

As LTE operators get ready to offer roaming to their 4G customers, it seems likely they will adopt peering arrangements rather than bilateral deals, says Tata's Allan Chan

Tata aims for major role in LTE roaming, with peering likely to replace bilateral deals



Allan Chan: I don't think you will see operators establish 300 bilateral deals as they did with 2G and 3G roaming

Tata Communications had a bigger presence at this year's Mobile World Congress than ever before, says Allan Chan, president of global carrier solutions at the company, and its enhanced presence marks the start of what the company hopes will be a significantly increased set of services to the mobile industry.

"In the past we used to just send a sales team, to talk to customers and sell the existing portfolio. In 2014 a significant part of the company's team in Barcelona was still from the sales side, he says, "but our discussions with customers were quite different, and we also have technology people and product people from the whole organisation."

Around a third of the whole team came from each sector, sales, technology and products, he says. That's because the mobile is growing in importance to Tata, he adds. The increased presence is a function of "how important the mobile ecosystem is and it's a function of the dynamics of the industry".

Tata Communications, which is a division of the \$100 billion Tata corporation, based in India, has been involved in mobile for a long time. "We were a mobile services provider, on the roaming side, and SS7 signalling — and we're still very strong in that space, the leader in that space."

But the company's involvement in the industry has expanded, he continues, developing along with the strategy of the company.

"We continue to be a very strong player in the enterprise space. We are now embarking on plans to start looking at where the intersection points are. We are a very good intermediary," he says.

Voice provider

"We are the world's number one voice provider. We have the world's largest submarine cable network. We are number five in tier-one ISPs terms of rankings. We have an extensive MPLS network on top of that. We offer ethernet services. We also have an extensive data centre capability.

"We have one of the largest footprints in India. We have a basic stack of services, from basic colo to hosting of cloud services. We also focus very extensively on the next generation of customers as well — the OTTs and the Googles and Amazons of the world."

Most of those aren't strictly mobile, but Chan says that there is a connection. "With all these mobile devices, with all these applications, the new devices will be required to work together," he says. "They will be required to work together across boundaries, and across networks and across operators."

That means that, for a start, Tata Communications' portfolio has evolved into LTE roaming, to take account of just one of the latest developments in the industry. "We do enable LTE roaming and we've just announced that we offer VoLTE," he says.

The company said just two weeks before MWC that its network was ready to offer voice over LTE — including high-definition voice — to service providers connected to its IPX service.

Most LTE operators do not yet offer voice over the IP-based LTE network. Instead the terminal and the base station falls back to 3G technology to carry voice calls — a move which also prevents the customer from using the speed of LTE data during the phone call.

High-definition voice

VoLTE — pronounced "volt-ee" — will be carried on the true 4G system. Customers will benefit from near-instant call setup, better sound quality and the ability to have HD voice conversations with fixed and mobile users.

"We have VoLTE interoperability for carriers that want to do VoLTE with each other," says Chan. "We can do that — and that's now all part of the normal roaming portfolio and the voice portfolio that becomes interesting. It's at the intersection of the data services and the enterprises play."

Chan began his career in Bell Canada and joined Teleglobe in 2000, initially as vice president of global traffic operations — responsible for voice routing, buying and bilateral agreements, — and he was vice president of business development, mergers and acquisitions when Tata bought the operation in 2006.

Today Tata is implementing a hosted deep packet inspection service for policy and charging rules and

enforcement. “One of the first interesting applications is how you can use that functionality in data roaming,” he says. That could enable operators to offer local breakouts, he says. “They will be able to capture more people that are roaming or to encourage people not to offload on to wifi.”

If users don’t go on to wifi, operators will not only be able to earn revenue but will also have more control over the experience.

“At a very high level what that means is that the control plane is still with the home operator, but instead of tromboning all the data back as is done currently, it behaves on the data plane as a local device.”

In simple terms, if you have a UK mobile and you’re roaming in Spain, for example, all the data you send and receive is routed via your home operator — even when you’re looking at a Spanish website, trying to find a Barcelona restaurant. The idea is to avoid that entirely, by recognising where you are and creating local links — reducing the need for international data transmission.

Fatter pipes

The move will also alter the way sponsored data is handled. “The most rudimentary example of this is where someone like YouTube pays a local network operator for a fatter pipe. That’s a big pipe for one application.

“The next extension of it is when you have enterprise applications that are coming down the line — for instance, when you have a large multinational com-

“We’re engaging every part of our portfolio that’s relevant in the mobile space, which will be almost all of it in the future,” he says.

Deep packet inspection

Tata is working with specific experts in deep packet inspection, as well as over-the-top companies “to help them as well”, he adds, “and we’re working with mobile network operators to help them perhaps look to create these applications among their groups.”

Next year at MWC he hopes to be showing off “a nice little ecosystem” as the result of this work. “We can stand up a hosted policy offering, but the interesting thing is to create an ecosystem around it.”

Meanwhile there is a strong focus on LTE roaming, which “is growing very quickly”, he says. “That market will be driven by the operators that are ready to LTE roam for the most part. A lot of them are actively trying to drive their footprint out.”

The market will move “to a larger peering ecosystem”, he says, different from 2G and 3G roaming, “which was more bilateral based”. There was an attempt to launch a roaming hub for 2G voice, “but it really never took off”, says Chan. Bilateral agreements between operators dominate the 2G and 3G market.

But it looks as if it will be different in 4G, where peering — somewhat similar to the arrangements internet service providers operator — is likely to be

“Where people are used to carrying a BlackBerry and an iPhone, you’re not seeing that any more. It’s allowing the delineation of the enterprise use of the device from the personal use.”

pany that have people in many jurisdictions around the world. Most of the world has unsubsidised devices, so people bring their own devices for the enterprise space, but companies would want to ensure that their VPN applications work properly on the device.”

And they’d also want to ensure that the bill for the data goes to the company rather than the employee. “There’s beginning to be a delineation of what’s personal and what’s business. The day has passed when there will be an enterprise device and a personal device. There’s no delineation any more,” he says.

“So where people are used to carrying a BlackBerry and an iPhone, you’re not seeing that any more.” But there has to be a way of allocating the cost. “It’s allowing the delineation of the enterprise use of the device from the personal use.”

That’s just one of the many features that are being enabled now. “We can work with [operators’] policy engines. We can also virtualise part of it for them, if it is hosted.”

Those are some of the discussions that Tata Communications is starting to have with operators, he says. “We’re getting some really positive feedback and traction.”

This all started with Tata’s early positioning in 2G roaming, with the addition of many more services.

significant. “Some of the big operators will establish bilateral arrangements,” says Chan. “If you could have instant peering and instant connectivity and instant options, there’s no need [for bilateral deals]. I don’t think you will see operators establish 300 [bilateral deals] like they used to.”

With 4G, “you have a hub and you can do that”, he adds. “In the old days there wasn’t the mechanism to do that.”

Roaming coverage

The old bilateral deals “were a very interesting way to lock the third or fourth players out of the roaming market”, he suggests. “If you’re the third or fourth in a smaller market and you want to create roaming coverage in one of the larger markets, the larger incumbents are probably not that interested because of the opportunity cost.”

Peering will “allow them to get connected”, though these smaller operators will still need to strike commercial deals. “But the heavy lifting of the connectivity and the testing is taken away.”

How many LTE hubs will there be, just Tata and two or three others? “I think there will be probably more,” says Chan. “I think it’s going to be much more open than that.” ■