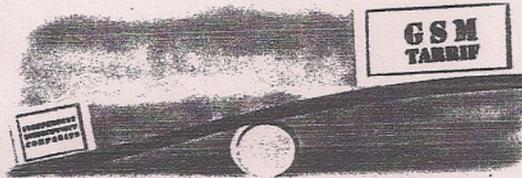


HOW INDEPENDENT INTERCONNECT COMPANIES WILL CRASH GSM TARRIF

So many times, the Nigerian nascent telecommunication industry has been thrown into states of unhealthy rancor over issues arising from interconnectivity. If major operators were not screaming the non payment of cost of calls that terminated on their networks from other networks, small time private telecommunications operators would be protesting the unwillingness of either a GSM or fixed wireless giant to interconnect with it. The industry,



even now, still seethes with dissatisfaction over issues arising from interconnectivity. To resolve the seeming state of perpetual conflicts, the National Communication Commission gave licenses to private

interconnect houses that are to play intermediary role among and between service providers. One of such interconnect clearing houses is Medallion Communications. In this interview with Fortune and Class team of Niyi Akinsiju and Michael Popoola Ajayi, the President of Medallion, Mr. Ikechukwu Nnamani, explains the importance of interconnect houses to telephone service providers and subscribers.

What is interconnect all about?

Interconnect takes place when you have more than one telecom operator and there is a need for subscribers on one of the networks



to talk to subscribers on the other network. So, both telecom operators have to be physically interconnected. Their switches, which conduct the call routing from one subscriber to the other subscriber, have to be physically interconnected. In the scheme of things, that is what really creates interconnect.

We do interconnect for a number of reasons. One is for financial reason because once a telephone service provider is interconnected with any other service provider, the subscribers can exchange traffic and it guarantees the provider more revenue because he is supposed to be paid for calls terminating on his network. Also, by virtue of an operator's subscriber calling others

through interconnection, the call volume in the industry increases and by default the revenue available for everybody participating equally increases. That is the business reason for interconnection.

Two, there is regulatory provision for interconnection. The regulation is to enhance competition such that all operators must seamlessly interconnect their networks so that subscribers can have options. Such subscribers can reach other service providers without having to be on the same network. This creates competition. So, from the regulatory point of view, the regulators always desire to have

multiple operators so as to have them interconnect seamlessly so that subscribers would have options on which network to use.

From quality of service point of view, without seamless interconnection, the subscriber will suffer. Like in the case where some operators do not want to go to a specific geographical area may be for reasons of financial viability, in such a situation only a regional or sectional operator can operate in the area and for the subscribers to enjoy the benefits of telephony the regional or sectional operator that is providing the service must be able to reach other network through inter-connectivity.

outside the country, we have needs for interconnectivity.

What was the state of interconnection in the country before your organisation came in?

The challenges that had been faced by the Nigerian operators are of four different types; they had challenges emanating from technical issues; they had financial settlement issues; they had regulatory issues; and issues of business, which operators look at from the corporate point of view.

On the technical side, this involves the methodology that is being employed. First of all, when an operator wants to interconnect directly with other operators may lead to technical challenges. This is because in a place like Lagos where you have over ten to twenty active telecom operators, to interconnect with them independently is troublesome, because each needs either fibre-optics microwave links to link up with each switching centres. So, it costs you money. It takes time to set up the links. You have to deal with right of way issues. If you are using microwave, you have to deal with P.A.M. and other things.

Basically, the operators did not have a central switching point. Some of them started using NITEL [Nigeria Telecommunications Limited] as contracting switching point. Some used Mobitel. Some others are using Discom to provide transit service for them just to minimise the interconnect links that were needed.

view, that is moving away from Lagos, you will find out that interconnect do not exist because apart locations like Lagos, Port Harcourt and Abuja where the GSM operators open up their networks for interconnection, you don't have interconnect points in other parts of the country. What that means is that what ought to be a local call within a locality in let's say Bornu, will have to go to separate parts of the country, probably Lagos, to be exchanged, before it comes back to be terminated in Bornu. When you do that, the subscriber takes on some transmission cost. Beside the added cost, the possibility of that call not being successfully terminated is equally higher when it is making that journey because the call actually goes through the international environment before it comes back. So, on the technical side, the method being implemented wasn't efficient.

Of course, the only person that suffers is the subscriber because he doesn't understand the technicalities of interconnect.

The subscriber does not know what is actually going on. All he knows is that each time he tries to call, the calls are not going through. And he gets charged for calls that are unduly terminated.

One of the major problems the industry is being confronted with is that some operators show monopolistic tendencies, like trying to be the dominant operators. They don't want smaller operators to interconnect with them purely for corporate strategic reasons. It's not that they have technical problems or financial challenges. You know, even in some cases where they are guaranteed payment or they are even paid up-front, some are not willing to open up their networks for other operators. Their reasoning is like, 'well; this operator is giving me traffic, yes. He is also giving me revenue. But his subscriber base is too small therefore it's not commercially viable for me to even interconnect with him. Give and take, if he does not interconnect with me, the small number of subscribers he has, would after some time, abandon his network and join mine.'

So, purely from the monopolistic or domination position on the corporate level, some operators won't want a seamless interconnect regime. They know that it is costing them some regime. But the thing is that if you lose some you'll gain in some other ways. They [operators] envisage that it is a matter of time before this small operators will be off. That is unfortunate and anti-

competitive in nature. But we've seen it in the industry. To such people, when you try to create a seamless interconnect scheme to make things work smoothly, they are not so interested in it just because they feel it will ultimately affect their corporate policy or position in the industry.

Then finally, on the regulatory side, we see a situation where the regulatory NCC



[National Communications Commission] had created some guidelines that were supposed to be good for the industry, for protecting small operators who dominant operators would want to intimidate into signing interconnect agreement or intimidate into not being operational at the right time. So, in that case, you find a situation where a small P.T.O. will want to interconnect with a dominant operator and the operator would say, sorry, I don't want to interconnect with you; or, you can only interconnect with me at so and so location. It's like a situation where an operator in Sokoto, for example, has to go to Abuja to set up switching centre just to be able to interconnect to other operators at an additional cost.

In order to prevent such scenario, what NCC has done is to set up some guidelines. There is a regulatory provision that you must interconnect with an operator who seeks interconnection with you. That is one. Then, even, if you people are interconnected you cannot unilaterally disconnect somebody because he owes you or for whatever reason without taking permission and going through the guidelines set by the regulatory authority, that is, the NCC

These are good policies that were intended to protect the small operators and enable a fair and level playing ground for everybody. But, unfortunately, some people have been abusing it. Some operators have accumulated debt knowing that you cannot

disconnect them. Some operators come to you to apply for interconnect without presenting a business case. They just feel, by law, you must interconnect with them. So, they don't take time to present a business scheme that will make it efficient and smooth to make it attractive to other parties to want to interconnect with them. These are challenges the industry have been contending with. In appreciating these challenges and alleviating them, the regulatory body has taken a step forward by giving out independent interconnect licences last year. We were one of the six companies licensed to provide this service.

What exactly are you licensed to do?

We were licensed to provide private interconnect services to operators. The provision of interconnect services, given the challenges in the industry, will entail two specific things. One is to have an interconnect switch, a traffic switch that will be able to generate accurate calls records, that is, calls that move around the operators

that use your services. Two, you must have a very good billing system and platform to accurately generate invoices for calls that go through your network so that people will know exactly how much they are owing and how much should be paid. Three, you must have an efficient settlement scheme in place to ensure that operators are paid.

How to do these is to establish a good switching platform to ensure that operators are interconnected and adequately provide new ones to them where such is needed. Interconnect both the big ones and the small ones so that small ones can reach wherever there is service without having to go through different channels. So, when an operator relate with us, if he has an inter-connect point, he won't need have to have switch points in 10 different states. All he need is to link to the private interconnect house, so, he is reducing of cost of getting started. Such an operator is equally reducing the cost of what it takes him to get into business and enjoy national spread.

We have multiple switches so that calls are now localised. So, call no longer have to move from one city to another even when it is a local call that ought to have terminated locally. The moment you start localising calls termination points tariff will continue to drop all over the country that is actually the biggest benefit to the subscriber for our type of service. The second one is that every clearinghouse like ours should be able to

operators. It's not just a question of every month an operator sends an invoice to other operators; there must be payment guarantee from both the operators that have positive or negative tariff flow for the month. Operators of private interconnect houses like ours must have settlement schemes in place, this should ensure that the debt ratio is reducing. That is what makes Medallion different from other clearing houses, we are the only one that as of today, is pushing a settlement scheme, every other operator simply wants to provide inter-connect of networks with good billing system and ask you for guarantee without a settlement scheme in place.

What manner of settlement scheme do you have in mind?

The Medallion settlement scheme entails that all operators have to be part of our settlement scheme before they pass calls through us. We have our settlement banks, which basically means the banks the operators are using must agree to act on behalf of the operators that at any given point within the billing circle they must make funds available for the settlement of their inter-connect debts once the invoice is delivered and it is accepted by all the inter-connect parties. So this time, we are moving the payment of the debt from the operators to the bank, it's like inter-connect clearing system. An operator that passes calls through Medallion or expects calls from Medallion won't be waiting for Medallion to send the cheque any day we feel like because from past experience the cheque may never come or it may come or be delayed and so on. So this time, we are looking at taking it to the players in the banking industry where crediting and debiting of both accounts is expected. With this, you don't wait for operators to write the cheque anytime they feel like or chasing the operators around to come and pay or risk the possibility of such operator disappearing. Because that is part of what some of them have done, by the time the debt gets so high, they just pack up and disappear. So we have a settlement scheme in place that will ensure that for every call that goes from Medallion switch to an operator the operator will be paid.

Are you covering the totality of the telecom industry?

Yes our licence covers all operators both to GSM and to PTO and fixed wireless.

One would have thought that one inter-connect company would be enough for Nigeria, how many do we have at present in the country?

Until each city in Nigeria has inter-connect exchange we'll still be having calls which are supposed to be local calls going through regional switches centres in Lagos before termination. So what will it take to put inter-connect exchange in each State Capital.

How do you make your own money or how do you recoup your investment?

We are paid for the number of calls that go through our switch. It is on the volume of calls that pass through our network. We do not charge operators for using our facilities like telling them to pay for one and all that, no. Remember that we are dealing with two layers of services, we are dealing with technical issues by providing a cheaper way to be connected technically, and we are equally undertaking financial services for them. This is a different type of service on its own but for all these we just take a token of operators per minute charge.

For the benefit of our readers, we want you to explain how calls travel.

Okay, let's say you want to call Cameroon from Lagos, let us use Nitel for example. On a Nitel line you dial a number in Cameroon the line you are dialing belongs to an operator in Cameroon probably the national carrier of Cameroon, so Nitel and that network has to be connected physically, the networks have to be connected, the need for that connection is that there is a fibre optic through which an international call has to go through. Your call will actually leave your handset to Nitel Exchange, the one closest to you, it will then move from that local exchange to NITEL primary centre or its international gateway depending on the way Nitel does their routing within their own network and then leave Nigeria either through SAT-3 or whatever fibre linkage or in the absence of that leave through V-SAT. If it goes through V-SAT, it will definitely go to Europe or North America from there the call will be routed back into Cameroon, to the gateway in the capital city from there it makes a journey to the operator that owns that subscriber's line before terminating on the set of the subscribers. That is for an international call.

Now let's look at national calls, for instance, you are in Maiduguri and you want to use a starcom line to call MTN line in the same Maiduguri. What happens at the moment is that to get interconnected in Maiduguri, the call has to first leave Maiduguri and go to Abuja where both starcom and MTN are interconnected before coming back to Maiduguri to be terminated on the set of the person you are calling in Maiduguri. Even if

carries that call; the first leg of it, from Miduguri to Abuja will have to be borne by most likely starcom except they are doing it through Nitel, it has to be borne by them.

What they do is that most time if there is a V-SAT base between Maiduguri and Abuja starcom will pass it through V-SAT to send it this means that the call will first go up and come to Abuja starcom switch centre from where the call will then be passed to MTN which will now try to locate the subscriber, by the time MTN finds out that the subscriber is in Maiduguri it will pass the call to their Maiduguri exchange or site which would then terminate it. So normally, let's assume Starcom and MTN interconnect at Maiduguri what will look like local call will have to go through the national or sometimes international route before being terminated at the local handset. The cost of that transmission has to be borne by the subscriber.

Can you give us a brief background of yourself?

I am Engineer Ikechukwu Nnamani. I had my first degree in Mechanical Engineering at the University of Nigeria, Nsuka, and then I went to the United States of America where I got a second degree Opto-Mechanical Engineering from Tennessee State University. Thereafter, I worked for some time at Caterpillar then I worked for Luxcore Network in Atlanta Georgia, USA for a number of years. We were into photonic wavelength convertership, an optical regenerative device. Then I decided to come home to contribute my own little quota to the industry.

