AMENDMENT 3

QUESTIONS AND ANSWERS

Q1. What is the desired size of the water column (width and depth) on which the instrument should be able to measure the density of microplastics?

A1. The equipment is aimed to be used in field, over scales ranging from tens of meters (rivers) to hundreds of kilometers (Open Ocean). Therefore, the solution is preferred to be functional for surveying water column sizes (width/depth) from centimetres in shallow region of a river to hundreds of meters in ocean.

Q2. The Challenge statement states *'Differentiate plastics from other polymers, or particulate organic/inorganic matters*. Should the solution be able to identify the nature of the plastics themselves?

A2. The solution **must** be able to differentiate plastic from "***other polymers, or particulate organic/inorganic matters***". However, identifying plastic types (PVC, Polyester, etc.) is not mandatory for the solution, and will be considered as the extra point in the evaluation.

Q3. Under the Problem statement it states: *The technology must be capable of <u>deployment</u> to monitor,*

Is the expectation that the solution should be able to travel on its own to defined locations and depths or we can consider that it's a static sensor (fixed buoy or drifting buoy) that could be deployed?

A3. The solution does not have to be capable of traveling on its own. However, it must be portable and be capable of deployment on a vessel, boat, or remote controlled system.

Q4. Under the Essential outcomes it states "be capable of providing plastic concentration throughout water column"

Can you please clarify the maximum depth that is expected to be analysed?
Are defined depths to be analysed simultaneously, or we can set the specific depths to analyse?

A4. There is no limitation in the maximum depth that is expected to be analysed by the solution. The solution is preferred to be functional for surveying water column depths from centimetres in shallow region of a river to hundreds of meters in ocean. Capability to work in deeper water depths will be considered as extra point in the evaluation.

The preference is to measuring depth and microplastic particles characteristics simultaneously and continuously through the water column.

Q5. Under the Essential outcomes it states "be capable of sensing microplastics in cold water environments, including ice-covered waters"

Can we access the water by drilling the ice, or you expect a drone type solution to travel under ice?

A5. The solution is meant to be capable to work in cold water environment, the mean to access the survey region is not determined for this challenge.

Q6. Under Additional Outcomes it states *"characterize microplastic particles size, distribution and density;"*

Can you clarify exactly what you mean by distribution and density?

A6. The solution is preferred to be capable of informing the size distribution and density distribution of microplastics within sample volumes, in addition to distinguishing their existence and concentration.