

Telco Focus

INDUSTRY ISSUES & COMPANIES TO WATCH



BROADBAND BOTTLENECK

From left to right: Paul Nathan, head, Technology Strategy (DiGi Telecommunications Sdn Bhd); Dr Mohamed Awang Lah, CEO of Jaring Communications Sdn Bhd; Karamjit Singh, editor, netv@lue2.0 (moderator); Michael Lai, CEO, Packet One Networks (Malaysia) Sdn Bhd; Chiew Kok Hin, COO, AIMS Data Centre Sdn Bhd; David Wong, chairman of Pikom; Rais Hussin Mohamed Ariff, executive chairman, The Red Snapper (M) Sdn Bhd; Azhar Yahya, HSBB (high speed broadband) programme director, Telekom Malaysia and Zainal Amanshah, group CEO, REDtone International Bhd



'Stop talking and get it done'

PG2



QubeConnect hopes to ride on China telco boom

PG4



Voice becoming a commodity

PG6

'Stop talking and get it done'



HANS HUSSEIN/THE EDGE

BY LEE WEI LIAN AND KARAMJIT SINGH |

The importance of broadband to Malaysia's future competitiveness cannot be overstated enough. And we can quote various sources on that — from the World Bank to the International Telecommunications Union (ITU), and from the chairman of British Telecoms to professors at the Massachusetts Institute of Technology (MIT). The bottom line from all of them is that broadband access does four things: it creates jobs all along the value chain, it allows citizens to become active participants in the Knowledge Economy, it boosts Gross Domestic Product, and it attracts investments.

So, *The Edge* has put together this industry roundtable on broadband to discuss some of the key issues holding Malaysia back and we came away with a chilling prognosis: we are still discussing the same issues brought up by *netv@lue2.0* in our Dec 25, 2006 bumper publication. And in the Digital Economy, if you are standing still, it means you have fallen behind. How far behind are we? Well, one of our panellists said Malaysia should look at how Bangladesh has reformed its industry. Absolutely no disrespect to Bangladesh, but I think readers will know what we mean.

And why are we standing still? Why do we (specifically, the politicians and the regulator, Malaysian Communications and Multimedia Commission or MCMC) have our

heads in the sand and hope all will be okay on the present path we are taking? A path that will see us losing foreign investments because few companies want to come into a market and have to rely on one player who controls most of the broadband infrastructure and a path that results in consumers having much less choice in service providers than they deserve?

Is it because we do not have the courage and a greater sense of national purpose, and urgency, to guide the regulators and politicians who instead want to try and protect incumbent behemoth Telekom Malaysia? That is, regrettably, a myopic view. In reality, the broadband pie can grow so much bigger than what it is now, a paltry 15% of household penetration, and will enable much greater economic activity when our citizens and businesses can play, learn, collaborate and communicate at the speed of thought. Where the fruits of connectivity can be enjoyed not just by us urbanites but also our fellow citizens in suburban and rural areas.

The panellists for our discussion were Ahmad Azhar Yahya, HSBB (high speed broadband) programme director, Telekom Malaysia; Michael Lal, CEO, Packet One Networks (Malaysia) Sdn Bhd; Dr Mohamed Awang Lah, CEO of Jaring Communications Sdn Bhd; Paul Nathan, head, Technology Strategy (DiGi Telecommunications Sdn Bhd); Zainal Amanshah, group CEO, REDtone International Bhd; Chiew Kok Hin, COO, AIMS

Data Centre Sdn Bhd; and Rais Hussin Mohamed Ariff, executive chairman, The Red Snapper (M) Sdn Bhd. We also invited David Wong, chairman of Pikom (The Association of the Computer and Multimedia Industry of Malaysia) to be a panellist too as Pikom has been taking on an increasing vocal role in urging the government to improve the quality of broadband in the country. Karamjit Singh, the *netv@lue2.0* section editor, was the moderator.

Karamjit: How important is high speed broadband (HSBB) to Malaysia's competitiveness and is our broadband already too slow?

Nathan: It is very important to the nation's goal of becoming a developed country. The speed is a relative thing. Some people need a Porsche and some need a MyVi. The most important thing is reliability and availability. Broadband needs to be brought to the masses.

Chiew: No doubt that HSBB is critical to make Malaysia competitive. As for the speed at the end of the day, it depends on the different consumer segments. But that is not the crux of the issue, which is availability. You don't talk about speed when you are unable to even

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Lai: When we talk about building KL into a world-class city today, it's not just about brains but also connectivity. So, the impact of broadband, nobody can deny. I mean, in the recent general election, we even saw that it has become a political factor.

Backhaul: The part that kills

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provide coverage. So, the first and foremost thing to address is providing availability.

Karamjit: But isn't speed critical for enterprises? Especially in attracting large MNCs which tend to harp on HSBB availability. And our neighbour down south is providing HSBB. It generates a positive perception about a country. So, don't you think it is important?

Chiew: I have a different point of view. If I can afford a 100Mbps (megabits per second) connection, why not? But what is important is whether that 100Mbps is as reliable as a 10 Mbps. That is what I emphasise on — availability and quality of service.

Awang Lah: My view is if you want to start broadband from scratch, you have to use fibre optics. The speed the user wants is something for them to decide. But the infrastructure to provide 1Mbps, 10Mbps or 100Mbps should be there. Whatever infrastructure we put in must be ready for HSBB. Unless you are talking about wireless broadband whose capacity is limited by the technology. So, to me, speed is not an issue. The issue is the technology and the willingness to go all out to make the broadband available. So, I agree with Chiew that availability and quality are more important and, of course, the price.

Ahmad Azhar: It is in our interest to do HSBB now. We can, of course, look to countries like Japan and South Korea which are the gold standard in this region. Interestingly, in Japan, the penetration of fibre optics exceed that of copper wire. To me, that is the example that we need to look at.



Nathan: It is not just about letting foreign carriers land their cables here but I feel Malaysia should focus on the area of content creation as it can excel here.

Zainal: Yes, HSBB is definitely necessary. Broadband should be seen like a utility. Malaysia is behind other countries where they are already talking about 1Gb to the home. We need to do something about it now. We need to relook the National Broadband Plan which was launched in 2002. Customers want broadband to be cheap and good. We need to do something because as long as we talk about it, we will be stagnant or even go backwards.

Lai: I think all of us here are believers in HSBB. It is a megatrend. So, we have to ask ourselves — where are we now as a country? Are we ahead or are we below the meg-

atrend? As Zainal has mentioned, broadband is now a utility. When we talk about building KL into a world-class city today, it's not just about brains but also connectivity. So, the impact of broadband, nobody can deny. I mean, in the recent general election, we even saw that it has become a political factor. It's a matter of where we are, how we do it — how is our coverage, how much does it cost and how much capacity do we have.

Wong: The International Telecommunications Union (ITU) definition of broadband is with speeds of 1.5Mbps to 2 Mbps. Our broadband penetration is about 5.5% of the population while household penetration is about 15%. But if you talk about real broadband as defined by the ITU, the penetration is even lower. HSBB is very important for certain sectors such as telemedicine, content or eLearning and eCommerce. Without HSBB, these businesses will be stifled.

Rais: We have a beautifully worded National Broadband Plan. What we lack is, as the norm in Malaysia, implementation of the plan. Not only by the ministries but also by the main carriers. We need to move away from the incumbent, legacy type of approach. We have fibres criss-crossing Peninsular Malaysia several times! Does it reach the consumer? Utilisation of fibres is abysmally low. We need close cooperation with everyone. And the MCMC should ensure a level playing field. All players have to work together to ensure the National Broadband Plan is a success. Let's stop talking about it and get it done.

Karamjit: What is the state of competition in our market and do you feel there is a balance between consumer choice and having too much competition in the market?

Rais: Competition is a function of many factors. For a player to be in a competitive market, it must be able to access backhaul and last mile at competitive prices, for instance. We all know that domestic backhaul price is three to four times the price of international backhaul price. When I worked for US carrier MCI in the late 1990s, I had to break down local and international backhaul rates for my clients as otherwise they will question the prices we charge. This was because the local backhaul prices were so high, much higher than the international charges!

So, the environment must be conducive to competition. There are only two main players in the backhaul space. Everyone else is dependent on the backhaul provided by these carriers. So, how can we work together to enable widely available low-cost broadband? I think it is very important to let consumers feel the broadband first — let them get a taste of it first. Later on we can talk about quality. In Ipoh, we provide wireless broadband at RM5 per day as part of Wireless Perak, RM20 for 30 days and RM50 for 90 days. Wireless may not be the most advanced technology but it is fast to deploy. At least you start with something. And this type of deployment can only happen with close cooperation between the Internet Service Provider (ISP) and the state. With more competition, the price will be lower and the quality will be better.

Wong: As I mentioned earlier, the level of broadband penetration is low. Therefore, there are plenty of opportunities for all players. So, from an industry point of view, we want to see more competition. I feel the government should open up the industry to encourage more players so that there are more choices and prices will be more affordable. You know, they are talking about 1Gbps speeds in Chi-



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na? In South Korea, they are talking about 3Gbps to be offered at US\$10 (about RM32) to US\$20. I feel that achieving the RM10 to RM20 price level here will be significant in spurring broadband usage.

Lai: We definitely need more choices. I want to go back to what Rais mentioned. In order to create healthy competition, it is more than just the last mile. It is also competition in the backhaul space. Without competition as in backhaul, you are never going to get last mile prices down. We need to look at competition from all aspects of the whole value chain rather than just last mile providers. Make it an open market. Another issue is government subsidies for backhaul. It should not be just for one organisation.

Zainal: I have a slightly different opinion. If I were the regulator and I am hearing this opinion, I would agree but I would not know where to start. If you talk about the whole value chain, there are so many aspects. But the critical success factor is, as Rais said, at the demand point, which is the customer point. We should have more competition at that level. When there is an increase in customer demand, you can then go back to the

backhaulers and ask for better terms.

We have so many projects — we have a huge fibre project which has not taken off [the nationwide RM15 billion HSBB], we have WiMAX projects in the 2.3Ghz spectrum but there are limitations in terms of equipment and WiMAX projects in other 2.5 and 3.5Ghz spectrums where there is equipment but you face other issues. So, backhaulers will ask where is the customer volume? The critical success factor is at the front end — let service providers create more competition. Let's get them rolling. We're too worried about too much competition. We should open up.

Ahmad Azhar: My opinion is that we do have an optimal level of competition. There are enough licences. But the services need to be launched. Competition is centred around urban areas but don't forget about rural area coverage. There are a lot of opportunities in rural areas. Everyone is trying to grab the same pie. We should spread out.

Awang Lah: We have to look at competition in totality. We cannot just look at the last mile. There is also the international level in terms of how many cable landing stations we have in Malaysia. Singapore has made certain policies that enable much more fibres to terminate there rather than Malaysia.

Secondly, how to get from the landing point to the national backbone. To my knowledge, there is only one party as far as I know [Telekom Malaysia] and there is no competition there. So, if you want to go out of the country, there is only one gateway and one toll. Thirdly, after landing, how to get to the service provider. Today, most of the fibres are also owned by one player. So, there is not enough competition in this area.

But when you come to the last mile, there is too much competition. But there is a lack of competition in the middle part. There is unbalanced competition in the country — that is the main issue. You cannot provide cheap broadband when you cannot control price upstream. It is all related.

There are people who have licences to do everything. There are those who can have licences to do only one part. So, how do we decide who can do what? It is not clear in terms of the licensing process. That is a problem to me. Another issue is that the talk about broadband being a utility has been there for a very long time. We just talk about it but we have not implemented. For example, every road needs to have proper ducting so that anybody can just lay the cable and not have to dig the roads everytime a provider wants to lay a cable. That is the most expensive part. A ca-

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Awang: Another issue is that the talk about broadband being a utility has been there for a very long time. We just talk about it but we have not implemented. For example, every road needs to have proper ducting so that anybody can just lay the cable and not have to dig the roads everytime a provider wants to lay a cable. That is the most expensive part.



Stumbling block to hub ambition

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ble may cost RM10 a metre but the construction may cost RM100. So why waste money in that sense? And in terms of housing, every house needs to be broadband-ready. So that the consumer can say I want service today and the service can be delivered tomorrow. Today, you can't do that. That is why we are suffering.

Ahmad Azhar: Right now, broadband is not considered an essential service under the local Housing Act unlike electricity and water.

Karamjit: There should be a broadband association or industry group who can push these things? Even as we talk, we are losing time because people are building townships and offices without pre-laying the pipes for broadband. This should be a given.

Zainal: There is a National Broadband Plan committee. The question is, will we be heard?

Awang Lah: I think the will among parties with the authority to ensure broadband becomes a given piece of infrastructure, is not there.

Chiew: I think there is a disjoint somewhere along the way. It has to happen at the highest level. Everyone must make it part of their agenda in their respective ministries. Coming back to the original question — I think competition is scattered. In some locations, there are a lot of providers, and in others there are only one or two. The entire value chain needs competition and let's look at the entire ecosystem — from submarine cables to backhaul. That is critical. Bangladesh has just deregulated. They have their own licensing regime. Instead of governing what you can or cannot do, it is concentrated on service. If you are an ISP, you can build your network on cable to even owning the international gateway, so you do not have to depend on someone else. That is something we can learn from Bangladesh. Here, if one party who has the infrastructure is not willing to compromise, the rest will suffer. We can look at the example of the Malaysian Internet Exchange or MyIX. The different players gathered to collaborate. A similar concept can be applied if the government were to form a national infrastructure initiative.

Karamjit: That's one way. The other way is just for the government to take over the whole infrastructure right? And make sure everyone has equal access?

Chiew: It depends which hat you are wearing. If you are wearing a corporate hat, then you would not want it. But if you were wearing a national agenda hat, that would be one of the options.

Karamjit: Has any country succeeded in doing this? It looks like there hasn't been any.

Chiew: Singapore tried to establish a common Internet exchange for the past 10 years and couldn't. But we managed to do it. So, there is always a chance of a breakthrough. It depends on how far you want to take the idea.

Awang Lah: One extreme as you suggested is to take ownership of all the fibres under a national entity. But I always believe that there must be competition as it will drive quality and price. I don't believe that creating a single monopoly will solve all the problems. It will solve some problems but it may create other problems. The government corporatised Telekom Malaysia when it was once a monopoly but the effort was not complete. It should be extended more to create competition.

Azhar: One of the things I want to say is that there is competition in backhaul but some of the other carriers do not want to open up. Most of the mobile operators do have backhaul capacity as well.

Chiew: I am not suggesting a monopoly. But the government can create another Telekom Malaysia for more competition and perhaps benefit the smaller players, right?

Karamjit: The government has already taken back the assets of the bus companies and the two LRT lines. It's been done before in the name of providing consumers better and cheaper services.

Rais: If you are talking about a national entity to run the whole thing, we will go back to the monopoly environment. We should avoid that at all cost. One STM1 line (155MBps fibre connection) to US is three times cheaper than one STM1 line from Mersing to KL. How can that happen? We need to change this. If you want to create another Telekom Malaysia, it will not solve the problem. You need competition. That does not mean Telekom has to suffer losses. They have a responsibility to their shareholders. In the greater scheme of things if you want broadband to work, you must have competition. You have to liberalise landing points. And I have never liked subsidy. Do it through competition.

Zainal: If you talk about the different fibre companies — FibreCom, FibreRail — at the end of the day, they all have a common shareholder [Telekom Malaysia]. Let's talk about the upcoming big fibre project by Telekom [HSBB]. How do you create competition for that? If you look at South Korea and Japan, how did their fibre really take off? That was a major initiative by the government entities. Then, service providers will be able to tap the infrastructure. The infrastructure provider cannot also be a service provider as there is a conflict of interest.

Nathan: Malaysia is pretty IT-savvy but if penetration is low, then you have to find out why. If you want to go to the masses, you need some enablement.

Wong: We really want more competition. The idea is there. The government wanted 75% household penetration by 2010 but it was revised to 50%. But somehow implementation is a big problem. WiMAX was one of the strat-



egies to achieve this.

Awang: But even for WiMAX providers, you need the backhaul. The part that kills is the backhaul.

Rais: Why freeze WiMAX apparatus assignments for 2.5Ghz spectrums? Why do you want to take back the licences for WiMAX operators? To me, that is completely ridiculous. I hope the new minister will engage constructively with the industry to implement the National Broadband Plan.

Ahmad Azhar: One of the things I want to say is that there is competition in backhaul but some of the other carriers do not want to open up. The regulator will be introducing accounting separation which we have done at Telekom. Most of the mobile operators do have backhaul capacity as well. There is competition but some carriers are not opening up as much as others. Now, let me correct some myths about our fibre project. The first myth is that we got a RM15.2 billion contract. That is actually the total cost of building the network. The government is only putting in RM4.8 billion and the rest of the money is coming from Telekom. It is a public-private arrangement.

Karamjit: I think the industry fears that this will lead to another monopoly.

Ahmad Azhar: There will be an access part where we retail services but we will also offer wholesale. We will offer three types of services under wholesale — HSBB connection, HSBB transmission and HSBB last mile access. There will be announcements on the framework later. So the network is available. But the pricing is not mandated but is negotiated which, I feel, is fair as we have to make money from our investment.

Lai: I think one issue is the way the local loop is unbundled. In Malaysia, it is only up to the bitstream level. It should be total local loop unbundling and only then can any service provider use it. If you look at the US, they deregulated by breaking up AT&T which used

Wong: If we want to be a hub, let's fix our backyard first as I think we are far behind. There are regulation, affordability and competition issues. All these will clearly affect our attractiveness to those who want to participate in Malaysia's dream of becoming a hub.

to control both long distance and local service. They make it very clear so that there is no one company that controls the whole value chain and still competes with you at the end of the day. I think from a deregulation perspective that can be done. Telekom could be broken up into two different companies. One is wholesale and one for retail. It is not good enough to have accounting separation when you also have the same owner. You need a totally different wholesale company.

Zainal: I agree with this model. This goes back to having less regulation. In this model, the wholesale company's job is not to offer retail but to provide access to the 10 or 20 broadband players at arms' length basis. It's so simple and then you don't have to regulate. It saves a lot of hassle as right now 60% to 70% of our time is not focused on the customer but talking to the regulator about issues related to wholesale such as getting access to towers and fibres.

Karamjit: Do you think Malaysia has managed its spectrum well?

Awang Lah: It is clear that the 2.3Ghz and 2.5Ghz spectrum have not been managed well. When the government released the 2.5Ghz in 2004 to seven companies, there was a clear condition that if they did not roll out in one year, the spectrum will be withdrawn but that was not done despite none of them using the spectrum. Why? This is a loss to the nation as they are hogging the spectrum. On the other hand, you had companies doing something with their 2.5Ghz spectrum and yet the government saw fit to freeze these licences. It's mind-boggling to me the way these people think.

Then there was the 2.3Ghz bid where 17 companies went in but as we all know, on the day the tender was closed on June 18, 2006, the rules were changed and the same tender documents were evaluated based on a different set of criteria with four parties getting it. And if this is not enough to show that we are not managing spectrum well, and are moving backwards, you have a situation where the 3.5Ghz spectrum was given to Astro for its satellite use despite the fact that we use it on the ground too. So, Astro complains about interference and because of this we cannot use 3.5Ghz for fixed WiMAX in Malaysia, which is a certified and popular spectrum used in many countries. In Malaysia, we can't even use it to improve our backhaul!

Chiew: Obviously, I agree that spectrum has not been managed in an effective manner. You have to look at who is managing this spectrum. I think you need technical people and those who are aware of the issues around the spectrum globally. But if you have commercial type people making spectrum decisions, then these issues, such as technical interference, will crop up. But I also believe that in certain areas enforcement is very important too. Our government gives out spectrum and some do something with it while others do not but in the end everybody suffers when it is withdrawn. It need not have been such an endgame if we had enforcement along the way.

Nathan: When managing spectrum one needs to be aware of competing technologies and what is going around globally. Certainly, there is lots of jockeying taking place in regard to spectrum and all want to have a say in it. Our position is that we need to be heard to ensure the consumers benefit at the end, especially when speaking about rural are-

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as to make sure services are available. As to the current mechanism, as far as how processes are working in regard to the licences, I feel we need to improve or else things will slow down.

Ahmad Azhar: As a fixed broadband player, we definitely need spectrum to roll out our service to rural areas which is part of our service obligation to the country. Otherwise, it will be very expensive to lay cables to those areas.

Zainal: Frankly, this is one of the most frustrating parts of the broadband chain. Already, the 2.5Ghz is frozen and as a service provider, we are supposed to talk to the regulators but they say wait till we have done a study. This will take time and in the meantime, we won't see any competition here for at least 12 months. So, how do you increase competition?

And I don't agree that we have sufficient competition at the enduser side. Sure, we have so-called spectrum and licence but we are held back. For instance, we are rolling out our WiMAX service soon but it will be with pre-certified equipment and there is a real danger that there will be compatibility issues with the newer certified equipment. But we do not want to give excuses and want to fulfil our obligation. But in the meantime, we are stuck and cannot move on our 2.5Ghz spectrum. It is like we are taking three steps backwards and one step forward. It is very frustrating.

Lai: When you look at it, Malaysia is one of the first countries in the world to roll out WiMAX based on 2.3Ghz, after South Korea where it is called WiBro. While there are sceptics, just look at the recent announcement of the first batch of certified WiMAX equipment based on the 2.3Ghz. Really, I think a lot depends on us as the service providers to work hard to get the eco-system together. At the end of the day, it won't come to us by accident. We have to create it.

Speaking of creating, while there has been much interest in Sprint's WiMAX rollout, they have not done anything yet. With half the world's population in Asia, I think we need to focus here. This is where the WiMAX action will be. The emerging markets of Asia are well-suited for an alternative technology like WiMAX.

Rais: While our spectrum management can be greatly improved on, I did not go through the process of applying for a licence in Malaysia. But let me share our experience in India where we are jointly applying, with our Indian partner, for a WiMAX licence. They have a very constructive and thorough process where the regulator actually sits with us and goes through our application page by page and critically evaluate it and I am telling you their feedback has actually helped us improve our business plan! I don't know if that was the case here.

Karamjit: What about Malaysia's positioning itself as a regional broadband hub. Where do we stand in regard to that?

Ahmad Azhar: I think there is definitely an opportunity for Kuala Lumpur to become an IP (Internet Protocol) hub to aggregate traffic, which is growing. One of the things we recently announced was this Asia-America optical fibre submarine cable gateway which will be ready sometime next year, which will also make Malaysia an attractive place. The Asia-America Gateway will run from Malaysia to Hong Kong, the Philippines, Guam,

Hawaii and the US. Costing around US\$500 million (about RM1.6 billion), it will span 20,000km and provide minimum capacity of 1.28 Terabit per second and up to 1.92 Terabit per second. With much of our Internet users still leaving the country to foreign content sites, this will also be an opportunity to bring this content closer to Malaysia.

Zainal: Malaysia has talked about being a hub for a long time and I think in all this talking we have missed many opportunities and we continue to miss opportunities. Just three weeks ago, I was with an international telco operator who wanted to land its submarine cable into Malaysia but was having a real difficult time doing so and he asked me why.

The point here is that we do not have a real cohesive plan on how to turn Malaysia into a telco hub. Did we spot the trend of online content and gaming, did we have a strategy and action plan to attack the Yahoos, Googles, the game companies and get them to come here? Is it easy and less bureaucratic for them to locate in Malaysia? I do not think so.

Lai: I think there are opportunities. As it is, we are among the first four to five countries to roll out WiMAX. This means we will have the experience and will develop expertise in the whole value chain or what I call the ecosystem which I term as the DNA, that is, devices, networks and applications. But let's look at what we are up against. Taiwan is very serious about staking a leadership position in WiMAX and has put in their money to back this. Its government put up US\$1 billion to help develop the WiMAX industry in Taiwan from the operator side and it has also put up US\$200 for building applications on WiMAX. This shows how serious it is about it. And next month, Taiwan are sponsoring WiMAX operators from around the world to go there and see what it has done with WiMAX from the network, chip and operator side. In Malaysia, we are really lost in execution.

Wong: I am hearing so many problems at this discussion. If we want to be a hub, let's fix our backyard first as I think we are far be-



Zainal: The critical success factor is at the front end — let service providers create more competition. Let's get them rolling. We're too worried about too much competition. We should open up.



Chiew: This is where the environment in Malaysia is not so competitive where, to access international capacity, all our providers have to go to Singapore and then route their traffic overseas. If you look at this, you realise that it is Malaysia that has enabled Singapore to be a hub!

hind. There are regulation, affordability and competition issues. All these will clearly affect our attractiveness to those who want to participate in Malaysia's dream of becoming a hub.

Rais: Malaysia is ideally placed to be a hub as we are in a transit location between India and China and if Singapore can position itself as a hub, we should be able to do it much more easily but we do not have the political willpower to implement. All we need to do is to give them permission to land their cables here.

What you need to be a regional hub is to have a conducive environment, sufficient fibre, liberalised market, fair pricing and good licensing regime. This will act as the sugar to get the ants to come and we then need to make them welcome to Malaysia. But, *susah lah*, this hubbing thing, as we need to change and reform extensively to get it done.

Recently, Hong Kong-based Pacnet was here and trying to get permission to land its cable here, which will mean big money but of course TM, Maxis and the other big brothers must be ready to accept this. Otherwise, if we continue protecting and yet continue talking about this hubbing thing, it will never end.

Nathan: It is late but not too late. It will take industry and government to work together. And it is not just about letting foreign carriers land their cables here but I feel Malaysia should focus on the area of content creation as it can excel here.

We know there are lots of creativity here compared to Singapore but at the same time we also need to make it easier for foreigners to come and set up business here. As has been mentioned, Malaysia has a good environment to live in, an IT-savvy population, and is ideal to create content but we need to get the world to come here.

Chiew: I think as of today, we all believe Singapore is the hub in Southeast Asia and its government has done a good job there. If you asked a couple of years ago, we were really way behind but the Taiwan earthquake in Dec 2006 really opened up the eyes of the broadband and content industry in the US to the fact that they have to be in Asia where half the world's population and broadband growth is. This has created a lifeline for Malaysia to grab the opportunity to become a hub.

If you look back in history, Melaka was once the world's most popular trade centre and that was because geographically we are well-positioned. In broadband lingo, we can send a ping (signal) to either China and India in 100 milliseconds. That is very critical to content players as they start to look at places like Malaysia, Singapore and Hong Kong as their back-up hub to the US. But these play-

ers need very high capacity, both domestic and international. If you look at it, we beat Singapore in every aspect but we do not have enough or accessible capacity.

This is where the environment in Malaysia is not so competitive where, to access international capacity, all our providers have to go to Singapore and then route their traffic overseas. If you look at this, you realise that it is Malaysia that has enabled Singapore to be a hub! This is the irony of it all because all the international cables that land in Singapore also want to and are waiting to land in Malaysia to bring more capacity to the country. This capacity will then encourage the global content players to come to Malaysia.

Aims is a datacentre provider and of late, we have been getting a lot of requests to put content here and one criterion is that these customers want a 10Giga bit capacity both inside Malaysia and to take their content outside to the world. But there is no other player besides Telekom and that I believe is the stumbling block to Malaysia being a hub.

We only have a small window of opportunity, maybe two years, to be a regional hub because these content players will soon decide where they want to be based and if they go elsewhere. We have lost yet another opportunity.

That is why I say there has to be a massive change in regulation to allow more cables to land in Malaysia at a competitive rate. Just recently, an Indian cables operator wanted to land in Kuantan but could not and on the west coast a Thai operator wanted to land in Kuala Muda but then chose Songkka instead.

Awang Lah: I am not sure if hub is the right word here. We have still not realised that we need equal strength [defined as having large fibre capacity] to access both the west and the east. This will then encourage content players to come here. Right now, our fibre capacity to India, the Middle East and Europe is just not there. If you were to send data to London, it would have to be routed to the US first and that takes 300 milliseconds but it would take 150 milliseconds if we went direct.

We need to take advantage of the two large pieces of land mass that we have, and, by the way, we have not done enough to increase capacity to Sabah and Sarawak even. I believe the industry, working in partnership, can create two loops using both Sabah and Sarawak and Peninsular Malaysia. That is a much less threatening concept for our players than the word hub. Working together, we can create these loops, from Sabah and Sarawak to Hong Kong and the Philippines and from Peninsular Malaysia to India and the Middle East. We are not just in the centre of two great population centres but also development. It just requires us to open up and make some investments. ■