Tour Bretagne Voile 2021
uses MVG NeptuLink to manage race and ensure crew safety

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Having a NeptuLink system aboard each of our three race management boats gave us the reliable 4G connection required to provide a safe, efficient and enjoyable seven-day race experience for the competing crews, on-shore organizers and spectators. We look forward to using NeptuLink technology again for future events."

Jean Coadou
Race Director

Challenge

For the race organizers of Tour Bretagne Voile, a week-long sailing race around the coast of France, communication at sea is critical in maintaining the safety of competing crew members and managing the progression of the race itself.

For races like this, communication must always be maintained with the shore, between race organizers situated at different points along the route and with all competing boats – of which there were around 30 in the 2021 race. In previous races, more conventional methods of communication have proven unsustainable the further out to sea the boats travelled. The low bandwidths of radio provide limited internet access past approximately five nautical miles off the coast, and satellite connection, although more efficient, is often costly and impeded by a large transmission gap when broadcasting images and sound.

"*Having access to a high-speed internet connection that remains reliable further out at sea is critical for races like Tour Bretagne Voile, especially during the longest stretch of the challenge, which requires crews to be at sea for one or two nights,*" says race director, Jean Coadou. "*Only by maintaining contact, can I ensure the security of the boats and their skippers, monitor the race equity, communicate with ports ahead of receiving the competitors and broadcast race highlights in real-time, without interruption.*"
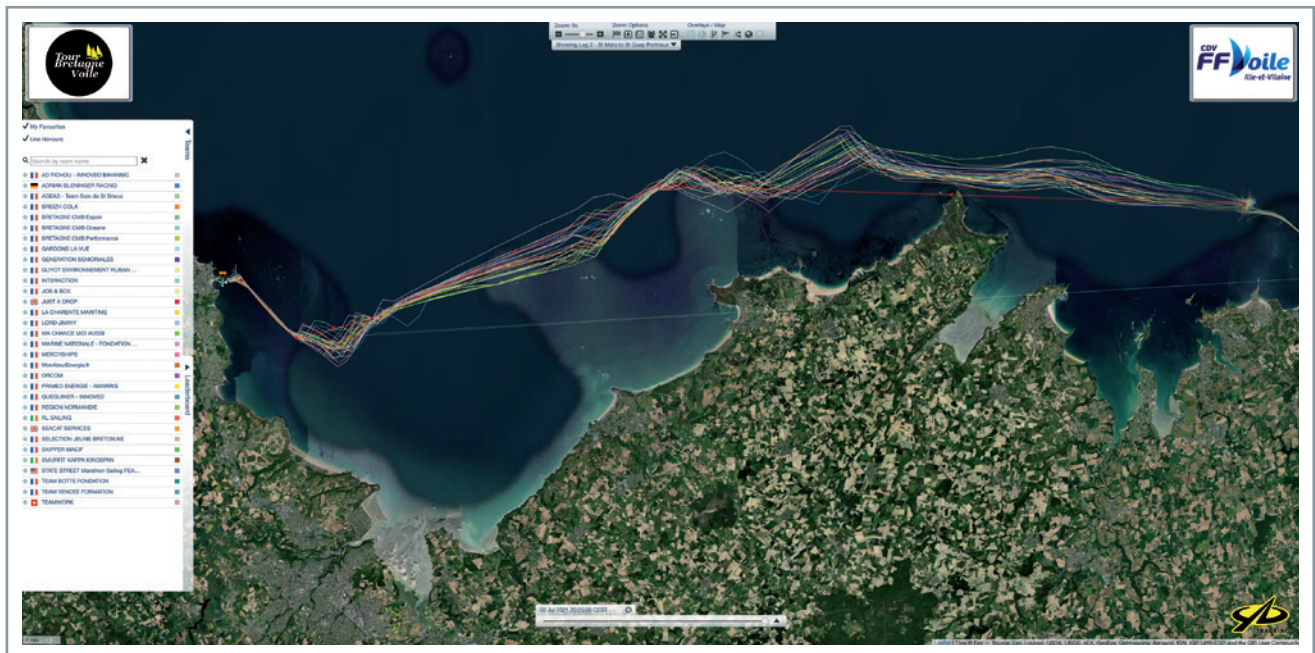
Solution

For the 2021 Tour Bretagne Voile, race organizers fitted MVG NeptuLink systems on each of the three race management boats, giving them reliable 4G high-speed internet access up to 100 Mbit/s, with ship-to-ship and ship-to-shore communication within in a radius of approximately 20 nautical miles.

For this race, two of the three race organizer boats used their NeptuLink systems to operate positioning beacons that plotted the position of each competing boat throughout the duration of the race. Using this as an indicator of race progression, race director Jean Coadou was able to communicate clearly with his colleagues on land so that each hosting port would be ready to receive the boats at the end of each race day.

With such reliable connection so far out at sea, I was able to pre-warn the on-shore fleet of any damage to the boats so they could prepare a mooring and spare parts ready for when the boat arrived. Repairs could take place quickly, and the boat could rejoin the race. This level of race efficiency was only possible because of the communication range of the MVG NeptuLink."

With such reliable connectivity, race organizers were also able to provide a stream of regular real- and near-real time content for the race website, something that is becoming increasingly important for sporting events of this nature.

With two antenna transmitter-receivers, the MVG Neptulink serves as a terminal that connects directly to distant 4G networks, or where 4G is not available, 3G or Edge connections instead. Because it uses a SIM card to provide high-speed connectivity to available networks, the cost of operation is comparable to mobile phone data access.

KEY FEATURES

- Rugged mechanical design to withstand maritime environments

- Takes into account specific characteristics of radio wave propagation above sea level

- Counteracts the effects of pitching and rolling motions on board

NEPTULINK MAXIMUM DATA RATES

- Fast broadband internet access on board ships and vessels of all sizes in coastal areas

- LTE/4G Downlink:
  Up to 100 Mbps (20 MHz bandwidth)
  up to 50 Mbps (10 MHz bandwidth)

- LTE/4G Uplink:
  Up to 50 Mbps (20 MHz bandwidth),
  Up to 25 Mbps (10 MHz bandwidth)

- HSPA+ Downlink: Up to 42 Mbps

- HSPA+ Uplink: Up to 5.76 Mbps

To find out more:

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