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Navarino UK Office Opens

This quarter we are excited to announce the opening of our UK based office. The office will be run by Navarino UK Managing Director Ray Brough. Ray has many years of experience in the satellite communications sector, having started his career at British Telecom Aeronautical and Maritime, satellite services division 22 years ago, before working for Iridium, Avanti Communications and Stratos in the Land and Maritime divisions, and has been involved in the industry at several levels over the years. 'The prospect of working with Navarino in the UK is a thrilling one. I look forward to supporting our existing partners there and also to introducing prospective resellers to our wide range of satellite communication solutions.



Mr. Ray Brough - Navarino UK Managing Director

Navarino has a reputation for high quality, reliable services and I am delighted to join the team of such a well regarded, world class satellite communications company.'

The office will focus mostly on business development for Infinity through resellers, serving both as a first point of contact for our UK based business partners and also as a base for the steadily growing network of resellers.

Looking ahead, as a Global Xpress Value Added Reseller Navarino also expects the UK office to play an important role in developing business for this upcoming service in the region and also across the Atlantic. With such a high concentration of major satellite network providers and manufacturers in the UK, the Navarino UK office will be their first port of call for enquiries and information on the very high bandwidth Global Xpress service, as well as for providing Infinity demonstrations to show how the combination of



higher bandwidth options from Inmarsat and optimisation through Infinity can enhance the way their customers are using their data allowances for both crew welfare and business applications.

Navarino CEO Dimitris Tsikopoulos is enthused about the new office, 'Establishing a presence in the UK, such a historically important centre of both the satellite communication and shipping industries, is an exciting new venture for Navarino. With the wide variety of potential partners and resellers found there in terms of their satellite communication requirements, we are able to extend our services and support network to each type of company, whether they need high bandwidth, fixed fee solutions or are looking for email only solutions. The diverse profiles of suppliers based in Britain are a perfect fit to Navarino, which has always been a flexible organisation, able to meet all kinds of requirements and which prides itself on building long term relationships with partners based on trust and excellence in the services we deliver.'

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Editor's note



by Christian Vakarelis

Welcome to another of our Newsletters. Of particular interest this quarter is an in depth look at how Infinity is being used in some very customised ways at Spliethoff in Holland, which shows just how flexible the Infinity service can be.

Besides attending Norshipping in June, the other big event Navarino participated in was the Inmarsat conference in Hamburg. While there, Inmarsat provided some interesting new ideas surrounding Global Xpress which I will touch on in this column. The fact that Global Xpress is going to offer much higher bandwidths than we are used to in satellite communications, whether on Fleet broadband or VSAT mean that we all must prepare for the new host of possibilities this will bring. One such aspect that Inmarsat and Navarino are already preparing for is the applications that a fixed fee, high speed network will allow. These include for example video calling for crew members, something which is usually prohibitively expensive or technically very difficult to implement using existing satellite networks. A video chat service over Global Xpress is already in development, and will operate in much the same way as current crew calling cards, with both prepaid and postpaid options available over users' smartphones. Importantly this video chat service will not consume all a customer's bandwidth as it is dynamically managed and assigned by the network as needed, resulting in good quality video calling without the need for a high CIR.

Other applications will address needs for chart updates and downloads, news and sport subscriptions and online shopping services, making being online aboard a vessel much closer to being online ashore. These types of features and applications, combined with a high performance, fast browsing experience will mean Global Xpress will set new standards for what seafarers consider the norm at sea, and as a Global Xpress VAR, Navarino is looking forwards to moving with our customers into the next era of satellite communications in 2014.

Case study

Spliethoff uses Infinity to bring Internet to crews

Established in 1921, the Amsterdam based Spliethoff Group is the largest shipowner in the Netherlands. The four subsidiaries 'BigLift Shipping', 'Sevenstar Yacht Transport', 'Wijnne Barends', and 'Transfennica', combine fleets of heavy lift, short sea, liners and yacht transport that altogether total over 100 vessels ranging from 2,100 to 23,000 tonnes. The company has since January 2009 added 22 vessels to its fleet, and is known for its leading role in the transport market and its reliability, commitment to environmentally friendly policies and for ensuring its customers have access to the latest technology in shipping.



Spliethoff's commitment to technology is reflected also in its approach to satellite communications, and the company has over time tested and used most of the major satellite communication networks available, from Inmarsat Fleet 77 and Fleet Broadband to Iridium Openport and VSAT. Of its sizeable fleet, around 25 are equipped with Navarino's Infinity solution to bring crew internet and other functionalities to its fleet.

The crew on the Infinity vessels are able to use their own devices to get online, from laptops to smart phones or ipads. The Infinity is setup so that the crew receives 300 MB of data each month for free. Peter Van de Venne, Director IT of the Spliethoff Group notes that the compression ratio of about 2 gives the crew about 600 MB in terms of actual free usage. Infinity also removes unwanted ads and automatically reduces the picture size to a fitting level. Experience so far has shown that in most cases this is enough to cover most of the crews needs. Via a web page, a crewmember can see on board how much capacity is still available to him. If a crewmember wants to use more, they can purchase additional internet access, even from the comfort of their own cabin. To make this possible and at the same time keep the administration overhead for crew, captain and office to a minimum, the Navarino Infinity department has developed webservices in close cooperation with Spliethoff. The webservices are tied to the company's crew management software. So if a new crew member is sent to a ship with Infinity, the crew planning software from the office will send the necessary account info to the ship so the crew member can login. If a crew member makes a purchase, it is linked to the office's crew administration software and tied to the wage account of the crew member, meaning that the purchase is automatically deducted from the crewmans' wages at the end of the month. In this way, there is no need for the crewman to bother the Captain to ask for a PIN, he can purchase credit at any time, even late at night, and of course this results in much less administration for the Master and the company. Furthermore, the customised Infinity set up on Spliethoff vessels ensures that a crewmembers' Infinity account follows him across the fleet, so if

he is posted to another Spliethoff vessel he simply logs in to his account and all his credit follows him onto the new vessel with no administrative hassle on the part of the company or crewmember.

The usefulness of Infinity is not restricted only to crew usage. Another interesting feature is the interconnection of the office phone system with onboard VoIP phones. Now office and ship can call each other (free of charge) by using a simple 4-digit extension number. To office staff, the vessel now has become just another colleague, and this increases cohesion between office and fleet. Other, more basic functionalities also include fleetwide firewall rules, and least cost routing (to choose the optimal carrier, be it FBB, VSAT, Iridium, Wifi, GSM, etc).

As Spliethoff has installed the Infinity Plus version of the system, they are able to virtualize applications on board. A virtual PC has been setup to make it possible for their satcom provider Imtech Marine to provide remote support to ships' satellite antennas by connecting through the Infinity unit to the actual antenna itself for command and control, and to make any necessary adjustments from onshore. There are also plans to implement a virtual business PC as a central machine, instead of a separate server. This will mean avoiding the need for the expense and administration that onboard servers usually call for, while still having a central machine which is always available.

Spliethoff IT can access all vessel PCs through a secure VPN tunnel that links all Infinity vessels with the headquarters onshore network.

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Looking further ahead, Spliethoff is keeping a close eye on developments with Global Xpress, the next generation service being launched by Inmarsat in 2014, to see what new possibilities it may bring for its satellite communications. As a Global Xpress Value Added Reseller (VAR) Navarino is of course well positioned to answer customers inquiries and for advice and consultation on what new functionalities Global Xpress will bring. The very high bandwidth speeds and fixed fee nature of GX will mean multiple new options open up for shipping companies, both for their business and crew welfare applications. For any information on this, or any aspect of your satellite communications, please contact your Navarino account manager.

Market News

As more and more shipping companies are finding that the need for greater bandwidth is becoming the norm, at Navarino we see that there is an ongoing shift in patterns amongst our customers who are following this bandwidth curve. Whether this exponential increase in bandwidth requirements is driven by business applications that allow vessels to become increasingly intertwined with office networks, or whether it is a result of offering more crew welfare options such as internet access, the shipping market is hungrier than ever for solutions that enable more applications to be used on board. Below are some of the latest developments amongst Navarino customers who are meeting these new demands for data with our services.

MMS Japan upgrade fleet

MMS Co Ltd in Japan have 29 vessels, 19 of which are tankers and 10 bulk carriers. Previously their vessels were equipped with a mix of Fleet 77 and Fleet Broadband terminals on the 50MB plans, which was adequate for their business communication. Recently the company decided



whereby an Infinity is also placed in the shipping company premises on shore, allowing for free calling between the office and the fleet.

Registered Users at Goldenport

Goldenport, based in Greece are a management company consisting of 11 Container Carriers and 10 Bulk Carriers. They have recently begun installing Infinity with Fleet broadband on the 6 GB plan, which they use to provide crew internet, not with PINs but through the Infinity registered users platform. This gives each crewmember an individual login and user account through which he can manage his data and voice consumption, purchasing more as needed. Averaging around 3GB per month for crew welfare, and around 1300 voice minutes for voice, Goldenport is like others also implementing the Infinity ship to office setup to bring down the cost of communicating with their ships from headquarters.



to begin offering crew internet, and so they have begun a project with Navarino to rollout Infinity across all the 19 tankers, upgrading the FBB plan to the GB allowance plans, with each installation taking 1 or 2 days. Via Infinity voice PINs, MMS can now offer both low cost crew calling at the low voice rates of the GB plan, and also issue crew with internet PINs of 25 or 50 MB each. So far this has resulted in average monthly crew data usage of around 2.5 GB per month per vessel, and an upsurge in the crew calling.

Infinity for Berge Bulk

Berge Bulk in Singapore have 25 vessels, some of which are the largest dry bulk vessels (over 380,000 DWT) in the world. Another company which in the past was using legacy Fleet 77 systems and small FBB packages, Berge Bulk has reacted to the need to improve crew welfare by providing internet with Infinity on the 6GB plans, with 5GB worth of data provided to the crews on each vessel free of charge by the company. If further usage is needed, each crewmember has the option to buy PINs of 50MB, while they are placing their personal calls at the rates of the 6GB plan. So far the crew have reacted very positively to the new system, and the vast majority of the 6GB allowance is consumed by their usage each month. One other feature of Infinity in use by Berge Bulk is the ship to office service,



We would like to thank each of these companies for appearing in our newsletter. Like many of our customers, they are discovering that upgrading a fleets' satellite communications with Infinity can result in significant cost savings, while offering much more utility for business and crew welfare. For further information on how combining the larger Inmarsat Fleet Broadband plans with Infinity can help enhance the satellite communications of your fleet, please contact your Navarino account manager on sales@navarino.gr

Events- Promotions

Nor-Shipping 2013

From June 4th to June 7th 2013, Navarino attended one of the worlds largest Maritime exhibitions, Nor-Shipping in Oslo. Both Marina Angler and Christian Vakarelis were in Norway for the exhibition which brought together representatives from the leading Scandinavian and international shipping companies for three days of seminars, forums and events. Of particular interest was the Digital Ship CIO forum, which addressed the issues and trends that shipping technology professionals face in an increasingly changing and continuously developing business environment. It examined the strategic and practical challenges which all companies are facing in current times:



Ms Marina Angler with Inmarsat colleagues Mr Kartik Sinha and Mr Hoogenbosch

How to drive business value in the form of growth as well as increased efficiency and productivity?

- How to build a better case for business value?
- How to foster innovation?
- How to gain internal support and buy in?
- How to build platforms that the customer will benefit from?

All these questions and more were covered in depth by some of the satellite communication industry's leading CIOs, making for a worthwhile and valuable debate on the state of the market.

Infinity news

This quarter sees the release of the new ship to ship VOIP service from Infinity. By putting an Infinity unit on each vessel, both ships can communicate between themselves using the data channel of their satellite communication channel to make VOIP calls at very low cost. This applies to unlimited number of ships and can be put across a whole fleet for low cost ship to ship calling.



Also new this quarter is the Infinity enterprise VPN solution, which connects vessels to a shipping company network using any kind of internet provider including 3G and Wifi, in addition to satellite networks. This is currently in use with our Infinity reseller Imtech Marine across many of its customers.

Additionally, IT Managers can use Infinity's new extended filtering tools to set who on board is able to connect over each type of connection. For example, the system can be set up to allow only the Captain to have connectivity over 3G networks for his internet access, but no one else. Any number of these filters can be



applied, ensuring only those that the shipping company designate can use the 3G network for the company.

Finally this quarter, the Infinity development team is pleased to announce that Infinity is now fully compatible with the Inmarsat Fleet Broadband multi voice service. This allows multiple, simultaneous calls to be made through the Infinity unit, meaning for example that several crew members can make their crew calls at the low rates of the FBB plan, while the master can at the same time be making and receiving business calls.

Tip of the Month

To use Infinity most effectively you may need to adjust some proxy settings for accessing secure https sites, such as web banking sites. The below tips help set this up for both Internet Explorer and IOS devices.

Internet Browser Proxy Settings (for secure sites via https)

Although INFINITY uses a transparent proxy, there are some cases in which the proxy must be inserted manually. In order to add the proxy to the web browser follow the below steps:

1. Click over the Windows Internet Explorer icon and wait for some seconds for it to load.
2. In the right upper corner click the Tools icon and select Internet Options.
3. From Internet Options select Connections and then LAN settings.
4. From the Local Area Network (LAN) Settings make sure that Automatically Detect Settings is checked. In the Proxy Server section check the Use a Proxy Server for your LAN and then the Advanced button.
5. In the Servers section you can see the Secure and FTP types. In the Proxy Address to Use fields, type "infinity" (without quotes) and in the Port field type 3128 and click OK twice.

Apple iPad/iPhone Proxy settings (for secure sites via https)

Due to Apple's background auto setup proxy function, the proxy server for https requests must be setup manually. The steps below describe the required actions for IPAD/IPhones.

1. Press the IPAD Home button until the screen with the Settings icon appears. Click it and wait for it to load.
2. Find the Wi-Fi section at the top of the screen and click it. If the Wi-Fi status is OFF*, please turn to ON and wait some seconds to find the available wireless networks.
3. From the available networks select infinity** and wait a second for it to be set as default network. As soon as the action is completed the network name will turn to blue with a tick on the left side.
4. As soon as the INFINITY wireless network is selected as default you can click over the blue arrow to setup the network properties.

