Digital connection indispensable to build Digital Bangladesh
Mustafa Jabbar

Interview of Posts and Telecommunications Minister Mustafa Jabbar

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Editorial

We have embarked on another new year which brings with it fresh goals. In 2023, we promise to provide mobile consumers with even higher-quality services. Operators are consistently investing and working hard to deliver smooth services.

One thing, nevertheless, must be kept in mind: establishing service quality standards or criteria for mobile service providers alone is insufficient; the requirements must also fall into all other service providers within this ecosystem. It won't be appropriate to expect even a higher-quality service otherwise.

The same supervision that the cell phone providers are subject to should be extended to other service providers as well. Then it will be possible to collaborate effectively and raise the level of overall services.

For the first time, AMTOB has published a position paper on the mobile ecosystem that outlines both the sector's fundamental features and future directions. The complexity and difficulty of mobile services are briefly discussed in this article.

We have an interview with the minister of the posts and telecommunications division on this issue where he talks about how this industry will advance the nation in the future.

Additionally, the regular contents include the Robi chief executive officer and Ericsson Bangladesh country manager.

I hope that everyone will experience greater happiness in the days to come.

Brig Gen S M Farhad (Retd.)
Secretary General, AMTOB

AMTOB President's Message

We are set to start another year with new hope, enthusiasm, and the objective to capitalize on the advancement we made in 2022. The telecom industry took a great leap last year when the operators purchased a total of 190 MHz spectrum, breaking all the previous records. The record-breaking number once again demonstrated our collective efforts to provide customers with superior digital services. We have also started the deployment of the new spectrum, and once it is deployed across the country, our overall quality of services will improve significantly.

While the industry faced some challenges along the way, we remained committed to protecting our customers' interests in all circumstances. Heavy floods hit the north-eastern region of the country last year, affecting telecom services across the region. However, we resolutely tackled the challenge with the support of all stakeholders. The dollar crunch and energy shortage also impacted us amid the global economic challenges.

No matter what challenges the industry faces, we firmly believe that they cannot stand in the way of our progress if we keep sight of the nation's remarkable development. 2022 will be remembered for the inauguration of the Padma Multipurpose Bridge and the Metro Rail, two monumental achievements that created an ambience conducive to the growth of all businesses.

As the government's development partner, we are always ready to serve the greater interests of the nation. With more people adopting digital lifestyles, the industry has a bigger role to play in the days to come. We realize our increasing responsibilities in a digitally advanced nation and look forward to opening a new chapter of advancement in 2023.

Erik Aas
President, AMTOB

AMTOB
Association of Mobile Telecom Operators of Bangladesh

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>> 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 for the Bangladesh mobile Industry for interacting with relevant government agencies, regulators, financial institutions, civil society, technical bodies, media and other national and international organizations. It provides a forum for discussion and exchange of ideas between the stakeholders and 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 eliminate digital divide.

Digital connection indispensable to build Digital Bangladesh
Mustafa Jabbar

Posts and Telecommunications Minister Mustafa Jabbar said the first and foremost step of the Digital Bangladesh vision is to build a digital highway, invent, manufacture and export digital device and ensure their availability.

"Thus, the digital connection is indispensable to building a Digital Bangladesh. In continuation of the process, the Posts and Telecommunications Division (PTD) is initiating and implementing several epoch-making projects to build multi-pronged digital infrastructure under the dynamic leadership of the Honourable Prime Minister Sheikh Hasina and the direction of the Honourable ICT affairs adviser to Prime Minister, Mr. Sajeeb Ahmed Wazed Joy," he told the ConneXion in a recent interview.

In reply to a question on how the telecommunication sector is contributing to the government's development plan and implementation process, the minister said: "Honourable Prime Minister Sheikh Hasina's goal is to translate Bangabandhu's cherished dream into reality by establishing a digital society free from indiscrimination. To reach the goal, Sheikh Hasina included the Digital Bangladesh vision in the election manifesto of Bangladesh Awami League on December 12, 2008. In 2009, the implementation of the Digital Bangladesh vision began under the farsighted leader Prime Minister Sheikh Hasina. In continuation of the process, Bangladesh, which was once termed a 'bottomless basket' by Henry Kissinger, has gone from a basket case to a development role model in the past 14 years. Former US President Barack Obama, during his visit to his motherland Kenya, urged Kenyans to follow the development model of Bangladesh. The country, which was hundreds of years behind in technology, has made remarkable progress in national growth and every development indicator aided by the Digital Bangladesh vision as per the country's development plan. In the past 14 years, the country has reached a new height of socio-economic development. Today, Bangladesh has joined the ranks of developing countries, and is self-sufficient in food grain production as well. The production of several farm products including fish, meat, eggs, milk, vegetables, and fruits increase significantly. The poverty declined to 20% from 40%. Per capita income jumped from $543 to $2,824. The literacy rate increased from 45% to 75%. Maternal and infant mortality rates also decreased. All of these achievements have been possible because the Awami League-led government has been ruling the country consistently.

The Honourable Prime Minister announced a plan to build a 'Smart Bangladesh' by 2041 and started the process to implement it. The government also announced a 'Delta Plan-2100' to save generations from the impact of climate change and build a better future. Digital connectivity is the highway of Digital Bangladesh. In the past 14 years, the country has made surprising success in building digital highway connectivity. The teledensity of Bangladesh was 30 percent in 2009 when the present government assumed office. Currently, this rate has increased to almost a hundred percent. The country had 4.46 crore mobile users in 2008, which now exceed over 18 crore. During that time, internet users were only 40 lakh, which now stands at around 13 crore. Bandwidth usage which was 7.5 Gbps has now crossed 4120 Gbps. There were 608 telecommunication licensees in 2008, which is now 3396 in various categories. In 2008, one Mbps bandwidth cost Tk 27,000, which has come down to Tk 80-100 under 'One Country, One Rate' initiative. The Cabinet Division and a2i, and Prime Minister's Office have jointly provided necessary support and advice to design, plan and implement the services of all ministries and departments speedily and accurately. For the offices and authorities under 27 ministries and departments, the designs of 1672 services have already been finished in order to turn all the user-friendly services into digital services.

> **The teledensity of Bangladesh was 30 percent in 2009 when the present government assumed office. Currently, this rate has increased to almost a hundred percent. The country had 4.46 crore mobile users in 2008, which now exceeds over 18 crore.**

He said: "The digital infrastructure has witnessed incredible expansions in the last three years since 2018. When the world was thinking about 5G technology, Bangladesh successfully tested it. On July 25, 2018, Prime Minister's ICT Affairs Adviser Mr. Sajeeb Ahmed Wazed Joy inaugurated the 5G trial. 4G services were launched by awarding the licences to the mobile operators on February 20, 2018, a week after the auction for the radio spectrum conducted by the government on February 13 of the same year. We've already completed the preparations for entering the 5G era by formulating 5G technology policy, holding multilateral discussions, analysing legal issues and many other relevant issues in the last four years. State-run mobile phone operator Teletalk completed preparations to roll out 5G technology on a trial basis in December 2021. The purpose of 5G technology is to create opportunities for our people and to move them forward by building a digital Bangladesh and using the technology as the basis for establishing a discrimination-free digital society. 5G technology is an industrial product and essential for industries such as pisciculture and agriculture to meet the challenges of the future technology AI, robotics, IoT, big data, or blockchain era. Even foreign investors will feel discouraged from investing without 5G facilities. To meet the demand, BTCL is working to provide

5G connectivity initially in the five economic zones."

On Bangladesh's embracing the Fourth Industrial Revolution (4IR) and its progress, the minister said, the World Economic Forum came up with the idea of 4IR originally in 2016. The 4IR is one of the most discussed topics in the world today. The real point is "The 4IR is an ongoing process of automation of traditional manufacturing and industrial systems using digital technologies." Popular leader Sheikh Hasina announced the Digital Bangladesh vision in 2008, eight years before the idea was floated. Thus, Hon'ble Prime Minister Sheikh Hasina is the first in the world to use the word 'digital' before the name of her country. A year after that, England announced Digital Britain in 2009, followed by India in 2014 and Pakistan in 2019. Digital Bangladesh's vision or Digital Industrial Revolution is to establish a happy, prosperous 'Sonar Bangla', free from hunger and poverty by establishing a discrimination-free digital society.

"However, there is much debate among developed countries about the 4IR concept. The world is now moving towards the 5IR by connecting the society with artificial intelligence, robotics, big data, or blockchain technology in the 4IR. We must prepare ourselves now for the 5IR. We'll not surrender ourselves to robots or machines. Machines will not replace humans. We're not going to replace humans with machines but we need to use machines as our assistants. So, every student should acquire digital skills along with conventional education. No need to be an expert in digital technology for this. But everyone should have minimum skills to operate digital devices. If Bangabandhu had been alive, Bangladesh achieved in the 80s what it achieved today in 2022. Bangabandhu had pulled Bangladesh out of a bottomless basket to a path of developed Bangladesh. The 3IR started in the world around 1969. Bangabandhu initiated participation in the 3IR by setting up a geo-satellite center in Betbunia, obtaining ITU-UPU membership, forming the T&T Board, nationalizing primary education, preparing Bengali typewriters, forming the Qudrat-E-Khuda Education Commission and expanding technical education. The world is now moving toward 5IR and we are also following it. We need to prepare the whole telecom system to face the 5IR. Policy revision is needed. Prime Minister Sheikh Hasina ensured Bangladesh's participation in the 3IR between 1996 and 2001 by granting licences to four mobile phone operators to bring the mobile phones into the people's grip, launching online internet through VSAT and revoking VAT-tax to make computers accessible to the people and developing the IT industry. Under the visionary leadership of Hon'ble Prime Minister Sheikh Hasina and the advice of Prime Minister's Information and Communications Advisor Sajeeb Wazed Joy, the PTD has played a crucial role in establishing digital connectivity in the country. The installation work of optical fiber has almost been completed to ensure high-speed internet connectivity in every union except 160 remote unions of the country. There will be no place in the country without high-speed broadband connectivity by 2023."

Shedding light on the preparation for the fifth industrial revolution, he said: "5G technology is the connectivity highway of the 5th Industrial Revolution. On the other hand, digital technology is the foundation of Smart Bangladesh which should be built in line with the continuation of Digital Bangladesh efforts. We'll make the 5IR through the highway. As I said earlier, we completed the 5G technology test in 2018 and Bangladesh entered the 5G era in 2021. What is important for us is to create 5G users. We're working to ensure the development of 5G home networks and 5G applications for industries, agriculture, and fish farming. We've introduced tower sharing for the mobile operators. It's time to approach 5IR as we have already overcome the 4IR. We've created the environment for 5G technology. We initiated auction for spectrum in last March with reduced price which the operators will utilize both for 4G and 5G services. Now we are preparing another auction in 2023 focusing 5G technology.

In response to a question on where he would like to see the telecommunication sector in the short and long term or in the next one to three years, he replied, "I've already said that digital connectivity is the key to move forward. The government is relentlessly working to bring high speed digital connectivity to the doorsteps of every rural person in the country as well as town. We've already brought 98 percent of the country under the 4G mobile network and now working to launch 5G technology commercially. The achievements of the country's telecom sector are widely visible."

He added during Covid-19 period, Bangladesh has set an incredible example of its capability to keep people's life of functioning by the blessings of digital connectivity. After launching Bangabandhu Satellite 1 to the orbit, the mission of launching Bangabandhu Satellite-2 has begun. The government continues to make efforts to begin its operations soon as per the election manifesto. Bangladesh has attained self-reliance in the field of satellite-based broadcasting and communication after launching the first satellite. The Bangabandhu Satellite-2 launch is a landmark decision to achieve self-reliance on the satellite technology. The satellite is going to be another formidable attainment for the nation in creating digital connectivity capability. He told after linking with the second submarine cable at Kuakata, the implementation of the third submarine cable in the country has started. "I strongly believe that the third submarine cable will be operational by 2025.

After its launch, another revolutionary change will begin in the development of digital connectivity in the country. The SEA-ME-WE 6 (Southeast Asia-Middle East-Western Europe 6) will contribute immensely to the seamless connectivity with the digital world by fulfilling the growing demand," said the minister.

The Posts and Telecommunications Division saw a big success in the Bangabandhu Satellite-2 launch, the 5G network, and connecting to the third submarine cable as was pledged in the election manifesto. The country's first submarine cable was commissioned in the first half of 2006. Until 2024, the country will require more than 6000 Gbps international bandwidth. In addition, BSCCL is exporting 600 Gbps bandwidth to Saudi Arabia by leasing the unused bandwidth on the western side and European side of the Second Submarine Cable for a long term. It is in the process of signing agreements with France and Malaysia. Bandwidth exports to India's Assam, Meghalaya along with Nepal and Bhutan are also under process. We're also exporting bandwidth to India's Tripura. All in all, we've been saying from the very beginning that our duty is to build the digital highway and we are trying to fulfill the responsibility sincerely.

We're also trying to keep ourselves secured in the future, the minister said, the more digital we will become it will require the more digital security. Social media-based rumor mongering or communal conflict is only one side of the digitization. If we fail to ensure security in everything from transactions to personal data, digitization will backfire on us. To get rid of this situation, we will take measures as per the Digital Security Act 2018. In some cases, the Digital Security Act is misused, which is undesirable. However, under any other legislation, such occurrences may happen. Last time when an incident took place in Cumilla and subsequently, followed by some other places, we registered complaints against 300 links in the social media. The social media authority blocked 264 out of 300 links. Earlier, they would block only 10 to 15 links, meaning they won't respond to our complaints, but now the situation has been changed. Now they (Facebook-YouTube) are registered in Bangladesh and paying Value Added Tax to the government. Facebook has appointed an official for Bangladesh market. I hope that they will work here by complying with the rules and regulations of Bangladesh and adopt the aspirations of the people of the country. The minister said, with the technology the PTD has, we can control or shut down the social media links. Even we can now turn off Facebook photos if we want, we can turn off Facebook or YouTube videos or live, if we want. But shutting down is not the only solution. Headache should be treated with medicine. It cannot be cut. We are still in talks with Facebook and trying to convince them. Good thing is that they now understand that the market of Bangladesh is huge. Digital Bangladesh vision has been successfully implemented in 2021. The government is now working to build a Smart Bangladesh by 2041."

Bangladesh's telecom ecosystem: complexity and way out

The communication world started to change rapidly soon after introducing the wireless telephone. People began to have access to mobile phones. There is no more distance between mothers living in villages and children living in towns or abroad because of telecommunications. Mobile phones have become a prime medium of communication for family members, businesses, and public and private enterprises. Bangladesh, like other developed countries, has already launched fixed wireless PSTN telephone services. But the services offered by fixed phones gradually lost popularity due to the better services offered by mobile phones.

Policy changes in the telecom sector are undeniably crucial to the expansion of mobile phones. It is needless to say that mobile phones provide multi-dimensional services to their customers at multiple times the rate of landlines. Liberalizing the telecommunications sector in the mid-90s helped grow subscribers faster. The Telecom Policy 1998 set a target of providing telephone access to four out of every 100 people by 2010, when the country's population was 14.76 crore. Because of the advancement of mobile phones, the country saw 6.8 crore mobile users in 2010, implying that 45 out of every 100 people were connected to phones.
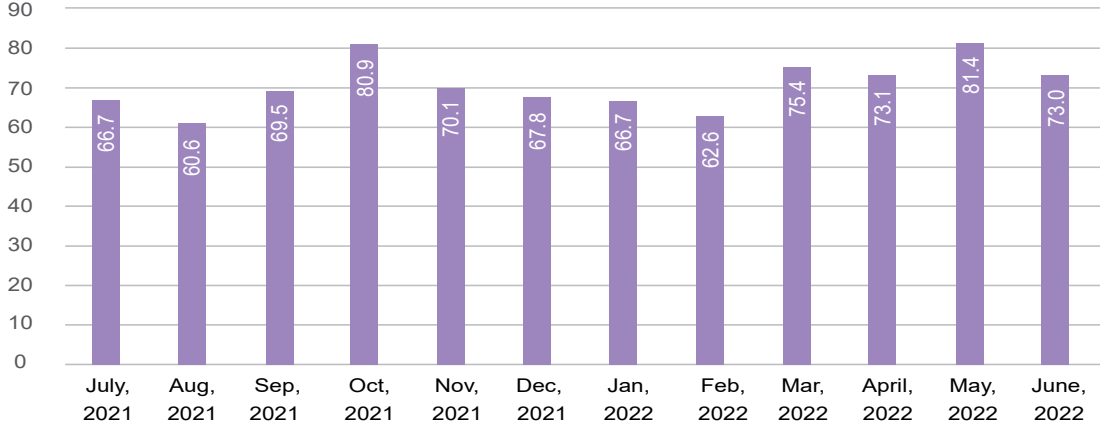
MOBILE SUBSCRIBERS IN MILLION
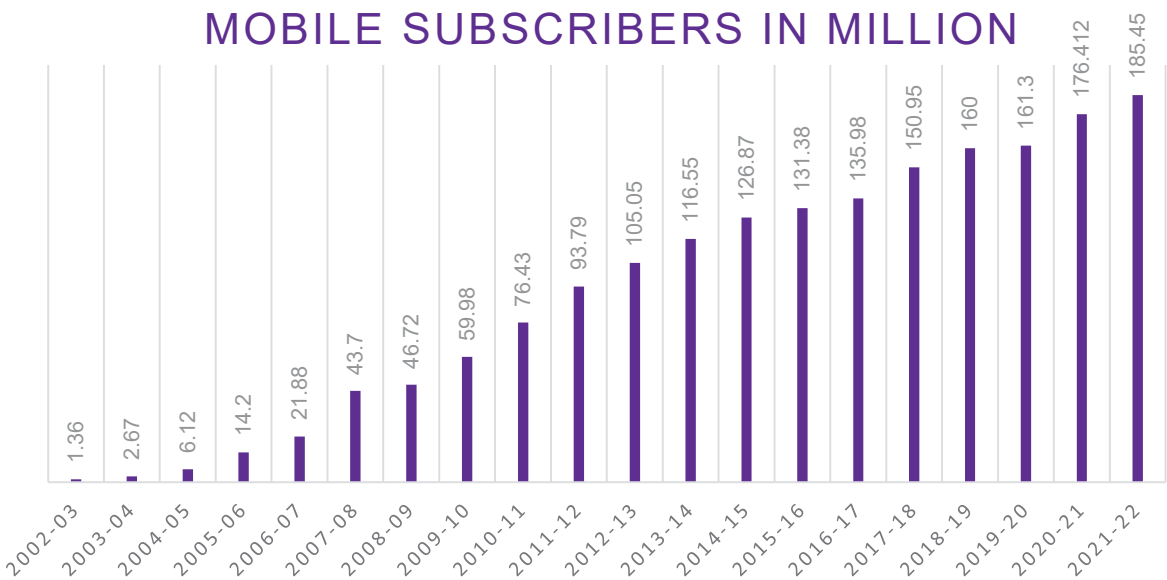
Mobile subscriber growth, 2002-03 to 2021-22

On-net calls (million minutes)
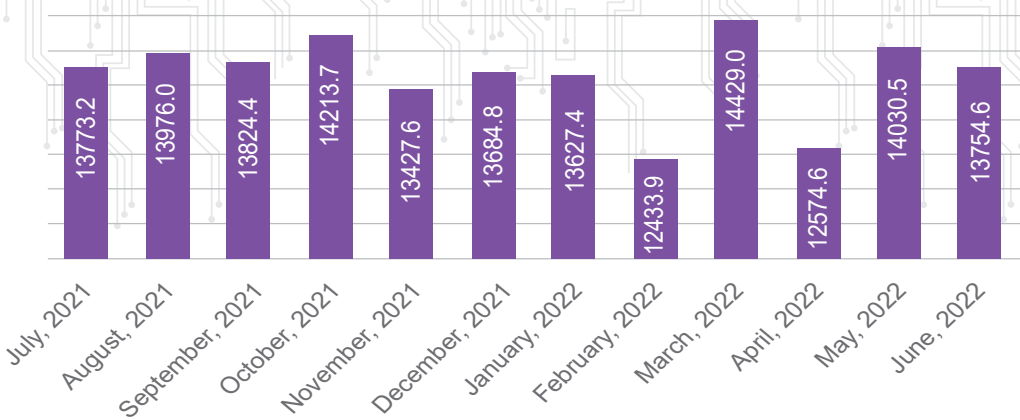
International inbound calls (million minutes)

Source: BTRC

Apart from mobile phone operators, various types of telecom service providers have emerged over the years. Gateway operators are engaged to connect mobile operators. Companies that provide services ranging from exchanging international calls to buying internet bandwidth to offering fiber services began operations. The more such companies increase, the more network management suffers and the costs go up. This article discusses the telecom sector's complexity, causes, ways out, etc.

Background

Postal and telegraph services in line with the Telegraph Act of 1853 were introduced in the region during the British period. Later in 1962, the then-East Pakistan Telegraph Branch was restructured. After the independence of Bangladesh, the Bangladesh Telegraph and Telephone Department was established under the Ministry of Posts and Telecommunications in 1971, followed by the "Telegraph and Telephone Board" (BTB) in 1975, the "Bangladesh Telegraph and Telephone Board (BTTB)" in 1979, and the Bangladesh Telecommunication Regulatory Commission (BTRC) in 2001. In spite of being a service provider, BTTB issued telecommunications licenses before establishing BTRC. Since 2001, it has governed the country's telecommunications sector.

In 2008, BTTB was renamed as BTCL (Smaraik, Bangladesh telecommunication services over time, published by BTRC). Bangladesh entered the era of mobile communication in 1996, when the government began to issue licenses to GSM-based mobile networks and mobile telecommunications service was liberalized. Earlier, CDMA technology was allowed in 1989. Since 1996, the demand for domestic and international calls has been rising due to the launch of a competitive system in the country. Mobile companies expanded their networks by laying fiber-optic cables across the country under their management. A similar guideline was followed for interconnection. BTCL, on the other hand, provided both fixed telephone services and international call exchanges. In the new century, the demand for mobile phones in the country skyrocketed, and subscriber growth beat all the forecasts.

Changing situation

Different categories of licenses for interconnections, internet gateways, and fiber connectivity were issued after framing the International Long Distance Telecommunication Service (ILDTS) policy in 2010. Earlier, telecommunications service operators provided the services. A IGW license was issued for the international call exchange, which was earlier issued by BTCL.

Subsequently, the era of feature phones and smartphones began. Initially, mobile phone operators started offering limited-speed internet services through EDGE and GPRS technology. With the receipt of 3G licenses in 2013, the country's mobile internet broadband service was established. The 4G license was issued in 2018. By the end of 2022, 5G technology will be rolled out across the country. It is noteworthy here that the number of subscribers of mobile phone operators and the internet penetration rate increase due to the growing demand for telecom services, making the quality of service more complicated. Fiber-cable transmission

service companies and fixed service providers lag in terms of interconnection with the demand of mobile phone operators. A difficult situation emerged at the back end of mobile telecom services in the country.

Current status

To get a rough idea of the country's telecom ecosystem, one needs to comprehend the layers a mobile call requires to pass through to be successful. A phone call from "customer A" to "customer B" requires that it go via the network tower and switch of "operator A," via the NTTN operator, via the interconnection operator, via NTTN, and via the network and switch of operator B. Regarding the data connection, assistance is sought from the International Internet Gateway (IIG) and the National Interconnection Exchange (NIX). The call needs to go through another layer in the case of the Mobile Number Portability (MNP) service or operators without changing the numbers. On the other hand, the international call exchange needs to be connected to the International Gateway (IGW), submarine cable, or International Terrestrial Cable (ITS). Another layer appears after granting TowerCo's license. Due to continuous
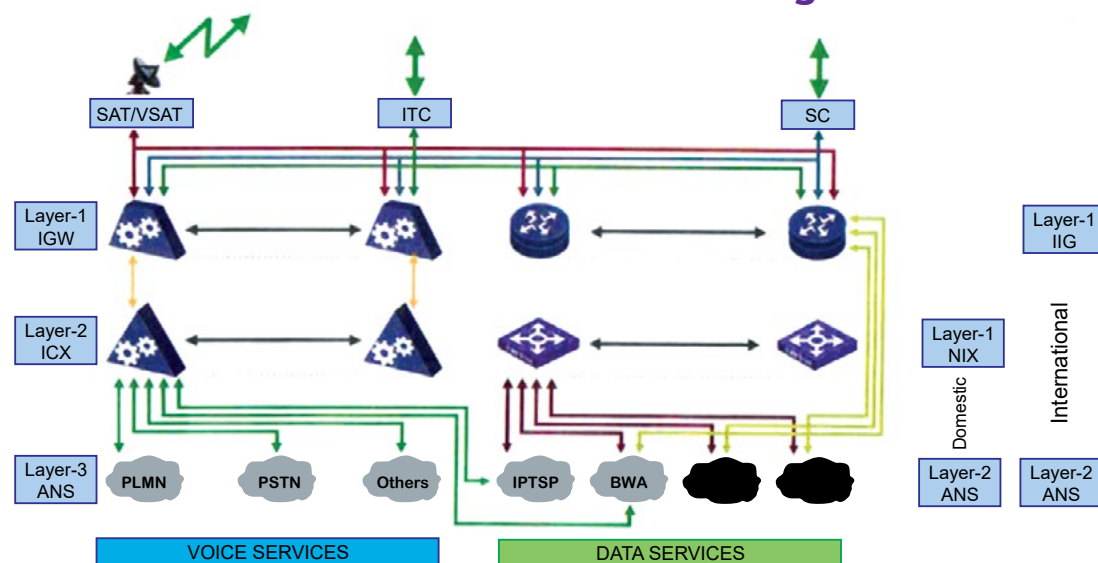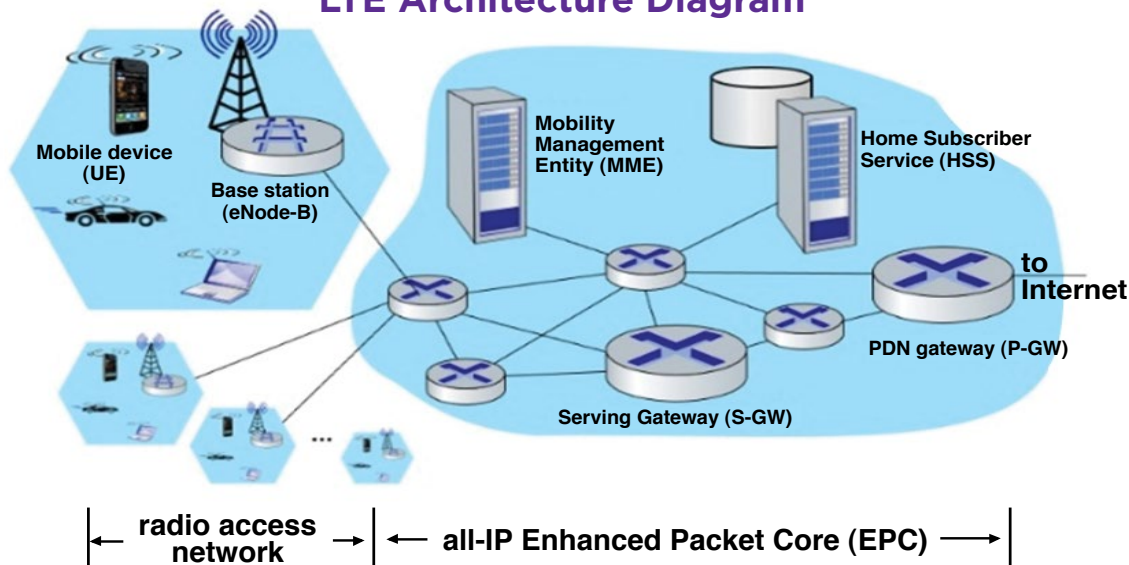
policy changes in the mobile sector, the ARPU of the service never exceeded USD 1.5.

Apart from the mobile phone operators, BTCL and IPTSP operators also provide call and data services in the country. Besides, various other service providers, including vehicle tracking services, telecom VAS services, call centers, and national database systems, have been involved in the ecosystem. Every phase of the system, whether there is a value addition or not, hurts the services and increases the cost of business. Against this backdrop, the quality of service may decline due to the weak connectivity of any service providers involved in the system. Meanwhile, monitoring such a large supply chain is also a complicated task. However, consumers ultimately bear the brunt of rising costs. The telecom ecosystem in the country has 3412 licensees, including 2849 ISPs. They are involved in the service somehow. It should be noted here that the situation will go from bad to worse when 5G is commercially launched in the country. Because 5G technology offers an extremely low latency rate and various activities are conducted in real time, If there is a connectivity problem at any point in this vast ecosystem, it will disrupt the entire network.

Conclusion

Digital technologies are spreading rapidly in the world due to the tremendous development of semiconductors during the past 30 years, resulting in increased dependency on them. Despite having yet to experience the industrial revolution, technological advancement is critical for a country like Bangladesh, which aims to be among the developed countries by 2041. We have been noticing that people are gradually adopting different types of technology because of several public and private efforts. Internet bandwidth usage has nearly tripled in the past several years. At the end of 2022, internet bandwidth usage was 4419 Gigabits per second, up from 672 Gigabits in the middle of 2018, meaning the usage has increased by more than six fold in the last 4.5 years. 4G technology is now available nationwide, and 5G is coming soon. 5G is not just a technology; it is a service that is dependent on an entire ecosystem. Even a single step back in the ecosystem may put a lid on the target. Moreover, satellite service, the availability of mobile handsets and various digital applications, the widespread use of e-governance, etc., need to be ensured. As a result, reliance on IT and telecom services has grown exponentially. Therefore, it is necessary to adopt and frame appropriate policies to move forward successfully toward far-reaching goals.

ILDTS Guideline's Network Diagram

LTE Architecture Diagram

Way out

Formulation of benchmarks, accountability, and monitoring of all licensees

The regulatory body regularly oversights the service quality of mobile operators. For this purpose, service quality control indicators have been defined. Meanwhile, all have licensing obligations as well. In order to get quality services, all service providers in the ecosystem need benchmarks and regular monitoring. It can be seen that despite the allocation of radio frequency at a cost of hundreds of crores of taka, the services of mobile operators are often affected due to the illegal use of jammers, repeaters, etc. Moreover, despite demand, the required sites are not always available for the network. Such problems need to be addressed.

Rationalization of the number of licensees

The number of license holders in the telecommunications sector in Bangladesh seems comparatively high considering the size of the market. The policy needs to be amended to rationalize the number of licensees and maintain strict policies to ensure quality service. Moreover, mergers can be encouraged.

Equality or simplicity in license provisions

There are 27 types of licenses in the telecom sector in Bangladesh, which can be revised to simplify the categories. The government is working on the unification of mobile network license guidelines. It is seen that operators in other countries offer almost all sorts of services. Considering this, unified licensing practices make sense. Moreover, incentive policies can be implemented to accelerate the overall progress of the telecommunications sector.

Policy reform

The National Telecom Policy of 2018 has set telecom-related targets to be implemented by 2027. The ILDTS policy needs to be updated to follow the National Telecom Policy, or the two policies can be integrated. The ILDTS policy includes the architecture of interconnection, IP telephony, BPO, data connectivity, etc. However, policies and guidelines, including the broadband policy, the ILDTS policy, mobile convergence, mobile broadband, the IoT, etc., need proper coordination.

@25 Robi is ready for tomorrow

Rajeev Sethi

CEO, Robi Axiata Limited

For a nation, it is one thing to move along with time, but quite another to pass this movement through a policy framework. Even the most developed countries fall short of such planned progress in the future. Bangladesh, in this context, offers a unique case study for the global community as well as foreign investors like us. Having successfully implemented the Digital Bangladesh vision, the country is now moving stridently towards the vision of Smart Bangladesh by 2041.

Celebration of Robi's 25 years of operation, therefore, goes far beyond the company domain- rather it is the celebration of Robi's efforts to implement the government's vision for the people of the country. We are indeed proud to have had this opportunity for the last 25 years and are ready to continue doing so in the days to come.

platforms to deliver our promise of new experiences in the lives of our customers. We have also opened up this countrywide asset to young talented app developers to express their zeal for innovation. As a result, we now have the recipe to turn Digital Bangladesh into Smart Bangladesh.

Going beyond the telecom domain, Robi is building the first-ever four-tier data center from the private sector at the Sheikh Hasina Software Technology Park in Jessore. We have also been recognized as the best operating company of Axiata when it comes to the AI maturity index for three years in a row.

We have recently launched the third edition of Robi's flagship digital entrepreneurship platform, r-ventures 3.0 as part of our celebration of Robi's 25 years of operation. Last year, we formalized r-ventures as a BSEC-approved Investment Fund, sponsored by Robi's ICT-focused subsidiary, RedDot Digital. We are committing an investment of up to BDT 25 million in the r-ventures 3.0.

While we look back at our past with pride, we feel confident in our readiness for the digital future. With leadership in 4G in terms of coverage, the proportion of 4G users in our network, and the overall quality of service, we are confident that we laid a strong foundation for the digital future.

We have the highest percentage of 4G users (50.9%), and the highest percentage of data users (75.5%) in our subscriber base (5.44 crore) in the industry [Total data subscriber base: 4.11 crore]. We also have the highest penetration of 4G handsets in our network in the Industry (58%). We now ensure 98.2% population coverage of its 4G network with 15,219+ 4G sites.

Out of a total of 580 million interactions, we have with customers every month, 52% happen through our single app, My Robi and My Airtel. Besides, 38% of our total recharge is done over digital platforms. Therefore, our digital supremacy is founded on a solid base.

If you peel into this base, you will find that we have put in enormous effort to create the complete ecosystem of towers, backhaul connectivity, digital infrastructure, and digital

> " We fully realize that our future growth rests on whether we can satisfy our customers with the quality of our service. In this connection, our priority for the future will be to listen to what our customers have to say about us. "

Since our inception, we have made close to 30,000 crore taka as a capex investment and contributed close to 39,000 crore taka to the public exchequer. Our sprawling business operation around the country supports more than 100,000 jobs at the moment.

However, we fully realize that our future growth rests on whether we can satisfy our customers with the quality of our service. In this connection, our priority for the future will be to listen to what our customers have to say about us.

I would like to thank the telecom regulator BTRC, the Posts and Telecommunications Division, the ICT Division, and the government as a whole for kindly affording us the space and guidance to grow our business. Thanks to all our business partners for being a part of our historic journey. Thanks to all our friends from the media for guiding us all along our journey like true friends.

Most importantly, thank you to each and every one of our customers for keeping their faith in us. Your trust in us is our biggest strength as we go forward. Thank you!

5G users to reach 4.4 billion by 2027

Abdus Salam

Head of Network Solutions, Malaysia, Bangladesh & Sri Lanka and Country Manager Ericsson Bangladesh

We welcome the Smart Bangladesh-2041 vision to build a knowledge-based economy, a developed and prosperous country. Policymakers have formulated a 14-point action plan to realize the dream of building a Smart Bangladesh. The components of 'Smart Bangladesh-2041' include smart education, smart healthcare, smart agriculture, smart trade, smart transportation, and so on. Thus, ICT's contribution to the economy and future growth is indispensable.

Abdus Salam, Head of Network Solutions, Malaysia, Bangladesh & Sri Lanka, and Country Manager Ericsson Bangladesh made the above observations while speaking to ConneXion.

"Ericsson has been an integral part of the telecom revolution in Bangladesh. We are the pioneer in launching 2G and 3G technologies in Bangladesh.

Referring to the 'Ericsson Educate programme, he said, "It is a specially curated online programme that can move the country's vision toward smart education further. The free online learning programme is to build the Malaysian workforce, as well as interested university-level students across all disciplines, to 5G and telecommunications, as well as related technologies such as Artificial Intelligence, Automation, Internet of Things (IoT), and machine learning."

Abdus Salam cited a few use cases as examples of how Ericsson Enterprise can accelerate the digital transformation of businesses. For example:

Connected Cars: The low latency and high bandwidth of the 5G network will ensure an atmosphere for running vehicles such as self-driving cars and taxis. Advanced driver-assistance systems and safety management will improve in 5G-enabled cars.

Connected Healthcare: Telemedicine, remote diagnosis, and instant medical repository creation are vital innovations of digital transformation. 5G is

likely to make up 21 percent of global healthcare.

Smart Manufacturing: Advanced wireless system using 5G's low latency and high-speed bandwidth and industrial IoT will establish Smart Industry. Operators addressing industry digitalisation with 5G technology might generate $7.8 billion in revenue from Smart Industry by 2030.

"The global data and use cases will help formulate strategy in realizing the government's vision of 'Smart' Bangladesh," said Abdus Salam.

According to Ericsson Mobility Report, he said, 5G subscriptions are expected to reach 4.4 billion by 2027, demonstrating strong growth across the region, despite current and developing economic challenges in many parts of the world. In Southeast Asia and Oceania, subscriptions may reach almost 3 million by 2022 and around 620 million 5G subscriptions by the end of 2028, overtaking 4G.

What kind of challenges he is facing in the telecom sector, he said, "From the experience of doing business in Bangladesh, it is better to speed up some important business issues related to tax, VAT, import and export approvals. Coming up, the government is simplifying the process. Looking forward to accelerating it."

"There are intercompany transactions among multinational companies across the world. The transactions are currently very complicated and often face restrictions, so we hope that the government will identify this problem and simplify the process to create a more investor-friendly environment that will enhance Bangladesh as an attractive destination for foreign direct investment, he said.

However, he further said the adverse economic impact of the pandemic might delay 5G adoption as it has affected the disposable incomes of the people, and many have decided to cut using mobile phones.

AMTOB-BIGF seminar

Concerted effort key for 5G service: BTRC Chairman

The Chairman of the Bangladesh Telecommunication Regulatory Commission (BTRC), Shyam Sunder Sikder, stated that a concerted effort is necessary to successfully implement 5G service, which is crucial in building a "Smart Bangladesh".

According to Mr. Sikder, businesses need 5G more than ordinary consumers and many corporations and public service agencies are not yet ready for the service. This statement was made at a seminar on "Smart Bangladesh - Opportunities and Challenges of Mobile Telecom", jointly organized by the Association of Mobile Telecom Operators of Bangladesh (AMTOB) and the Bangladesh Internet Governance Forum (BIGF).

The BTRC chairman emphasized that the implementation of 5G service must be done gradually and efficiently. He noted that while smart devices have been brought into the country and radio waves have been allocated to operators, it is important that the public be able to use them. The government will allocate time for operators to launch the 5G service, but the mobile operators must also invest in necessary equipment.

Mr. Sikder emphasized the significance of the Internet of Things (IoT) and automation in 5G and noted that they are crucial in connecting people and equipment. He highlighted the need for automation in various industries such as education, health, agriculture, and transportation, and stated that 5G is the

solution. However, citizens must also be knowledgeable in using the network.

During the seminar, the Chief Corporate Affairs Officer of Grameenphone, Hans Martin Henrichsen, presented the keynote and spoke about the four pillars of a smart society: Smart Economy, Smart Society, Smart Government, and Smart Citizen. He stated that to build smart cities and villages, connectivity, sensors, applications, adaptability, and the use of big data are essential.

Building 64 smart cities and 60,000 smart villages in Bangladesh by 2030 is possible, according to a keynote paper presented at the event. To achieve this, Bangladesh can learn from other countries and conduct pilot projects in selected cities and villages. The success of the projects, as well as public and private collaboration, and a well-planned national strategy, are crucial for the realization of "Smart Bangladesh."

> " **Internet of Things and Automation are very important for 5G. Connecting people with the equipment is possible because of the technologies.** "

At the event, the director general of spectrum division of BTRC, Brig. Gen. Mohammad Moniruzzaman Jewel, emphasized the importance of a collaborative approach for success. He noted that data demand in the country is rapidly increasing, along with the number of mobile devices, and the government will support efforts to build a smart Bangladesh by coordinating with operators as needed. Jewel emphasized the importance of a common platform over working in isolation.

Abdus Salam, Head of Network Solutions Ericsson Malaysia, Bangladesh, Sri Lanka and Country Manager Ericsson Bangladesh pointed out that spectrum has been allocated to operators, now coordination with other players in the ecosystem is essential. He noted that over 90% of

the country's population uses mobile internet and stressed the importance to gradually phase out the lower generation mobile services and move to latest technologies so that the service providers can utilize the spectrum.

Robi Executive Vice President Anamika Bhakta noted that 50% of the country's unique customers still do not use the internet and they are not aware of its benefits. There are lot of people who do not have the affordability to buy handsets. She highlighted that reducing the cost of mobile devices is necessary to increase digital inclusion and that cooperation from various stakeholders, including the government, regulators, mobile operators, and people, is required to address the challenges faced by the telecom sector.

In indicating the challenges of the mobile sector, she said taxation is the biggest impediment to the growth of the industry. Moreover, the operators need to upgrade their equipment after certain intervals. For example, she said, the operators invested in the third generation (3G) service in 2013, but now, within a decade, they have to decommission the technology. So, the sector should not be considered a short-term revenue-generating sector, but rather one that should consider how the sector is contributing to society in the long run.

In conclusion, AMTOB Secretary General Brig. Gen. SM Farhad (Retd.), who moderated the seminar, stated that 95 to 96 out of every 100 internet users rely on mobile internet, and proper coordination and a well-planned strategy will be necessary for the successful implementation of the "Smart Bangladesh", as we did during implementing the Digital Bangladesh vision.

Veon (Banglalink's parent company) Group CEO Kaan Terzioğlu accompanied by Banglalink CEO Erik Aas visited UCEP School in Mirpur recently. Banglalink provided UCEP Bangladesh students with free internet packages to help them continue their e-learning. The initiative enabled them to access online classes, digital content, online meeting, e-professional teachers' group, class e-monitoring, education-related websites, and information about life skills and soft skills curriculum.

Cyclone Sitrang left a trail of destruction in some areas of Bangladesh in mid-2022 when thousands of distressed and homeless families urgently needed food aid. In response, Banglalink in collaboration with Bidyanondo Foundation distributed relief goods in the affected areas and supported 6,500 families nationwide.

Youth Leadership Center (BYLC) in partnership with GYLC organised a summit to explore how today's youth can lead the fight against climate change in October. Grameenphone was the sponsor of the event. Summit participants took part in a tree plantation programme in a mangrove forest at Laudobe in the coastal belt. Grameenphone CEO Yasir Azman accompanied them.

Robi Axiata Limited celebrated its 25th year of operation in Bangladesh in November 2022. To mark the day, the company shared its socio–economic contributions to the country at a city hotel.


The devastating flash flood in Bangladesh's north and the north-eastern region left millions of people in need of shelter, food, and healthcare. As part of its CSR activities, Grameenphone and the Bangladesh Red Crescent Society (BDRCS) jointly helped fight the ordeal through relief and rehabilitation efforts.

National Appstore bdapps launched by Robi in association with ICT Division organised National Hackathon 2022 in a gala event at the Bangabandhu International Convention Centre in November. The top best 10 teams were recognised at the event.

Teletalk Bangladesh Limited, Robi Axiata Limited, and Summit Towers Limited signed a tripartite agreement on sharing existing network infrastructure recently at the Posts and Telecommunications Division. Summit Towers Managing Director Md Arif Al Islam (second from the left), BTRC Chairman Shyam Sunder Sikder, Teletalk Bangladesh Managing Director AKM Habibur Rahman, Post and Telecommunication Division Secretary Md Khalilur Rahman and Robi Axiata Chief Financial Officer M Riyaaz Rasheed were present.
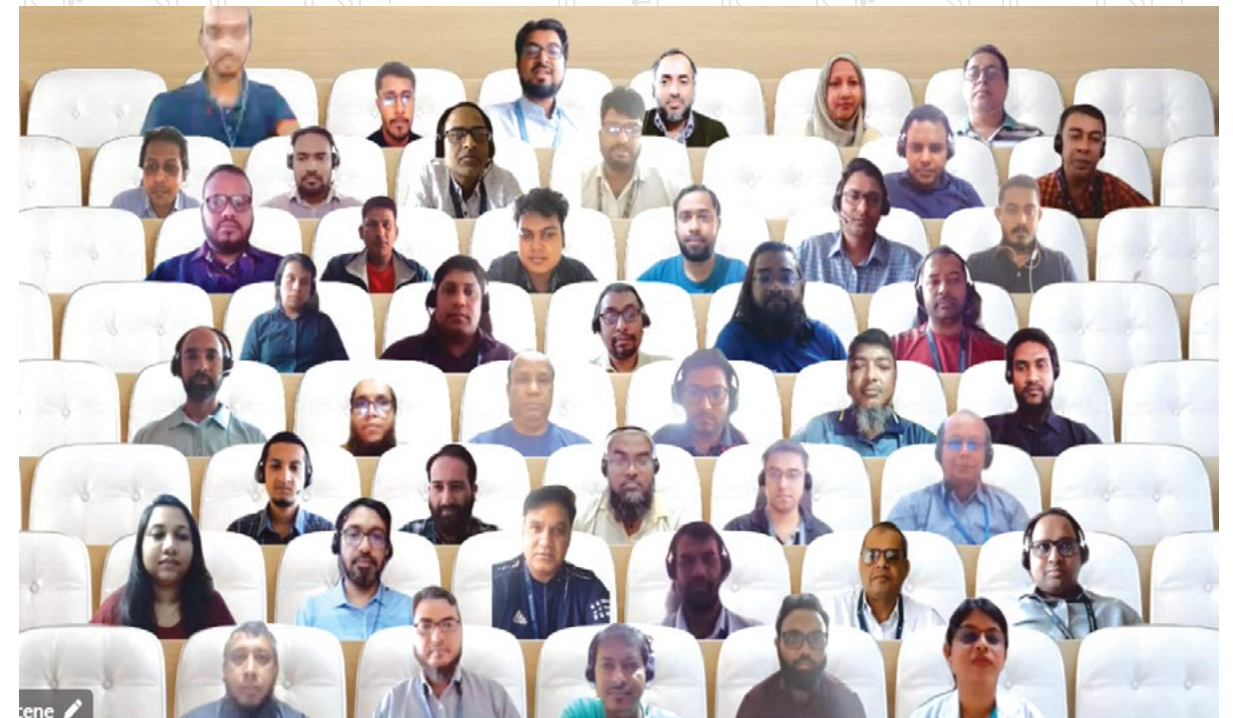
Ericsson Bangladesh recently organised a health awareness session on dengue fever for its employees.

Education Minister Dr. Dipu Moni and Teletalk Bangladesh Managing Director AKM Habibur Rahman recently attended at a digital lottery programme for admissions to public secondary schools from Class-I to Class-IX for the 2023 academic year.

Nokia, New Country Head, attended and led the Nokia capability presentation and plan for Bangladesh Vision 2041

Huawei launched a specialised knowledge-sharing center, named 'Huawei Bangladesh Academy' in Dhaka on November 10, 2022. This 7,000 square feet facility is equipped with advanced technological equipment for knowledge sharing. The worldwide business case scenarios of the latest ICT innovations, engineering courses, solutions, and so on, what Huawei has got with its significant investment in research and development for more than 30 years, will be showcased here to the overall ecosystem partners.

Huawei signed a Memorandum of Understanding (MoU) with Bangladesh Garment Manufacturers and Exporters Association (BGMEA) on October 30, 2022. Under the agreement, Huawei and BGMEA will work together to help garment factories become 'green factories' by shifting to a green source of energy. Huawei will be providing solar power solutions to the BGMEA-enlisted factories at their convenient business models designed under the MoU.

Posts and Telecommunications Minister Mustafa Jabbar recently took part in a roundtable styled "Importance of Preserving Intellectual Property in Implementing Smart Bangladesh" jointly organised by the telecom ministry, Technology Reporters' Network Bangladesh (TRNB) and Robi Axiata at the mobile operators' head office in the Dhaka's Gulshan. Among others, Robi Axiata's Chief Executive Officer Rajeev Sethi and AMTOB Secretary General Brigadier General (retd) SM Farhad attended the event.

AMTOB Secretary General Brig Gen S M Farhad (Retd.) recently paid a courtesy call on newly appointed Bangladesh Investment Development Authority Executive Chairman Lokman Hossain Miah.

Congratulations Bangladesh

AMTOB
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