DIRECTION WAVE SENSOR

Institution/Company name	Hercules Control, S.L. (HCTech)
Contact details	Republica Checa 40. 15707 Santiago de Compostela (A Coruña). Spain Carlos Durán Neira carlosduran@hctech.eu +34 981 551 732 / +34 981 552 836
Website	www.hctech.eu

□ **Key words**

Communications - Data management - Software engineering / development

□ **Description**

HCTech has developed a software for directional wave monitoring, to be installed at Bares Wave Sensor, a hardware composed by a system including three accelerometers, gyroscope and compass, plus a control unit and external plugs for power supply and data communication.

Thanks to this innovative development HCTech's Bares Wave Sensor does sharply decrease the cost of this sort of technology comparing to other solutions at the market.

The software balances deviations and gives an accurate, multi-parameter and reliable result based on hardware data. Wave information is available for the customer in real time.

When embedding such technology within a Galicia specifically addapted buoy we get the best performance of the system, plus a turn-key solution called Bares Wave Buoy. Bares Wave Buoy includes float a float and a tower where Bares Wave Sensor is deployed jointly with a self-sufficient power supply system (with solar pannels),
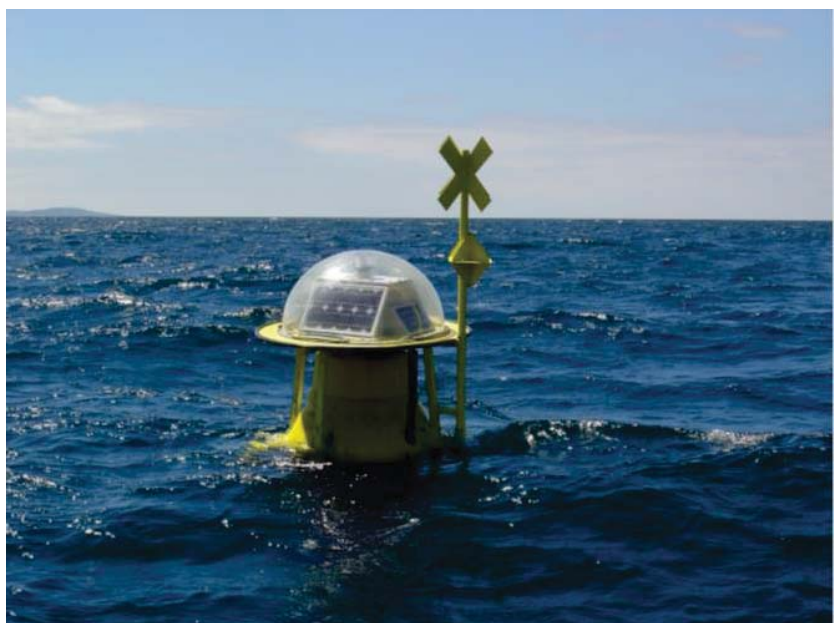
communication system (via GPRS or optionally via satellite), adding marine singnalling (mark, lantern and radar reflector). To complete the turn-key pack, customer may access data through Pagina Continuata Sensorum software pack, which includes graphics, tables and raw data without needing any installation at customer's computer systems.

☐ **Applicability of Technology to Maritime SMES**

Seaport authorities and marinas may use real-time directional wave information for navigation and port operations, increasing safeting, quickness and therefore cost-efficiency of the port or marina. Meteorology institutions, oceanographic observatories, environmental consulting and engineering firms as well as research institutions are the scope of this technology.