
# Blue Economy Business and Science Forum Hamurg 2016b

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Sea-on-a-CHIP

*This project has received funding from the European Union's FP7 Research and Innovation Programme under grant agreement no* 614168

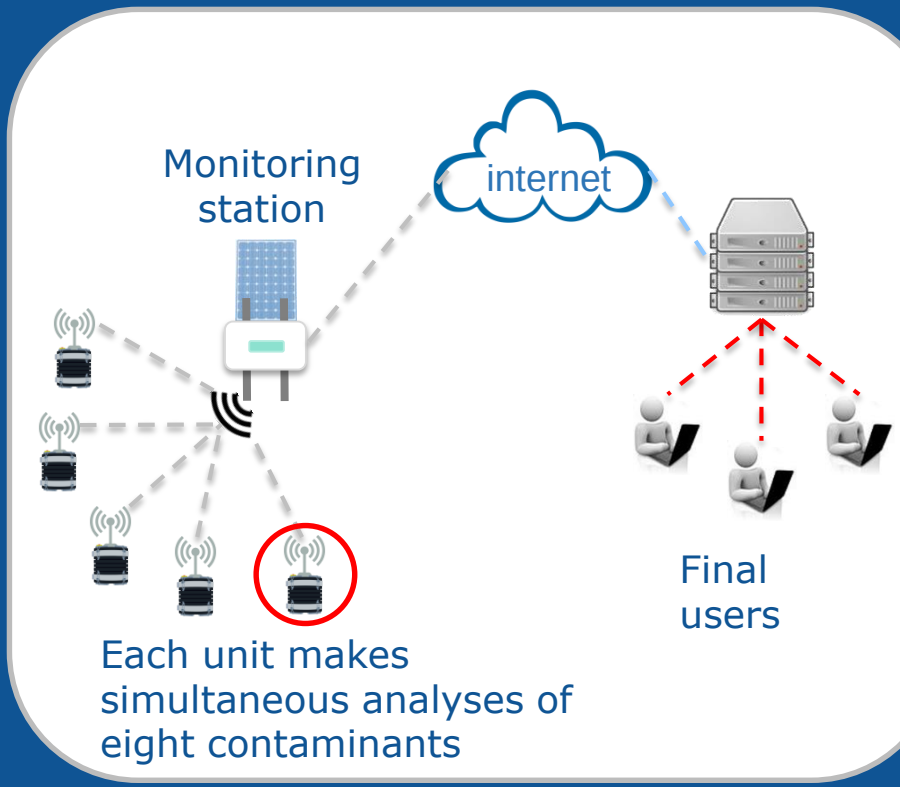
# The aim of the Sea-on-a-CHIP

**To develop an immunosensor system with electrochemical transduction**

- Miniaturized
- Autonomous
- Remote operation system

Based on nanotechnology, microelectronics and microfluidics to achieve the cost effective production and maintenance of each device, permitting the **deployment of multiple devices** at a very low cost.

## Rapid alarm system




European Commission

# The main results of the Sea-on-a-CHIP platform are in line with some of the objectives of EU policies and the new industrial reuirements in term of rapid decision making tools

The Marine Directive aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend on.

The establishment of monitoring programmes and the development of a programme of measures designed to achieve or maintain GES

**The Sea-on-a-Chip platform:**

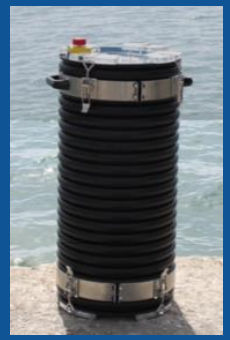
- Cost-effectiveness
- Continuous, unattended measurements
- 8 measurements per unit
- Type of contaminants to be measure practically *on demand*
- Sensitivity and robustness

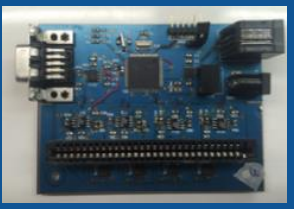
**The platform have been developed to attend the needs of:**

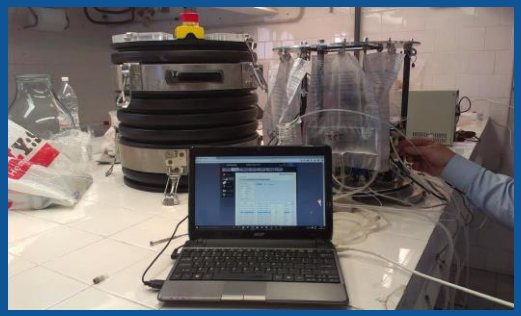
- Related industries (aquaculture, fisheries, tourism)
- Local authorities
- Large monitoring programs

**Type of contaminants:**

- Legacy POPs
- Biotoxins
- Emerging contaminants







# And then....

**There is a need for DEMONSTRATION PROJECTS to perform long term tests, under different scenarios and for different applications as well as to disseminate the results among the general public and related industries**