

ENTIC-lab

Draft PART B proposal

You must name this file with the format DraftPARTB_g_t.pdf

WHAT are you going to implement?

This section should consist on a brief list of the product objectives

The objectives of our product are to measure the quality of the water and do so following a preplanned route. Manual input will also be an option, there will be two modes you can switch between.

HOW are you going to build it?

Once the product has been described, this section should provide a high-level description of the project. The project is intended to design, implement, test and deliver the product.

We are going to implement an array of sensors to measure the quality of the lake's water, controlled by an Arduino. The ROUV will have the capability to be piloted automatically.

Three sensors will be used to measure water quality:

- Water temperature sensor
- Water turbidity sensor
- Water conductivity sensor

Autopilot feature will be implemented through a simple on/off switch that switches between manual and auto mode. The ROUV will be controlled through a series of delays after motor activation and following a programmed sequenced.

WHY is it useful?

(Think about the Project Management track Business Case)

Discuss briefly why the product is needed.

The need for the product comes from the poor state of most aquifer nature reserves in the world and the difficulty of accessing it. This is why we propose a remote control system without anyone having to activate it and having an automatic pilot to get the water data. This data can be used for a multitude of scientific and technological uses and in turn for food use by the government.