

## Side Event 1: Ship Strikes in the Caribbean and Mediterranean: Studies and Solutions

Tuesday, 8 November: 19.30 – 20.30

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The scientific community and shipping companies are seriously concerned about collisions between vessels and large cetaceans in different regions of the world, such as the Mediterranean and Caribbean Sea.

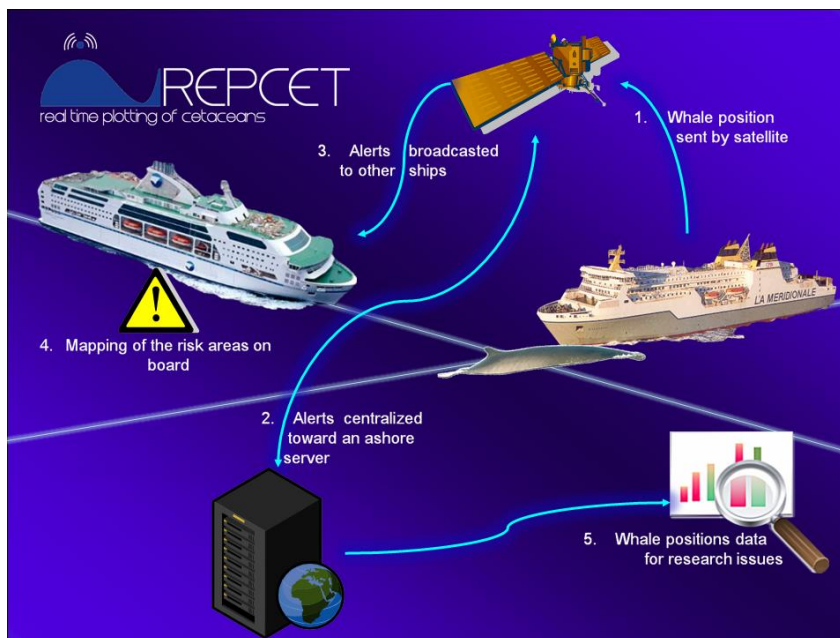
### In Caribbean Sea, a research program on collisions has started.

In the Caribbean region, the marine biodiversity, including cetaceans, is protected by the Cartagena Convention. In this framework, the Marine Mammal Action Plan, adopted in 2008 by the parties to the protocol for Specially Protected Areas and Wildlife, or the SPAW Protocol, is the instrument dealing with ship strikes.

Last year, the SPAW Regional Activity Centre (SPAW-RAC) started to collate information on vessel activity and collisions. The first data collected show that vessel strikes are a real issue, and that big and small species can be affected in different parts of the region. Following that conclusion, a group of regional experts<sup>1</sup> focused on regional shipping routes overlaid a traffic map on a distribution map of marine mammals in order to target potential areas of conflict.

The first results of this research clearly shows that collisions happen in the Caribbean more often than we thought. The studies will be continued and completed by collecting more data on vessels activities and strikes. It will also be essential to improve communication with people from the maritime sector and marine environment. In parallel, it would be relevant to think about measures that could be implemented in the region in order to limit the risk of collisions.

### In the Mediterranean Sea, the REPCET system is now operative.



In the Mediterranean Sea, covered by the ACCOBAMS treaty and including the Pelagos Sanctuary for Mediterranean Marine Mammals, researchers, engineers and representatives of maritime transport companies have joined forces to develop REPCET, the REal-time Plotting of CETaceans, a collaborative computer system based on the density of the navigation network.

On board each equipped vessel, crew members can instantly transmit positions of detected whales to other ships using an input interface. A mapping interface allows the display of the alerts sent by other contributors. For each alert, the system calculates and broadcasts a dynamic risk area. Inside these areas crew members can

improve their watch, add some observers and reduce the speed. Then they can detect whales over a longer distance, to give enough time to evaluate the situation and operate the best avoidance steering. The system is designed to integrate distribution prediction models, and to enable any type of sensor, in future, to automatically detect the animals. Thanks to the observations provided by REPCET-equipped vessels, we will learn much about

<sup>1</sup> Including the French Navy, CROSS AG, the French Marine Protected Areas Agency (AAMP), the Eastern Caribbean Coalition for Environmental Awareness (ECCEA), the NGO SEPENMAR and the SPAW-RAC/UNEP office.

cetacean presence and distribution. A simulator of the REPCET system is available at [www.repcet.com/simulateur\\_en](http://www.repcet.com/simulateur_en).

A collaboration between the Pelagos Sanctuary and ACCOBAMS area and the Caribbean Sea (SPAW-RAC and Agoa Sanctuary) is hoped for in the near future, in order to benefit from mutual experiences regarding knowledge of the ship strike issue and the measures to limit it.