



Renewal of Estonian DGNSS stations powered by EDAS

September 2019



The [Estonian Maritime Administration](#) (EMA) is a governmental agency responsible for navigation safety in Estonian waters. The EMA deals with navigational information (hydrographic surveying, chart production and operative information) and maintenance of Aids to Navigation (AtoN).

In the area of navigational aids, EMA is conducting a project for the renovation of their DGNSS maritime service consisting of two IALA DGNSS stations in Ristna and Narva-Jõesuu that provide accuracy and integrity corrections to marine vessels in the central Baltic and the Gulf of Finland. As part of this renovation project, EMA has taken advantage of the [EDAS Ntrip DGNSS corrections](#) generated at Laapeenranta EGNOS stations (in the south of Finland) to feed the recently upgraded Narva-Jõesuu station.

In this renewal process, EMA has chosen to replace the obsolete HW devices by with SW components capable of taking the role of the Reference Station (RS) and the Integrity Monitoring, thus, switching from the traditional HW-Local approach to a SW-Hybrid (remotely and locally generated corrections) concept.

The EDAS Ntrip DGNSS messages (provided by Laapeenranta EGNOS station) are the primary source of corrections and, only in case of failure, the IM SW (running in parallel on two servers) switches to the corrections generated by the local RS. This means that from now on, marine vessels on the Gulf of Finland using DGNSS on-board benefit from EGNOS by means of the EDAS Ntrip DGNSS corrections to increase their position accuracy and, therefore, increase their safety as well.