Intel firmly behind WiMAX

BY **Aishah Mustapha**

The technology industry has hosted some of the liveliest debates seen, with technologies constantly pitted against one another. Some debates are still ongoing, like the rivalry between Microsoft Windows PC and Apple's Mac, dating back to the early days of the tech era. Others, however, have been fought to the death, such as when the HD DVD standard was killed off by industry heavyweights throwing their support behind Blu-ray in 2008.

As the communications industry preps up for its transition to 4G standards over the next few years, a showdown is brewing between WiMAX and Long Term Evolution (LTE). While it is still very early in the game, WiMAX and its family have a head start, with rollouts — some as early as in 2005 — in both developed and developing markets.

WiMAX's early adopters include developed markets like the US (Clearwire) and Japan (UQ). In the developing markets, Malaysia's own P1 — which has been in operation for about two years and had 175,000 WiMAX subscribers as at end-March — is a leader in Southeast Asia.

In Russia, Yota managed to scoop up 250,000 subscribers just six months after its rollout in major Russian cities.

However, recent developments have seen telcos such as Clearwire and Yota planning LTE adoption in the future, putting a smug smile on faces in the LTE camp.

Be that as it may, an important issue is the availability of consumer devices supporting these technologies. Without the mass availability of devices that support either WiMAX or LTE, or both, these technologies could die a natural death.

Ultimately, consumers will be the deciding factor as to which technology will come out tops.

This is why Intel, a heavyweight for WiMAX, has released its newest WiMAX-embedded chips, a move it hopes can replicate its success in stimulating the growth of WiFi.

Back in 2003, the introduction of the Intel Centrino system with WiFi network chips represented a mobile desktop brand that enjoyed mass adoption by consumers.

Today, the WiFi standard has become so pervasive that new devices introduced come equipped with it. As for WiMAX, brands such as Acer, Asus, Dell, Lenovo, MSI and Toshiba have already introduced notebooks and netbooks based on Intel processors featuring the dual mode Intel Centrino Advanced-N + WiMAX 6250 embedded solution.

In an interview with *netv@lue2.0*, Intel Malaysia's country manager Ryaz Patel shares the company's vision of the new WiMAX-embedded chips and what he thinks about the whole debate of WiMAX versus LTE. While Intel is regarded as a heavy backer of WiMAX, Patel has come out to say that the two will ultimately co-exist for the consumer.

Please tell us the company's vision of these new WiMAX chips. Obviously, you are trying to recreate the same success that you had with WiFi.

Patel: I'll start at a macro level. Any kind of broadband is good broadband. We fundamentally believe that all forms of broadband deliver some form of enhanced and enriched Internet experience whether you use 3G, ADSL, broadband over power [lines] , WiMAX, WiFi or fibre to the home. Each one is a means to an end ... that rich Internet experience.

When Intel embarked on Centrino back then, we looked at a couple of things. Prior to Centrino, the processes were developed primarily for the desktop. The thing that changed with Centrino was that the design process started at scratch for the mobile world.

Centrino was really a by-product of three parts: a Pentium processor, chipsets and WiFi components. But over time, people assumed Centrino was WiFi. Today, you couldn't imagine ever buying a platform without WiFi. People will think you're crazy for not spending, say, that extra RM10 to get WiFi. So that vision (of WiMAX) remains the same.

Intel wants to deliver to the end-consumer an optimal rich Internet experience on an Intel platform but ... and it's a huge but ... Intel supports and will always support products and technology that are standards-based.

How much extra is it for a WiMAX chip?

Today, a WiFi WiMAX module from Intel costs US$40. You get the 802.11 cards and WiMAX and a whole bunch of functionality like WiDi (wireless display interface). It's basically high-definition streaming over WiFi. Our basic specification with the right graphics card supports WiDi. This is far better value than if you were to get a WiMAX dongle. With our chip, essentially the whole back panel of the LCD on your laptop becomes an antenna. Reception is better. Over time, we will be able to drive the cost down. The point is the rate of innovation you can drive around the silicon. Eventually, you can drive your cost curve down.

What about Malaysia? Maxis is banking on LTE and YTL is supposed to come up with WiMAX soon. With more laptops coming out with WiMAX chips, will this boost WiMAX locally?

Again, my key message is that all broadband is good broadband. What we need to focus on as a country is figuring out how to improve the quality of our broadband. We need to improve and drive local content as much as possible. In general, we have some really big issues to solve at the macro level as a country. The first is, how do I drive my cost down? Malaysia is reported to be a country with the most expensive broadband. To me, that's a big issue. We also have to solve our overall quality. Those are the big nuggets that I believe the national broadband committee is focused on. We have these fairly exciting and aggressive goals to go and get.

For Malaysians, no one is saying what kind of broadband he is getting. As long as I can get reliable and predictable connectivity, that is the technology people will sign up for. In the space I'm in, it's all so speculative.

You can sit back and you can say this WiMAX versus LTE debate is so fun. You know there are two parts to the debate. One is that it is purely speculation. The other is by looking at facts. LTE today is in the labs with few trials running. Maybe at best, it will be two years before you see anything meaningful. By then, WiMAX would have five to six years of implementation.

Who will win? Personally, we are not bothered because it's not a race of winning over LTE. I believe that no one wins and they will both co-exist and they will deliver their own experience. You can potentially see a scenario where you are connected to a service provider that delivers both WiMAX and LTE. Yota in Russia could be that service provider. They have plans to adopt LTE. But they never said they would drop WiMAX.

You mentioned the importance of driving local content. Can you elaborate on this?

We absolutely have to build a rich local content ecosystem. Local content spurs the local industry. You have a lot of heritage such as those black-and-white movies you love to watch. If that content were digitised, that is a service someone local can provide to you over video on demand.

The other reason is that today, if you look at the amount of Internet traffic that Malaysians consume, 70% to 80% of that is from out of Peninsular Malaysia. It's all foreign content. When we can reduce that foreign content, we help our service providers reduce their cost for accessing sites overseas. They also pass some of that cost to us. Malaysians also produce a tonne of stuff on YouTube. Right now, everybody has to go all the way to the US just to get access to local content.

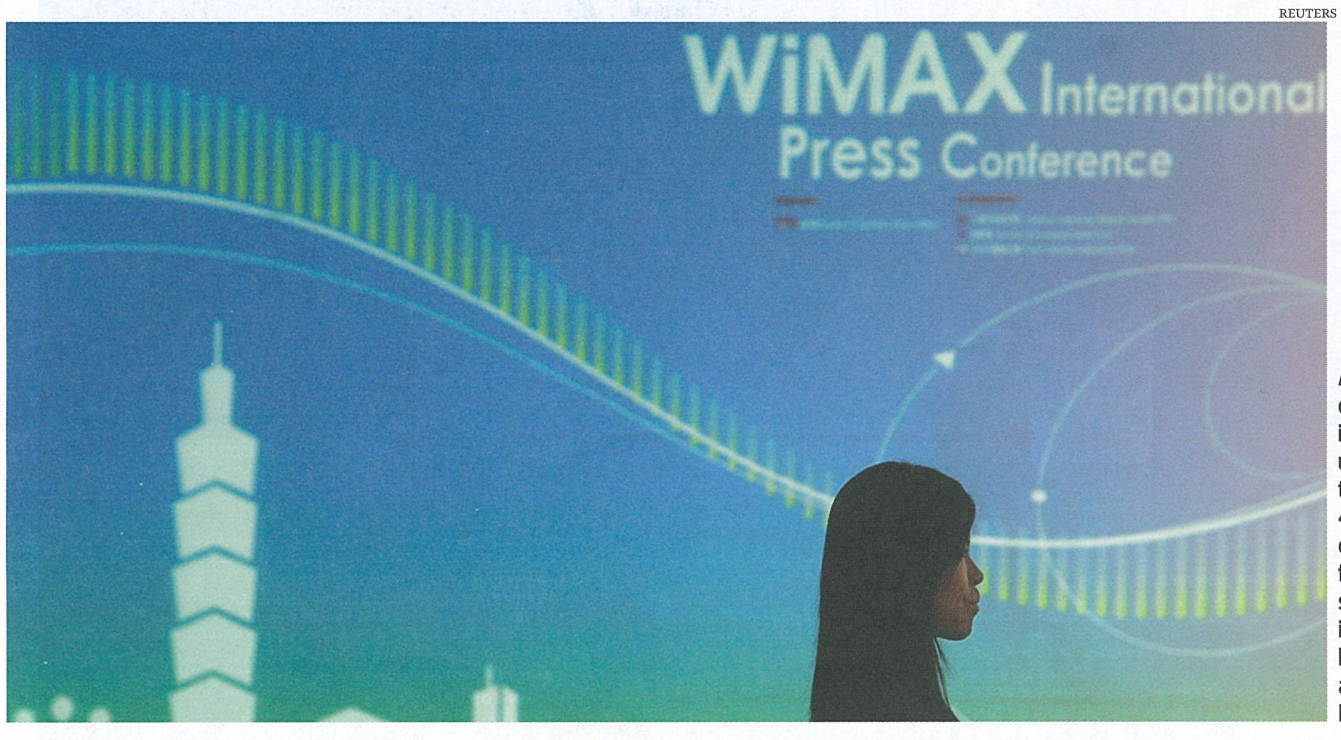
There have been reports that say WiMAX is picking up better in developing Asian markets such as Malaysia, South Korea and Vietnam. What do you think of this?

In developing markets, our spectrum management is better. We have more space to allocate. We are able to allocate more prudently when managing our spectrum.

Some of the challenges for service providers in developed markets is that a fair amount of capex (capital expenditure) has been spent on their 3G infrastructure. They want to maximise that return. After you've made a few billion of investment, that's tough to upgrade. [An interesting point is that our three major telcos have also invested billions in 3G.] When you have a new guy that comes in with a clean slate that is going to build a pure IP-based network, it's easier. When Malaysia embarked on the decision to do WiMAX, one of the factors that helped arrive at the decision and obtain the spectrum was that the service provider is supposed to make milestones in area coverage.

The plan was to get the country blanketed with broadband. With WiMAX, they know it's a fairly cost-effective technology. If you look at your cost per bit delivery, delivery to rural areas can be cheaply delivered via WiMAX. E

REUTERS



As the communications industry preps up for its transition to 4G standards over the next few years, a showdown is brewing between WiMAX and Long Term Evolution