



Islander May 2015

Technology Update

March was a good month for new innovations with the Energous WattUp product providing wireless charging and various other projects at Satellite 2015. The Energous product sounded far-fetched, but it definitely wasn't the April Fool in last month's column!



April is starting well with the launch of the Apple Watch for preview and pre-order on 10th April, and it should end well with new products that can be seen on our joint "The Consortium" booth at the Palma Superyacht Show.

Apple Watch

So, from 10th April you have been able to book a 15-minute preview appointment at a launch Apple store. I have seen a cross section of feedback from respected reviewers. The first one I saw was from Scott Stein of C|Net on 8th April. He stated that he thought the Apple Watch was a beautiful bold watch, but has complications.

David Phelan of Stuff magazine wrote "In some ways it's the ultimate gadget. A device that no one needs but that oozes desirability, that doesn't change any aspect of life in a substantial way but makes a number of subtle improvements that you wouldn't want to give up."

Some of us derided the iPhone at its initial launch. Almost no-one saw the point of the iPad when that was announced. Will the Apple Watch be a similar story? It certainly appears to be a very cool gadget - more desirable and more luxurious than the smartwatches that have gone before it.

A brief summary of views say the good points are that the Apple Watch is a beautifully constructed, compact smartwatch. It's feature-packed, with solid fitness software, hundreds of apps, and the ability to send and receive calls via an iPhone. The bad points are that the battery barely lasts a day and recharge time is slow, most models and configurations cost more than they should, it requires an iPhone 5 or later to work, the interface can be confusing and sometimes it's slow to communicate with a paired iPhone.

So, what about prices? The Apple Watch comes in three different models, two different sizes, and six different finishes, with a range of swappable bands and prices ranging from €399 to €13,000. It's designed to be Apple's most personal product: fashion as much as it is tech. Apple's products have been fashionable for years, but now Apple wants these watches to transcend into jewellery.

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David Phelan of Stuff ended his conclusions with “It’s hard to pin down a specific thing that makes the Apple Watch special, but having worn one for almost two weeks now, it’s become an important, valuable part of my everyday life”. The first units start to be shipped on 28th April.

Spain’s Vodafone is the fastest 4G LTE network in the world!!

We have been a distributor for Vodafone Spain for some 10 years, and I learn this piece of information by reading it in the press and not from Vodafone! Anyway, it’s pretty impressive.

According to a study by network tracking service OpenSignal, Vodafone Spain’s average speeds of 25.2Mbps have helped Spain achieve the accolade of having the fastest 4G LTE networks in the world, with average download speeds of 18Mbps.



Denmark, Finland and South Korea tied for second place with speeds of 17Mbps. The US, with average speeds of just 7Mbps, ranked 26th out of the 29 countries measured. However, T-Mobile, the service we distribute in the USA, has the fastest LTE network in the USA.

Last year’s fastest country, Australia, fell to 14th as the average speeds of the country’s networks were 12-15Mbps

The report also found that the average global LTE speed is 9.3Mbps, almost 4 times faster than the average 3G speed.

If you come to the Palma Superyacht Show at the end of the month, please take the opportunity to visit The Consortium booth at SY23 to see how we aggregate multiple Vodafone Spain 4G lines together into one service providing from 25Mbps to 200Mbps. This is enough to run multiple IPTV streams on different TVs simultaneously.

Another new satellite Thor 7 Ka band launches 15th April

By the time you read this, the Thor 7 Telenor satellite should have successfully launched from French Guiana.

Why is this of interest? Well, firstly, it is a new high capacity geostationary communications satellite which is perfectly positioned for the Mediterranean. Perfectly positioned because it will sit over the equator at 1° West. In Mallorca we are at 2.65° East so it is only 3.65° west of us. In satellite terms, this is close. This means it has a good, relatively high, elevation at about 44°, so satellite dishes or flat panels will have less shadow caused by other masts, buildings, cliffs etc., and the distance through the ionosphere to the

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satellite will be shorter which means it will be less affected by poor weather.

Secondly it also includes a Ka-band payload, which will be used to meet the growing demand for broadband communications within the maritime sector – offering coverage over the North Sea, the Norwegian Sea, the Red Sea, the Baltic Sea, the Persian Gulf and the Mediterranean. The Ka band service is expected to be faster, so this will be an ideal service for yachts in the North Sea, Med and the Gulf.



The THOR 7 satellite will be the first mission of 2015 for Arianespace in French Guiana. This photo shows it being unloaded from the transport aircraft.

OneWeb Low Earth Orbit Constellation (LEO)

In my March column I wrote about SpaceX the Elon Musk LEO project which Google and Liberty have invested in. At the Satellite 2015 Show in Washington DC in March, Greg Whyler, one of the original founders of the O3b project, made a presentation about his OneWeb LEO Constellation in which Richard Branson and Qualcomm are investing.

Both these projects, together with LeoSat, aim to have their constellations of low earth orbit satellites running around 2020.

In a city full of suits and ties, Greg Whyler presented in jeans and black shirt, like the late Steve Jobs, on a huge stage in a huge hall.

His aim is to provide Internet to the 3 billion people who are not connected in the world. The plan is to launch 648 small micro-satellites in low earth orbit to provide a 60Mbps service at a latency of 130ms. This response time is as fast as fibre networks.



He intends to develop a \$250 land-based phased array terminal with fold out solar panels and built in 3G and wi-fi. Developing such a terminal is technically possible, but providing it for an affordable \$250, whilst being a very worthy aim, will be not far short of a miracle due to the cost of phased array.



Kymeta flat panel antenna at Palma Superyacht Show

We were very pleased to sign an agreement with Kymeta at the Satellite 2015 Show to become their official Customization Partner for the Yacht Industry. We hope to have the prototype flat panel on The Consortium booth SY23 at the Palma Superyacht Show at the end of April. We will also show you a useful application for old domes!



We have also been asked to host a Round Table discussion on the Kymeta Flat Panel at the Future of Refit & Repair conference, during the Palma Superyacht Show, at the Hotel Melia Palas Atenea on Thursday 30th April. If you would like to join in an open discussion and learn about the product and the development, please come along. If you haven't registered, please contact me.

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