

Navarino offers SpaceX's Starlink service to maritime



Navarino is proud to announce that it has signed a distributor agreement and has added SpaceX's Starlink service to its portfolio of connectivity solutions. The agreement means that Navarino will act as a global 'Authorized Starlink Integrator', offering Starlink's low latency, high-speed broadband to the merchant marine sector.

Navarino CEO, Dimitris Tsikopoulos, said 'In today's business environment, constant evolution, and the continuous adoption of innovative technologies is a necessity for the shipping industry. By introducing this new option from Starlink to the Navarino suite of services, we are

able to offer our customers' vessels low latencies and high-speed layers of bandwidth that they have never seen before in the sector.

We look forward to working closely with Starlink to leverage the power of the latest in cutting-edge satellite technology to provide a powerful new communications platform that is designed specifically for the unique needs of the maritime sector. Combined with our broad experience of integrating, managing and maintaining complex vessel IT networks, Navarino is well positioned to undertake the full range of any fleets' technology needs, all while offering a five-star customer experience.'

 **INFINITY**
version 2.8.1

STARLINK
ready!

Alongside the announcement of our Starlink partnership, we are delighted to also share the news that Infinity, our best selling bandwidth management and optimization solution, is also fully compatible with the Starlink connectivity service thanks to its latest update, version 2.8.1.

Head of our Product Department, Nikolas Papanikolaou said 'Of course

with Starlink's very high bandwidth capabilities, we expect to see the volume of data generated on vessels increasing to levels that have not been possible before.

Despite the fact that the Starlink commercial packages offer very generous monthly data allowances, there are still out of bundle charges that apply once those allowances are used up. This means that ship operators will certainly want to have full control over the allowances made available onboard – to ensure that only traffic that they want to allow can be accessed, and of course to ensure that out-of-bundle, per GB monthly costs do not exceed limits that they have predefined.'

Editor's note

by Christian Vakarelis



Hello and welcome to our latest Navarino Newsletter! In this quarter's edition you will notice that there is one particular focus, namely Starlink. We are very proud to be among the first companies to offer this exciting new service to the maritime sector and we believe it will become the must-have companion to the more traditional geostationary satellite systems used on merchant vessels.

Starlink's very high speeds will undoubtedly be welcomed on board vessels, both for the new possibilities it brings for business applications but also as a big upgrade to crew welfare options. But all that speed needs careful control and management to ensure that data limits are set within each ship operator's budget and IT policy. This is why we have carefully tested and rolled out Infinity update 2.8.1 to give our customers the tools they need to keep a handle on what the extremely high bandwidth of Starlink can be used for on their fleets.

There is also good news from Inmarsat this quarter as you will read about on page 3, as they are in the process of adding extra capacity to the Global Xpress network in the form of their new I-6 satellites. These will add bandwidth to both the Ka-band and L-band spectrums which can be directed to the busiest areas in real time as needed.

And finally this quarter we are delighted to launch the first activity of our Global Environmental Action plan in Guatemala. This program aims to make a real difference to local areas by organizing sustainability events to educate, inspire and deliver positive results for our environment all over the world. The schoolchildren at Lake Atitlan who volunteered to clean up their neighbourhood did a fantastic job of making their community more habitable and we would like to thank everyone who joined in!

Navarone enjoys strong partnership with Navarino for connectivity and technology needs



Navarone is an Athens based ship owner/manager and operator with a fleet of 27 bulk carriers. In this interview, their IT manager, Mr Kostas Sakellakos describes how they use the power of Fleet Xpress from Navarino to drive the ongoing digitalisation of their fleet.

'At Navarone, past collaborations with connectivity providers were severely impacted by supply chain disruptions, therefore we were seeking a strong, stable partner on whom we could rely on for our next 5 year connectivity plan. We are happy to say that the partner we chose for that stability is Navarino, who provide us with FX on the 2MB Entry plan and Infinity. Besides stability, one of the main reasons we chose Navarino was that we felt that they were one of the first companies who foresaw the way technology would become ever more important to maritime, and the huge increase in demand for software on ships, as vessels become more and more like an extension of our offices.

Navarino is also a well-organized company, where each department is focused on what they need to do, and furthermore we are very happy with their support, the whole team is eager to intervene to help resolve issues whenever needed.

Navarino's Infinity Plus solution is installed on all our ships and we mainly use its connectivity functionalities, while virtualization, security, crew welfare, asset management etc are currently being evaluated, are partly deployed or being kept as backup.

With this range of services, we have the peace of mind of being able to transition between our partners' platforms and be resilient against the most disruptive supply chain vendor issues.



Crew welfare is something we take very seriously, and we want to support our colleagues on board while they are at sea away from their families as much as we can, so having reliable connectivity is extremely important. We offer all our seafarers 4 GB of usage a month for free and we are considering upgrading the FX plan to ensure that there is enough bandwidth to allow business operations to continue unaffected by crew use. Infinity's Quality of Service feature does help a lot in this regard too, as it stops crew traffic from becoming too heavy.

Another Navarino solution we are looking at is Spectrum, which is a very well-designed product with lots of functionality to really drill down and see the complete picture of all the onboard IT infrastructure. If the IMO requirements on asset management reporting increase, we shall definitely be considering Spectrum for the whole fleet.

We were also pleased to hear about Navarino becoming a Starlink reseller – this is a potentially very interesting new connectivity option. If its deployment plan is kept, we foresee that vessels will be just office nodes much sooner than expected with FX. We plan to combine this with our current service for complete coverage and failover.'

Ioannis Brougiannakis, the Navarino Account Manager for Navarone added 'Vessels today are becoming an extension of their shore offices

as real-time data exchange is widespread and a ships' operational efficiency depends on the continuous monitoring of the vessel. What's more, given the current market conditions and the geopolitical challenges, worldwide crew welfare is extremely important. We are very happy to successfully offer our solutions to these maritime needs to Mr Sakellakos' IT team and to Navarone's fleet and we look forward to an ever closer partnership in the coming years.'

'Besides stability, one of the main reasons we chose Navarino was that we felt that they were one of the first companies who foresaw the way technology would become ever more important to maritime, and the huge increase in demand for software on ships, as vessels become more and more like an extension of our offices'

Kostas Sakellakos,
IT Manager for Navarone

Enesel SA goes full speed ahead with Starlink from Navarino on MT Kanaris 21

Athens based Enesel S.A. operates a modern fleet of 16 tankers and have begun implementing the rollout of Starlink's new connectivity service with a trial on MT Kanaris 21. Mr Andreas Panagiotaras, IT Manager for Enesel S.A. said 'We are always interested in exploring ways to keep our modern fleet at the forefront of technological innovations, and so trying Starlink is a natural step for us. We chose Navarino to implement this project with us as we know that they are the leading technology partner in the market and we have enjoyed an excellent partnership with them for many years.

As connectivity becomes ever more critical, adding this new, high-speed, low latency solution in combination with our existing setup of Inmarsat Fleet Xpress and Infinity will ensure that our vessels will be able to benefit from a fully redundant, high-speed bandwidth setup. We look forward to seeing what Starlink can do to further enhance both our business and crew welfare applications.'

Mr Ioannis Brougianakis, Navarino's VP Sales Middle East, added 'I am delighted that Enesel S.A. chose us to deliver Starlink to their fleet and I am really excited to see how the never before seen speeds of this new satellite constellation will offer

new ways of connecting to vessels and the applications that it will enable. Enesel S.A. operates a very advanced IT environment on their vessels and I believe that Starlink will help bring their fleet to a new level.'



Inmarsat coverage for maritime customers is set to double as new I-6 satellites prepare to come online



Launched on 17 February 2023, I-6 F2 is the second of two state-of-the-art Inmarsat-6 satellites soon to come into service. Alongside I-6 F1, which launched in December 2021, the identical pair are Inmarsat's first hybrid geostationary Earth orbit (GEO) satellites. Featuring both Ka-band (Global Xpress) and L-band payloads, they represent a key step in Inmarsat's technology roadmap that will see a further five satellites launched by 2025, together with the

largest ground network expansion in the company's history.

'The new I-6 satellites will bring 50% more spectrum,' explains Inmarsat CTO, Peter Hadinger. 'They have double the amount of processing power that we can transmit, and thus we can easily get four times the amount of capacity through the network than we do today,' he adds. The extra L-band capacity the I-6s offer is in fact double what was offered by the entire 1-4 generation of satellites that came

before them. Furthermore, as a dual band satellite, the Ka-band element of these satellites also has much to offer.

'At the same time, we're taking advantage of the fact that we are putting a new spacecraft into orbit by adding new Global Xpress (GX) Ka-band capacity,' expands Hadinger. 'This new capacity is very flexible, offering 20 Ka-band spot beams per I-6 satellite that can be directed to meet customer demand second-by-second, meaning we can steer capacity to hotspots around the world,' he said.

'Our roadmap for the future will see us manage rising demand for connectivity well into the 2040s. These I-6 satellites are just one step in the journey but it's a significant and reassuring one, demonstrating that we will remain dependable and capable in the future. Our planning and investing now means our customers can rely on us for the foreseeable future, and that's exactly why we're doing it,' added Inmarsat's Senior Director of Growth Markets, Marco Christoforo Camporeale.

Navarino launches the first activity of its Global Environmental Action Plan at Lake Atitlan in Guatemala, Central America

On March 9th, 2023, Akis and Vula, who have been travelling around the world overland in a 4x4 Iveco camper since 2019 and are sponsored by Navarino, visited Lisi School in San Juan La Laguna, a village on the shores of Lake Atitlan in Guatemala. This volcanic lake, at 1,562 metres altitude and considered 'the most beautiful in the world', is facing environmental issues such as water contamination that causes fish-threatening diseases, overpopulation in its lakeside communities and a lack of waste treatment and deforestation.

Dense population and post-pandemic tourism are also posing challenges for Lake Atitlan and the surrounding areas in Guatemala. Mayan villages such as San Juan La Laguna – where most locals speak the Tz'utujil language – produce more "basura" (trash), such as plastic, glass and metal than they can manage. As a result, the outskirts of the village are sadly decorated by entire fields of plastic bottles, cans, rubbish and snack bags, making them daily playgrounds for numerous stray dogs looking for food. All this waste ends up either in the surrounding rain forests or at the bottom of the lake.

Akis and Vula met with Lisi School students and volunteers from all over the world to talk about environmental protection. They then formed a group of 20 people and provided large plastic bags together with medical gloves, before calling everyone to take action to collect and sort trash, plastic, metal and glass waste.



Given the wet tropical environment, the activity was challenging yet rewarding. By noon, 35 large bags had been collected, which were then taken to an appropriate disposal site by a volunteer local truck driver.

The next stop for Navarino's Global Environmental Action plan will be El Salvador; stay tuned for more!



The day finished with an extra surprise for the Lisi school students who are still educated on 60-year old typewriters. Navarino donated the school some Dell equipment, so that the teachers and students could modernise their educational practices.