

## Partnering Opportunity

Profile Status: Published

### Research & Development Request

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## H2020 Pilot action for the removal of plastics and litter - seeking expertise in several areas

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### Summary

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*A UK company working in ocean research is seeking a range of companies with expertise in marine vessel development to join a range of EU companies in their H2020 bid, to launch a novel machine for the collection and compaction of ocean waste. They are seeking companies with expertise in areas including marine instruments, manufacturing, navigation, energy harvesting, automation, marine biology, robotics, and computer programming via research cooperation agreements.*

<b>Creation Date</b>	08 November 2019
<b>Last Update</b>	12 November 2019
<b>Expiration Date</b>	14 December 2019
<b>Reference</b>	RDUK20191108001
<b>Public Link</b>	<a href="https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/ca44d582-1ddd-48c2-8148-c418df265180">https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/ca44d582-1ddd-48c2-8148-c418df265180</a>

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### Details

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#### Description

Marine litter is high on the scientific and political agendas and of major concern for European citizens. More than 80 percent of marine litter is plastic. It is estimated that by 2050, more plastic could be in the ocean than fish. It can be found on beaches (mostly produced locally), on the ocean surface, in animals and on the seafloor. Microplastics can get into the food chain, together with the integrated and adsorbed toxins. It is estimated that each year 5 to 13 million tonnes plastics reach the seas and oceans (worldwide), becoming eventually the main source of microplastics. In addition to possible health risks, the damage to marine ecosystems and the blue economy (tourism and other maritime sectors) due to plastic litter are enormous.

A UK company are seeking additional partners to apply for the H2020 Pilot action for the removal of marine plastics and litter, to help co-develop an waste-collecting, transporting vessel, the collector head, compactor and plastic transfer machinery, to be included in a purpose built boat hull that also includes an energy harvesting and storage system (solar and wind). The

company currently works in ocean research and has expertise including marine manufacturing, equipment fabrication, CAD design and engineering.

They are also seeking ICT companies to program computers that read from the instruments/sensors and control the filtration plant, and to wirelessly navigate to ports and park the machines individually for emptying to operate individually or in fleets.

Finally, they require manufacturing or retail partners to assist in developing a recycling chain.

They are seeking partners via research cooperation agreement, and expressions of interest close in this profile on 14 December 2019.

The bid closes on 20 January 2020.

### Advantages and Innovations

- \* Self contained litter recovery machine
- \* Operable in blue water and shallows
- \* Zero carbon operation and processing
- \* Selectively filters plastic from wildlife
- \* Transportable to plastic hotspots
- \* Works with satellites for plastic data logging and geodata dissemination
- \* Able to work in fleets with suitable software
- \* Long service life

The development or pilot version of this ocean cleaning machine is a versatile platform that may be set up in various ways to collect floating marine plastic and litter or adjustable to various depths to collect from shores, subsurface.

The machine is designed to be wirelessly remote operated via satellite, or as a drone with human steerage.

A range of litter sizes can be collected, from solids several hundred millimeters to microplastics, using selective filters and computer based automation, coupled with sensors.

A substantial holding tank allows transport of collected plastic to port, with the eventual inclusion of a transfer at sea option to a factory ship for treatment and recycling.

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## Keywords

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### Technology

02009	Transport and Shipping Technologies
02009002	Hybrid and Electric Vehicles
02009005	Shipbuilding
06006013	Downstream Processing
07003003	Marine Science

**Market**

03004003	Other electronics related equipment
03007002	Other measuring devices
06003001	Solar/thermal energy
06011	Energy for Transport
08004004	Other pollution and recycling related

**NACE**

M.74.9.0	Other professional, scientific and technical activities n.e.c.
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**Network Contact**

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**Issuing Partner**

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

**Contact Person**

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**Open for EOI :**    **Yes**

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**Client**

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**Type and Size of Organisation Behind the Profile**

Industry SME 11-49

**Year Established**

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**Already Engaged in Trans-National Cooperation**

Yes

Ref: RDUK20191108001

**Languages Spoken**

English

**Client Country**

United Kingdom

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**Partner Sought**

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**Type and Role of Partner Sought**

Type: Industry

Activity: A wide range, including ICT, navigation systems, energy systems and harvesting and marine manufacturing.

Specific role of partner sought: The co-development and launch of the existing waste-collecting marine vessel, according to their expertise above, via research cooperation agreement.

**Type and Size of Partner Sought**

SME 11-50, SME <10, >500 MNE, 251-500, SME 51-250, >500

**Type of Partnership Considered**

Research cooperation agreement

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**Program - Call**

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**Framework Program**

H2020

**Call title and identifier**

H2020 Pilot action for the removal of marine plastics and litter

**Submission and evaluation scheme**

Single-stage

**Anticipated Project Budget**

EC guide 6 million euros

**Coordinator Required**

No

**Deadline for EOI**

14 Dec 2019

**Deadline of the Call**

20 Jan 2020

**Weblink to the Call**

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ce-fnr-09-2020>

**Project Title and Acronym**

Seavax