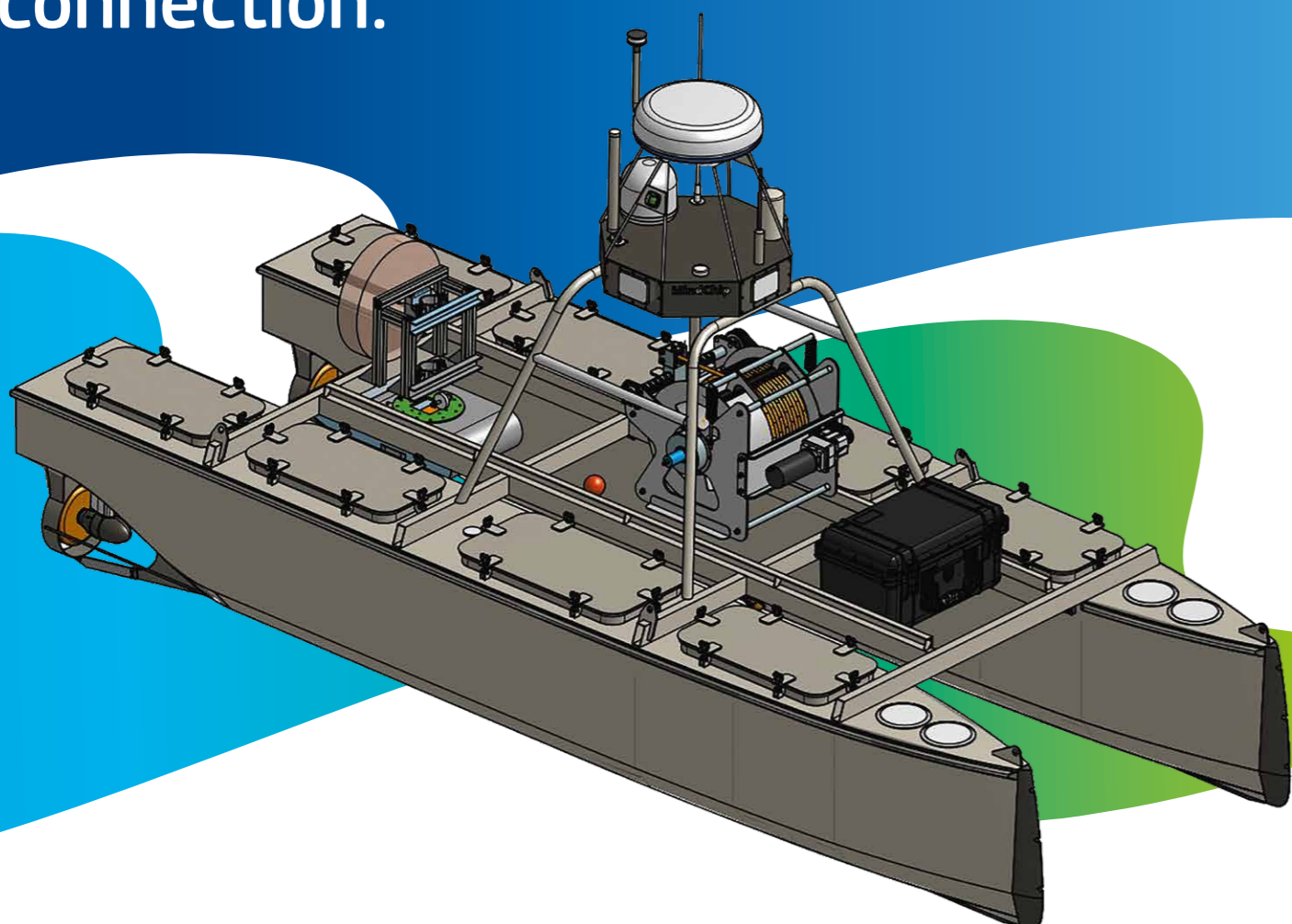




Development of an autonomous research vessel for economical commercial fishing and fisheries research (Estonia)



Vessel-based surveys are important in assessing and managing fishery stocks, but can be time-consuming, expensive, and hazardous for crew members. In response, Estonia is developing and testing an autonomous, self-navigating fisheries research vessel able to travel long distances by a pre-planned trajectory or directions received solely by a remote network connection.



MAIN OUTCOMES OF THE PROJECT

- Records and transfers live data about the position and parameters of fish schools
- Cost-effective solution for tracking and estimating fish school parameters and directing commercial fishing
- Will substantially decrease the economic and environmental cost of commercial fisheries research as well as general safety at sea
- Time savings on large fishing vessels would be around 25%
- Sonar sampling could be conducted entirely on smaller vessels, since the sonar is quite small (less than 100 kg)

TO BE FINALIZED BY SUMMER OF 2023

Length	Width	Depth	Max payload	Max speed	Operation speed	Operation range	Electrical drive voltage	Control system voltage
6,2m	2,5m	0,4m	500kg	7kn	3kn	162 (300 km)Nm	48V	5 and 12V



Connectivity
5G, 4G, 433 MHz, WIFI, AIS, satellite

Sensors
Radar, camera, magnetometer, anemometer, gyroscope, sonar

Safety equipment
AIS, radar reflector, navigation lights



FAMENET