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QUIETMED2 – Joint programme for GES assessment on D11- noise in the Mediterranean Marine Region.

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DELIVERABLE

D10.2. Summary report of the Training session for competent Authorities from MS to authorities to establish new regionally- coordinated measures (tools, methods and results)

Deliverable:	D 10.2. Summary report of the Training session for competent Authorities from MS to authorities to establish new regionally-coordinated measures (tools, methods and results)
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List of participants:

No	Participant organization name	Participant short name	Country
1	Centro Tecnológico Naval y del Mar	CTN	Spain
2	Permanent Secretariat of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area	ACCOBAMS	Monaco
3	Department of Fisheries and Marine Research	DFMR	Cyprus
4	Inštitut za vode Republike Slovenije/Institute for water of the Republic of Slovenia	IZVRS	Slovenia
5	Hellenic Centre for Marine Research	HCMR	Greece
6	Institute of Oceanography and Fisheries	IOF	Croatia
7	University of Malta -The Conservation Biology Research Group	UM	Malta
8	Politecnico di Milano-Department of Civil and Environmental Engineering	POLIMI-DICA	Italy
9	General Secretariat for Natural Environment and Water	GSNEW	Greece
10	Specially Protected Areas Regional Activity Centre	SPA/RAC	Tunisia
11	International Council for the Exploration of the Sea	ICES	Denmark



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CO Confidential, only for members of the consortium (including the Commission Services)	

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Contributions	CTN	Marta Sánchez

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Abstract

This document is the Deliverable “D10.2. Summary report of the Training session for competent Authorities from MS to authorities to establish new regionally-coordinated measures (tools, methods and results)” of the QUIETMED2 project funded by the DG Environment of the European Commission within the call “DG ENV/MSFD 2018 call”. This call funds projects to support the implementation of the second cycle of the Marine Strategy Framework Directive (2008/56/EC) (hereinafter referred to as MSFD), in particular to implement the new GES Decision (Commission Decision (EU) 2017/848 of 17 May 2017 laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU) and Programmes of Measures according Article 13 of the MSFD. The QUIETMED2 project aims to support Member States Competent Authorities in the Assessment of the extent to which GES on Descriptor 11-Underwater noise has been achieved in the Mediterranean Region by providing practical outcomes to implement the new GES Decision through: i) a joint proposal of a candidate for an impulsive noise indicator in the Mediterranean Region; ii) a common methodology for Competent Authorities to establish thresholds values, together with associated lists of elements and integration rules; iii) a data and information tool to support the implementation of the monitoring programmes of impact of impulsive noise based on the current ACCOBAMS joint register; iv) demonstration of the tool through an operational pilot; and v) several activities to boost current regional cooperation efforts of Barcelona Convention developing new Mediterranean Region cooperation measures.

This document reports the development of the workshops on new regionally coordinated measures for Competent Authorities from EU and non-EU countries, planned in the QUIETMED2 project. The different sections of this report set out the contents of the sessions, the general information on attendees, the feedback received by the participants and the main conclusions and recommendations extracted from this workshop.

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List of Abbreviations

CTN	Centro Tecnológico Naval y del Mar
ACCOBAMS	Permanent Secretariat of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
DFMR	Department of Fisheries and Marine Research
IZVRS	Inštitut za vode Republike Slovenije/Institute for water of the Republic of Slovenia
HCMR	Hellenic Centre for Marine Research
IOF	Institute of Oceanography and Fisheries
UM	University of Malta -The Conservation Biology Research Group
POLIMI-DICA	Politecnico di Milano-Department of Civil and Environmental Engineering
SSW	Special Secretariat for Water-Hellenic Ministry of Environment and Energy
SPA/RAC	Specially Protected Areas Regional Activity Centre
ICES	International Council for the Exploration of the Sea
MSFD	Marine Strategy Framework Directive
GES	Good Environmental Status
MS	Member States
MED	Mediterranean Sea Region
EcAp process	Ecosystem Approach process
INR-MED	Impulsive Noise Register of the Mediterranean Sea Region
TVs	Threshold Values. According to the Commission Decision (EU) 2017/848 of 17 May 2017 ‘threshold value’ means a value or range of values that allows for an assessment of the quality level achieved for a particular criterion, thereby contributing to the assessment of the extent to which good environmental status is being achieved.
TG Noise	EU Technical expert Group on Underwater Noise for MSFD implementation
PoMs	Programmes of Measures
MPAs	Marine Protected Areas

1. Introduction

The QUIETMED2 Project is funded by DG Environment of the European Commission within the call “DG ENV/MSFD Second Cycle/2018”. This call funds the next phase of MSFD implementation, in particular, to implement the new GES Decision (Commission Decision (EU) 2017/848 of 17 May 2017 laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment and repealing Decision 2010/477/EU) and Programmes of Measures according Article 13 of the MSFD.

The QUIETMED2 project aims to enhance cooperation among Member States (MS) in the Mediterranean Sea Region (MED) to implement the Second Cycle of the Marine Directive and in particular to assist them in the preparation of their MSFD reports through the following specific objectives:

- Develop and implement a candidate impact indicator in the Mediterranean Region for D11C1 Criteria.
- Make a joint proposal of a methodology to establish threshold values, list of elements and integration rules to implement the GES decision in reference to D11 in the Mediterranean Region.
- Build an efficient data and information tool to support the implementation of the D11C1 Criteria and the update of the monitoring programmes of Impulsive Noise according the new GES Decision.
- Perform an operational pilot of an impulsive noise impact monitoring programme implemented with the updated Joint register to demonstrate its feasibility.
- Promote Mediterranean Region Coordination by i) boosting current regional cooperation efforts of Barcelona Convention and others and ii) developing new cooperation measures.
- Enhance collaboration among a wide network of stakeholders through the dissemination of the project results, knowledge share and networking.

To achieve its objectives, the project is divided in 3 work packages around 3 priorities and 10 activities whose relationships are shown in Figure 1.

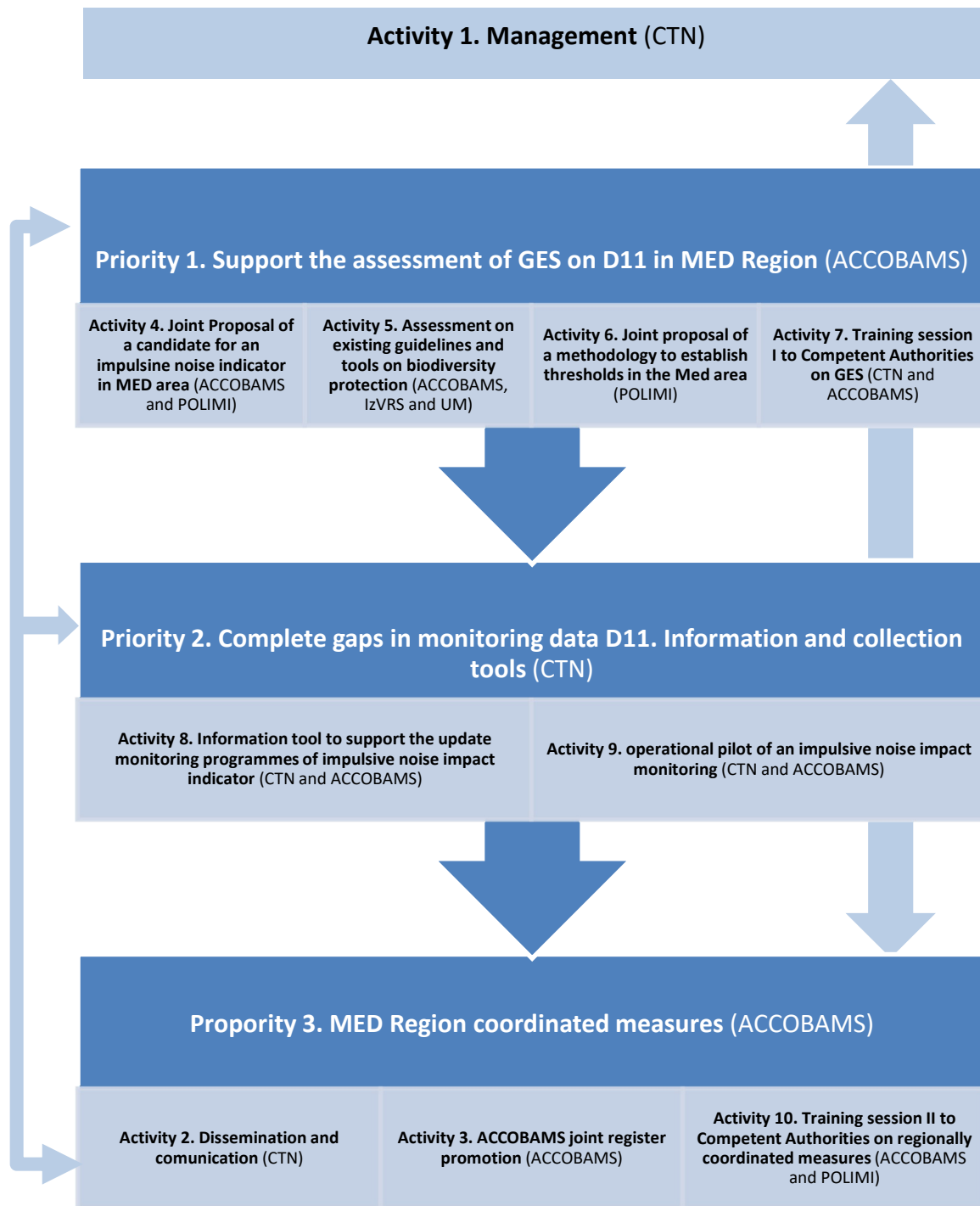


Figure 1. Work Plan Structure

The project is developed by a consortium made up of 11 entities coordinated by CTN and it has a duration of 24 months starting on February 2019.

This document reports the development and main conclusions of the workshop for Competent Authorities on new regionally coordinated measures celebrated through webinar sessions on 10th and 11th of September 2020 (initially planned in Milano on July 2020).

2. Objectives and expected results

This online event aims to facilitate a knowledge exchange between Regulators, Policy and Decision Makers and Scientists in the context of the MSFD Descriptor 11 (underwater noise).

The workshop had the following objectives:

- Demonstrating best practices of regional or subregional cooperation.
- Fostering the use of the ACCOBAMS Impulsive Noise Register for the Mediterranean Sea Region (INR-MED).
- Presenting the work developed under the QUIETMED2 project and how the project results can promote the Mediterranean Region coordinated measures.

Expected results were:

- To engage in discussion in order to understand and appreciate views and recommendations
- Get familiar with the use of the ACCOBAMS Impulsive Noise Register for the Mediterranean Sea Region (INR-MED)

3. Workshop agenda

The agenda for the 1st day (10th September) was the following:

Table 1. Day 1 Agenda

Time	Agenda Item
8:45 – 9:00	Connecting on-line platform
9:00 – 9:15	Agenda Item I – Welcome addresses (ACCOBAMS & CTN) Opening of the meeting/presentations
9:15 – 9:30	Agenda Item II QUIETMED2 Project (CTN)- Reminder and follow-up of the 2-day workshop held during the 2019 World Marine Mammal Conference - Conclusion of the Training session for competent Authorities from MS to better implement the new GES decision and specific Guidance to better implement the new GES decision (Deliverable 7.1 and 7.2)
09:30 – 10:00	Agenda Item III. Specific Guidance for MS to establish new regionally-coordinated measures (ACCOBAMS)
10:00 -10:15	Short Break
10:15- 10:45	Agenda Item IV. Work to be developed in the project to promote coordinated measures in the MED (overview) (ACCOBAMS) Live questionnaire to collect feedback about regionally coordinated measures (ACCOBAMS & POLIMI)
10:45 – 11:15	Break

11:15 – 12:00	Agenda Item V. Open Discussion and feedback on the coordinated measures in the MED - Discussion about the live questionnaire results (POLIMI - ACCOBAMS) - Open discussion (Question and Answer) (ACCOBAMS - CTN - POLIMI)
12:00-12:15	Conclusions and recommendations (ACCOBAMS - CTN)

The agenda for the 2nd day (11th September) was the following:

Table 2. Day 2. Agenda

Time	Agenda Item
8:45 – 9:00	Connecting on-line platform
9:00 – 9:15	Agenda Item I. EcAp process and MSFD opportunities for implementing coordinated measures (SPA/RAC - ACCOBAMS) Similarities in both processes regarding the establishment of programme of measures.
9:15-9:30	Agenda Item II. From the Impulsive noise register in the Mediterranean to a tool to support monitoring programmes (CTN)
9:30-10:45	Instructions for the practical session
09:45-10:00	Short Break
10:00-11:00	Agenda Item III Joint proposal of a methodology to establish thresholds in the MED Area (POLIMI - CTN) Review of the proposed methodology and alignment with TG Noise (Deliverable 6.2 and TG Noise report) - Practical session about the applicability of the methodology (CTN)
11:00-11:15	- Live questionnaire to collect feedback about methodology (CTN - POLIMI)
11:15=11:30	Short Break
11:30-12:15	Agenda Item IV. Open Discussion and feedback on methodology to establish thresholds (POLIMI -CTN - ACCOBAMS) - Discussion about the live questionnaire results (POLIMI) - Open discussion (Question and Answer) (ACCOBAMS - CTN - POLIMI)
12:15-12:30	Wrap-up of Training and Conclusion.

3.1. Attendance and roles

Attendees came from 15 countries, as depicted in the Figure 2



Figure 2. Participants came from 15 countries around the Mediterranean basin

The attendance list is given hereafter.

Name		Entity
Adriana	Vella	Conservation Biology Research Group, University of Malta
Aleksandar	Bozovic	Environmental Protection Agency. Montenegro.
Alessio	Maglio	SINAY, France
Antonis	Petrou	AP Marine Environmental Consultancy Ltd, Cyprus
Arianna	Azzellino	POLIMI, Italy
Aristeidis	Prospathopoulos	Hellenic Centre for Marine Research (HCMR), Greece
Asli	Topalak	Directorate General of Environmental Management. Turkey
Betül	Keskin	Directorate General of Environmental Management. Turkey
Boustila	Souad	Algeria
Caterina	Lanfredi	POLIMI, Italy
Céline	Mahfouz	National Centre for Marine Sciences-CNRS, Lebanon
Charalambos	Panayiotou	Atlantis Environment & Innovation Ltd, Cyprus
Charalamos	Ververis	General Secretariat for Natural Environment and Water (GSNEW), Greece
Christina	Mallia	Environment and Resources Authority (ERA), Malta
Dimitrios	Kassis	Hellenic Centre for Marine Research (HCMR), Greece
Elvira	García-Bellido Capdevila	DG de Sostenibilidad de la Costa y del Mar, MITECO, Spain
Eugenia	Gentile	Ministry of the Environment, Land and Sea. Italy
Florent	Le Courtois	Service hydrographique et océanographique de la Marine (Shom)/ TG Noise
George	Melekis	General Secretariat for Natural Environment and Water (GSNEW), Greece
Helena	Caserman	Institute for Waters of the Republic of Slovenia
Hrvoje	Mihanovic	Institute of oceanography and fisheries-Croatia
Inès	Houarbi Ben Salah	Agence Nationale de Protection de l'Environnement. Tunisia
Iván	Felis	Centro Tecnológico Naval y del Mar (CTN), Spain
Ivana	Bulatovic	MedPOL Focal Point. Environmental Protection Agency of Montenegro
Ivana	Stojanovic	PAM Focal Point. Ministry of Sustainable Development and Tourism. Montenegro
Joseph	Vella	University of Malta
Junio Fabrizio	Borsani	ISPRA/ TG Noise
Lavrentios	Vasiliades	Department of Fisheries & Marine Research (DFMR), Cyprus
Lilijana	Kuhelj	Slovenian Environment Agency
Lobna	Ben Nakhla	SPA/RAC
Lucía	Martínez Deneche	García- DG de Sostenibilidad de la Costa y del Mar, MITECO, Spain
Luke	Tabone	Environment and Resources Authority (ERA), Malta
Maite	Hernández Sánchez	DG de Sostenibilidad de la Costa y del Mar, MITECO, Spain
Manuel	Bou	Instituto Español de Oceanografía (IEO)
Marta	Martínez-Gil Pardo de Vera	DG de Sostenibilidad de la Costa y del Mar, MITECO, Spain
Marta	Sánchez Egea	Centro Tecnológico Naval y del Mar (CTN), Spain
Marwan	Abderrahim	SPA/RAC

Maýlis	Salivas	ACCOBAMS
Milad	Fakhri	National Council for Scientific Research, Lebanon
Noelia	Ortega	Centro Tecnológico Naval y del Mar (CTN), Spain
Pablo	Ruiz	Centro Tecnológico Naval y del Mar (CTN), Spain
Predrag	Vukadin	Institute of oceanography and fisheries-Croatia
Rimel	Ben Messaoud	Institut national agronomique de Tunisie
Roberto	Giangreco	Ministry of the Environment, Land and Sea. Italy
Senida	Dzajic-Rghei	Hydro-Engineering Institute Sarajevo. Bosnia and Herzegovina
Snježana	Dominković Alavanja	Inland Water and Marine Unit. Croatian Environment Agency
Souad	Boustila	MedPOL Focal Point. Ministère de l'Environnement, Algérie
Urška	Kocijančič	Institute for Water of the Republic of Slovenia
Valentina	De Santis	POLIMI, Italy
Vlado	Dadic	Institute of oceanography and fisheries-Croatia

Table 3. Competent authorities and national representatives present in the training workshop

Participants represented:

- Competent Authorities from 11 countries
- TG Noise
- UNEP-MAP (SPA/RAC, MedPOL focal point, MAP focal point).
- Intergovernmental Agreement (ACCOBAMS).
- Entities to support the implementation (Research centres, universities...).

3.2. First Training Session during the World Marine Mammal Conference 2019, 7-8th December, Barcelona

Introduction:

- Presentation and training on the ACCOBAMS International Impulsive Noise Register for the Mediterranean Sea Region (INR-MED).
- Review of the Good Environmental Status (GES) assessment and presentation of existing approaches and solutions for the management of underwater noise pollution impacting marine biodiversity.

The following difficulties and opportunities were pointed out during the workshop/training session:

Difficulties for moving forward to define what GES (the desired state of the marine environment and its components) means for underwater noise in the MED region:

- Lack of threshold values. Most of the GES definitions are “pressured-level”. Need to move forward to “risk-level”. No “response-based” definitions have been identified in the MED Region (definitions which include the regulation of noise generating activities).

- Insufficient level of information/available data about the effects of increased noise levels makes difficult the agreement of common definitions among the Mediterranean MS.
- Limited information about the effect of noise on marine species different than marine mammals. GES can be adapted with updated advances in the knowledge about the impact of noise on the marine environment.

Difficulties to set thresholds values:

- TG Noise proposes either a species or a habitat approach. Both approaches require strong effort in transnational cooperation among MS.
- OSPAR methodology is difficult to apply in the Mediterranean as the Mediterranean is heterogeneous with variable topography.
- The methodology to set threshold values (TVs) should be a dynamic process able to integrate new knowledge.
- INR Implementation constitutes key element for the assessment of the impacted habitat. This implementation is still at early stage.

Difficulties to collect information on underwater noise:

- The data availability (for MSFD national responsible) at national level is conditioned to:
 - the existence of legal obligations to provide information from Companies (or entities) that conduct activities producing (or potentially producing) underwater noise.
 - the coordination among different Ministries, and/or entities involved in the process of permitting activities (industry, environmental agencies, scientists) and MSFD implementation.
- At regional level, the lack of noise data availability and the absence of an obligation for MS of the Mediterranean area to report noise information into the INR-MED make the GES assessment impossible at MED level.

Opportunities:

- Activities for boosting cooperation among all the countries in the MED are highly welcomed by EU and non-EU countries.
- Capacity building in noise technical issues and management has been detected as a priority.
- EU projects funded to support the MSFD implementation may provide practical outcomes to strength synergies among the MSFD and the EcAp process implementation.
- Connection between Biodiversity (D1) and Underwater noise (D11) should be considered for the future.

3.3. Specific Guidance for MS to establish new regionally-coordinated measures (ACCOBAMS - Deliverable 10.1)

Background on PoMs from the MSFD text:

- Measures for what? For achieving or maintaining GES, i.e., environmental policy
- Measures should be conceived based on:
 - the initial assessment made pursuant to Article 8(1)
 - the environmental targets established pursuant to Article 10(1)
 - And taking into consideration the types of measures listed in Annex VI

Background on PoMs (Annex VI of the MSFD). Measures can be:

- Input controls: management measures that influence the amount of a human activity that is permitted.
- Output controls: management measures that influence the degree of perturbation of an ecosystem component that is permitted.
- Spatial and temporal distribution controls: management measures that influence where and when an activity is allowed to occur.
- Management coordination measures: tools to ensure that management is coordinated.
- Measures to improve the traceability, where feasible, of marine pollution.
- Economic incentives: management measures which make it in the economic interest of those using the marine ecosystems to act in ways which help to achieve the good environmental status objective.
- Mitigation and remediation tools: management tools which guide human activities to restore damaged components of marine ecosystems.
- Communication, stakeholder involvement and raising public awareness.

PoMs implementation after EC overall analysis (2020):

- MS made significant efforts to develop their first MSFD programmes of measures by integrating different national, EU and international policies and covering the existing gaps with new cost-effective measures.
- They reported a total of **4653 measures**.
- Overall, 79% of the reported measures were **direct technical or regulatory measures while the rest were more indirect** support actions.
- EC states that just 53% of the **PoMs assessed** (per descriptor and per MS) **seem appropriate** to tackle the existing pressures
- MS also found **difficult to assess what the effect of the different measures** they have put in place will be on the marine environment.
- Of the roughly 4,700 measures reported by MS under the MSFD, 246 were spatial protection measures.
- MS have doubled the space designated as MPAs in Europe since 2012, reaching more than 10% coverage of its waters and fulfilling global commitments.

**[Cit. Report on the implementation of the Marine Strategy
Framework Directive_June2020] COM(2020) 259 final**

Major issues in the overall MSFD implementation:

- MS often failed to distinguish between targets and GES.
- They did not link their targets with their measures, so as to have a measurable record of how they are progressing towards achieving GES.
- Monitoring programmes were likewise not always linked to the targets. Monitoring programmes were set before the targets (illogic, but likely very common).
- Finally, progress in setting TVs for determining GES has so far been slow.

Based on COM(2020) 259 final

Main conclusions from the assessment of PoMs:

- MS relied heavily on existing regulatory frameworks (classified as existing measures).
- MS took measures specifically agreed with neighbours within an EU marine region (generally through Regional Seas Conventions).
- The number of cases with (sub)regional coordination of action were limited
- MS reported a total of 4653 measures in their programmes (all Descriptors).
- 34% were new measures (defined specifically for MSFD implementation); the rest were existing measures.
- Higher proportion of new measures were defined for underwater noise (D11), with 39% of new measures, and marine litter (D10) with 31%.
- Information about management effectiveness is scarce.

Types of measures (all Descriptors):

- Existing measures from other EU regulation that could contribute to MSFD implementation
- Spatial protection measures:
 - No-take zones. They are by far the most effective type of protection to restore both the biomass of fish assemblages and the resilience of ecosystems.
 - Designate new MPAs.
 - Establishment of management plans and/or conservation measures in existing and new MPAs.
 - Spatially-explicit limitations of human activities within the protected sites.
- Regulation:
 - Licensing/registering of activities (e.g., EIAs/NATURA2000 assessments)
 - Compliance monitoring.
- Transversal/indirect measures:

- Increasing knowledge (Mapping noise, habitats, studying alternative technologies, etc.).
- Prepare/update management guidance.
- Awareness raising campaigns.

Types of measures (D11):

- Protecting specific areas from both impulsive and continuous noise.
- Developing 'eco-friendly' ships.
- Limiting the use of certain types of lights on oil and gas platforms.
- Raising awareness.
- Carrying out research.
- Developing guidelines for noise assessments.

Key figures

- **Good news:** Between 2012 and 2016, the overall coverage of MPAs in European seas almost doubled, rising from 5.9% to 10.8%, thereby fulfilling the Aichi Target 1163 coverage goal long before the 2020 deadline. 10% coverage was also broadly met at a regional scale in all four European marine regions.
- **Bad news:** 3 out of 4 Mediterranean subregions have coverages **far below 10%**
- The subregion with the **highest proportion of MPAs** is the Greater North Sea with 27.1 %.
- The subregion with the **lowest coverage of MPAs** is the Ionian Sea and the Central Mediterranean Sea with 2.9 %.
- **Where underwater noise is part of the management plans of MPAs, these are considered management measures for D11.**

Specific examples regionally coordinated measures:

- Particularly Sensitive Sea Areas (PSSA) established under the International Maritime Organisation
- Sulphur Emission Control Areas (ECAs) again established under IMO.
- ACCOBAMS quiet zones (not yet defined).

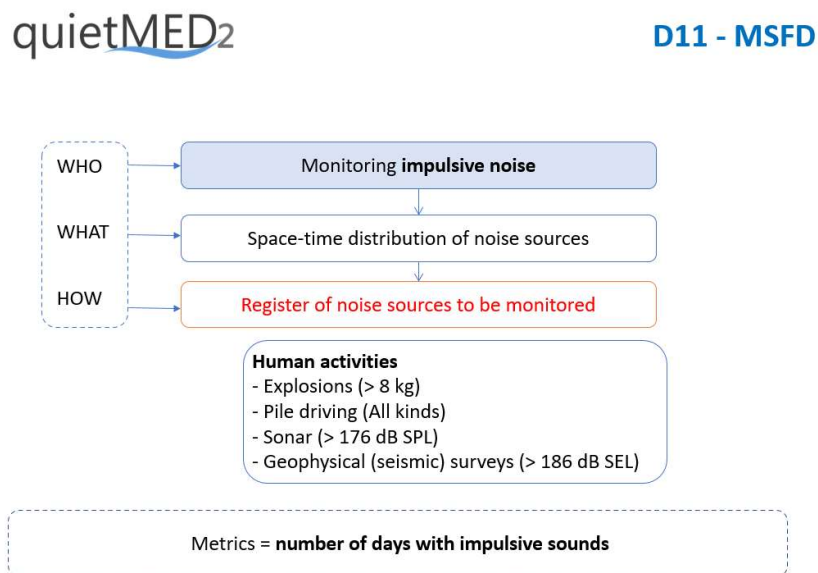
Conclusions:

- The programmes of MS are often very unclear concerning D11
- 4653 measures reported by MS in the framework of their PoMs appear a lot:
- around 200 per country on average (23 countries with coasts)
- We do not know how the total number of measures reported was calculated (likely the sum of the number of measures reported by countries?). However, this number point out that coordination is needed at the regional/subregional scale.
- Identify and implement measures sub-regionally or regionally;

- To provide timelines for the implementation of these measures and match them with funding;
- to better link the measures with other parts of their strategy such as target-setting and monitoring;
- To quantify the effects of these measures on reducing pressures on the marine environment and their contribution to improving the state of the seas and oceans;
- To cover all pressures and to ensure that the measures cover an appropriate geographic scale.

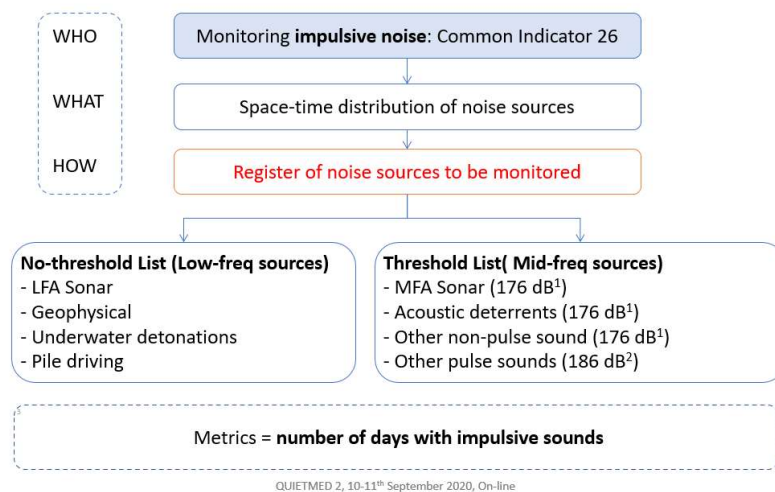
3.3.1. EcAp process and MSFD opportunities for implementing coordinated measures (SPA/RAC & ACCOBAMS)

Synthetic view of D11C2 and EO11-Common Indicator 26 (CI26):



QUIETMED 2, 10-11th September 2020, On-line

2



Major concerns related to implementation of D11C2 and CI26:

- The **data availability** (for MSFD national responsible) at national level for the development of national registers, that strongly depend on:
 - the absence of legal obligations to provide information from Companies (or entities) that conduct activities that produce (o potentially produce) underwater noise emissions.
 - the coordination among different Ministries, and/or entities involved in the process of permitting activities (Industry, environmental agencies, military) and MSFD implementation.
- The **absence of an obligation** for countries of the Mediterranean area (MS and non-MS) **to report noise information** into the INR-MED.
- MS should **easily submit their data** to the INR-MED.
- It would be advisable to have **comparable quality of data** (i.e., sound sources typology; metadata associated) by sub-region to guarantee a regional assessment and comparison among different sub-regions.
- The time required to guarantee a consistency in the level of information available on the INR-MED, aligned with MSFD implementation time period.

Recommendations and Policy implications:

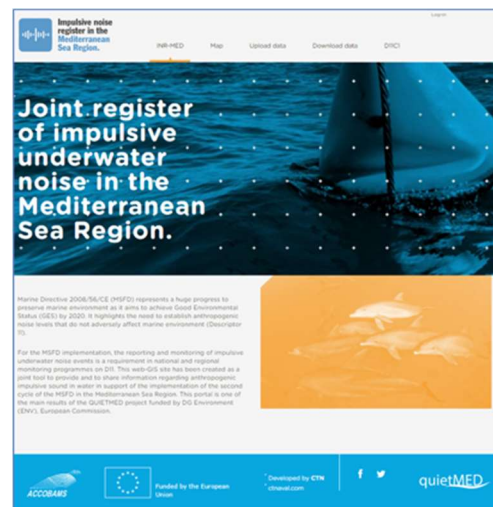
- Due to the high cetacean’s diversity in the Mediterranean Region, it is recommended to consider a “multi-species approach” in which the presence of vulnerable species is assessed by sub-regions.
- The vulnerable species presence should be assessed considering not only their spatial distribution inferred from direct observation, but also assessing the presence of potential suitable habitat (using a precautionary approach) for the species.

- Cooperation between ACCOBAMS and Barcelona Convention should continue on the basis of coordinated implementation of MSFD and EcAp processes, respectively Ecological Descriptor 11 and Objective 11, to ensure the coherence and the long-term viability of actions.

3.3.2. From the INR-MED to a supporting tool for monitoring programmes

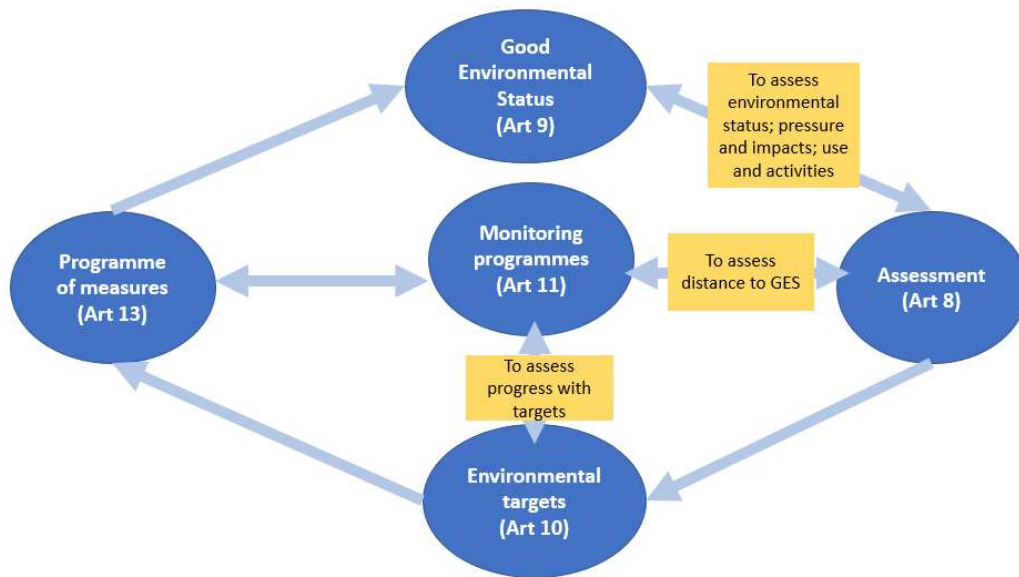
Introduction on the Impulsive Noise Register for the Mediterranean Sea Region (INR-MED):

- Developed under QUIETMED project.
- To record activities in order to enable assessment of the total pressure from impulsive noise sources.
- For computing the distribution of impulsive noise sources in space and time.
- The register is a database in the form of an Excel sheet.
- Information computed in a GIS tool (Geographic information system).
- WEB TOOL to be managed by ACCOBAMS.
- Functions:
 - Upload data
 - Download data
 - View on a map
 - Calculations



Ongoing development (Sept 2020)





Main function to be developed and added to the online tool:



Tool for impulsive underwater sound (D11-MSFD) monitoring and assessment in the Mediterranean Sea Region

[Home](#)

[INR-MED](#)

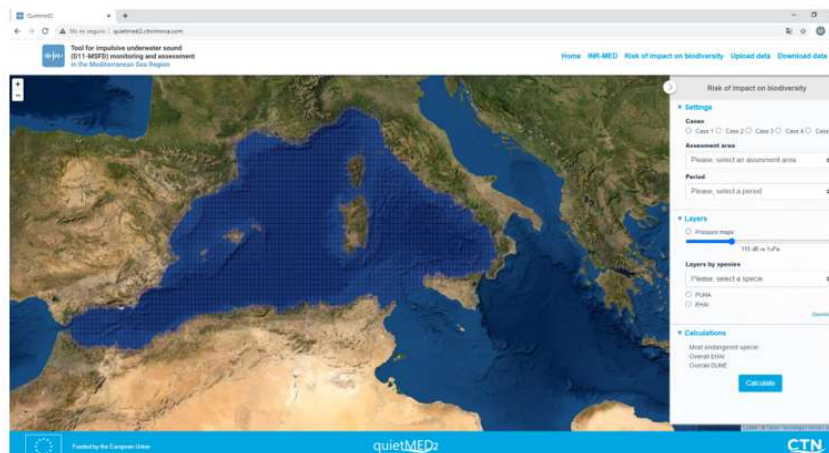
[Upload data](#) [Download data](#)

[Risk of impact on biodiversity](#)

The threshold system (and therefore the assessment methodology) will be based indeed on the risk for biodiversity from the exposure of impulsive noise

A further development of the tool was demonstrated:

<http://quietmed2.ctninnova.com/>



QUIETMED 2, 10-11th September 2020, On-line

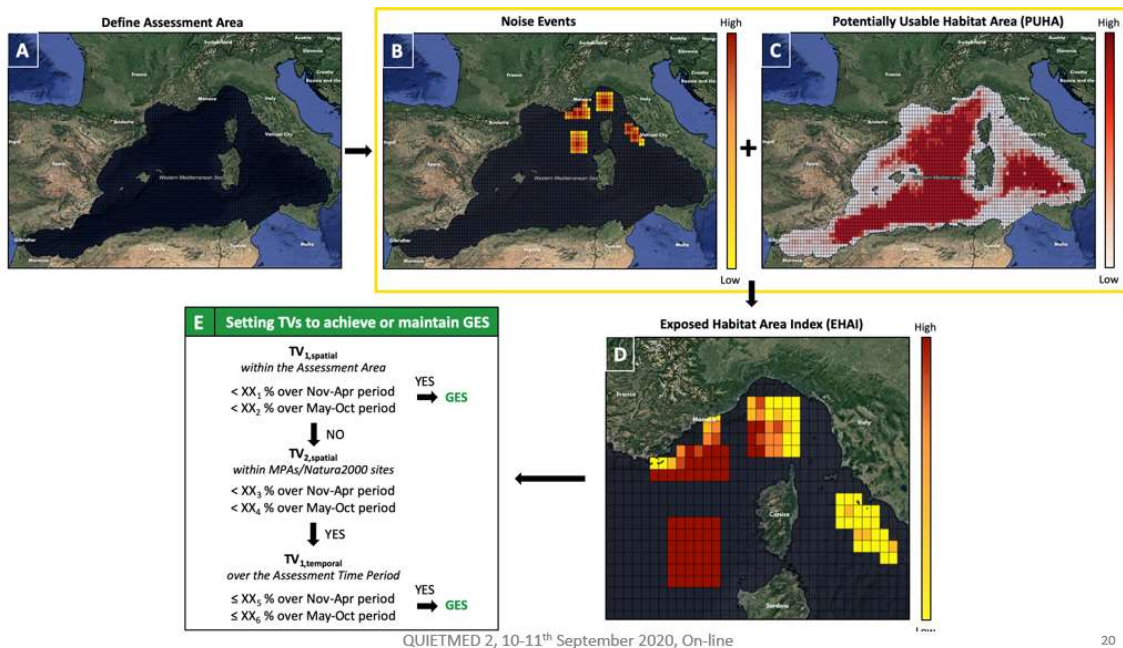
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3.3.3. Review of the proposed methodology and alignment with TG Noise (Deliverable 6.2 and TG Noise report)

Presentation of the stepwise procedure:

- The INR-MED might be the basis for the GES assessment;
- Through the INR-MED it will be possible to evaluate the percent of potential habitats affected, in time and space, for the main cetacean species in the Mediterranean Sea;
- The evaluation should be carried out at a regional, subregional or another appropriate level (e.g., Marine Reporting Unit);
- Setting thresholds in terms of **percent of species habitat and time over the year or the season**, makes it easier to move from GES definition toward management targets;
- Such an approach is potentially open to other species for which suitable habitat can be predicted;
- **Studies aimed to collect baseline data are necessary for the Mediterranean Sea area to fine-tune the TVs.**

Presentation of the workflow of the proposed methodology:



3.4. Feedback received through Questionnaire 1 about Methodology

An on-line questionnaire was designed to assess the main topics discussed during the training session. Apart from general questions on the development of other issues, specific questions on the use of the tool were included.

5. EU Country

[Altri dettagli](#)

[Insights](#)

- YES 13
- NO 8



8. Was the training clear enough to explain the proposed stepwise framework of the methodology?

[Altri dettagli](#)

[Insights](#)

● YES	20
● NO	1



10. Do you believe that the methodology should be applied at the Mediterranean region or at the scale of MSFD marine sub-regions?

[Altri dettagli](#)

[Insights](#)

● YES (both scale)	16
● Only at MSFD marine sub-regi...	5
● NO	0



12. Would you expect problems in the applicability of the methodology at National level? (consider your Nation)

[Altri dettagli](#)

[Insights](#)

● YES	14
● NO	7



14. Do you think that there could be data/info about cetacean species (i.e. habitat, abundance etc.), collected through specific monitoring programme(s), which can better refine the proposed methodology and support the setting of TVs at National level? (consider your Nation)

[Altri dettagli](#)

[Insights](#)

● YES	19
● NO	1



15. Do you think that the proposed methodology has some drawbacks or bottlenecks?

[Altri dettagli](#)

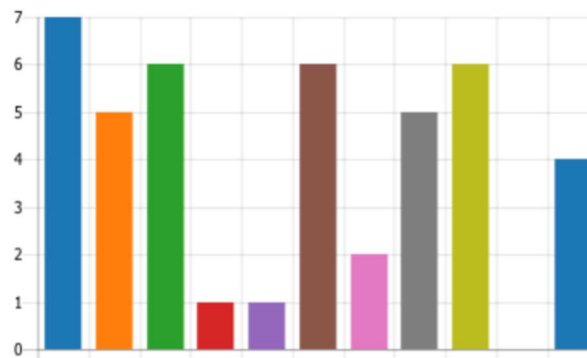
● YES	12
● NO	7



16. If you answer YES, Please, explain which you would expect to be the critical phases:

[Altri dettagli](#)

● Step 0. Implementation of join...	7
● Step 1. Definition of scope of ...	5
● Step 2. Definition of indicator ...	6
● Step 3. Define sound characte...	1
● Step 4. Production of pressure...	1
● Step 5. Define the estimated h...	6
● Step 6. Produce exposure risk ...	2
● Step 7. Compute proportion o...	5
● Step 8. Determine potential fo...	6
● Other	0
● Altro	4



18. With the practical session you have seen how the methodology would deal with different scenarios. Do you believe that the web-platform as implemented would be a practical management tool?

[Altri dettagli](#)

● YES	20
● NO	1



20. Do you think that miss any information or functionality into the tool?

[Altri dettagli](#)

[Insights](#)

- YES 2
- NO 18



3.5. Feedback received through Questionnaire 2 about Regionally Coordinated Measures

5. EU Country

[Altri dettagli](#)

- YES 11
- NO 7



8. PoMs are designed to achieve or maintain GES. To what extent can you assess/measure the effectiveness of the PoMs?

[Altri dettagli](#)

[Insights](#)

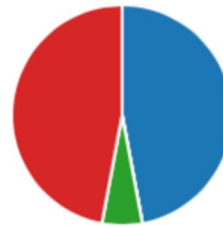
- COMPLETELY (I am generally a... 1
- PARTIALLY (e.g. in many cases ... 7
- INSUFFICIENTLY (I don't have ... 9



9. How do you assess the effectiveness of PoMs?

[Altri dettagli](#)

- Through CRITERIA INDICATOR... 8
- Through other QUANTITATIVE... 0
- QUALITATIVELY (e.g. if GES is c... 1
- OTHER/UNKNOWN/NOT ABLE 8



11. What do you feel as a priority, for your country, at the regional/subregional scale:

[Altri dettagli](#)

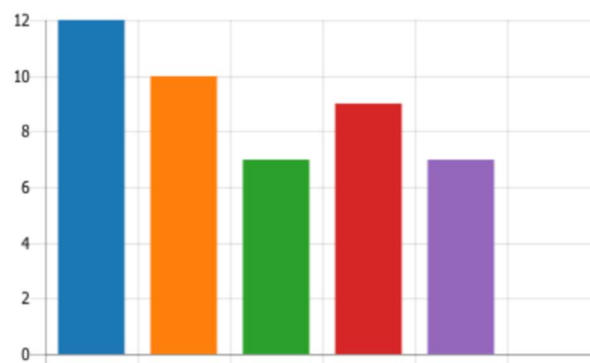
- Coordinate the implementatio... 2
- Harmonise the way the effecti... 5
- Both 14
- Other 0



13. What would be the best role, RIGHT NOW, of regional organizations (ACCOBAMS in cooperation with UNEP/MAP, in the case of D11/EO11):

[Altri dettagli](#)

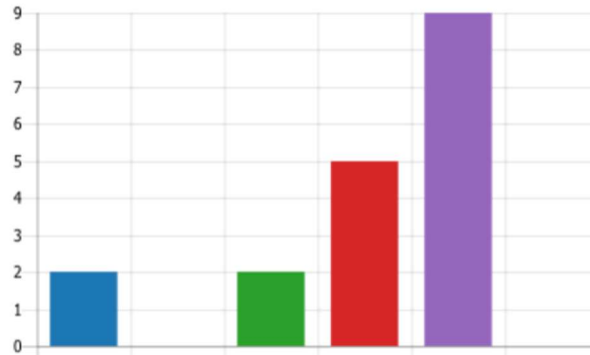
- Producing guidance for joint e... 12
- Coordinating joint efforts 10
- Participating in the implement... 7
- Assessing regional/sub-region... 9
- Contributing to the assessme... 7
- Other 0



15. What would be the best role, IN THE LONG TERM, of regional organizations (ACCOBAMS in cooperation with UNEP/MAP, in the case of D11/EO11):

[Altri dettagli](#)

- Producing guidance for joint e... 2
- Coordinating joint efforts 0
- Participating in the implement... 2
- Assessing regional/sub-region... 5
- Contributing to the assessme... 9
- Other 0



17. Is UW noise included somehow in the management plan of MPAs in your country?

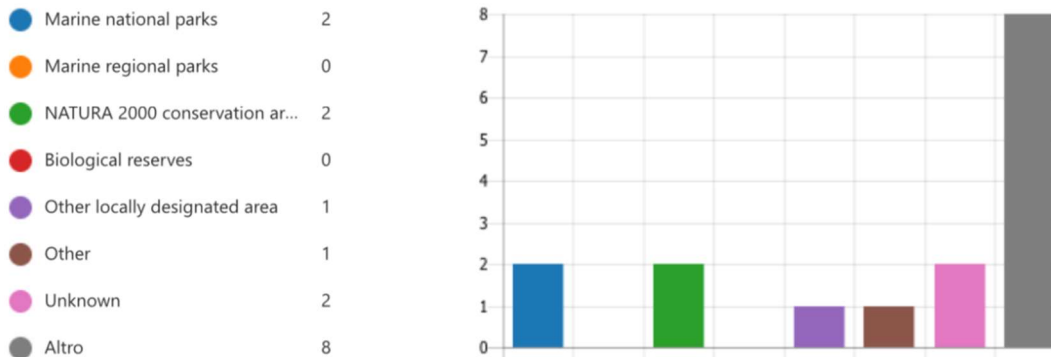
[Altri dettagli](#)

- YES, UW is generally included ... 0
- Some information is available ... 3
- NO information available/not ... 15



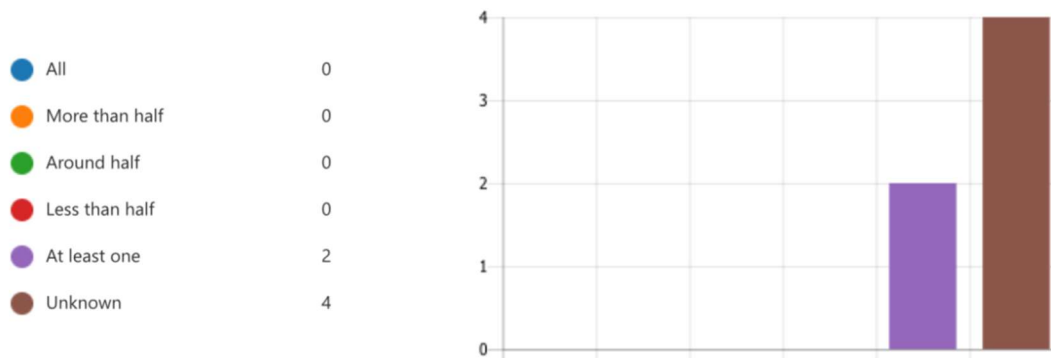
18. If you answered with the first or second option to question 17: do you know what kind of MPAs include UW in the MPA management plan?

[Altri dettagli](#)



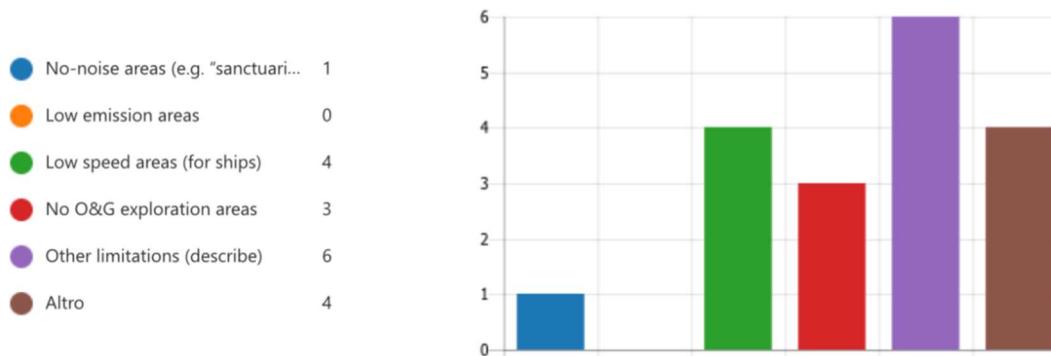
20. If you answered with the first or second option to question 17: do you know, even roughly, how many MPAs include UW in the MPA management plan?

[Altri dettagli](#)



21. What spatial management measures, other than MPAs, are in place in your country:

[Altri dettagli](#)



23. Are programs in place to promote less noisy technologies?

[Altri dettagli](#)

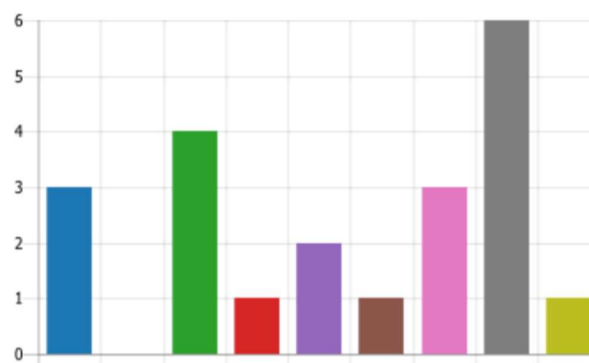
● YES	5
● NO	7
● Unknown	6



24. To what sector are they applied?

[Altri dettagli](#)

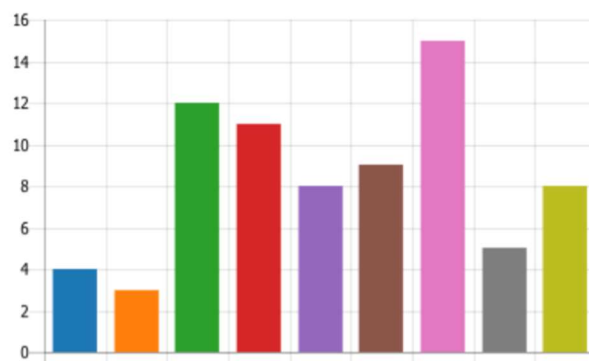
● Offshore and inshore construc...	3
● Ports	0
● Shipping	4
● Recreational craft	1
● Marine research (e.g. geophysi...	2
● All	1
● None	3
● Unknown	6
● Altro	1



25. What kind of measure would be more useful/effective?

[Altri dettagli](#)

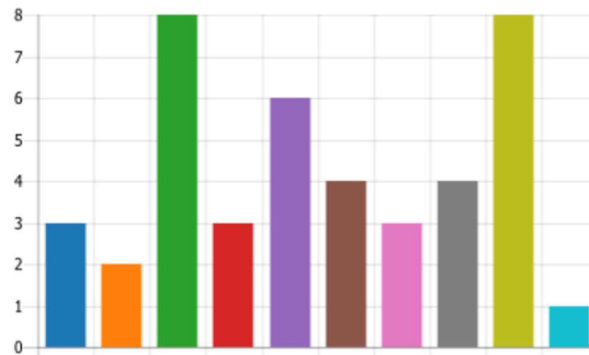
● Establishing Quiet zones/no-n...	4
● Designating new MPAs	3
● Establishing management pla...	12
● Establishing spatially-explicit li...	11
● Licensing/registering of activit...	8
● Compliance monitoring	9
● Increasing knowledge (Mappi...	15
● Prepare/update management ...	5
● Awareness raising campaigns	8



26. What kind of measure would be faster/easier to implement?

[Altri dettagli](#)

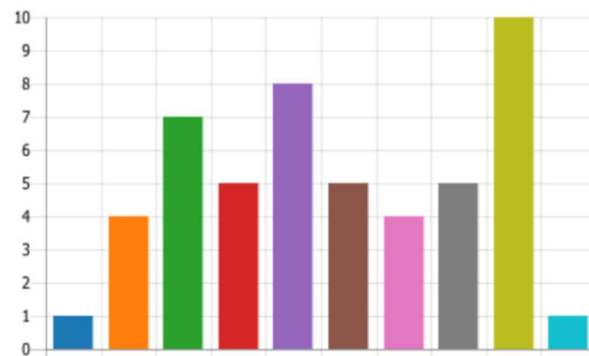
● Establishing Quiet zones	3
● Designating new MPAs	2
● Establishing management pla...	8
● Establishing spatially-explicit li...	3
● Licensing/registering of activit...	6
● Compliance monitoring	4
● Increasing knowledge (Mappi...	3
● Prepare/update management ...	4
● Awareness raising campaigns	8
● Altro	1



27. What kind of measure would be feasible/sustainable (in terms of costs)?

[Altri dettagli](#)

● Establishing Quiet zones	1
● Designating new MPAs	4
● Establishing management pla...	7
● Establishing spatially-explicit li...	5
● Licensing/registering of activit...	8
● Compliance monitoring	5
● Increasing knowledge (Mappi...	4
● Prepare/update management ...	5
● Awareness raising campaigns	10
● Altro	1



28. Now we take a specific example: the ramp-up procedure, which consists in starting the use of noise sources with increasing power during a defined period (e.g. 20 minutes) until reaching full power. How do you consider this procedure?

[Altri dettagli](#)

[Insights](#)

● As a target (either operational...	8
● As a measure to achieve GES, ...	8



29. Another specific example, what about the use of a specific software that reduces the acoustic risk caused by a given activity:

[Altri dettagli](#)

- It is a target 2
- It is a measure 8
- It Depends on how it is includ... 7



31. Most Member States report measures that aim to implement a register for impulsive sounds. Is the noise register:

[Altri dettagli](#)

- A measure to achieve GES? 2
- A management tool to monito... 14
- An operational target to mana... 1



32. Do you agree with this sentence? "Despite the knowledge gaps, it is acknowledged that a number of activities producing impulsive noise causes negative impacts on marine wildlife and ecosystems. Direct measures to address such activities should be taken as soon as possible."

[Altri dettagli](#)

- Fully agree 12
- Partially agree 6
- Disagree 0



4. Conclusions

With regards to methodology for threshold setting:

- The methodology for threshold setting and therefore for GES assessment appeared clear, however the attendees saw drawbacks and bottlenecks specified hereafter (critical phases).
- Critical phases in threshold setting
 - Implementation of the register
 - Select the indicator species

- Obtain data on habitat and population density data
- Computation the indicators of exposure: proportions of space and time that habitats are covered by noise events
- Determination of potential negative effects
- A web-based tool is considered a practical management tool; however, it is not clear if attendees are willing to build similar tools in their countries, or if they were commenting about the regional tool only, or even if they may consider using the regional tool for national objectives

With regards to PoMs

- The effectiveness of PoM is hard to assess; attendees say that they are insufficiently or partially able to assess whether the management measures they implement have a (positive) effect towards achieving or maintaining GES
- When the assessment of the effectiveness of PoMs is possible, this is done through indicators set under D11C1
- The priorities for improving the current situation are harmonising the way effectiveness of measures is assessed and coordinate the implementation of measures with neighbour countries
- Attendees considers that, in the short term, international organization should mostly produce guidance for the implementation of joint efforts (for example between neighbour countries); also, based on feedback from the audience, international organisations should also coordinate such joint efforts and assess whether or not GES has been achieved at the regional and sub-regional scale.
- On the longer term, the role of international organisations will be to assess the effectiveness of management measures implemented from a regional perspective; GES assessment is also seen as an important role for half of the audience.
- Little or no information is available concerning management measures on noise in MPAs; however, some attendees affirmed that underwater noise is included in the management plan of at least one MPA. Other attendees affirm that noise is included somehow in the management plan of some MPAs but are not able to provide even an approximate number of such MPAs where noise is addressed.
- An interesting conclusion is also that attendees say that other kinds of spatial management measures (other than MPAs) are in place in the different countries, such as no noise areas (1 answer), low speed areas for ships (4 answers), no Oil and Gas exploration areas (3 answers) and other limitations (4 answers, but without further details)
- Approximately 1/3 of attendees said that programmes for less noisy technologies exist and are promoted in their countries, 1/3 have no information about that, and the last 1/3 affirmed such measures are not in place.
- Based on answers on noise-mitigating technologies, a surprising point is that programmes to promote/implement such novel technologies are applied to more and less all maritime domains (offshore, oil and gas, shipping, recreational craft), but not to ports.
- The measure considered as most effective is the increasing of knowledge, for example through noise mapping

- The measure considered as faster and/or easier to implement is the inclusion of noise into the management plan of MPAs and also setting up campaigns to raise awareness. The latter is also considered as the most feasible/sustainable in terms of cost
- Finally, some questions were aimed at assessing the differences in the understanding of measures and targets (as defined under the MSFD), confirming that a significant degree of confusion still exist.

On the way forward:

- The feedback and the answers given through the questionnaire presented above helped drawing the priorities for the way forward. These elements as well as the analysis of further elements were pooled to develop in D10.1 – Specific guidance for MS to establish new regionally coordinated measures
- The use of English is a barrier for attendees from many southern and eastern Mediterranean countries. A request from attendees who are more familiar with French was therefore to develop training material as well to as organise a workshop in French. Such a workshop was organized online by ACCOBAMS on 14th and 15th December 2020. Around 20 experts from Algeria, Lebanon, Monaco, Morocco and Tunisia actively participated.