



The Governing Board of the national ports authority, Puertos del Estado, is receives information about the agreements signed for predicting oceanic and meteorological risks

## 25 Port Authorities sign agreements with Puertos del Estado to develop the SAMOA system

- The system developments will enable one to predict the outcome of possible accidental hydrocarbon spills within the ports and their anchorages.

25-07-2018 (Ministry of Public Works). At the National Ports Authority Board Meeting yesterday, President of the National Ports Authority, Ornella Chacón, informed the members about the agreements that were signed with the Port Authorities of A Coruña, Alicante, Almería, Avilés, Baleares, Barcelona, Cartagena, Castellón, Ceuta, Ferrol-San Cibrao, Gijón, Huelva, Las Palmas, Málaga, Marín and Ría de Pontevedra, Melilla, Motril, Pasajes, Santander, Santa Cruz de Tenerife, Sevilla, Tarragona, Valencia, Vigo, and Vilagarcía for implementing a new and complex oceanic and meteorological risk prediction system, called SAMOA. The Meteorological and Oceanographic Support System for Port Authorities (SAMOA for its acronym in Spanish), co-funded by Puertos del Estado and the State-owned port system ports, is the product of three years of developments and multiple research projects carried out by Puertos del Estado and a group of institutions and companies.

SAMOA operates on the basis of three key elements: on the one hand, the Puerto del Estado measuring networks, which are capable of monitoring the condition of the sea in real time, and; on the other hand, digital forecasting models which aim to estimate how these will evolve, and; finally, mechanisms for accessing information and generating alerts that can be customised for each user within the actual Port Authorities. The developments made signify a qualitative and quantitative leap in these three aspects, given that the existing networks have improved and



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more than 40 high-resolution digital models (for predicting currents, agitation and wind within the ports) have been developed and put into operation. A new software has also been created which enables one to view the results, configure reports and customised alerts, as well as to use added-value tools. Standing out amongst these are systems for predicting the outcome of possible accidental hydrocarbon spills within the ports and their anchorages.

The project has continued onto a second phase called SAMOA-II, which was initiated in 2018. This phase will develop additional products, such as prediction systems for alerting of overflows on the most exposed dikes.

Puertos del Estado staff have visited each port to explain the SAMOA-II technical proposal, which is again based on developing specific models. These models will be developed over the next few years with the support of specific recruits. Like in the previous project, Puertos del Estado will fund 25% of SAMOA-II's investment costs. Each port has selected their modules of interest, as based on their needs and priorities.

On the other hand, Puertos del Estado has signed an agreement with the University of Cádiz to expand the Puerto del Estado's superficial and wave current-measurement high-frequency coastal radar system along the Strait of Gibraltar. This agreement will regulate the institutions' collaboration for obtaining data on the Camarinal Sill area by integrating the information supplied by a new antenna into the existing operating processes, the end result of which will be an extension to the Strait of Gibraltar's current system measurement area to the West. The new antenna will combine the Puerto del Estado's 3 high-frequency coastal radars (Ceuta, Punta Carnero and Tarifa) monitoring the Strait of Gibraltar, which are compatible with the new antenna.