

# SEACAMS: Can an SUV be used to track fish?

**AIMS:** To explore the development and application of an autonomous surface vehicle in tracking fish in coastal waters

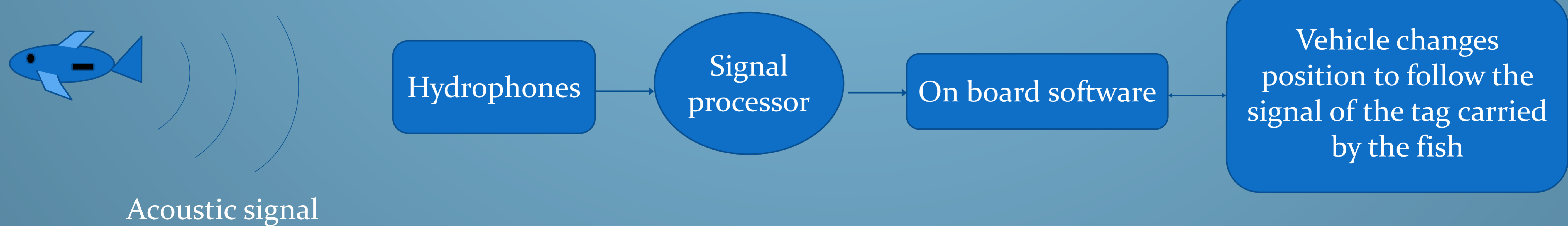
## RATIONALE:

Migratory fish populations can be tracked using acoustic technology as they move downstream and out into a moored acoustic array, but once beyond the receivers, their routes and use of habitats are largely unknown. As innovating companies, RS Aqua and HR Wallingford are keen to engage with SEACAMS to explore novel solutions to the challenges of understanding the movements of fish in coastal waters and how tidal energy technology may interact with them. Autonomous vehicles are being used widely in oceanographic and biological sampling and show huge potential for other novel applications. This project aims to develop an autonomous system capable of providing fine scale positional data that can improve our understanding of fish movement ecology.



## METHODS:

SEACAMS has brought together a multi-disciplinary team of electronic engineers, software developers, fish biologists and industry collaborators to design an acoustic based navigation and tracking system that will be integrated onto an AUV platform. The diagram below shows the simplified system on board the AUV.



## OUTPUTS:

This project is in development with the assistance of KESS2 funding and aims to develop a complete system that may be used to track a range of fish species for a variety of purposes in coastal waters.

