid villages in Kurigram. Under the banner 'Robi'r Alo', Robi has already covered two nearby villages- Char Joykumar and Kismat Sinoy. About 450 homes of these two villages have electricity coverage through mini solar grid systems. Nights are no more synonymous with darkness for these villages. Life goes on even after the sun goes down. Thousands of inhabitants, whose lives were regulated by sunrises and sunsets, are now free from the curse of darkness.





Prof. Tim Unwin
Secretary General



COMMONWEALTH
TELECOMMUNICATIONS
ORGANISATION

Bangladesh has been able to be so successful, part of it is actually driven by the Digital Economy

Prof. Tim Unwin, Secretary General of Commonwealth Telecommunication Organisation (CTO), shared his thoughts on Bangladesh during his recent visit in Dhaka.

What is your reflection on the progress of Bangladesh Mobile Telecommunication sector?

One of the things that amazed me most is the economic growth rate here in Bangladesh which is around 6 percent a year. I was wondering why Bangladesh has been able to be so successful, part of it is actually driven by the Digital Economy; the ways in which Bangladesh is being very successful in getting distribution to large numbers of its population. Of course there are areas that are not yet connected. Bangladesh has many disadvantages in terms of physical environment, such as flooding and the associated challenges, but actually for rollout of telecommunications, Bangladesh has fantastic advantages as it is flat, it is relatively easy to roll out telecommunication, and total coverage compared with many countries is good. The price of making calls has reduced dramatically - I have heard one of the lowest in the world - it's a combination of the competition and regulatory environment that has been created. There are many positives but it obviously still has long way to go. I believe the critical factor for the future is going to be the expansion of mobile broadband, the extent to which you actually can roll it out and deliver it. The auction of licenses and how that's going to be done is a great potential for the future.

How CTO can contribute in Bangladesh's development?

Bangladesh has long been a strong member of the CTO and I have been very keen to explore ways through which we can work more closely together. We have three operational divisions, all of which can contribute to the various aspects of the development of the industry here in Bangladesh. One is obviously capacity development training mechanisms and that takes lots of different forms. One of the main messages that people from the

government and private sectors have mentioned to me is the importance of capacity building especially for middle ranking management, and we can certainly help with that. I have to say, though, that compared with many of the countries we are working in, I have always admired the capacity of the population of Bangladesh. You have some really good universities, as well as good people who work in the industry, and so I was little surprised that there still appears to be such a demand for capacity development.

The second area is the research and consultancy opportunities we can offer. The CTO has considerable expertise and quite a lot is actually very relevant to what Bangladesh needs and we can provide. The third area is of course events, conferences and summits and we have to identify exactly what area we might work on here but one of

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the things the CTO has capacity in is bringing together people from a diversity of backgrounds, bringing together governments, the private sector and civil society, and actually bringing

together and getting solutions and getting ideas out.

These are our three operations divisions, and we work particularly in six niche areas several of which are very relevant to Bangladesh. During my stay we have had brief discussions, for example, on the importance of cyber security and that's one scenario we can work on. Obviously we touch on Mobile Broadband and that is a huge area, as well as regulatory environments. One of the things we committed to do last year in Sri Lanka was to create a regulatory peer review mechanism and I look forward to putting this into practice and I think Bangladesh can contribute hugely there as well.

"Promoting, facilitating and guiding members in using ICTs to deliver effective development interventions" how CTO is helping Bangladesh in light with CTO's vision?

It is fair to say that in recent years much of our work has focused on other parts of the world. One of the things that I have been particularly committed to do since I have taken over as the Secretary General is actually to identify ways that we can support what members want across the Commonwealth. That is why I am here. I don't think it is our job to tell



Prof. Tim Unwin is having a chat with Sunil Kanti Bose, Chairman of Bangladesh Telecommunication Regulatory Commission (BTRC) and T I M Nurul Kabir, Secretary General of Association of Mobile Telecom Operators of Bangladesh (AMTOB).

countries what to do, but rather we should listen to what they want to do and help them to deliver on their ambitions. I believe in good practices rather than a single best practice. One of my major concerns is I think, that technology often leads to greater inequality. The richer and urban people in most of our countries are taking advantage of technology to move forward. But people in rural and marginalized areas, women and often people with disabilities, the most marginalized who don't have access to this technology are left further behind so that inequalities are increasing. My own personal commitment is to help people make a difference in that space, to understand these issues and to ensure that everybody has access to technology at an affordable price so that they can use it to transform their lives for the better, so that it is not just the privileged and the rich and urban who benefit.

What should be the strategies for Bangladesh for the current government's agenda of 'Digital Bangladesh' by 2021?

I think it's an ambitious agenda. One good thing is that we are reasonably far away from 2021, and yes there are a number of things to be done by 2015 and that lead time is really important as long as you start now. Very often people have ambitious short term targets and don't deliver on time. You have to have enough time to make them happen. I have heard that across the government and to some extent in the private sector here in Bangladesh there is a commitment to make sure that everybody does have access. It is important to ensure widespread spatial distribution, and here Bangladesh has some advantages in terms of the physical environment. One of the things that have always struck me about Bangladesh is that the position of women is much stronger than in many countries. You have got several ministers who are women and there is a real commitment to ensure that women can benefit from ICTs as well as men. I think there are quite ambitious plans to develop the software industry and BPO. I would like to know more about the rationale for BPO and what are Bangladesh's niche competencies that

will actually make a difference from some other countries – the good quality English, the skilled workforce – those are some of the highlights I would pick out. I do not think it is over ambitious. If it is planned correctly you can achieve great things.

What are the key opportunities and challenges in Mobile Telecommunication Sector in Bangladesh?

There are always challenges! I think for me one of the really interesting challenges is how many players you need in a market to keep your prices low? Are all the current operators going to survive? What is going to happen in 3G/4G even, going further down the road? How are we going to provide the infrastructure to enable those who don't have access? These are some of the issues that need to be resolved. I think, secondly, it is ensuring that there is enough appropriate content, so that people can use mobile communications actually to get the information that they need.

How Bangladesh can exploit its human resource in tapping opportunities in global ICT market?

One of my roles is to Chair the Commonwealth Scholarship Commission in the UK, and I have got to see some of the products of your higher education structure. There are some outstanding academics here and many of them are engaged in contributing towards the development of Bangladesh. There has been innovation; I mean one only has to look at the example of Grameenphone which has rightly been praised across the world. There are always challenges though in terms of ensuring that everybody has access to quality education and how it is delivered. What has been said to me a few times since I have been here is the need to enhance the middle management structure, the people who have the skills to drive forward the industry creatively. Bangladesh has generally low labor rates, which is one of the main reasons why quite a number of international companies are working here, although I am not sure that this is always a particularly good thing and often there is the unfortunate exploitation of cheap labor. But again it is how we build the capacity across the board that matters.



Prof. Tim Unwin is seen with the senior officials of Bangladesh Telecommunication Regulatory Commission and AMTOB member companies at a reception accorded by AMTOB during his recent Dhaka visit.

WTISD Observed with a renewed call for road safety and usage of ICTs

Road traffic safety is a global concern for public health. World Telecommunication and Information Society Day (WTISD) 2013 was observed in a befitting manner in the country along with different countries of the globe with the theme "ICTs and Improving Road Safety".

Every year on May 17, International Telecommunication Union (ITU), the United Nations specialized body on telecommunication, celebrates WTISD to mark the founding of the organization in Paris in 1865.

This year's theme, 'ICTs and Improving Road Safety', highlights the role technology can play in making our roads, vehicles and drivers safer. The theme is in line with the United Nations "Decade of Action for Road Safety".

Honorable Prime Minister Sheikh Hasina said that the government has given highest priority to the development of telecommunications and information technology as there is no alternative to ensuring the free flow of information for building a knowledge-based democratic society while inaugurated the day-long programs at Bangabandhu International Conference Centre (BICC) as the chief guest.

"Telecommunications and information technology have now become one of the main tools of socio-economic development globally," she said.

Stressing the need for creating mass awareness on stopping usage of cellphones while driving vehicles, Hasina said, "I believe that road and river route accidents could be brought down further with the successful use of information technologies."

The government has formulated the ICT Act and ICT Policy in 2009 announcing the information technology sector as the thrust sector to achieve its election pledge of building technology-based "Digital Bangladesh" by 2021, she added.

The country's tele-density has doubled in the last four years to 67 percent and internet density increased to 25 percent while some 8,000 rural post offices and 500 upazila post offices have been transformed into e-centers, the Prime Minister further added.

To mark the day, Posts and Telecommunication Ministry and its affiliated organizations including Bangladesh Telecommunication Regulatory Commission (BTRC), fixed and cellular phone operators have chalked out various programs.

"ICTs and Improving Road Safety - Bangladesh Perspective" was one of the seminars organized on the occasion where AMTOB Secretary General T I M Nurul Kabir presented the keynote paper on the theme while Lt. Col. Rakibul Hasan, Director of Systems and Services Division of BTRC made a technical presentation on "The Impact of ICT on Modern Communication" and Brig. Gen. Shahadat Hossain Chowdhury (Rtd.), of Bangladesh Machine Tools Factory (BMTF) presented a paper on "Digital Driving License and Electronic Vehicle Tracking System can Contribute to Improve Road Safety".

AMTOB Secretary General, in his presentation mentioned that the financial loss from road accidents in Bangladesh is equivalent to 2 to 3 percent of Gross Domestic Product (GDP). He underscored the need for implementation of ITU's call of action in order to improve road safety in the country.

In addition to seminars on the day's theme, online essay writing competition and other programs on road safety were organized. Moreover, radio and television stations broadcast and telecast special programs highlighting the significance of the day while special supplement were published in the different national dailies.

President MD. Abdul Hamid, Prime Minister Sheikh Hasina, Posts and Telecommunication Minister (MOPT) Advocate Shahara Khatun, MP, UN Secretary-General Ban Ki-moon, ITU Secretary General Dr. Hamadoun I. Toure, BTRC chairman Sunil Kanti Bose and MoPT secretary Abubakar Siddique gave separate messages on the occasion.

The purpose of WTISD is to help raise awareness of the possibilities that the use of the Internet and other information and communication technologies (ICT) can bring to societies and economies, as well as of ways to bridge the digital divide.

A colorful road show of vehicles decorated with various banners and festoons with messages on road safety and usage of information technology passed different thoroughfares in the city to make people aware of road safety.



Prime Minister Sheikh Hasina inaugurating the WTISD function as the chief guest while BTRC Chairman Sunil Kanti Bose, MoPT minister Advocate Shahara Khatun, MP and Md. Abdus Sattar, MP, Chairman, Parliamentary Standing Committee on MoPT also seen on the dais



AMTOB Secretary General T I M Nurul Kabir presented a keynote paper on ICTs and Road Safety while Lt. Col. Rakibul Hasan, Director of Systems and Services of BTRC and Brig. Gen. Shahadat Hossain Chowdhury (Rtd.), of BMTF also presented separate papers.



NUMBERS & ANALYSIS

91% of all mobile internet usage is “social” related e.g. people **Twitter, Pinterest** etc. On a desktop computer the



visiting **Facebook**, figure is only 79%

Average smartphone usage nearly tripled in 2011, from **55 MB per month** in 2010 to **150 MB per month**

There is one cell phone for every two people in the world, which totals about **3.3 billion** cell phones that are actively in use



It takes **90 minutes** for the average person to respond to an email. It takes **90 seconds** for the average person to respond to a text message



More than **180 million iPhones** have been sold to date. If you turn them sideways and line them up, they measure more than **12,700 miles**



AMTOB ACTIVITIES



Prof. Tim Unwin, Secretary General of Commonwealth Telecommunications Organisation (CTO) is seen with senior officials of Bangladesh Telecommunication Regulatory Commission and AMTOB member companies at a reception accorded by AMTOB during his recent Dhaka visit.



AMTOB was one of the main participants in organizing the event WTISD 2013.



TIM Nurul Kabir, Secretary General of AMTOB moderating a session on “ICTs and Improving Road Safety-Bangladesh Perspective” a seminar organized on the occasion of WTISD where Lt. Col. Rakibul Hasan, Director of Systems and Services Division of BTRC and Brig. Gen. Shahadat Hossain Chowdhury (Rtd.) of Bangladesh Machine Tools Factory (BMTF) presented separate technical papers.

AMTOB MEMBERS' ACTIVITIES



Airtel secures 1st position in the WTISD Road Show & Rally 2013 for its extra ordinary performance & presentation on the theme ICTs and improving road safety.



Banglalink celebrates Robindro Jonmo Joyonti at Dhaka and Kushtia



Citycell donates computers to different schools in Chittagong, Mymensingh, Rajshahi, Norshingdi and Rangpur as part of its nationwide initiative to accelerate the growth of ICT education among underprivileged.



Grameenphone signs a MOU with ICT Ministry to expand the reach of telemedicine service in the



Robi presents showcase Malaysia



The Signing ceremony of Electric Bill Payment through SMS between Teletalk Bangladesh Ltd. and Rural Electrification Board (REB).

AMTOB

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