

VoIP and Relevant Issues: Bangladesh's Context

Md. Anwarul Kabir and Tamnun E Mursalin

VoIP: An Internet based Telephonic Communication: Voice Over Internet Protocol (VoIP) is the state of the Art Technology that allows one to make voice calls using a broadband Internet connection instead of regular (or analogue) phone line. VoIP services convert the voice into a digital signal that travels over the Internet. If a person calls a regular phone number, the signal is converted to a regular telephone signal before it reaches the destination. Besides VoIP also allows to make a call direct from a computer, a special VoIP phone, or a traditional phone connected to a special adapter. The major building blocks for VoIP are i. A broadband (high speed Internet) connection. ii. A computer, adaptor, or specialized phone and iii. Relevant software.

As the cost for VoIP communication is insignificant considering the land or mobile phone communication, people of all walks of life are using this technology worldwide especially for global telephone communication.

VoIP licenses and dirty games in Bangladesh: Despite the fact that the installation and configuration of VoIP communication rely on high-tech, in Bangladesh the trend of VoIP communication, though illegally, has already been started for about last four years. However, three years back in January 2004, due to crying demand of various quarters including ICT sector, the Bangladesh Telecom Regulatory Commission (BTRC) announced legalizing VoIP and awarding licenses within two months. But ironically, since then long three years have passed but the question of issuance of license is yet to be resolved.

The unusual delay in taking decision for issuing licenses is a technical one. Bangladesh Telephone and Telegraph Board (BTTB) has pointed out that for the security of the country as well as for ensuring the inflow of revenues to the government from the private VoIP service providers , a strong monitoring system must be implemented. At the policy level, initially, there were some dilemma regarding infrastructure of Information exchange, for instance, whether the management of all the traffic be made through a gateway or, in this context, set up an Internet Exchange. The original proposal of BRTC suggested that the international phone traffic would be managed through existing very small aperture terminals (VSATs) but later on it was modified and decided that management of all Internet traffic, including that of the ISPs, would be done by a single gateway or exchange managed by the BTTB. The rationale of such a common platform is that without a common platform, nobody will know how much the VoIP operators are earning. It is ridiculous to expect that the VoIP operators will give genuine revenue reports to the government and pay taxes. In line of this argument, subsequently, it has been decided that the licence for VoIP would be given after setting up a common platform in four areas of the country under BTTB through which Internet phone calls will be channelized. The four areas are Dhaka, Chittagong, Sylhet and Bogra. Such a common platform, has to be connected to the submarine cable with a view to connecting our VoIP systems to global Information High Way.

Meanwhile, vested interest groups using their political influence slowed down the BTTB's move to set up a common platform. The BTTB floated tender for installation of such a platform several times but due to allegation of corruptions involved in tender evaluation this initiatives could not be effective. For instance, in its second tender, the BTTB picked up a bid of Chinese company Huawei, represented by the youngest son of a very powerful minister of the 4-party alliance government. However following a formal complaint from a bidder, the planning ministry at that time categorically recommended blacklisting Huawei for corrupt practices to win the contract. Instead of taking decision as per the planning ministry recommendation, the telecoms ministry sat on it, and approved Huawei's \$ 3.5 million bid to set up the platform in Dhaka, Chittagong, Sylhet and Bogra through which internet phone calls will be chanelized. But following exclusive reports in the mass media, the PMO subsequently cancelled the Huawei bid and directed the BTTB to re-tender the scheme.

At this total mess situation, at the end of the tenure of the 4-party alliance government, in October, 2006, BTRC took a hurried motion to issue VoIP licences without ensuring first a common platform for VoIP operators. In response to BTRC's call it received 51 applications for VoIP licences on October 8, 2006. Applicants include 31 Internet Service Providers (ISPs), 14 Public Switched Telephone Networks (PSTNs) and six mobile phone companies. Among these applicants, many were powerful illegal VoIP operators, very close to power center of the then political government. These illegal VoIP operators were so powerful that they could successfully influence the BTRC in chalking out very high licensing fees for this business to minimize the number of competitors and to monopolize this business. For providing license, the BTRC has categorized VOIP into three groups namely, Category A: Cellular Mobile operator VOIP License, Category B: PSTN operator VOIP License and (iii) Category C: Nationwide ISP VOIP License. For the inquisitive readers, the following table shows the required licensing fees set by BTRC for these three categories VoIPs operators.

1.	Application Fee		Taka 5,000
2.	License acquisition fee	Category A (Cellular Mobile operator)	Taka 10 crore
		Category B (PSTN operator)	Taka 1 crore
		Category C (Nationwide ISP)	Taka 50 lac
3.	Annual License Fee	Category A (Cellular Mobile operator)	Taka 2 crore
		Category B (PSTN operator)	Taka 20 lac
		Category C (Nationwide ISP)	Taka 7 lac
4.	Gross Revenue Sharing (Generated from VOIP service only)	Category A (Cellular Mobile operator)	5%
		Category B (PSTN operator)	2%
		Category C (Nationwide ISP)	1%
5.	Security Deposit (for sale of pre-paid cards)	Category A (Cellular Mobile operator)	Taka 20 lac
		Category B (PSTN operator)	Taka 10 lac
		Category C (Nationwide ISP)	Taka 5 lac

Presumably this sort of very high license fees will bar many real IT enabled and genuine business professionals to acquire license from the BTRC.

However, the dirty game over issuance of license for VoIP operators, for the time being, is in recess following high court stay order issued in November last year.

Drive against illegal VoIP operators and its economic implications: The present interim government led by Dr. Fakhruddin Ahmed, presumably with good intention has started a countrywide drive against illegal VoIP operators. Already many illegal VoIP operators have been shut down, legal actions against the involved personnel have been initiated and their equipments are seized by the law enforcing agencies. Apparently this drive seems to be very effective and due to this drive, substantial increase of revenue of BTTB earned from overseas phone call is being treated as an optimistic step of the present government.

However, “the ban of VoIP is proportionate to the increase of revenues earned from the telecommunication sector”, this simplistic notion must be avoided if we want to analyse the implications of VoIP use and its long time impact on overall growth of economics and the development. It has been already mentioned that the process of issuing licence has been stopped for the time being following the high court stay order. This implies, in our country, right now, legally there is no VoIP communication setup is possible. Even BTTB in its overseas communication is using the VoIP facility, although for limited use without procuring licence for BTRB and so this operation is also be deemed to be illegal one. So, it may be claimed that at present there is no legal VoIP operator in Bangladesh and we are passing through a vacuum state concerning the VoIP communication. This vacuum state must not be continued for the sake of apparent increase of revenues from the overseas telephone calls.

Our development partners in general and the World Bank in particular recognize the importance of access to telecommunication as an element within the agenda of economic development and poverty reduction. The World Bank has adopted a strategy that includes universal access to telecommunications as a goal. The VoIP technology paves the way for the cheapest, efficient and perhaps the best global telephonic communication system for the developing country like ours. The VoIP communications dramatically reduces the cost in telecommunication and this cost effective communication has tremendous impact on overall development of business and the growth of GDP. The VoIP has also opened up new avenue for employment by initiating call centres. Our neighbouring country India has already installed call centres and created new employments in the job market. Besides, in business communications, VoIP offers easy video-conferencing facility which, no doubt, speeds up the global business transactions. Even in Bangladesh some business concerns have already started the practice of arranging video-conferencing using VoIP. It has been marked that especially in the case of software development sector, this sort of video conferencing has boosted up in procuring work orders from global markets.

It is true that due to use of VoIP, worldwide the revenue earned from telecommunications has declined abruptly. The same scenario has been found in the developed countries like the UK, USA and Canada. Still at the policy level the developed world have not adopted any policy that hampers the establishment of the VoIP communications as it facilitates the alternative sources of revenue generation, new job opportunities, and above all quality and economical telecommunication services for the people which should be prime concern of the good governance.

Even many developing countries have encouraged the rapid expansion of VoIP taking risk of reduction of direct revenue earned from the traditional telecommunications. For instance, in Hong Kong, at the policy level due to flexible attitude toward VoIP setups the direct revenue earned through telecommunication has decreased by 18 percent but the indirect revenues earned from VoIP-based establishments increased by 145 percent. Besides, common people there are more than happy to get quality and low cost telecommunication services. In China VoIP is also legalised and obtaining licence for VoIP is not a great deal in terms of both financial as well as bureaucratic process. For this reason many VoIP operators are working there and people are enjoying competitive VoIP based services and indirect revenues earned from VoIP services have also increased significantly. Similar scenario have been found in Singapore, Thailand, and many other countries.

So, it is evident that the many of the developed and developing countries as well have given priorities for rapid expansion of VoIP services. Rather than focusing on direct revenue earned from the telecommunication these countries have given concentration on indirect increase of huge revenues from VoIP based services. Besides, due to widespread use of VoIP, citizens of those countries are also enjoying quality telecommunications services at low cost.

Legalizing VoIP and some pragmatic steps: In Bangladesh, though the VoIP is legalized at least at the policy level but the process of providing licenses has yet to be executed. It has been already discussed that on the issue of providing license for VoIP some dirty games have been played by the immediate past political government undermining the public interest. Drive against illegal VoIP operators should not be considered a positive step unless the procedure for issuance of license begins immediately. In this regard some pragmatic steps that government may follow are given below:

1. Decision about BTTB's role in this regard should be reexamined. BTTB wants to regulate the VoIP with a view to enhancing its revenues earned from overseas telecommunications. But increase of direct revenues from overseas telecommunications should not be considered as the overall economic growth of the country. Rather it has been observed that the reduction of telecommunication rate has the greater impact on the GDP of the country. Till to date, the telephonic call charge in Bangladesh is the highest in the world. But still BTTB has failed to contribute much to the net revenues earnings of the country. The BTTB if at all wants to increase the revenue then it should consider initiating other value added services for VoIPs and other modes of telecommunications using the facility of the submarine cables.
2. The decision of management of Internet traffic through a common platform should be reevaluated. But the question is why should it be under BTTB. If at all such common platform has to be implemented then it should be under BTRB. It is to be mentioned that such common platform should be used for monitoring some technical issues for instance, ensuring the network security.

3. There are gross allegations against BTRB on the question of issuing VoIP licenses. For this present BTRB should be reconstituted and reformed without any delay. Present hefty license fees (please see the table) for running the VoIP operation must be reduced drastically so that small and medium scale entrepreneurs can initiate this business. This, in turn, will create a competitive environment following the core philosophy of market economy.
4. Regulatory decisions should be made in a timely fashion and incorporate flexibility, and should encourage innovation and competition.

The question of issuance of VoIP must be resolved as quickly as possible otherwise we will fail to achieve success in global competitive business arena. In the past due to delay or ill decision in taking the opportunity of the technological advancement, the nation has slowed down to achieve the economic growth. For taking pragmatic decision on the issue of VoIP, the government may initiate an immediate national dialogue with different stakeholders, experts, economists and other relevant people. In this context it should be mentioned that through a national dialogue Singapore has successfully resolved the question of VoIP regulation and relevant issues.

The authors are the faculty members of Computer Science, AIUB