Implementation of the Virtual AtoN AIS technology on Lake Ladoga, the Volga-Baltic Waterway, Russia
AIS Shore Station 1 (operational)

AIS Shore Station 2 (operational)

AIS Shore Station 3 (2017)

AIS Shore Station transmits Aids-to-Navigation report (Message 21) every 3 min

3 Virtual AtoN AIS test areas
1st Virtual AtoN AIS test area (the Neva river head): 25 virtual AtoNs
Vessel passing between the chart buoy indications and the corresponding virtual AtoNs in 1st Virtual AtoN AIS test area.
2nd Virtual AtoN AIS test area (the Vuoksa outlet): 16 virtual AtoNs
Vessel passing between virtual AtoNs in 2nd Virtual AtoN AIS test area
3rd Virtual AtoN AIS test area (the Svir outlet): 8 virtual AtoNs (planned in 2017)
Virtual AtoNs in the Gulf of Finland marking danger areas
Vessel passing virtual AtoNs on the entrance channel to Grand port of St. Petersburg
Main advantages of the Virtual AtoN AIS technology:

✓ accuracy and stability of the AtoN’s position
✓ Operational reliability
✓ Simple and affordable maintenance
✓ All-weather operation

Main disadvantage (restriction) of Virtual AtoN AIS technology:

Inland ECDIS facility available onboard
Thank you for your kind attention!

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