Research Problem Statement – Tank Surveying Drone

How could your research contribute towards the development of a very small UAV for internally surveying tanks?

Problem (and business need)

Development of a system to stow, deploy and land/recover a very small Uncrewed Aerial Vehicle (UAV) from/to an underwater Remotely Operated Vehicle (ROV). UAV to be small enough to manoeuvre and navigate inside a structure, with system to communicate with ROV and to include a high-definition camera with adequate lighting to give quality footage. Objective is to complete an internal ballast tank survey, above water, in order to understand the material condition of the tank prior to draining and cleaning.

Sensitivity (e.g. whether commercial, official sensitive etc)

Not Official Sensitive. Solution could be used on any marine vessel in maintenance.

Specifications (more information available on request)

ROV Platform known

Typical ballast tank dimensions available

Scope

UAV, Launch/Recovery and Communications system in scope.

Desktop study potentially leading to development of demonstrator.

Potential Research Areas (not exclusive)

All engineering, mechatronics

Owner/Sponsor contact details

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