

The AQUO consortium

Led by DCNS, it involves 13 partners including ship industry, specialised companies, a classification society, research centres and academics. 8 European countries are represented.

	DCNS SA	France
	TÉCNICAS Y SERVICIOS DE INGENIERÍA, S.L.	Spain
	BUREAU VERITAS	France
	UNIVERSITAT POLITECNICA DE CATALUNYA	Spain
	QUIET-OCEANS SAS	France
	SSPA SWEDEN AB.	Sweden
	UNIVERSITÀ DEGLI STUDI DI GENOVA	Italy
	UNIVERSITY OF STRATHCLYDE	United Kingdom
	CANAL DE EXPERIENCIAS HIDRODINAMICAS DE EL PARDO	Spain
	CENTRUM TECHNIKI OKRETOWEJ SPOLKA AKCYJNA	Poland
	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	Netherlands
	TOTALFORSVARETS FORSKNING-SINSTITUT	Sweden
	COMMUNITY OF EUROPEAN SHIPPYARDS ASSOCIATIONS ASBL	Belgium

«What quiet, what silence, what peace!»

Jules Verne's
«Twenty Thousand Leagues Under the Sea»

That was in 1870.
Today, the situation is different.
What about tomorrow?



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www.aquo.eu

AQUO project
7th EC Research Framework Program
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AQUO

Achieve QUIETER Oceans
by shipping noise footprint reduction



A Collaborative European Research Project of the 7th Framework Program, in the scope of theme "Sustainable Surface Transport", topic coordinated with the "Oceans of Tomorrow"



ISSUES



Maritime traffic and industrial activity at sea has increased steadily, causing underwater noise with impact on marine fauna.

Legislative instruments must be developed with regard to marine acoustic pollution for the protection of marine biodiversity.

AQUO OBJECTIVES



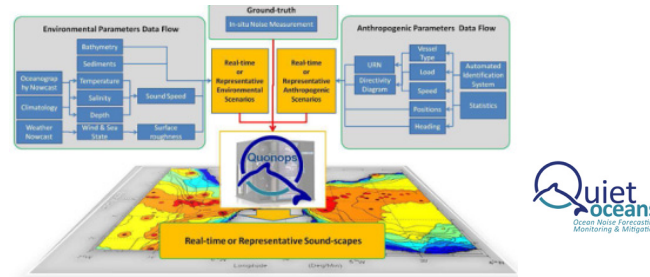
- Design solutions to reduce ship underwater radiated noise (without affecting the fuel efficiency) and mitigation measures for the impact on the marine environment
- Practical guidelines to reduce shipping noise for a quieter ocean, providing responses to the needs of policy makers

AQUO IMPACTS

- New technologies for measuring, monitoring, predicting and controlling underwater radiated noise.
- Solutions and guidelines targeted at maritime stakeholders and authorities.
- Consistency with the Marine Strategy Framework Directive.

WP1 Noise footprint assessment

Provide ocean noise forecasts as a decision aid tool will lead to the evaluation of noise footprints of maritime shipping and help regulators to assess the risks towards marine life.



WP3 Noise Measurements

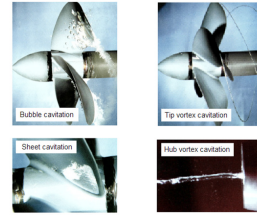
- New measurements tools and methods for experiments at sea (including cavitation detection and characterization).
- Proposal of a European standard for underwater radiated noise measurement procedures to fill the gap in existing standards.

On-site Measurements



WP2 Noise sources

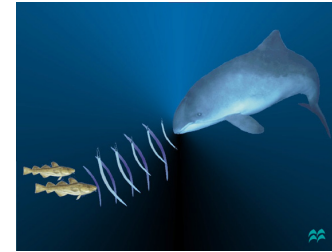
Improvement and validation of models and methods to predict radiated noise from ship propellers, accounting for cavitation and interaction effects.



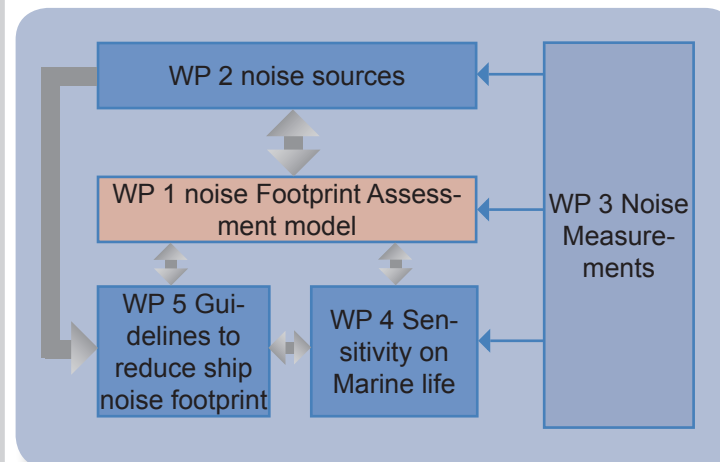
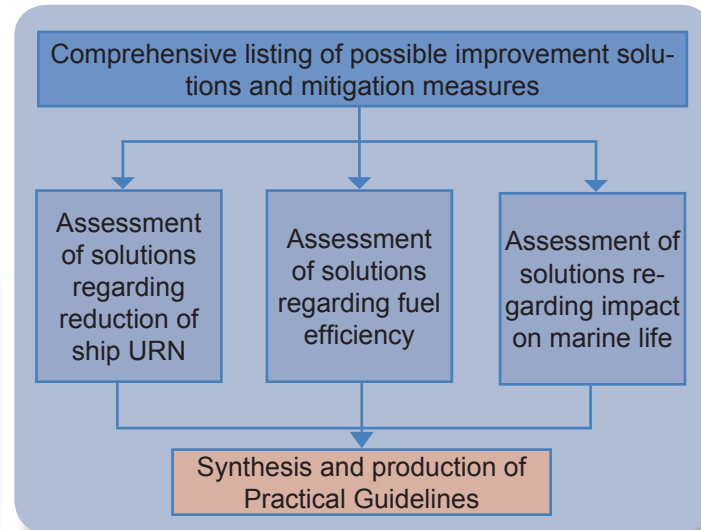
WP4 Sensitivity of Marine Life

Bioacoustics experiments and derivation of criteria for noise protection of marine life.

Activity supervised by an internal ethical board and an external ethics expert.



WP5 Guidelines to reduce shipping noise footprint



WP6 Dissemination & Exploitation

WP7 Management

