Ingenieurbüro Klaas Schlenkermann

Bei der Doppeleiche 4a
22880 Wedel

Tel: 04103 7031-666
Fax: 04103 1878085
Mob: 0176 1301 8904
Mail: Info@iks-hh.de

Logbook Messages via Starlink

Important information about logbook messages via Starlink internet connections

Starlink satellite communication systems are increasingly being installed on fishing vessels. The devices and services are now sufficiently reliable and the low prices compared to VSAT or Inmarsat are attractive.
However, this creates a problem for the transmission of logbook messages.

For security reasons, all IP addresses that are not registered in the EU are blocked by the firewall of the BLE's vCatch server. This is called geo-blocking.
Theoretically, we could write the IP addresses used on a white list, but in practice this does not work because Starlink works with dynamic IP addresses. These are regularly reassigned, which means that the internet connection then gets an IP address that is not on the white list. It is not possible to write all Starlink IP addresses on the white list, there are simply too many.

When sending logbook messages with the vCatch client, the following happens:
As there is an Internet connection, the client tries to send the logbook message over the Internet, but the vCatch server does not respond due to the geo-blocking described above. The transmission tries to connect for about a minute, which leads to a waiting time and then times out. If the vCatch client is configured to automatically switch to Inm-C, this happens without further warning: Although the operator had previously received a message that the message was being sent over the Internet, the transmission is now initiated via Inm-C. However, due to the system, this is slow (takes at least seven minutes), expensive (depending on the contract, around EUR 0.20 per data block (32 characters)) and unreliable for larger messages and far north positions.
Tip: Avoid automatic mode to avoid accidentally sending over Inm-C.

The only solution to this dilemma is to set up and use a VPN tunnel.
This creates a tunnel connection with good protection through encryption with a VPN server in the EU, so that a fixed IP address registered here is used. This makes it possible to send vCatch logbook messages over Starlink without any problems.

And how does it work? You can either set up your own VPN server, which is quite easy to do with a current AVM router (Fritz.Box), for example, or you can use a commercial offer.
Nord-VPN would be a suitable provider, but there are of course many others.
The cost of using it is currently around EUR 3 per month. Good instructions are provided for installation. The supplier of the Starlink device can certainly provide technical support here.