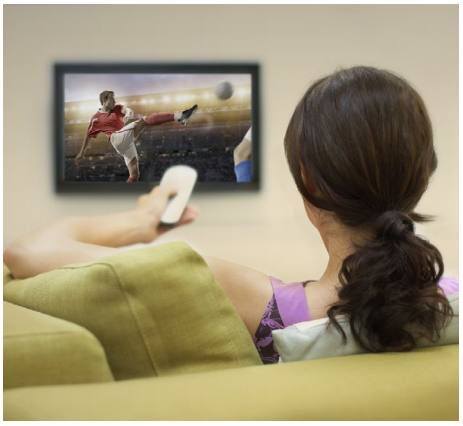
telenor satellite broadcasting

Newsletter Q1
April 2013

News



In Focus

Industry Opinion

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Follow us:

TSBc launches ‘the W1’ from Neterra

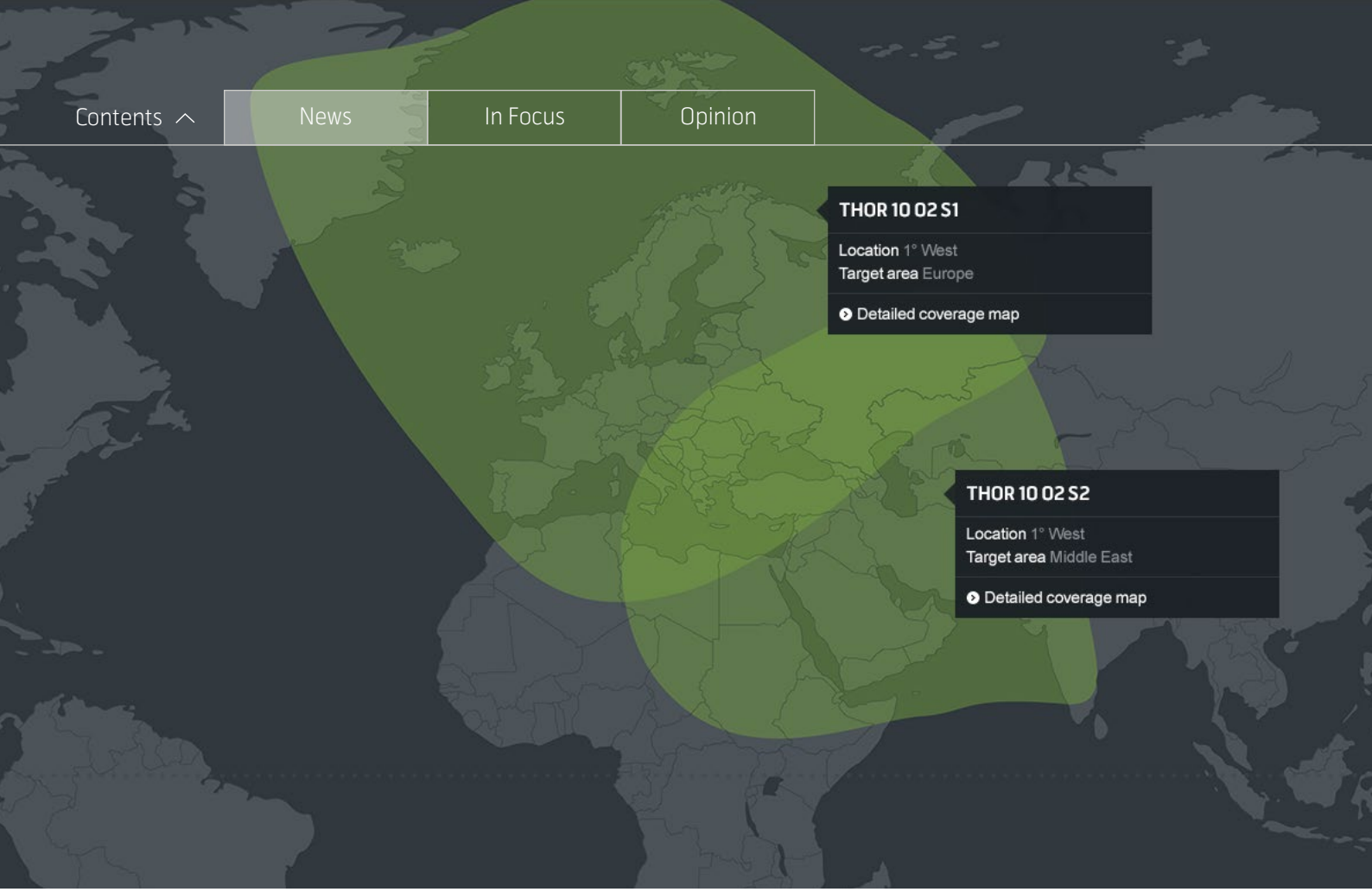
TSBc was pleased to announce in early March the signing of a transponder agreement with Bulgarian broadcast-services provider Neterra for “the W1”, a new direct-to-home (DTH), white-label shared platform that will offer pay-TV services in Bulgaria.

Contracting two transponders on TSBc’s THOR 6 satellite, located at 1˚West, Neterra will utilise the capacity for video distribution in Bulgaria. Neterra plans to offer other operators a premium pay-TV platform, delivering high-quality and highly reliable broadcast services, using the latest available technology.

Neterra, a company with more than 18 years of expertise in providing and supporting broadcast services in Bulgaria, will offer a bouquet of premium quality channels, delivering a superior TV experience. The company expects the first operations utilising the new DTH platform to launch within the next few months, carrying more than 60 of the Bulgarian market’s most popular local and international channels. Plans are in place to expand this line-up rapidly, adding local and international HD channels.

The arrival of Neterra gives another significant boost to the local and international channel line-up available at 1˚West, which distributes more than 700 TV and radio channels. 1˚West is now a well-recognized broadcast position in the CEE region and reaches more than 17 million households across Europe.

TSBc welcomes and looks forward to working with Neterra in developing its DTH proposition for the Bulgarian market.



Explore our THOR fleet at 1° West

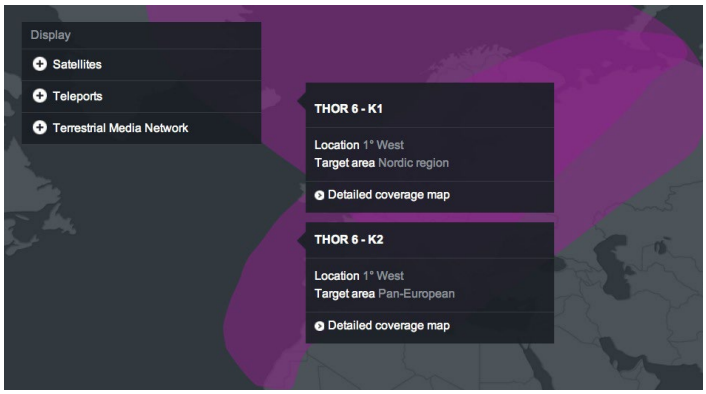
Every day TSBc's orbital location of 1˚West strengthens its position in key regions throughout Europe. With our new satellite, THOR 7, due to launch in 2014, the THOR fleet looks forward to further growth and expansion.

With this in mind, TSBc wanted to keep things simple and in Q1 we consolidated all our satellites under the THOR name. This move required a change to the name of our payload on the IS 10-02 satellite. But this small change makes a big difference to our customers and the external community, which can now immediately identify TSBc's THOR satellite fleet and our orbital home at 1˚West.

Our spruced-up satellite fleet at 1˚West comprises:

THOR 5	T1 and T2
THOR 6	K1 and K2
THOR 10-02	S1 and S2

Click here to explore our 1˚West fleet and download satellite-coverage maps.



TSBc launches its state-of-the-art operations hub for occasional services

Over the past nine years, Telenor Satellite Broadcasting's (TSBc's) Occasional Broadcast service, has gone from strength to strength, successfully building a reputation for delivering the best-quality capacity to meet customers' requirements, using its own dedicated THOR 10-02 capacity as well as third-party capacity to provide global reach.

TSBc's occasional-use operational activity has historically been shared between two locations – Nittedal, TSBc's main teleport in Norway, and the central London teleport in the UK.

With a view to streamline our operations and provide a better service to our customers, we have developed a new state-of-the-art operational centre based entirely in the UK. All occasional-broadcast services including line-ups/access and bookings will operate from the London teleport from the second quarter of 2013. Full details, and the official launch date, will be communicated to customers soon.

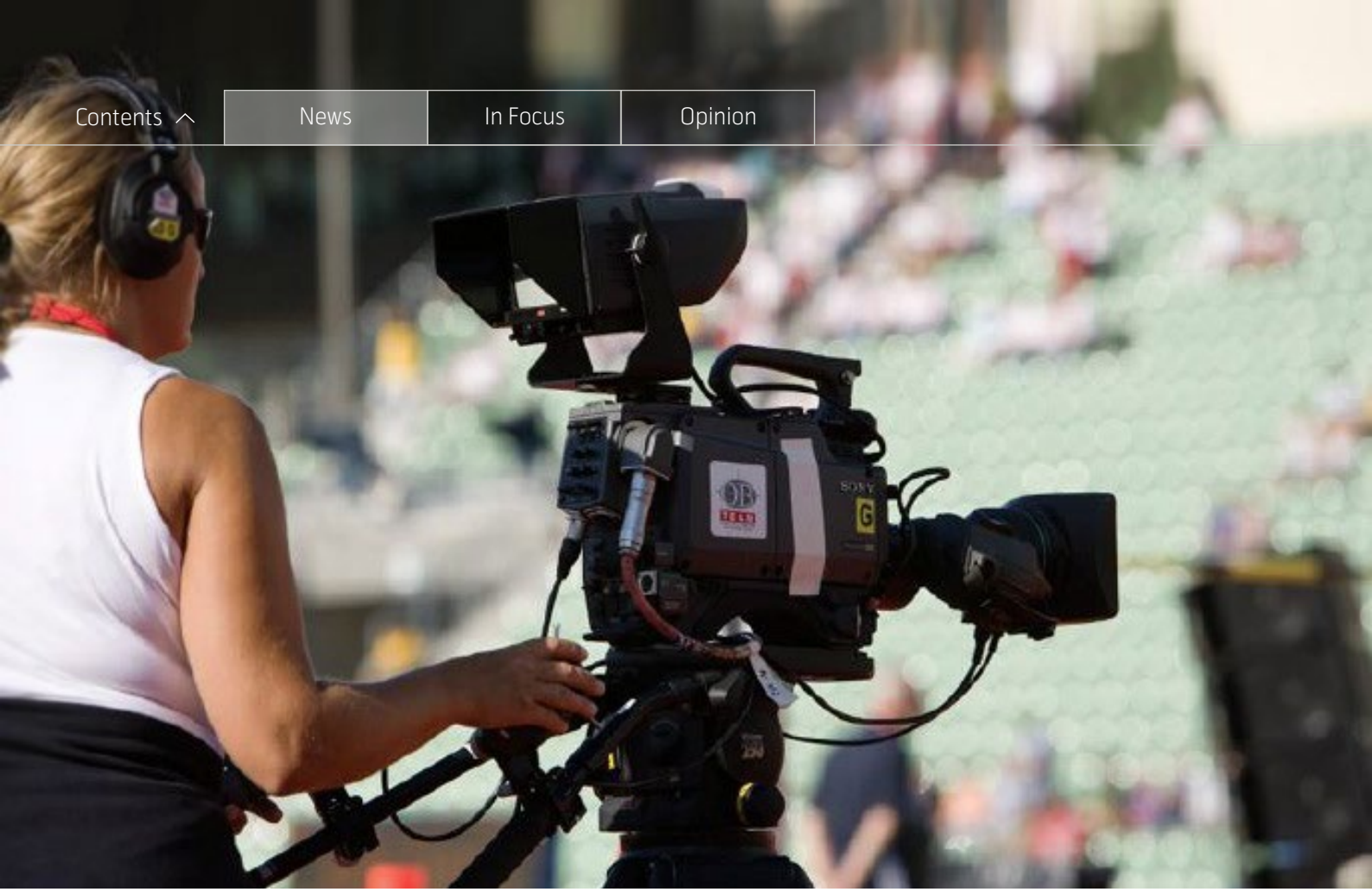
As a direct response to the customer feedback we have received over the past year, we are also upgrading our booking system. Customers can look forward to receiving much improved email booking confirmations and easy-to-read billing statements!

Welcoming new channels to 1˚ West

It's a pleasure to welcome the following new TV channels to our 1˚ West platform.

Service	TV/Radio
Nick Jr.	Children
TV3 Sport 1	Sports
TV3 (D)	General Entertainment
TV3 Plus	General Entertainment

The full up-to-date channel line-up at 1º West can be found on our website: click here for our complete channel listings.



Ka-band for Occasional Broadcasts

The latest Telenor Satellite Broadcasting (TSBc) satellite, THOR 7, due to start commercial service in 2014, will be equipped with both Ku-band and Ka-band payloads.

There is an opportunity for TSBc to provide a Ka-band solution suited to occasional broadcasts and we're looking for customers interested in working with us to develop a feasible OU Ka-band solution.

"Eutelsat's Ka-sat satellite has already proven that Ka-band is suitable for areas of occasional- use broadcasts and, as momentum builds for services to be transmitted using this frequency, we hope to offer an attractive service that encourages our customers to benefit from both Ku- and Ka-band solutions," said Lisa Barlow, Sales Director for Occasional Broadcast at TSBc. "Once we develop a Ka-band alternative, customers will be able to utilise this on THOR 7 as soon as the satellite is operational."

For further information or to express your interest please contact: lisa.barlow@telenor.com

Network and Data capacity availability

Satellite	Capacity
THOR 10-02	European and Middle Eastern capacity
Telstar 12 (Ku band)	Northern and Middle Eastern capacity
IS 12 (Ku band)	European and Middle Eastern capacity
THOR 5 (Ku band)	North Sea and Northern European capacity
IS 902 (C band)	Africa connectivity
THOR 10-02	Africa connectivity
Thor III (inclined orbit)	Middle Eastern capacity

Special events broadcasts via satellite

The Occasional Broadcast team has had a busy start to the year, providing THOR 10-02 S1 capacity for a wide variety of sports events such as the 23rd Men's World Cup Handball held in Spain (January 11 to 27), the Biathlon World Cup in Oslo (Februrary 27 to March 3 and the Six Nations rugby championship (February 2 to March 16).

Other sports events including Gaelic Athletic Association (GAA) matches throughout 2013 and the Champions League (August 2012 to May 2013) are also keeping the team busy.

Pope Benedict XVI's resignation on February 11 and the election of his successor, Pope Francis, on March 13 also required the Occasional Broadcast bookings team's wealth of expertise in helping broadcasters' secure last-minute capacity.

"2012 was a very successful year for Occasional Broadcasting, largely due to the UEFA European Football Championship and the London Olympics, which both provided unprecedented capacity demands," said Lisa Barlow, Sales Director, Occasional Broadcast. "In 2013, we have already seen a substantial demand for occasional capacity and, although it may prove a little more challenging, we look forward to another successful year."

Occasional capacity for live coverage of upcoming events

- 60th coronation anniversary of Queen Elizabeth II, June 4
- Swedish royal wedding, June 8
- Tour de France, June 29 – July 21
- UEFA Women's EURO 2013, Sweden July 10 – 28
- UK royal birth, July 2013
- Norwegian parliamentary elections, September 9
- German federal elections, September 22

Space available on: THOR 10-02 S1, Telstar 12, Astra 4A, Astra 3B, Euro bird, NSS7, IS 905, and any of the available Eutelsat satellites. Please call bookings, +44 207 923 6555 to reserve capacity for these events or any last-minute requirements.

A note for your diaries: Upcoming events

Telenor Satellite Broadcasting (TSBc) has a full calendar of events and will participate in major up and coming industry exhibitions and conferences. To arrange a meeting at any of the events listed below, please email:

infosatellite@telenor.com

10th Annual Digital Ship-Cyprus 2013

This is the third event this year from Digital Ship, which focuses on communications and information technology for the maritime industry. TSBc is proud to be European sponsor of the Digital Ship series.

Hear TSBc's Manual Valero, Maritime Sales Manager – Southern Europe, speak during the conference on the topic: Investing in Future Satellite Capacity to Satisfy Growing Communications Requirements in the Maritime Sector.

Place	Date
Limassol, Cyprus	23-25 April, 2013

For more information on this event, please visit: thedigitalship.com

Global Space and Satellite Forum (GSSF)

The fourth edition of the Global Space and Satellite Forum (GSSF) is a two-day conference, providing knowledge sharing and networking for industry colleagues concerned with satellite communications in the Middle East. It is co-located with the satellite communications event Milsatcom Middle East.

Place	Date
Abu Dhabi, United Arab Emirates	7-8 May, 2013

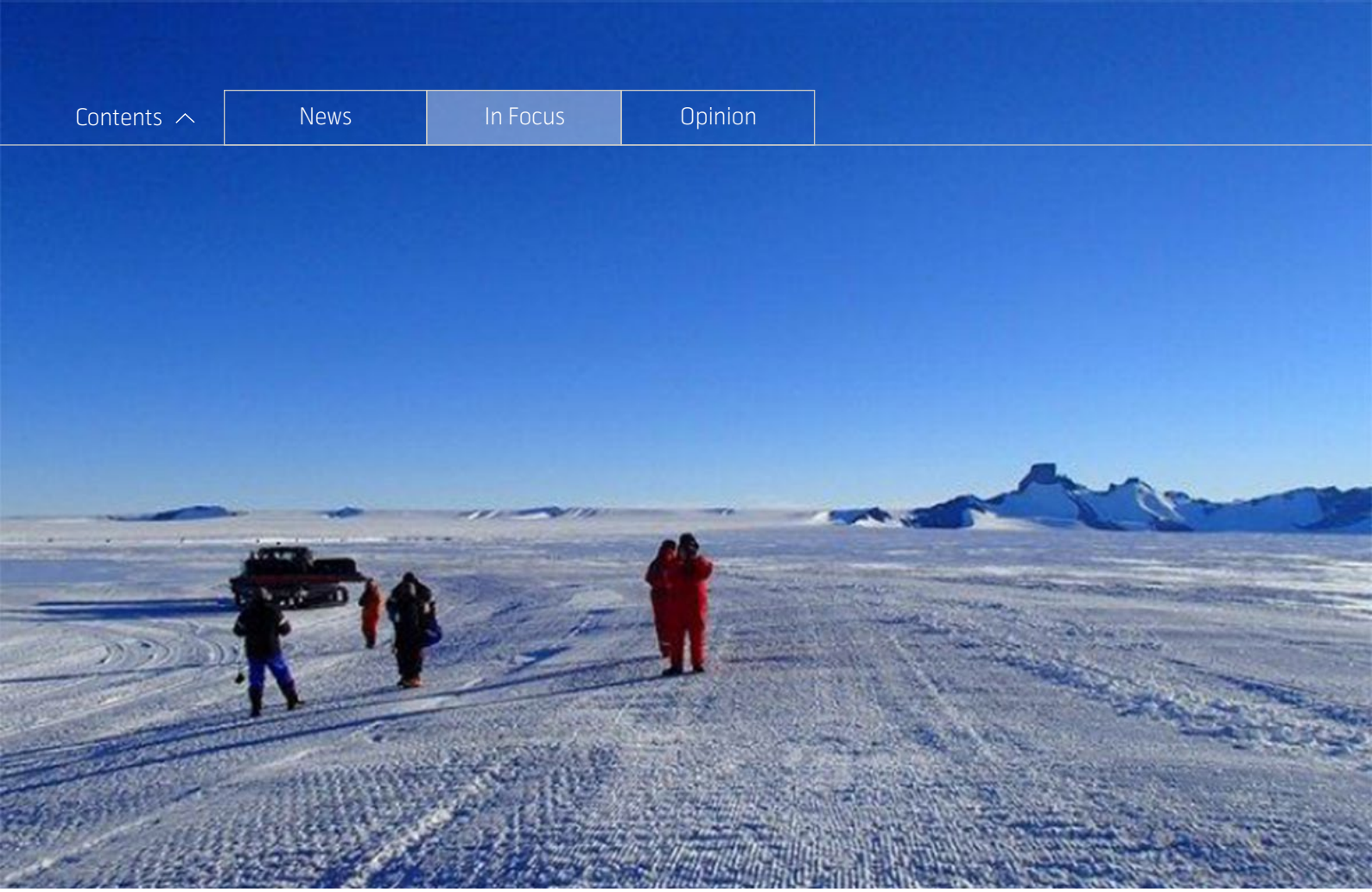
For more information on this event, please visit: gssforum.com

Norshipping

TSBc is pleased to be exhibiting at this leading maritime event held near Oslo, Norway.

Place	Date
Lillestrom, Norway	4-7 June, 2013

Visit us at our stand, located at B01 – 26. For more information: nor-shipping.com



Antarctic Expedition

It's not every day you plan a business trip to the Antarctic, but this was exactly what was required of a couple of our engineers as they had to carry out some essential work to an antenna ahead of the launch of THOR 7.

Terje Wold, Installation Supervisor, and Arne Svendsen, RF System Engineer, spent close to a month living at the Troll base in Antarctica's /Queen Maud Land in January, during the brief Antarctic summer – a period which experiences more favourable weather conditions, allowing many engineering and research projects to take place.

During their time there, Terje and Arne set up systems to deliver the co-operative agreement TSBc holds with Norsk Romsenter Eiendom for the provision of a dedicated link from Antarctica for Kongsberg Satellite Services (KSAT), using THOR 7 satellite capacity. The link will be used for transmitting meteorological and environmental data for research purposes, as well as faster broadband connections for employees at the Troll base to improve their communications via voice and broadband with colleagues, family and friends.

They converted and tested the existing antenna, which will allow TSBc to receive transmissions from the Troll station, by utilising Ku-band capacity on its THOR 5 satellite. This provisional solution will operate until the THOR 7 satellite comes into commercial operation in 2014.

There was not much free time within their work schedules, but the weather proved to be relatively favourable and stable during their visit, which allowed some scenic exploration. Along with the rest of the contingent, which included engineers and scientists travelling to Antarctica for a range of projects, the TSBc duo were able to go on a few hikes in the afternoon, while their evenings were spent playing pool, table tennis and darts.

Some further work is needed because the satellite connectivity links for Norsk Romsenter will be operating on Ka-band frequencies. This means that a second antenna capable of receiving and transmitting these frequencies will be constructed at a later date. At least one engineer will be making a return visit, and one thing is certain –there are plenty of TSBc engineers willing to take on this project.

The unstoppable rise of High Throughput Satellites

By Helen Jameson,
Editor at Satellite Evolution

High Throughput Satellites (HTS) represent the next chapter in the satellite industry's story - and what an exciting chapter it promises to be. Since the first dedicated Ka-band satellite was launched in 2006, the precedent has been set, and operators all over the world are now building HTS into their business strategies.

HTS combine spectrum efficiency and spotbeam antennas with ultra-wide transponders that enable much enhanced levels of bandwidth and throughput - around 5 to 10 times the capacity of traditional satellites. The spotbeams featured on HTS enable improved link performance and higher data rates at better availability than 'classic' satellites. It must, however, also be pointed out that there are trade-offs to be made when moving to a HTS satellite model. Geographic coverage is not as good as their traditional counterparts due to the fact that the spotbeams are concentrated on small areas of the earth. Therefore, when an operator looks at the development of a HTS system, they must be able to deal with these trade-offs and balance these with the needs of their prospective customers. HTS tend to be application-specific and highly suited to some applications such as SNG, live web streaming and consumer broadband. There are other applications that HTS may not be able to fulfil due to their assumed technical limitations that have been widely debated.

But what is a High Throughput Satellite? This is argued from two camps. One would class HTS as a Ka-band satellite - much of the industry does still regard HTS as equating to Ka-Band. However, the other camp believes that HTS can use any frequency and can suit any application through the application of frequency reuse, for example.

The satellite industry is at a point where it is waiting to see how HTS will fit in. HTS already in orbit are finding their feet, and with more set for launch this will be a very interesting time for the industry. However, it must been remembered that HTS do not represent a one size fits all solution. That said, there are many emerging solutions that HTS will serve well such as M2M and mining. There needs to be understanding about where Ka-band HTS fit into the market and in some cases, it will not be the best solution. In many cases, users need flexibility and it is not all about the frequency band but the ability to offer more than one frequency to fulfil a wider range of applications.

There can be no doubt that HTS represent an important gear shift for the satellite industry, especially today when users require the best possible service at a lower cost for increasingly bandwidth hungry applications. HTS have a vitally important job to do and will complement the 'traditional' satellites to augment operators' capabilities across the board.