



Islander July 2012 Technology Update

Should Internet access be termed as “a basic human right?”

This is an interesting question, and the reason I ask it is because in June 2011 the United Nations released a report that defines Internet access as a “basic human right”. UN Secretary General, Frank La Rue stated that the internet is “an indispensable tool for realising a range of human rights, combating inequality, and accelerating development and human progress.”

The report emphasises the importance of the need for universal access and policies that won’t limit access for political reasons. It also recognises that not all nations are commercially able to deploy the infrastructure necessary to support universal broadband access, but it states that it should be their aim.

However, would you put Internet access in the same category as water, for example, as a basic human right?

Did you know that Switzerland, Finland, Taiwan, and Spain have made broadband access part of their universal service regulations by extending the existing mandates for voice access as a right of every citizen? Other countries are considering it. Other efforts in other countries are not mandated but are government funded, like those in the US, Japan, the UK, and elsewhere. Broadband access has not truly been mandated in too many places yet. The reasons are primarily political, and those discussions will continue but there is a real cost in NOT deploying broadband to everyone.

A number of countries are developing broadband networks without a mandate either through direct government investment or government endorsed arrangements. These countries realise that having access to the internet will help them build their countries for the future as they cannot afford not to. The cost of not building a global network that is open and accessible will be reflected in education, health care, transportation, and most other industries as costs rise and the unconnected fall behind.

There are a number of surveys indicating current broadband penetration by country and by population. They do vary quite a lot, but provide a good indication of the numbers. The last survey conducted by WebsiteOptimisation.com was in quarter three of 2011 and had Liechtenstein at the top of the list with 63.2% followed by Luxembourg at 53.6% and Malta and Monaco at 46.4%. Hardly surprising, you may say, as these are very small, wealthy countries so the investment and complexity of bringing broadband to the population is not such a challenge. The first largish country after that is Denmark at 41.8%. In fact most of the Scandinavian

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countries feature in the top 11 countries. France is 12th at 37%, UK 17th at 34.3%, Germany 18th at 33.9% with the USA only in 22nd place at 30.4%! Sadly even though, to my surprise, Spain is one of the only countries that has a mandate to bring broadband to the people, it doesn't feature in the top 25 and neither does Greece, Italy, Ireland or Portugal. In fact if you look at this report in reverse order and read it as "Debt to GDP" it could be the same report! Does this say something?

What's new from Apple?

On June 11th Apple opened their 23rd World Wide Developer Conference (WWDC) in San Francisco with a Keynote presentation from their CEO Tim Cook. The iPhone Siri did a great crowd warm up before he came on stage, which is worth seeing.

Apple unveiled an all-new 15-inch MacBook Pro, featuring a stunning Retina display with over 5 million pixels, all-flash storage architecture, and quad-core processors in a radically thin and light design. Measuring a mere 0.71 inch high and weighing only 4.46 pounds, the completely redesigned MacBook Pro is the lightest MacBook Pro ever and nearly as thin as a MacBook Air.

They announced an updated MacBook Air with the latest Intel Core processors, faster graphics, and flash storage that is up to twice as fast as the previous generation. The current generation 13-inch and 15-inch MacBook Pro have also been updated with the latest Intel Core processors and powerful discrete graphics from NVIDIA.

OS X Mountain Lion was also announced. This is the ninth major release of the world's most advanced desktop operating system and will be available in July. Mountain Lion introduces more than 200 innovative features, including the new Messages app, Notification Center, system-wide sharing, Facebook integration, Dictation, Power Nap, AirPlay Mirroring, Game Center, and the enhanced security of Gatekeeper. With iCloud built into the foundation of OS X, Mountain Lion makes it easier to keep your content up to date across all your devices. I love the Power Nap feature and specifically the name – this feature performs any software updates automatically when the system is asleep. Yachts needing to manage your bandwidth beware!

The new iOS 6 mobile operating system features include: an all-new Maps app with Apple-designed cartography, turn-by-turn navigation, and an amazing new Flyover view; new Siri features, including support for more languages, easy access to sports scores, restaurant recommendations, and movie listings; Facebook integration for Contacts and Calendar, with the ability to post directly from Notification Center, Siri, and Facebook-enabled apps like Photos, Safari, and Maps; shared Photo Streams via iCloud; and Passbook.

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One of the features that particularly caught my attention was “Eyes Free Siri”. This is for use in the car. A number of major car manufacturers have agreed to put a Siri button in the middle of the steering wheel to enable you to talk to your iPhone and thus to not take your eyes off the road. Some of these manufacturers include Landrover, Jaguar, BMW, Honda and Mercedes.

So, a whole plethora of new features from Apple. If you want to see the full detail take a look at the Key Note presentation on the Apple website. Give yourself some time as it is nearly 2 hours long!

Intelsat to improve VSAT capacity with a new satellite network

On 12th June, the day after the Apple announcements, Intelsat introduced its EpicNG satellite platform, a new series of satellites which will combine Intelsat's spectral rights in the C-, Ku- and Ka-bands. Not many companies have the opportunity to have “spectral rights”!

The satellite network will be built upon an open architecture design and will utilise multiple frequency bands, wide beams, spot beams and frequency reuse technology.

The new technology will also be integrated with Intelsat's existing satellite fleet and global IntelsatONE terrestrial network, for backward compatibility.

“The Intelsat EpicNG platform represents the next generation of satellites, a progressive evolution of the Intelsat fleet,” said Intelsat CEO Dave McGlade.

“As the global demand for bandwidth surges and penetration of communications reaches ever further into developing regions and mobile applications, we are strategically investing in this platform to support our customers with a highly reliable and efficient broadband infrastructure as they launch new services and enter new geographies.”

With the launch of its new satellites Intelsat is promising higher performance, and therefore a lower cost per-bit.

This news will open up the way to a greater supply of satellite bandwidth and reduce the threat of any spectral monopolies developing.

As I have mentioned in previous columns, the demand for more bandwidth is predicted to increase by a multiple of 18 between now and 2016, so the supply has to increase to avoid a capacity crunch. This is all good news.

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