# Project SeaNet

## Purpose:

*The purpose of this project is to produce a (prototype demonstrator) tool for the Portuguese Navy to use in deploying Unmanned Surface Vehicles (USV) to patrol the Portuguese maritime territory. Due to the current ambitions of Portugal to expand their maritime assets (Extended Continental Shelf currently pending UN approval) new Navy assets will be required to patrol this greater area. To achieve this goal a fleet of Unmanned Surface Vehicles (USV) can be deployed, potentially minimizing costs, operating in complete autonomy under the watchful eye of the Portuguese Navy.*

## Deliverables:

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| --- | --- |
| Deliverable | Description/ Details |
| Research Paper | Paper with all research and reporting |
| WebApp | Software to command and control the USV fleet |

## Schedule Overview / Major Milestones:

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| --- | --- | --- |
| Milestone | Expected Completion Date | Description/Details |
| *Sea Data acquired* | *2/8/2022* | *Acquisition of Sea State data completed* |
| *Sea State Analysis* | *5/8/2022* | *Sea state analysis for the USV requirements* |
| *USV requirements initial report* | *7/8/2022* | *R Markdown report on Sea State analysis with conclusions.* |
| *Graphs defined* | *12/08/2022* | *Graph(s) for the USVs, to use in implementation* |
| *Graph cost function* | *13/08/2022* | *Function that determines the edges weight* |
| *USV class implemented* | *19/08/2022* | *The class that defines a USV object* |
| *Start WebApp process* | *20/08/2022* | *Study html and CSS* |

## Estimated date for completion:

*The project should be completed by 10/09/2022.*