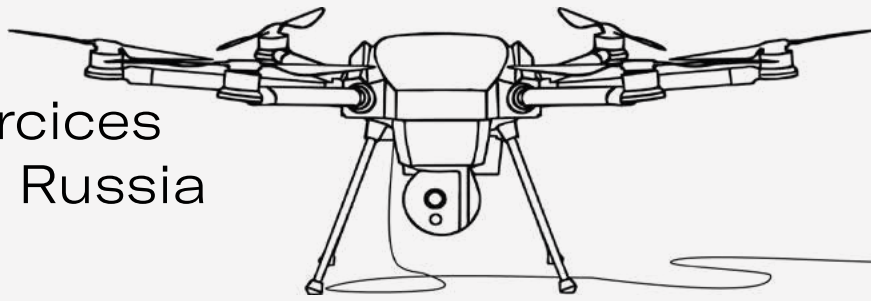


# Border Protection Exercises between Lithuania and Russia

## Neringa, November 2022



On November 15th and 22nd, 2022, Lithuanian frontier guards tested a new system of surveillance and artificial intelligence technologies developed in the scope of NESTOR European project for border security. The objective of their missions was to prevent smuggling activities and illegal border-crossing with vessels and UAVs at the frontier between Russia and Lithuania.



The Orion 2 complements the overall system as it provides an aerial view of the surrounding area where there is no permanent infrastructure available. It effectively covers a surveillance gap upon request, and continuously permits to operate even in the presence of an intercept or jammer where a conventional free flying drone would probably face issues communicating with the ground station.

Incubation

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### SOLUTION



The Orion 2 tethered drone was integrated in a whole system composed of radars, radio frequency sensors, unmanned underwater vehicle, free drone, standalone surveillance cameras and collective intelligence. An API allowed the connection of all these technologies to the control and command system located at the border station, where the officers were also able to remotely control the Orion's camera.

### RESULT OF THE MISSION



In a windy area with gusts to 35 knots, the Orion 2 flew for 4 hours at 90m AGL to provide an aerial view of an 8km coastline. Along with the other technologies it helped coordinate efficiently the devices deployed to prevent (1) a vessel from unloading cigarettes on a pier, (2) a vessel from dropping cargo at sea before moving back to its country, and (3) a UAV from dropping cargo on a vessel.



Maritime borders



Secured video stream



Remote camera control