Visual detection of large cetaceans from High Speed Crafts in order to limit the risks of collision: Context, results and applications.

"Ideal platforms for cetaceans studies and privileged sites to educate crew members and passengers". This is an unusual definition to characterise the ships which regularly navigate between France and Corsica. In fact, since 1999, the SNCM[1] has made its ferries available to the EPHE[2] for a program supported by the french division of the Pelagos Sanctuary. The main objectives of this project are to limit the risks of collision, validate some protocols for population monitoring and organise informative conference for passengers.

Our report will show one of the positive points resulting from the association of the SNCM and the EPHE. This is illustrated through a study on the "Visual Detection of Large Cetaceans from High Speed Crafts in order to Limit the Risks of Collision". The presence of a scientist onboard during a working season has shown how whales were detected from the decks of these HSC. This information is essential in order to establish some proposals to improve the security of HSC (*e.g.* ergonomic modifications, presence of a specialised observer onboard). Subsidiary applications – which have already been tested or not – could limit the risks of collision and be applicable to all types of merchant ships. These applications include a system of positioning report for Large Cetaceans (REPCET) and a training of the staff of the watch at the National School of Merchant Marine in Marseilles. A synthesis of the actual technological developments is presented for their interests when visual detection is limited (*e.g.* night time observations).

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