



MISTIC´SEAS

MACARONESIA ISLANDS STANDARD INDICATORS AND CRITERIA: REACHING COMMON GROUNDS ON MONITORING MARINE BIODIVERSITY IN MACARONESIA

www.mistic-seas.com

Mistic Seas Consortium

By Filipe M. Porteiro

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Coordinated by:



Partners:



Secretaria Regional
do Ambiente e Recursos Naturais



Supported by the:



Grant Agreement
No. 11.0661/2015/712629/SUB/ENVC.2



EUROPEAN COMMISSION
DIRECTORATE-GENERAL
ENVIRONMENT
Directorate C – Quality of Life, Water & Air

GRANT APPLICATION FORM FOR
'DG ENV/MSFD Action Plans/2014'

(Multibeneficiary)

"BEST PRACTICES FOR ACTION PLANS TO DEVELOP
INTEGRATED, REGIONAL MONITORING PROGRAMMES,
COORDINATED PROGRAMMES OF MEASURES AND ADDRESSING
DATA AND KNOWLEDGE GAPS IN COASTAL AND MARINE
WATERS"

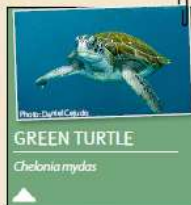
Original

Acronym: MISTIC'SEAS
Macaronesia Islands Standard Indicators and Criteria: Reaching Common
Grounds on Monitoring Marine Biodiversity in Macaronesia

Directive 2008/56/EC - MSFD

Relevant Art.

- **Art. 4** – Macaronesia: Azores (PT), Madeira (PT), Canary Islands (ES);
- **Art. 5** – Neighbouring Member States need to cooperate to ensure coherence and coordination between Marine Strategies at sub regional and regional level;
- **Art. 6** – Regional cooperation;
- **Art. 8** – Environmental evaluation;
- **Art. 9** – Definition of **Good Environmental Status (GES)**;
- **Art. 10** – Environmental targets;
- **Art. 11** – Monitoring programs;
- **Art. 12** – Evaluation by the Commission - the EC Art. 12 report did not examine the adequacy, coherence and consistency of the Canary Islands, Madeira and Azores reports, due to the mismatch in delivery among countries.



CHARACTERISTICS OF MACARONESIA AND THE THREE ARCHIPELAGOS

The Macaronesian sub-region is one of the four sub-regions included in the marine region of the **North East Atlantic Ocean**, as referred to in the Article 4 of the **Directive 2008/56/EC** of the European Parliament and of the Council of 17 June 2008, establishing a **framework for community action** in the field of marine environmental policy (Marine Strategy Framework Directive, MSFD).

Macaronesia consists on the waters surrounding the **Azores, Madeira, the Canary Islands** and Cape Verde. This sub-region is one of the most extensive biogeographical regions of the European seas however it is one of the least studied. The project is developed in the Macaronesian waters under the jurisdiction of Portugal and Spain.

AIM OF THE PROJECT

The purpose of the **MISTIC SEAS** project is designing a common **methodology for monitoring the marine biodiversity** in the Macaronesian region, one of the territories with the greatest biodiversity in Europe. The project focuses on the populations of marine cetaceans, turtles and seabirds. Its aim is to establish a **common roadmap** to improve coordination in the implementation of the Marine **Strategy Framework Directive in Portugal and Spain** (the Azores, Madeira and the Canary Islands).



Photo: I. Quintan



Photo: Daniel Cejudo



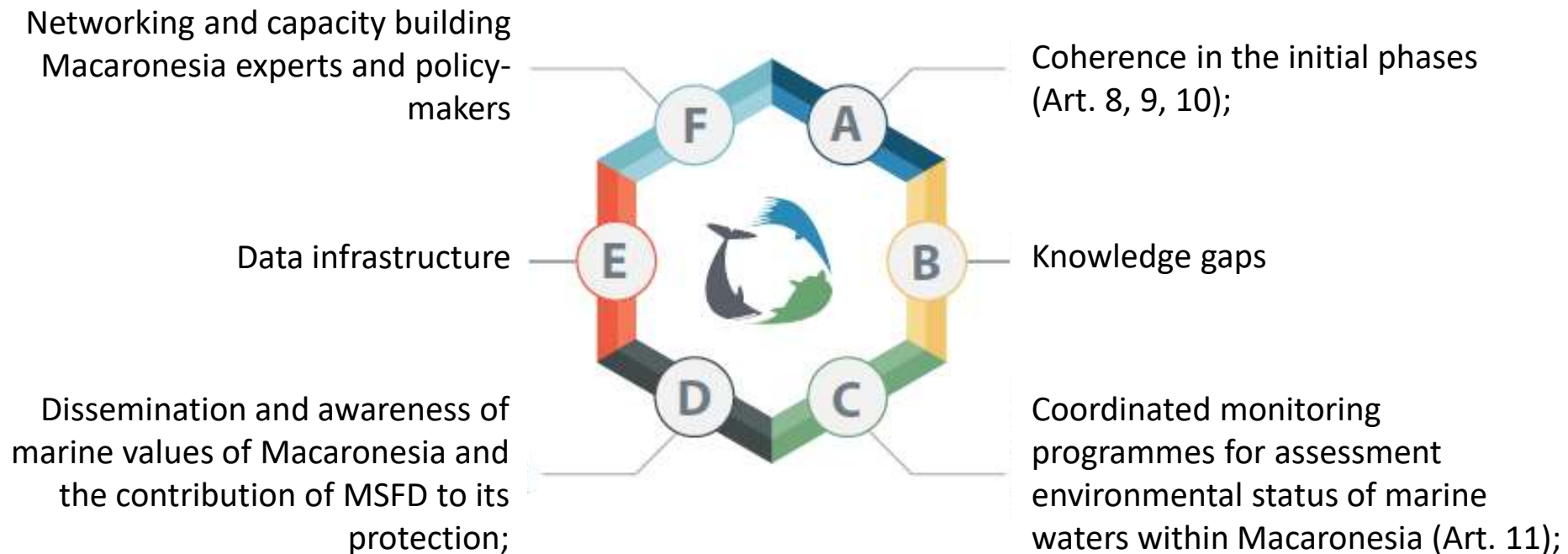
Photo: Großes Tümmler; jwerdland



Photo: P. Magalhães

To establish a common **roadmap** for ensuring the **coordination for MSFD implementation** by Spain and Portugal, through the Governments of Spain, for Canaries, and the Governments of the Azores and Madeira **in the Macaronesia sub-region**

Specific objectives



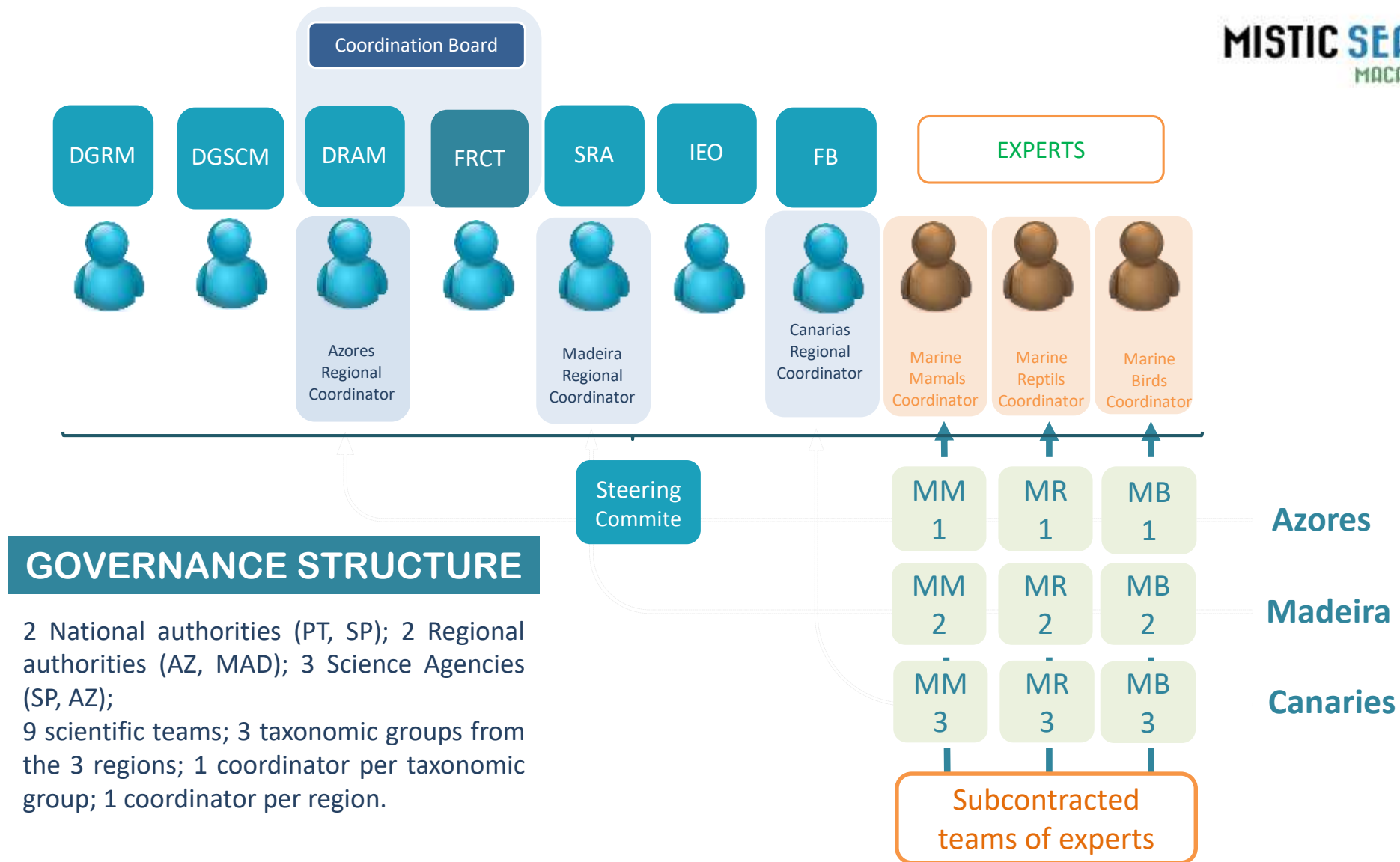
Initial assessments; comparisons; methods to define GES; ES assessment; standardized GES criteria; environmental targets; common measures; common monitoring programs; knowledge gaps; public awareness; sharing and reporting data; networking and capacity building

MISTIC'SEAS structure

- WP 1** Review of initial assessment, including knowledge gaps, GES definition and environmental targets of the Macaronesia Archipelagos initial reports
- WP 2** Common MSFD monitoring strategy to cetaceans, turtles and birds, applied to the MSFD D 1 throughout Macaronesia
- WP 3** Testing common monitoring methodologies
- WP 4** Towards a common infrastructure on Data Management & Sharing
- WP 5** Action Plan
- WP 6** Dissemination & Networking
- WP 7** Coordination & Management



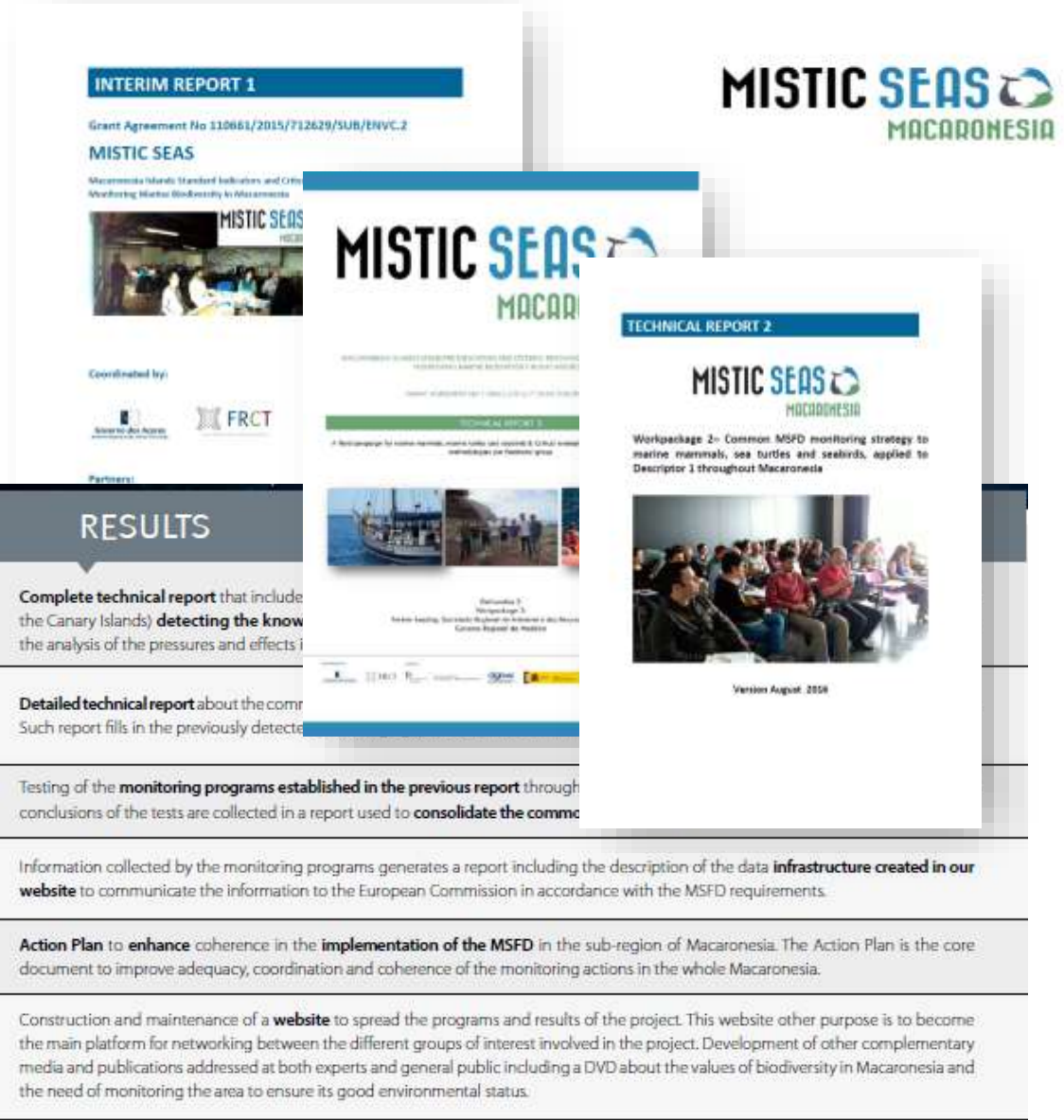
- Third Technical Workshop of the **MISTIC SEAS Project** at **21 of June, Museu da Baleia , Machico (Madeira).**



Coordinated by:

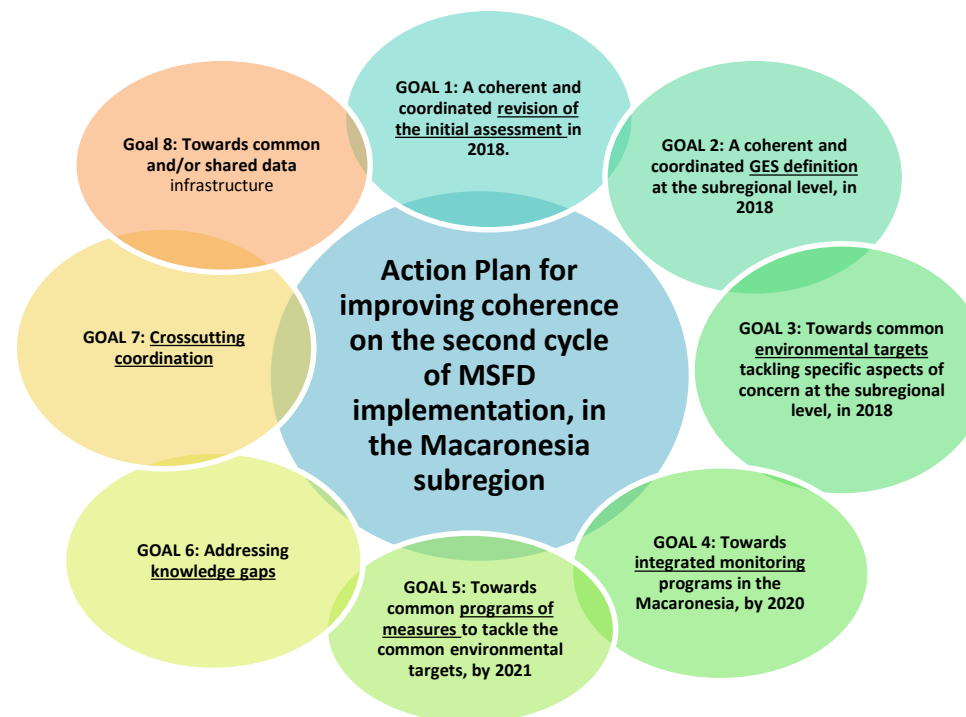
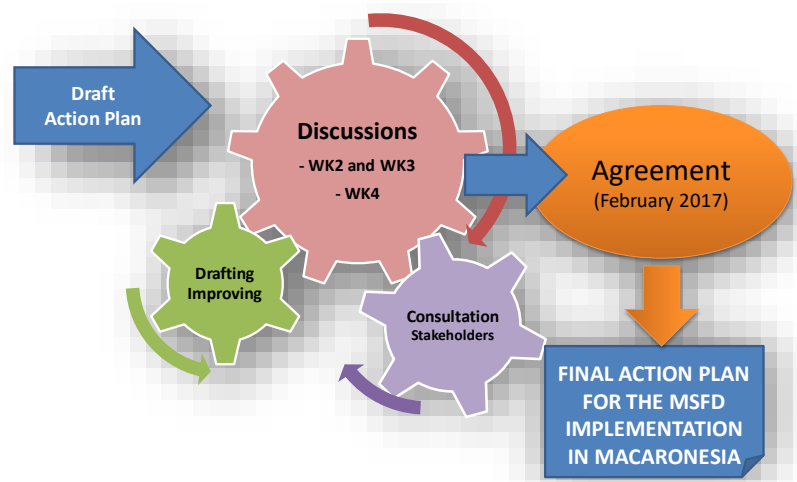
Partners:

Project deliverables



**2 Meetings; 4 workshops; 1 Field Trip; 3 Communication events;
5 Technical Reports; 2 Interim Reports; 1 Action Plan; 1 Dissemination Publication; 1 Promotional Video; 1 Final Report**

THE ACTION PLAN



- Commitment among authorities, to further work on improving coherence and strengthen coordination on the MSFD implementation in Macaronesia.
- A policy document designed with scientific and technical knowledge.

SMART: Specific, Measurable, Attainable, Realistic, Time-based

CARACTERÍSTICAS DA MACARONÉSIA E DOS TRÊS ARQUIPÉLAGOS

A subregião macaronésica é uma das quatro subregiões iniciais na região marinha do Atlântico Nordeste, de acordo com o artigo 4.º da **Directiva 2000/56/CE** do Parlamento Europeu e do Conselho de 17 de Junho de 2000, pela qual se estabelece um **quadro de acção comunitária** para a política do mar marinho (Directiva Quadro sobre a Estratégia Marinha, DCM/M).

A Macaronésia é composta pelas ilhas que rodeiam os Açores, a Madeira, as Ilhas Canárias e Cabo Verde. Trata-se de uma das regiões biogeográficas mais externas dos mares europeus, e também uma sobre a qual menos informação existe. O projeto é desenvolvido nas águas macaronésicas sob jurisdição de Portugal e Espanha.

MOTIVAÇÃO DO PROJETO

O projeto **MISTIC SEAS** tem por objetivo desenvolver uma **metodologia com marinha** na região da Macaronésia, uma das áreas com maior biodiversidade espécies de cetáceos, tartarugas e aves marinhas, e estabelecer uma **folha** na aplicação da **Diretiva Quadro da Estratégia Marinha em Portugal e E**

O projeto, cofinanciado pela Comissão Europeia, e que está a ser executado em 2017, está coordenado pelo Fundo Regional para a Ciência e as Tecnologias (parceiros com a Direção Regional dos Assuntos do Mar (Governo Regional de Recursos Naturais (Governo Regional da Madeira), a Direção Geral de Recursos do Governo de Portugal, o Ministério da Agricultura e Pesca, Alimentação e M. General de Sustentabilidade da Costa e do Mar, a Fundación Biodiversidad).



James M. Smith



Free Market Clinic



From: Gifford, Nicholas



MISTIC SEAS
MACARONESIA

*INDICADORES E CRITÉRIOS STANDARD PARA AS ILHAS DA MACARONÉSIA: PARA O ESTABELECIMENTO DE UMAS BASES COMUNS PARA O ACOMPANHAMENTO DA BIODIVERSIDADE MARINHA NA MACARONÉSIA

QUE **BENEFÍCIO** É QUE VAITER O PROJETO A LONGO PR

Todas as ações realizadas durante o projeto e as condutas obtidas dele, resultam na elaboração de um **Plano de Ação**, no qual são estabelecidas as metas e indicações para a melhoria na implementação da DME; aplicação, podem ser previstos e enumerados claros benefícios.



GRANPO
Granplus Group
America

HISTIC SEASONS

GUIA DE BOAS PRÁTICAS EM CIÊNCIA CIDADÃ

¹ *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 10, 1179-1186.

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Journal compilation © 2006 Blackwell Publishing Ltd

Abstract—The purpose of this study was to determine the effect of a 10-week training program on the heart rate (HR) and heart rate reserve (HRR) of sedentary middle-aged men. The subjects were randomly divided into two groups: a control group and an exercise group. The exercise group performed a 10-week training program consisting of three sessions per week. The control group did not exercise. The HR and HRR were measured at rest and during maximal exercise at the beginning and end of the 10-week period. The results showed that the exercise group had a significant decrease in HR and HRR at rest and during maximal exercise compared to the control group. The control group had no significant change in HR and HRR. The results suggest that a 10-week training program can improve the cardiovascular fitness of sedentary middle-aged men.

© 2004 Blackwell Publishing Ltd *Journal of Internal Medicine* 255: 103–110

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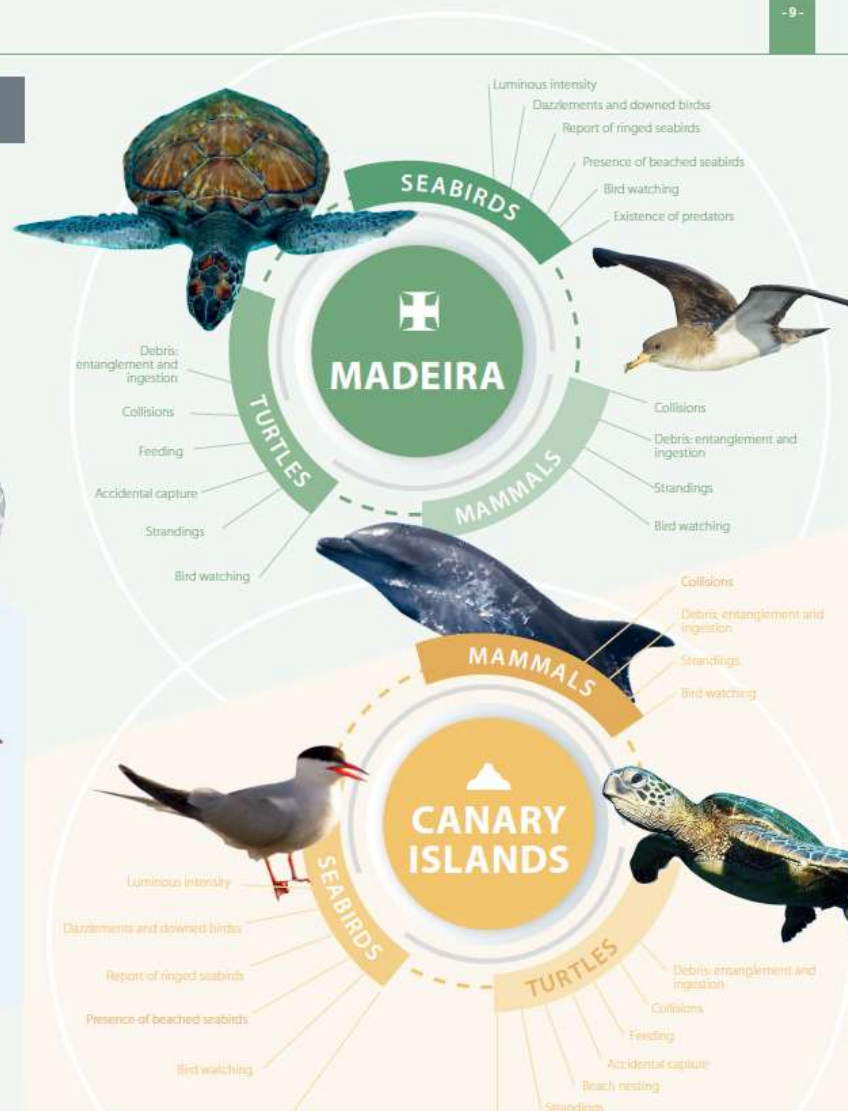
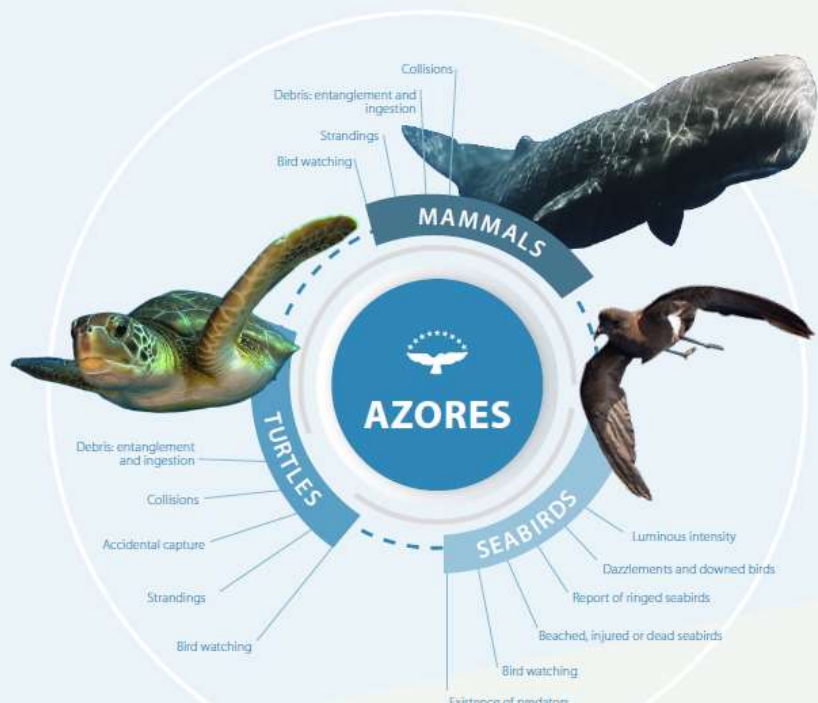
GUIDE TO GOOD PRACTICE IN CITIZEN SCIENCE

Citizens' involvement is essential for a project as MISTIC SEAS to be carried out and for the Good Environmental Status of different spaces to be kept in the future.

Research and actions undertaken in the framework of the project **have drawn positive results and conclusions**, showing its efficiency and utility in the preservation of the **Macaronesian biodiversity** and especially the native marine mammals, sea turtles and seabirds.

According to such conclusions, here it is the **GUIDE TO GOOD PRACTICE IN CITIZEN SCIENCE** whose purpose is to share publicly **simple and practical measures** that everyone can adopt to improve and learn how to do their best facing the different environmental situations.

Read the further information for each species and archipelago as follows:



- The **Action Plan** itself, as a **core document**, to enhance the adequacy, coordination and coherence of the monitoring actions in the whole Macaronesia.

- **The founding of common methodologies** for monitoring the marine biodiversity in the Macaronesia, which will increase the vigilance of shared populations of marine cetaceans, turtles and seabirds in the archipelagos.

- **The improvement on the coordination and application of the Marine Strategy Framework Directive** in Portugal and Spain (the Azores, Madeira and the Canary Islands).

- **The refinement of the information** about the target species collected that will relieve the pressures and effects in all the region and will adjust both the defined environmental targets and the measures taken to reach or keep the Good Environmental Status (GES).

- **The creation of networks between associates and other groups interested** in the implementation of the MSFD.

- **The increase of public knowledge and awareness** of the natural value of biodiversity of the Macaronesian region, having the MISTIC SEAS project website as a reference point.

WHICH ARE THE LONG-TERM **BENEFITS** OF THE PROJECT?

The actions developed during the project and the conclusions obtained make up an Action Plan. This **Action Plan** establishes the standards and guidelines to improve the implementation of the MSFD. The application of the Plan brings along several clear benefits:

MISTIC SEAS MACARONESIA

"STANDARD INDICATORS AND CRITERIA FOR THE ISLANDS OF MACARONESIA:
REACHING COMMON BASIS FOR MONITORING MARINE BIODIVERSITY IN MACARONESIA"



RISSE'S DOLPHIN
Grampus Griseus
Azores

Photo: Ingrid Magalhães

“Macaronesia Islands Standard Indicators and Criteria: Reaching Common Grounds on Monitoring Marine biodiversity in Macaronesia”



MISTIC SEAS

MACARONESIA

PROJETO MISTIC SEAS

Duração	15 meses (desde 1 de dezembro de 2015 até 31 de fevereiro de 2017).
Orçamento	649.747€ e o 80% de cofinanciamento da CE.
Coordenador E Parceiros (Participantes)	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <u>Fundo Regional para a Ciência e Tecnologia, Secretaria Regional do Mar Ciência e Tecnologia, Governo Regional dos Açores, Portugal</u> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <u>Direção Regional dos Assuntos do Mar, Secretaria Regional do Mar Ciência e Tecnologia, Governo Regional dos Açores</u> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <u>Secretaria Regional do Ambiente e dos Recursos Naturais, Governo Regional da Madeira, Portugal</u> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <u>Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos</u> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <u>Fundación Biodiversidade</u> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <u>Instituto Español de Oceanografía</u> </div> <div style="border: 1px solid #ccc; padding: 5px;"> <u>Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente</u> </div>

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Programme: Best Practices for Action Plans to develop integrated Regional Monitoring Programmes, coordinate programmes of measures, and addressing data, and Knowledge gaps in coastal and marine waters

Instrument: DG ENV/MSFD Action Plans/2014

Action: Agreement No. 11.0661/2015/712629/SUB/ENVC.2

Budget: € 649.750

Duration: December 2015 - 2016

Coordinator: FRCT

Consortium: DGRM, DRAM, FRCT, SRA DGSCM-MAGRAMA, FBIO, IEO



MISTIC SEAS 
MACARONESIA 2



Thank you

Directive 2008/56/EC - MSFD

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