The artificial intelligent algorithm for this operation has been developed by using ultra latest versions of VHDL (Very High Speed Integrated Circuit Hardware Description Language) and incorporated into an IC using the TTL VLSI (Very Large Scale Integration) technology. The implementation and amalgamation of VHDL coding makes the whole design efficient and reliable in case of number of subscriber increases. VHDL is a high level language which is only taught in American International University-Bangladesh.

Their design is a combination of Time Division Multiplexing (TDM), Frequency Division Multiplexing (FDM), Circuit Switching, IP Packet Switching and many other communication concepts.

Their project is a design of a full scale telephone exchange consisting of user equipment and exchange stations. Primarily they have designed it for about 10,000 users. These users are then distributed between 11 exchanges, 10 of them are providing the service for 1000 users each while one is dedicated for VOIP services and for connecting to other external networks (BTTB, Grameen Phone, Banglalink etc). Individual station is connected to every other station by means of only 25 pairs of wires in order to carry the information of its 1000 users in multiplexed form. Each of the 11 exchanges plays myriad roles including that of a traditional "Central Office Station" and a self sustained switching station.

Every user's equipment is connected to the 'Local exchange station' by means of a pair of wires; one transmits the analog voice to the station while the other carries the voice to the user equipment. Each user will have a 4 digit subscriber ID e.g. 4675. The first digit i.e. 4 indicates that the user belongs to the 4th exchange station. The remaining 3 digits are the "Subscriber's Exclusive Identification (SEI)" tag within the exchange. 4 digit SEI number allows 10000 possible combinations over the whole network where each local exchange station allows a possibility of 1000 SEIs.

Their communication system supports VOIP (Voice Over Internet Protocol), data communication. VOIP is about exchanging the voice data through internet. It is nothing but STD-ISD facility through internet. One can call any person across the world not at the rate of STD -ISD but just at the rate of normal internet browsing. It simply means transformation of voice using internet.

It is high time that the government and the private sector concerned came forward to finance these three talented technologists at least for the sake of our country's benefit. Why do we need to disregard our indigenous invention which is obviously up to the global quality?

Another feature of their project is Long-Distance Least-Cost Routing. This scenario is likely to be adopted by enterprises with high cost-call volumes. A combination of lower cost, long-distance career and VOIP voicedata integration is seen as the most cost effective solution in this area.

Superiority of their system to other networks

Completely patent technology, hence no royalty payment to foreign companies

- Extreme ease of expansion
- Cheaper layout and installation
- Introduction of VOIP
- Above all else, it is product of Bangladesh. To some people it is the principal pride.

It is their hope if they could implement this system countrywide, it will perform far better than Ericsson's system. They need the finance to implement it. Given the fact the large sum of valuable domestic currency we can save from going outside, we all feel it as government's prime responsibly to finance this invention.

We do not want a repetition of the Electric Prepaid Meter project. The Electric Prepaid Meter was conducted by some BUET students which was an electric meter with the facility of prepaid card for the electricity bill. They offered Bangladesh Government to buy this product. When the Government did not accept it, Italy bought their whole system.

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Photograph by Samantha Saberin