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Governance Conditions and Models for Successful ICZM and MSP Participation

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Abbreviations

DLABs – Democracy Labs

ICZM – Integrated Coastal Zone Management

MSFD – Marine Strategy Framework Directive

MSP – Maritime Spatial Planning

SWAP – Scenario Workshop and Adaptation Pathways

Executive summary

The report “Governance Conditions and Models for Successful ICZM and MSP Participation” aims to facilitate and guide the implementation of SWAPs and DLabs in the frame of the INCORE-MED project, by building on lessons learned from previous participatory processes at the four pilot sites.

Following a qualitative approach, a literature review was combined with semi-structured interviews with experts from the pilot sites. Insights were collected on the current governance framework related to climate change adaptation, coastal planning and lessons learned from past participatory processes. These lessons were structured around stakeholder engagement, inclusiveness, and the integration of participatory outputs in coastal plans and strategies.

The strategies and plans relevant for integration of outputs stemming from the SWAPs and DLabs implementation during the INCORE-MED project are listed below:

- Catalonia: Coastal Protection and Management Plan (PPOL)
- Sardinia: Italian national MSP plans within regional framework
- Algarve: Regional climate planning processes led by Algarve Municipality Association (AMAL) and the Algarve Regional Development and Coordination Commission (CCDR).
- Kastela: The Integrated Coastal Zone Management Plan (ICZM) for the City of Kaštela

The main lessons learned include early stakeholder mapping and integration in a structured participatory process. Specific attention should be placed on underrepresented stakeholders that sometimes demand for targeted engagement strategies and offer to enlarge the diversity of perspectives, needs and ideas. Moreover, the process should be locally grounded with clear objectives, problem framing and purpose of the activity. The process should link to local climate impacts, respond to the interest of the stakeholder in the region and should in the best case be facilitated by a locally-known expert. Quality facilitation and adapting methodologies to the given context has been proven useful to enhance ownership, engagement and avoid conflicts during participatory processes. When it comes to integrating participants’ contributions into strategies and plans, transparency was stated as being the most crucial component. Clear selection criteria should be stated to enhance the effectiveness and build trust during participatory processes.



Introduction

INCORE MED project

INCORE-MED (Inclusive Coastal Resilience in the Euro-Med) is an Interreg Euro-Med project under the Natural Heritage Mission. It addresses the challenges of coastal and marine planning and management in the Mediterranean, where fragile ecosystems are under growing socio-economic pressures. Climate change, tourism, infrastructure development, aquaculture and offshore energy are all increasing sources of pressure in coastal areas, often generating conflicts among stakeholders with diverging interests. The project aims to put citizens at the heart of coastal & maritime planning to reconcile economic development, climate change adaptation and social well-being in Mediterranean coastal and marine regions. To this end, it strengthens the capacity of regional and local authorities, together with civil society organizations, to design and implement solutions that foster climate adaptation and sustainable development.

This ambition is carried out through the adaptation and testing of two innovative participatory methodologies: the SWAP approach, which links scenario workshops with adaptation pathways to co-develop dynamic climate adaptation plans, and Democracy Labs, citizen-centred spaces that foster the co-creation of democratic innovations tailored to coastal and marine governance. These methods enable the co-design of adaptation pathways in a deliberative way, strengthening public participation, enhancing legitimacy, and promoting inclusive democratic practices in the prevention and management of climate risks.

These tools will be deployed to create and update participatory cartographies and climate risk perception maps, develop local climate action plans in four pilot sites, the regions of Catalonia (Spain), Algarve (Portugal), and Sardinia (Italy) and the city of Kaštela (Croatia), and disseminate the results to new territories through adoption pathways.



Figure 1 : Pilots and methodology used in INCORE MED

The SWAP -Scenario Workshop and Adaptation Pathways - is a mix-methods participatory action-research methodology that emerged from the BASE¹ EU FP7 Project (Bottom-up climate Adaptation Strategies towards a Sustainable Europe, 2012-2016), which piloted participatory approaches for climate adaptation across Europe. It combines the Scenario Workshop method, emphasising participatory scenario co-creation with stakeholders, and the Adaptation Pathways approach, which helps structure decisions over time by identifying sequences of adaptation actions and transition points under uncertainty.

SWAP builds on a diverse toolbox to support structured decision-making while enhancing local ownership of climate adaptation plans:

- literature review,
- narrative analysis,
- surveys and questionnaires,
- qualitative scenario building,
- participatory multi-criteria analysis and cost-benefit analysis,
- quantitative modelling (e.g., coastal erosion and flooding models).

The method has been used in coastal areas to engage local authorities, scientists, NGOs, and community representatives in evaluating adaptation measures against future sea-level rise and increasing extreme weather events. It has supported the co-design of pathways for coastal resilience that consider grey (hard infrastructure), green (nature-based solutions), and soft

¹ <https://base-adaptation.eu/>



(governance, behaviour change) adaptation measures while assessing the timing, effectiveness, and feasibility of these measures under multiple scenarios.

SWAP's principal value lies in its capacity to bridge quantitative modelling and local stakeholders participation. Coastal systems are characterised by high uncertainty and complex, often conflicting, stakeholder interests, making traditional top-down planning approaches insufficient. By using participatory scenario building, stakeholders explore different futures and preferred visions, while quantitative models (e.g. shoreline evolution, inundation risk, economic impacts) inform the feasibility and implications of decisions. The pathways' structure allows decisions to remain flexible, with clearly defined "tipping points" for advancing or adjusting measures as environmental conditions or societal priorities change, making adaptation strategies robust yet dynamic.

The methodology offers significant potential for participatory coastal adaptation planning, particularly in places seeking to develop technically robust Climate Adaptation Plans that also consider legitimacy through stakeholder-based co-design. SWAP can be integrated into official planning processes to guide the prioritisation of measures, facilitate dialogue among diverse actors, and provide a clear roadmap for implementing adaptation over time. It also aligns with EU climate adaptation frameworks and can help secure funding by demonstrating inclusive, evidence-based, and forward-looking planning processes.

Democracy Labs (DLABs) are citizen-centred meta-democracy processes that engage diverse groups of people in co-creating democratic innovations rather than deliberating on specific policy issues. Inspired by approaches such as living labs, policy labs, and generative design research, they combine recruitment of representative citizens, sensitising activities, critical reflection, and ideation to generate inclusive, transparent, and context-specific methods for democratic participation. Their purpose is to strengthen democracy's legitimacy and capacity to address complex socio-ecological challenges and democratic backsliding by empowering citizens to design the ways in which they want to be involved in governance. Importantly, Democracy Labs are not intended to produce direct policy solutions but instead generate insights into individual and collective socio-technical imaginaries, values, and principles to inform policymaking. By foregrounding inclusivity, transparency, and dialogue, Democracy Labs strengthen the legitimacy of democratic practices and enrich how societies imagine and design responses to complex sustainability challenges and democratic backsliding².

The INCORE-MED project aims to replicate the Democracy Labs to support the participatory development of climate adaptation plans, build climate resilience and tackle climate risks through inclusive democratic innovations in the Algarve and Kastela.

² See <https://doi.org/10.1007/s42532-024-00197-7>

Scope and methodology

Scope of the study

The study examines the governance, institutional, and participatory contexts within which action plans linked to SWAPs and DLabs are developed at the pilot sites. It considers the institutional arrangements, policy instruments, and decision-making structures relevant to coastal management and climate change adaptation, through drawing on the practical experiences of pilot sites in applying participatory approaches. This objective is pursued by identifying and analysing lessons learned from past and ongoing participatory approaches developed within the pilot sites, in particular those linked to coastal planning and climate change adaptation processes.

Building on the preparation and training related to the SWAP and DLAB methodologies (Activities 1.1 and 2.2), the study places particular emphasis on the practical experiences of pilot sites in applying participatory approaches. Given that the broader governance contexts were already well established, the analysis focuses on how participatory processes have been designed, implemented, and operationalised in real planning environments.

Ultimately, the study identifies key lessons learned from these experiences, including factors that influence effective stakeholder involvement and the integration of participatory results into action plans. These insights are intended to strengthen the application of SWAPs and DLabs by grounding the methodologies in concrete, site-based experiences and enhancing their relevance across diverse governance settings.

Methodology

The study is following a qualitative approach combining desk-based research and semi-structured interviews. A bibliographic review was conducted to analyse policy documents, planning instruments, project reports, and scientific and grey literature related to coastal governance, climate change adaptation, and participatory processes across the pilot sites. This review provided an overview of the institutional and policy contexts in which participatory approaches have been implemented, as well as their stated objectives and expected outcomes.

Semi-structured interviews were carried out with stakeholders involved in the design, coordination, or implementation of participatory processes at the pilot sites. A questionnaire (Annex 1) was developed to guide the interviews and ensure a shared analytical framework across sites. Interviewees were identified with the support of the pilot site teams, based on their institutional roles and direct experience with participatory processes in coastal planning and climate change adaptation. Between one and two interviews were conducted per pilot site.

The interviews were carried out in accordance with the programme's General Data Protection



Regulation (GDPR) requirements. Each interviewee signed a consent form acknowledging and agreeing to how the collected data would be used and who would have access to it. The consent form is provided in Annex 2.

For the Sardinia and Algarve Region pilot sites, the interviews were conducted by Plan Bleu in English. At the Kaštela pilot site, the interviews were conducted by PAP/RAC in Croatian, and the interview transcripts were subsequently shared with Plan Bleu in English. In Catalonia, one interview was conducted in Catalan by EcoUnion, and a second interview was conducted in English by Plan Bleu. All interviews were conducted between November and December 2025.

Both the document analysis and the interviews focused on a set of key points of attention. These included the modalities of stakeholder engagement and the range of actors involved, the level of inclusivity of participatory processes, the ways in which participatory outputs were translated into or reflected in action plans and planning documents, and the state local stakeholder awareness and understanding of climate change issues.

The cross-analysis of bibliographic sources and interview material made it possible to identify lessons learned related to the design and implementation of participatory processes in coastal governance and climate change adaptation. These lessons highlight recurrent strengths and limitations observed across the pilot sites and provide a basis to support the implementation of SWAPs and DLabs in governance contexts characterised by diverse institutional arrangements and stakeholder landscapes.

Pilot sites experience in participatory processes

Catalonia

Catalonia pilot site

Extending over 692 km, the Catalan coastline encompasses cliffs, urban and natural beaches, ports, and high-value ecosystems. Although it represents only 7% of Catalonia's territory, it concentrates more than 42% of the population and a significant share of economic activity, particularly tourism, ports, logistics, and industry. The coast is increasingly exposed to climate change impacts, including rising temperatures, coastal erosion, flooding, aquifer salinisation, and damage to critical infrastructure.

In recent years, the principles of Integrated Coastal Zone Management (ICZM) have guided new regulatory initiatives by the Government of Catalonia, including the 8/2020 Law on Coastal Protection and Planning, the Maritime Strategy of Catalonia 2030, and the updated generation of Partial Territorial Plans (PTT). Building on these frameworks, the Coastal Protection and Management Plan (PPOL) aims to strengthen coherence across territorial, maritime, and sectoral policies by improving coordination between land-based and maritime planning. It also seeks to enhance alignment with other strategic instruments and municipal urban plans to support consistent coastal management and protection. Particularly, it involves the development of spatial strategies towards climate adaptation and biodiversity protection.

Within this framework, the INCORE-MED project supports the co-development of coastal adaptation pathways for the Catalan coastline under the PPOL. From June 2025 to the end of 2026, the project transfers the Scenario Workshop with Adaptation Pathways (SWAP) methodology through targeted training and mentoring, supporting participatory and forward-looking coastal adaptation planning.

The Coastal Protection and Management Plan

The Coastal Protection and management Plan (PPOL) is the strategic planning instrument established by the Government of Catalonia under Law 8/2020 on Coastal Protection and Planning. Its purpose is to provide a coherent framework for the protection, management, and sustainable use of the Catalan coast, addressing environmental, social, economic, and climate-related challenges in an integrated manner.

The PPOL applies to the coastal strip and its interface with the marine environment, ensuring continuity between land-based planning and maritime spatial planning. It is structured around five strategic objectives:



1. Reducing natural and human-induced coastal risks, particularly in the context of climate change.
2. Restoring coastal geomorphology, ecosystems, and landscapes while ensuring public access.
3. Reconciling economic, social, and cultural activities with environmental conservation and risk reduction.
4. Improving the effectiveness, clarity, and participatory nature of coastal governance.
5. Defining a research and knowledge agenda to support long-term coastal management.

The PPOL is coordinated by the General Directorate of Coastal Planning, which leads its design, drafting and future implementation and ensures coordination across authorities and sectors, and alignment with regional strategies, including the Catalan Climate Change Adaptation Strategy 2021–2030.

A prior consultation phase of the PPOL was conducted in 2022, aimed to ensure broad stakeholder representation along the entire Catalan coastline, from Portbou to Alcanar. Around 300 individuals and entities from public administrations, the scientific and academic sector, environmental organisations, economic actors and civil society were invited, resulting in the participation of 108 stakeholders. In a post-COVID context, the process was organised through four online thematic sessions structured by stakeholder groups, a choice intended to facilitate dialogue, identify intra-sectoral synergies and manage potential conflicts in a highly contested coastal space. The pre-consultation focused on building a shared understanding of the innovative scope of the PPOL, going beyond traditional urban planning to address the land–sea interface and long-term coastal management, and on initiating a collective reflection on future coastal visions.

Catalonia governance framework on Climate change adaptation

The Catalonia Climate Change Adaptation Strategy³ (ESCACC) is the main regional planning instrument aimed at reducing vulnerability to climate change impacts, as established by the Catalan Climate Change Law. The development of both cycles of the ESCACC has been led by the Catalan Office for Climate Change (OCCC). The OCCC is the technical body of the Government of Catalonia responsible for promoting climate change mitigation and adaptation across sectoral policies, in line with European commitments. It supports public administrations through scientific expertise, climate data, future scenarios and coordinated climate action planning. The OCCC is also involved in the development of the PPOL, providing climate data, ensuring alignment with the ESCACC, and supporting the integration of adaptation pathways, including nature-based solutions

³https://canviclimatic.gencat.cat/web/.content/03_AMBITS/adaptacio/ESCACC_2021_2030/00_Memoria-ESCACC30_rev_ling.pdf

and blue carbon considerations.

Catalonia experience in participatory process

Catalonia has experience with participatory processes in the field of climate change adaptation. Several participatory initiatives have been implemented in the development of regional strategies, providing insights and lessons learned for future participatory processes.

While the first cycle of the ESCACC (2013–2020) relied mainly on a consultative approach, the second cycle (2020–2030) placed participatory processes at the core of the strategy's development. Stakeholders from different sectors and governance levels were involved throughout the process. The results of the participatory process and the supporting documentation have been made publicly available online, including reports detailing the participatory approach and its outcomes, summarised below.

The objectives of the participatory process were to:

- Inform stakeholders about climate change impacts and territorial and sectoral vulnerabilities;
- Involve stakeholders in the development of the new ESCACC30;
- Collect and discuss adaptation measures to reduce vulnerability;
- Prioritise adaptation measures for inclusion in the strategy.

Implemented entirely online due to the COVID-19 pandemic, it combined an informative phase and a structured participatory phase, mobilising several participation channels, including an online platform, expert webinars, online questionnaires and self-managed sessions organised by stakeholders.

The informative phase, lasting four months, focused on presenting climate data, vulnerabilities and the objectives and modalities of participation through the online platform and the Catalan Office for Climate Change website.

The participatory phase, conducted over two months, was organised around thematic axes, each addressed through a webinar with scientific experts presenting impacts and adaptation challenges, followed by a deliberative session combining presentations and small-group discussions to formulate and refine adaptation objectives and measures, complemented by written contributions.

A feedback phase in 2022 closed the process, with a dedicated report explaining how proposals were assessed and specifying which contributions were incorporated into ESCACC30 and which were excluded, with justification.

In total, 191 participants representing 72 entities, mainly public administrations, the private sector



and research institutions, contributed to the process, generating 610 proposals, largely focused on nature-based solutions and the integration of biodiversity into adaptation planning; following an evaluation based on scientific relevance, feasibility and policy coherence, 442 proposals were accepted or reformulated and integrated into the strategy.

Lessons learned from participatory experience in Catalonia

Based on the analysis of ESCACC documentation and interviews with process implementers and planning officer from the Directorate of Coastal Policies, several key lessons have been identified to inform the implementation of SWAP in Catalonia in the context of the PPOL:

Stakeholder engagement :

- Communication of the process

The use of multiple communication channels proved essential to reach a wide range of stakeholders. Institutional communication (newsletters, official websites), social media, and targeted outreach all played complementary roles. Social media, in particular, was effective in engaging the general public, while the identification of key individuals or institutions acting as “broadcasters” helped reach stakeholders who were less accessible through conventional channels.

- Participation and inclusivity

The process achieved strong engagement from certain stakeholder groups, notably public administrations and private sector actors. However, challenges were encountered in engaging young people, migrant communities (notably in fisheries and tourism), seasonal workers, and private coastal landowners, who remained under-represented from the process, despite targeted outreach efforts. As usual in this type of process, participation relied mainly on voluntary and unpaid engagement, often outside working hours, which created barriers to inclusion.

The early involvement of sectoral departments and multilevel governance bodies (local, regional, and state), as a dedicated working group, was a key success factor. It helped ensure that proposals were realistic, aligned with institutional mandates, and compatible with available resources and political priorities, ultimately contributing to a higher likelihood of implementation.

- Engagement tools and methods

The use of clear, visual and locally grounded climate data, such as maps, projections and concrete impact examples, improved the quality of discussions. Linking adaptation options to the economic and social costs of inaction helped shift the dialogue towards decision-making.

Continuous feedback loops, including the online publication of proposals and the possibility to

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vote on measures, further strengthened transparency, prioritisation and stakeholder ownership.

Sector-specific working groups were more effective at early stages, allowing stakeholders to build consensus within their own sectors, while mixing actors with conflicting interests too early proved counter-productive.

Effective participatory processes depend on a facilitation team that combines sectoral understanding, methodological clarity, and strong empathic skills. Facilitators should clearly frame the purpose of the process without steering outcomes, be prepared to accept results that challenge initial expectations, and ensure inclusive engagement of territorial actors. This approach strengthens trust, legitimacy, and the quality of collective decision-making, particularly in complex policy areas such as climate adaptation and territorial planning.

Outputs in local strategies :

A transparent and structured evaluation process for selecting proposals was essential to translate participation into concrete policy outputs. Clearly defined selection criteria helped manage expectations, justify decisions, and maintain credibility. Reformulating contributions rather than rejecting them outright also contributed to maintaining engagement and demonstrating that participation had a tangible impact on the final strategy.

Climate change awareness

Awareness of climate change is high among coastal professionals and public authorities, and is increasing among citizens where impacts are visible and recurrent. Beach loss, delta flooding, infrastructure damage, and repeated storm and rainfall events have made climate change a tangible reality, particularly in highly exposed areas such as the Ebro and Tordera deltas. Awareness is strongest where local authorities actively implement and communicate the benefits of adaptation measures.



Sardinia

The Sardinian pilot site

The Sardinia pilot case is implemented within the Italian Maritime Spatial Planning (MSP) framework, established under the EU MSP Directive (2014/89/EU), the EU Strategy on Climate Change Adaptation, the European Green Deal, and the Italian national MSP legislation (Legislative Decree 201/2016 and Ministerial Decree 237/2024).

The pilot builds on the outcomes of the REGINA-MSP⁴ project (2022–2024, EMFAF), which supported stakeholder engagement and capacity building in the MSP process at regional level. Sardinia presents a context characterised by multiple and competing maritime uses, including fisheries, aquaculture, tourism, shipping and ports, combined with the presence of an extensive system of protected areas (MPAs, Natura2000 sites, Regional and National Parks) and exposure to climate pressures such as rising sea temperatures and ocean acidification.

Within the INCORE-MED project, the pilot addresses the identified gap in integrating climate adaptation within the Italian MSP framework. Using the SWAP methodology, the pilot focuses on Northeast Sardinia, and aims to support institutionalised participatory processes to better link climate science, local knowledge, and spatial planning. The objective is to co-develop shared, knowledge-based spatial and governance solutions to address climate risks and to co-design adaptation pathways that can inform the implementation of existing MSP measures and the definition of new measures to be integrated into the next MSP planning cycle.

Although MSP follows a formal ten-year planning cycle, several entry points exist for integrating project outcomes. The Sardinia Region participates in technical coordination tables related to MSP implementation and contributes to monitoring activities. These mechanisms provide opportunities to incorporate the project results into implementation practices and strategic updates. Sardinia's role as a project partner further strengthens legitimacy and facilitates the uptake of results beyond formal MSP revision cycles.

MSP plan in Sardinia

The Italian Maritime Spatial Planning (MSP)⁵⁶ process was developed within the framework of the

⁴ <https://www.regina-msp.eu/>

⁵ Carella, F., De Martino, P., Soffietti, F., Negretto, V., & Musco, F. (2024). The spatial and governance dilemma of small and medium-sized Italian ports (SMPs): Maritime spatial planning (MSP) as a potential response. *Water*, 16(2), 251.

⁶ Ramieri, E., Bocci, M., Brigolin, D., Campostrini, P., Carella, F., Fadini, A., ... & Barbanti, A. (2024). Designing and implementing a multi-scalar approach to Maritime Spatial Planning: The case study of Italy. *Marine Policy*, 159, 105911.

EU MSP Directive, under the responsibility of the Ministry of Infrastructure and Transport, the competent authority for the elaboration and adoption (September 2024) of the three plans, one for each maritime areas: the Adriatic Sea; the Ionian and Central Mediterranean Sea; and the Tyrrhenian and Western Mediterranean Sea, the latter encompassing Sardinia.

The process involved all the ministries with competencies in the marine domains, 15 coastal regions and was also supported by a scientific coordination team involving IUAV University of Venice, CORILA (Consortium for Research in the Lagoon of Venice), and the National Research Council - Institutes of Marine Research (CNR-ISMAR).

The MSP framework for Sardinia identifies 40 planning units as the main spatial elements of the plan and defines 39 management measures addressing spatial regulation, monitoring, and governance, including around 15 measures implicitly or explicitly linked to climate-related risks.

Experience of participatory processes in Sardinia

To gather feedback and experience on past participatory and consultation processes, an interview was conducted with IUAV University of Venice' specialist in Marine Spatial Planning as contributor to the Regina MSP project, as well as review of the REGINA MSP project documentations.

The consultation process within the MSP Framework

No formal participatory process was implemented during the drafting of the Italian Maritime Spatial Plans (MSP). However, two formal public consultations were carried out in parallel over a 45 day period (mid September – End October 2023): the public consultation on the MSP plans, coordinated by the Ministry of Infrastructure and Transport (MIT), and the public consultation on the Strategic Environmental Assessment (SEA), led by the Ministry of Environment and Energy Security (MASE).

The consultations aimed to disseminate the draft plans, verify and update the underlying data, collect comments and critical observations, assess planning choices, and ensure transparency and public information. This process enabled the integration of updated inputs into plans whose initial components had, in some cases, been developed several years earlier. Feedback was provided by public authorities, environmental NGOs such as WWF Italy, technical agencies, regional environmental protection agencies (ARPA), and fisheries and aquaculture associations.

The consultation process took place mainly at national and regional level and at a late stage of plan development. As a result, the integration of local knowledge, place-based expertise, and community perspectives remained limited. Participation at local levels was not institutionalised and mainly depended on project-based opportunities, such as the REGINA MSP project. Despite the inclusion of a dedicated climate change chapter in the MSP plans, climate adaptation and mitigation measures were only weakly translated into spatial planning decisions.



Participatory Experience from the REGINA-MSP Project

The REGINA-MSP⁷ project aimed to strengthen the participation of regions, local authorities, and stakeholders in the development and implementation of national Maritime Spatial Planning in 8 regions from 5 countries.

In Northern Sardinia, the participatory process implemented under the REGINA-MSP project followed different steps⁸: two workshops (in presence) were organised, bringing together regional authorities, municipal representatives, protected area managers, port authorities, researchers, NGOs, and economic actors from fisheries, aquaculture, tourism, and nautical activities. Participants were invited to identify and discuss interactions, conflicts, and synergies among marine uses, express local needs and priorities. The sessions combined introductory presentations with interactive round-table discussions supported by maps and visual tools.

Following the workshops, bilateral interviews were conducted with specific stakeholders. These interviews allowed to address in depth issues such as conflicts, synergies and needs, and supported the inclusion of under-represented stakeholder perspectives. The outcome of the workshops, together with the interviews led to the drafting of targeted solutions.

A final joint participatory workshop was held remotely and focused on the collective validation and prioritisation of identified actions. Participants reviewed proposed MSP measures, provided feedback through facilitated discussions and interactive tools (such as Mentimeter surveys), and contributed to refining and ranking actions based on feasibility and local relevance.

This participatory process resulted in the identification of five actions addressing specific local needs and feeding into the next Italian MSP cycle. These co-designed actions include: (i) advancing the strategic objective of establishing a cross-border UNESCO MAB Reserve in the Strait of Bonifacio; (ii) strengthening the knowledge base through the collection of data on boating activities and their environmental impacts in the La Maddalena archipelago; (iii) reducing spatial conflicts between artisanal fisheries, maritime transport and biodiversity conservation through the establishment of a Traffic Separation Scheme in the Gulf of Asinara; (iv) addressing governance challenges through the creation of dedicated coordination mechanisms, namely a Nautical-Port Table in the La Maddalena archipelago; and (v) a permanent technical forum for shellfish farming in the Gulf of Olbia.

⁷ Gutiérrez-Ruiz, E., Cervera-Núñez, C., Campillos-Llanos, M. (Eds.) et al 2024. Regional specificities. Results of the regional workshops and other discussion initiatives. REGINA-MSP project, European Climate, Infrastructure and Environment Executive Agency.

⁸ Didonna, R., Carella, F., Brigolin, D., et al., 2024. Regional actions for MSP. Fostering MSP implementation from regional needs. REGINA-MSP project, European Climate, Infrastructure and Environment Executive Agency.

Lessons learned

Based on REGINA MSP experience, several lessons learned can be drawn to be integrated in the implementation of SWAP in Sardinia:

Stakeholder mapping is key to an effective and inclusive participatory process. Early compilation and validation of regional stakeholder lists, combined with systematic stakeholder analysis tools (e.g. databases, ranking exercises, interest-influence matrices), help clarify levels of power, interest, and representation across actor groups. Based on this process, REGINA-MSP identified seven overarching categories of stakeholders to be involved in regional MSP processes⁹.



Figure 2. MSP Stakeholder groups from a regional perspective, Source: (REGINA-MSP 2022–2024).

Targeted engagement strategy for better inclusivity and legitimacy: specific attention to under-represented stakeholders enables the identification of barriers to participation and the design of targeted engagement strategies. Fishers, the general public and local authorities were identified as among the least-heard stakeholders in MSP. Despite their deep local knowledge, fishers are often underrepresented, while citizens and local communities remain mostly excluded beyond formal consultation mechanisms. Municipal administrations and port authorities were identified as particularly difficult to engage, often due to institutional fragmentation, unclear mandates, or reluctance to engage in potentially conflictual discussions.

Maintaining stakeholder engagement through the combination of collective workshops, bilateral interviews, and constant feedback loops. Bilateral exchanges can help maintain continuity and engagement when stakeholders are unable to attend collective sessions and ensure that all perspectives are retained throughout the process. The circulation of intermediate outputs (e.g. summaries of interactions, portfolios of proposed solutions) further supports continuity by

⁹ Papageorgiou, M.; Pozoukidou, G.; Istorlou, T.; Kostopoulou, T. Inclusive Maritime Spatial Planning: Stakes at the Regional Level. *Sustainability* 2024, 16, 10148. <https://doi.org/10.3390/su162210148>



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enabling participants to reconnect with the process even after periods of absence.

Stakeholder awareness of climate change varied across sectors. Actors such as aquaculture operators, already experiencing impacts related to temperature increase and sea-level rise, have a higher awareness of climate-related challenges, though these impacts were not always explicitly linked to climate change drivers. Fostering a shared understanding of climate-related pressures and responses by balancing local-scale experiential knowledge with scientific insights is necessary, although communicating scientific climate information in a way that remains both accurate and accessible is identified as a challenge.

Algarve

Algarve pilot site

The Algarve pilot site is located within the Ria Formosa Natural Park, a low-lying coastal lagoon system protected by sandy barrier islands that act as a natural buffer against marine dynamics and protect adjacent urban areas. The site combines high ecological value, particularly its lagoon and seagrass habitats supporting fisheries, blue carbon storage and local livelihoods, with a complex social-ecological context shaped by fishing communities, intense seasonal tourism and overlapping uses. These ecosystems are increasingly pressured by marine pollution, unregulated anchoring and waste management challenges, and are highly vulnerable to climate change impacts such as sea-level rise and coastal erosion.

In this context, the pilot will implement Democracy Labs to co-develop, with citizens, local stakeholders and public authorities, concrete measures for climate adaptation and mitigation, ecosystem protection and sustainable resource use. The process will address use-related conflicts and translate local knowledge into actionable inputs for Integrated Coastal Zone Management and Maritime Spatial Planning, feeding into regional climate planning processes led by Algarve Municipality Association (AMAL and the Algarve Regional Development and Coordination Commission (CCDR)), while building on existing community engagement dynamics, notably in Culatra.

Governance framework related to Climate Change Adaptation

In the Algarve region, several climate change adaptation governance frameworks are relevant for the development of the pilot action plan.

At national level, the National Strategy for Adaptation to Climate Change¹⁰ (ENAAAC 2020), extended until December 2025, provides the overarching framework. It defines sectoral adaptation objectives and aims to mainstream climate adaptation into sectoral policies and territorial planning instruments. Its implementation is coordinated by the Portuguese Environment Agency (APA) through sectoral and thematic working groups. In particular, the thematic area on integrating adaptation into land-use planning is highly relevant for the project.

At regional level, ENAAAC served as the basis for the Intermunicipal Climate Change Adaptation Plan of the Algarve (PIAAC-AMAL¹¹). Developed through a transdisciplinary process involving nearly 200 stakeholders, the plan includes a comprehensive climate impact and vulnerability

¹⁰ [Plano Nacional Energia e Clima](#)

¹¹ Dias, L. F., & Santos, F. D. (Coords.). (2019). *Plano intermunicipal de adaptação às alterações climáticas da CI-AMAL (PIAAC-AMAL)*. Faro.
https://www.climaaa.com/files/ugd/14d34d_1110d4c1943147c59af94682ec7093b0.pdf



assessment up to 2100 and proposes around 100 adaptation measures to enhance regional climate resilience.¹²

At local level, Municipal Climate Action Plans (PMAC)¹³ translate adaptation objectives into concrete measures. Developed in line with the Climate Framework Law, they emphasise participatory approaches, often involving citizens through focus groups. In Tavira, for example, the PMAC includes 16 measures and 85 priority actions and is supported by a Municipal Council for Citizenship and Climate Action, which fosters dialogue and monitors municipal climate policies.

Experience with Participatory Processes in Algarve

Multiple participatory processes have taken place in the Algarve region. Two case studies that are relevant for the action plan that will be developed for Ria Formosa in the frame of the INCORE-MED project are presented below, the Intermunicipal Climate Change Adaptation Plan of the Algarve (PIAAC-AMAL) and the Co-Design of a new marine protected area (MPA).

Intermunicipal Climate Change Adaptation Plan of the Algarve (PIAAC-AMAL)

The PIAAC-AMAL was developed through an extensive participatory process involving municipal technical staff from all CI-AMAL municipalities, working in close collaboration with decision-makers at national, regional and municipal levels, as well as a broad range of local stakeholders (businesses, local development actors, environmental organisations and civil society representatives).

Following a preparatory phase dedicated to stakeholder mapping and the identification of adaptation barriers and opportunities through a municipal survey, the process was structured around three main workshops.

The first workshop (November 2017) aimed to build a shared understanding of current and future climate risks and to validate vulnerability assessments using a World Café format, complemented by two open stakeholder consultations. The second workshop (July 2018) focused on the development of scenarios and adaptation pathways, drawing on SSP and RCP narratives to define sectoral adaptation objectives. The third workshop led to the selection of the most viable adaptation pathway and its operationalisation, including the identification of thresholds and decision points.

Finally, all outputs from workshops, stakeholder consultations, scientific modelling and literature

¹² The 100 adaptation measures can be retrieved here: <https://www.algarveadapta.pt/en/piaac-amal-adaptation-measures/>

¹³ The municipalities Loulé and Tavira have already adopted their Municipal Action Plans (PMAC): <https://www.theportugalnews.com/news/2025-07-08/2nd-algarve-council-approves-municipal-climate-action-plan/99189>

review were consolidated by the technical team into the PIAAC-AMAL.

Co-Design of a new marine protected area (MPA)¹⁴

The participatory process leading to the creation of the MPA was a bottom-up initiative initiated by local stakeholders and structured around a series of workshops. Following an initial phase of stakeholder mapping and the definition of guiding principles, the process allowed for iterative refinement of proposals while remaining aligned with the original objectives. Although participation fluctuated over time, all stakeholder categories were represented throughout the process, and continuous updates ensured collective ownership of decisions.

Between May and October 2019, three multi-stakeholder workshops progressively developed and refined zoning proposals, complemented by targeted follow-up meetings. Conflicts emerged, particularly regarding potential economic losses linked to access restrictions, leading to temporary deadlocks. These were addressed through additional bilateral consultations and the development of a compensation scheme for fishers based on official catch and revenue data.

After more than 50 engagement meetings, the final zoning proposal was presented in February 2021, supported by the majority of stakeholders and submitted to the Portuguese government. Over time, the benefits of the co-designed MPA became evident, with increased stakeholder support, fisher involvement in research activities, new opportunities for sustainable tourism, and scientific evidence reinforcing the ecological legitimacy of the protected area.¹⁵

Lessons learned from the participatory process

The following section highlights key lessons learned from past participatory processes in the Algarve region.

Stakeholder Engagement

The stakeholder landscape in Algarve is very diverse and consists of fisheries, tourism operators, municipalities, universities, businesses, administrative bodies, agriculture, etc. and enables vivid exchange through the region's manageable size and existing networks. Key lessons learned when it comes to stakeholder engagement are the following:

Existing networks matter for communication. Due to the relatively small scale of the region, a well-connected stakeholder network already exists. This facilitated especially the communication and recruitment of stakeholders. For example, hard-to-reach stakeholders such as fishers are

¹⁴ To learn more about the co-design of the new marine protected areas (AMPIC-COM project), consult the website here: <https://ampiccomprojeto.pt/projeto/>

¹⁵ More lessons learned for this specific case can be found here: Horta e Costa, B., Guimarães, M. H., Rangel, M., Ressurreição, A., Monteiro, P., Oliveira, F., ... & Gonçalves, J. M. (2022). Co-design of a marine protected area zoning and the lessons learned from it. *Frontiers in Marine Science*, 9, 969234.



often known and sometimes require in-person meetings.

Repeated interaction builds trust. The continuous contact, meetings and communication between stakeholders help to build trust and shift perceptions. In addition, a kind of local culture of participation and trust has been established that facilitates continued attendance throughout a long-term participation process.

Integrate diverse and cross-sectoral stakeholders from the start. In the PIAAC-AMAL process, as well as in the MPA creation¹⁶, it has proved useful to form working groups and integrate diverse stakeholders at the start to create a common problem understanding, define shared goals and prevent blockage at a later stage.

Conflict resolution

Conflicts often appear in participatory processes and have also been encountered in the past in the Algarve region. Using the right facilitation method for high conflict topics, has been identified to be useful to address these conflicts. In the different case studies, structured facilitation methods have shown to be useful to reduce the conflict potential. Methods like the World Café, structured scenario and adaptation pathways workshops, could help reduce conflicts when compared to open and unstructured consultations. In the MPA case, it was decided to conduct over 50 bilateral dialogues with specific stakeholders between two workshops as some stakeholder groups were disagreeing with the proposal at that time and blocked the process twice. These bilateral meetings contributed to the final acceptance by the majority of participants of the final proposal. In addition, capacity-building and data driven discussions are essential for meaningful participation. The combination of informative presentations with discussions and more participatory methods during the workshops of the PIAAC-AMAL process, were useful to gain informed inputs from the stakeholders that are based on a common understanding of the current state and problems in the region. Moreover, in the MPA case scientific data and economic records were vital to show long-term benefits, gain public legitimacy and solve conflicts.

Outputs in Local Strategies / Influence on Decisions

When it comes to the integration of outputs from participatory processes transparency has been identified as being the most crucial criteria. In the example of Algarve 2030, stakeholder proposals were integrated when “considered reasonable” and elements that were not integrated were justified. Synthesizing ideas and managing expectations was seen as the biggest challenge of the process. Developing specific selection protocols or criterias can support transparency towards participants, prevent conflict, manage expectations and facilitate the process.

¹⁶ [Rangel, M. et al \(2025\). Co-designing a community-based Marine Protected Area of Community Interest in south Portugal. *Energy Policy*. Elsevier](#)

Stakeholders awareness to climate change

Most stakeholders in Ria Formosa are well aware of climate change in general. However, an important lesson learned is the need to make climate change more concrete and show tangible local impacts to drive ownership. Participation should be based on a clearly defined problem or local climate change impact so that the participants can appropriate the problem and fully engage in the co-design of solutions.



City of Kaštela

Kaštela Pilot Site

The City of Kaštela is located in central Split-Dalmatia County. The area covers approximately 57 km² and includes more than 20 km of coastline, making it one of the longest coastal cities in the county.

Kaštela has experienced sustained population growth, construction activity, and tourism development, mainly linked to private accommodation and nautical uses. These dynamics have increased pressure on coastal land, infrastructure, and public spaces, while limiting the spatial capacity for further development.

Observed and projected climate trends in the Kaštela area include rising air temperatures, more frequent heatwaves, reduced total precipitation, and increased rainfall concentration over short periods. These trends contribute to higher flood risks, particularly in urban and peri-urban areas. Urbanisation and soil sealing have altered surface and groundwater runoff processes, reducing drainage capacity and increasing exposure to flash floods and erosion. Sea-level rise further affects low-lying coastal zones where residential areas, transport infrastructure, public spaces, and cultural heritage assets are concentrated.

Within INCORE-MED, Kaštela implements Democratic Labs (D-Labs) to structure citizen participation, stakeholder engagement, and the co-design of adaptation measures, focusing on :

- flood risks linked to torrential streams;
- stormwater drainage in urban areas;
- sea-level rise and coastal flooding.

The pilot is coordinated by the Regional Development Agency of Split-Dalmatia County (RERA) and builds on existing planning instruments developed at local, county, and river-basin levels, including the Integrated Coastal Zone Management Plan for the City of Kaštela (2019), the Coastal Plan for Split-Dalmatia County (2021), and the Climate Change Adaptation Plan for the Jadro River (2021). These documents identify climate risks and adaptation measures but face implementation constraints due to fragmented responsibilities, limited administrative capacity, and weak cross-sectoral coordination. Participatory practices remain largely confined to formal consultation procedures.

Coastal planning framework in Kaštela

Governance of the coastal planning at local level

As a local self-government unit within Split–Dalmatia County, Kaštela operates within a multi-level governance framework defined by national legislation on spatial planning, environmental protection, and the management of the maritime public domain. Any coastal intervention, whether related to construction, concessions, or shoreline modification, requires approval through several administrative levels, starting at the county level and extending to the competent national ministries, often accompanied by an environmental impact assessment.

At the municipal level, responsibilities are divided between two main administrative departments. The Department for Spatial Planning and Urbanism prepares and adopts spatial acts that frame local land-use decisions, while the newly reorganized Department for Construction and Public Areas oversees the drafting and execution of the maritime public domain management plan. This plan defines concession zones, permissible activities, and control mechanisms. A recent administrative reorganisation aims to improve coordination between departments and clarify competencies within local governance structures.

Coastal Zone Management Plan

The Coastal Zone Management Plan was developed as a pilot activity under the CO-EVOLVE project (Interreg MED) to support the preparation of an action plan based on Integrated Coastal Zone Management and Maritime Spatial Planning (ICZM/MSP). The initiative is aligned with the ICZM Protocol, Directive 2014/89/EU on maritime spatial planning, and UNEP/MAP - PAP/RAC guidance on sustainable coastal tourism.

The city of Kaštela was selected due to its high exposure to climate change impacts, considering its population size and density, approximately 18 km of coastline, and terrain configuration. The plan builds on earlier efforts undertaken during the EU pre-accession period, when the Coast GAP project produced the first city-level coastal management guidelines. This continuity was further strengthened through the Change We Care project, which developed a Coastal Infrastructure Cadastre for the wider Kaštela Bay area. This inventory documents coastal structures and their characteristics (e.g., elevation, materials, function), alongside a database of flood-vulnerable infrastructure, GIS datasets, and standardised protection solutions adapted to different coastal types, in collaboration with neighbouring municipalities.

The Plan defines priorities, measures, and actions addressing coastal resilience, infrastructure, and spatial development. Measures include the delimitation of the maritime public domain and the reinforcement of coastal and urban areas against climate change impacts through a combination of grey and nature-based solutions.

The Coastal Zone Management Plan was developed through collaboration between RERA S.D., the



Faculty of Civil Engineering, Architecture and Geodesy of the University of Split, the City of Kaštela, and the Kaštela Tourist Board, with contributions from PAP/RAC. The process combined scientific expertise, existing strategic documents, and stakeholder participation.

The main governance challenge is the enforcement of planning regulations over time. While spatial plans include requirements related to land use and green space, compliance is often limited to the permitting phase, with weak monitoring and enforcement after construction. This gap in law enforcement reduces the effectiveness of planning provisions and contributes to increased vulnerability to climate-related impacts, particularly in areas with intense development.

Climate Change Adaptation Plan for Jadro River and Kaštela Bay Area¹⁷

Within the framework of the “Change we care” project, three thematic participatory workshops were held with stakeholders as a basis for the development of an Adaptation Plan for the pilot area of the Jadro River and the Kaštela Bay. This achieved a more comprehensive overview of the problems and needs in this area, which is vital because it is a source of drinking water for approximately 300 000 inhabitants. Participatory workshops were held with stakeholders from the city of Solin, the city of Kaštela, and the municipality of Klis. The Climate Change Adaptation Plan for the Jadro River and the Kaštela Bay area was developed as the main result of the project for the Split-Dalmatia County. The plan proposes measures and activities aimed at preserving and improving the state of water and the natural environment, and strengthening the resilience of built-up areas to climate change.

Experience of participatory processes in Kaštela

Several participatory processes have been implemented in Kaštela on coastal planning and climate change adaptation.

Coastal zone management plan participatory process

The Coastal zone management plan, building on ICZM framework, followed a participatory approach initiated at the early stages of the project to ensure integration of local knowledge into the planning process and strengthened stakeholder ownership. Stakeholder identification and analysis were therefore carried out during the project establishment phase, accompanied by the development of a dedicated communication strategy. The planning process was structured into three phases, analysis, definition of measures, and monitoring, with stakeholder feedback incorporated at each stage and aligned with expert inputs.

Stakeholders were classified as primary and secondary according to their level and type of involvement. Primary stakeholders included local residents and economic actors operating in the

¹⁷ <https://www.portal.hr/en/novosti/aktualnosti/59601-zeleni-plan-za-podrucje-jadra-i-kastelanskog-zaljeva>

Kaštela area, while secondary stakeholders comprised public authorities, policymakers, and local experts responsible for managing the coastal zone. Initially around 60 stakeholders were identified, through among others things the local press (as part of the external communication strategy), additionally stakeholders got interested in the process and joined later during the workshops.

The participatory process was structured around four thematic workshops, complemented by public meetings and presentations. Workshop themes addressed climate change impacts and the natural environment, coastal flooding and heritage protection, sustainable tourism development, and spatial planning supported by GIS-based vulnerability analysis.

Each workshop combined expert inputs from an interdisciplinary team, including among others sociologist, coastal engineers, tourism and cultural heritage experts, landscape architects and climate change experts, with facilitated discussions and stakeholder feedback. Stakeholders were not required to prepare in advance; participation was based on attendance, discussion, and written inputs collected through questionnaires. Workshop outputs were synthesised in reports and selectively integrated into the final Plan. In parallel, continuous consultations were conducted beyond the workshops activities, including mail exchange, calls and focus group meetings.

Overall, this process can be characterised as an enhanced consultative approach with certain co-creation elements. Several stakeholder proposals were integrated as specific adaptation measures and spatial guidelines in the final plan. However, stakeholders primarily provided feedback and comments on proposed measures rather than actively co-developing them throughout the process.

Participatory process to develop climate adaption plan

The Kaštela pilot also benefits from regional experience developed through the AdriaClim project (Interreg Italy Croatia), which aimed to strengthen climate resilience by improving capacities to develop and update climate adaptation plans based on robust climate data, with a focus on coastal and marine areas.

Within the AdriaClim project¹⁸, participatory processes were designed and implemented to support the development of climate adaptation actions for coastal areas exposed to erosion, flooding, and other climate-related risks, including Kaštela Bay and the wider Split-Dalmatia County. Participation was conceived as an integral component of the adaptation planning process, aimed at linking scientific knowledge, institutional responsibilities, and local experience.

The process followed a phased methodology implemented over approximately one year, including

¹⁸<https://programming14-20.italy-croatia.eu/documents/2134091/0/D2.2.8.+Infographics.pdf/2fbc1a04-959b-0831-105f-416afd1df159?t=1691670365133>



a preparatory phase with context analysis and stakeholder mapping, stakeholder meetings, and a closing session linked to the draft adaptation plan.

The process resulted in the development of guidelines for improving the management of the marine environment and coastal areas of Split-Dalmatia County, with specific attention to beach erosion. However, limited publicly available information exists on how participatory inputs were translated into the final adaptation strategy.

Lessons learned from participatory experience in Kaštela

Based on past project experience, literature analysis, and interviews conducted with the Director of the Kaštela Development Agency and the Head of the EU Funds Section, as well as the Head of the Department for Regional Development and Strategic Planning at the Regional Development Agency of Split-Dalmatia County, who has extensive experience in implementing participatory processes, several lessons learned have been identified to inform the implementation of D-Labs in Kaštela:

Stakeholder identification and participation

Stakeholder mapping is necessary to identify institutions and actors with formal responsibilities, technical expertise, or decision-making abilities. However, experience shows that opening participation to the wider public can add value. Workshops involving students, residents living near project sites, or non-specialist participants generated perspectives that would not have emerged through expert-only formats.

Stakeholders with the most relevant expertise or institutional roles often face time constraints linked to their professional responsibilities. As a result, participatory events may attract participants who are motivated but not directly connected to the topic, while key stakeholders can remain underrepresented. All relevant institutions for cross-cutting topics must be involved to make sure that the propositions and measures are aligned with existing implemented local plans, such as the spatial plans, and to ensure synergies.

Stakeholder fatigue is a potential issue in Kaštela where multiple projects address similar themes and mobilise the same groups, leading to a sense of saturation and the perception that input has already been given without resulting change.

Factors of continuous stakeholder engagement

Participation increases when stakeholders perceive a clear link between the topic discussed and their own interests and responsibilities. Participants need to understand why their involvement matters. Simple incentives and informal elements, such as shared meals, help increase attendance. Furthermore, the timing of activities (morning for institutions, evenings for residents), the duration of sessions, and the use of online formats for the younger population can significantly

influence the participation. However, long-term engagement depends on participants recognising that their views are taken into account.

Communication channels and outreach methods

Formal communication channels, such as official online portals, is the main method for reaching stakeholders, but they should be completed with direct outreach through personal networks, local associations, NGOs, and sectoral organisations to mobilise specific groups. Moreover, local and regional media outlets were essential to reach the general public.

Design of participatory formats

Less structured formats, such as open discussions or focus groups, allow participants to express their views more freely and contribute knowledge based on experience rather than technical expertise. Highly structured questionnaires or overly technical formats tend to limit engagement and reduce the range of responses, particularly for non-expert participants. Workshops that allow participants to talk openly have produced more diverse and sometimes unexpected ideas.

Creative and interactive formats, such as quizzes or informal events linked to cultural venues, have proven effective in attracting participants who might not attend conventional workshops. Digital formats were identified to be useful to engage younger participants. To conclude, diverse formats can serve as entry points for engagement, allowing participants to assess their interest before committing to further involvement. To increase effective participation, participatory formats should be designed and tailored to address the needs and capacities of different stakeholder groups.

Facilitation

Facilitation by locally known and project-involved individuals fosters trust and more direct exchanges. Participants are more willing to speak openly when moderators are perceived as part of the local context rather than external facilitators. For specialised topics, technical expertise remains important, but facilitators also need to be accessible and recognised as legitimate by participants. In addition, facilitation requires adjusting communication to groups with different levels of technical understanding. Presentations and discussions need to be accessible and clearly explained to ensure that all participants can contribute meaningfully. Since stakeholder groups often hold divergent interests - particularly between environmental, tourism and urban development sectors - effective facilitation also involves managing differing viewpoints and guiding constructive dialogue.

Climate change awareness

Climate change is often perceived as abstract until it manifests through direct impacts such as flooding or damage to property. Even then, impacts are not always associated with climate change



drivers. Awareness increases when issues are framed in relation to concrete local effects and everyday practices. Different stakeholder groups respond to different framings, which requires tailored communication approaches. In addition, the need for continuous education and long-term awareness-raising efforts was stressed.

Conclusions

The analysis of past and ongoing participatory processes across the four INCORE-MED pilot sites confirms the central role of participation in addressing coastal governance issues and climate change adaptation challenges. While institutional settings, thematic priorities and levels of experience with participation differ across sites, a set of recurrent lessons emerges. These lessons provide guidance for the design, implementation and transfer of participatory approaches in coastal and marine planning.

Cross-cutting lessons from participatory processes

Across all pilot sites, **early stakeholder identification and involvement** is a key condition for effective participation. Stakeholder mapping at the outset of the process, combined with a clear understanding of roles, mandates and interests, supports representativeness and helps anticipate potential conflicts. Participatory processes that integrated the wider public, under-represented or so-called 'hard-to-reach' stakeholders, signaled benefits through a diverse set of perspectives and ideas. Under-represented groups such as fishers were found to often require targeted engagement strategies and/or bilateral meetings. Furthermore, continuous engagement over time contributes to trust-building.

Clarity throughout the process is also essential. Participants need to understand the objectives, purpose, scope and limits of participation, including how decisions are made and how their contributions will be used. Moreover, the process should be **locally grounded** and link the process to participants' own interest. Often **locally-known facilitators** and experts were recommended to be integrated in order to support the creation of ownership of the process. The design of participatory formats and the **quality of facilitation** strongly influence outcomes. Structured approaches help frame discussions and limit conflict escalation, while flexibility allows adaptation to stakeholder diversity and evolving dynamics. Facilitation requires methodological competence, sectoral understanding and neutrality to support dialogue, particularly in contexts marked by competing interests and contested uses of coastal and marine space.

Another shared lesson concerns the **articulation between scientific knowledge and local experience**. Participatory processes function best when stakeholders share a common

understanding of climate risks and environmental pressures. This requires accessible, locally relevant data supported by maps, scenarios and concrete examples of impacts. At the same time, local experiential knowledge improves the relevance and feasibility of proposed measures and complements scientific assessments.

Transparency and structured feedback mechanisms, explaining which proposals are retained, modified or excluded and on what basis, are necessary to manage expectations and sustain engagement. Where such feedback is absent, frustration and disengagement tend to increase.

Context-specific lessons and the need for adaptation

Beyond these shared lessons, the pilot experiences show that **participatory approaches must be adapted to local contexts**. In areas with established participatory practices and dense stakeholder networks, such as Catalonia or the Algarve, challenges relate to inclusion of under-represented groups, stakeholder fatigue and the integration of participatory outputs into formal planning cycles. In contexts characterised by more formal or consultative governance traditions, such as Sardinia or Kaštela, participation remains limited at local level and often occurs late in the planning process, which reduces its influence on decisions.

Approaches to conflict management also depend on local conditions. In some cases, structured multi-stakeholder workshops support dialogue and convergence. In others, conflicts linked to access, economic impacts or resource use require bilateral exchanges, compensation mechanisms or extended negotiation phases. Communication and outreach strategies must also reflect local realities, combining institutional channels with informal networks and targeted formats to reach groups that are often absent from standard participatory processes.

These findings show that participatory methodologies cannot be applied as fixed models. They need to function as adaptable frameworks that respond to governance structures, stakeholder landscapes and the nature of coastal and climate-related challenges.

Feeding adoption pathways for replication and upscaling

Together, these lessons learned, combined with the concrete experience gained through the pilot sites, will support the final outputs of the INCORE-MED project. They will feed the development of adoption pathways intended to support other coastal territories in replicating and adapting the participatory methodologies tested within the project, in particular SWAPs and DLABs, reaching both EU and non-EU stakeholders as part of the Barcelona Convention system and other regional initiatives - EUSAIR, Westmed, UNESCO MSP.



Annexes

Annex 1 – Semi structured questionnaire for interviews

Preliminary study of ICZM and MSP Governance Frameworks in the pilot sites

Objective of the interview :

The purpose of this interview is to collect information and experiences from Pilots regarding their **participatory governance processes, experiences and lessons learned**, as well as the integration of climate change adaptation measures in local maritime and coastal strategies.

It will feed Act 1.4. report on the Governance Conditions and Models for Successful ICZM and MSP Participation.

Guiding questions

1. Stakeholder Engagement

- How are stakeholders involved in Coastal, Maritime or Climate adaptation planning or decision-making?
- Which groups of stakeholders participate, and how are they identified?
- Which participatory methods or tools are commonly used (e.g., workshops, working groups, surveys, mapping exercises)?
- How frequently are stakeholders engaged throughout the process?
- How are stakeholders informed about the objectives, progress, and outcomes of the process?
- How would you describe the engagement of stakeholders throughout the process ?
- What are the main challenges encountered in implementing participatory processes? What are the main lessons ?

2. Inclusiveness

- Which groups of stakeholders participate, and how are they identified?
- Are any stakeholder groups underrepresented or difficult to involve? If so, why?
- Are there specific measures or approaches in place to ensure inclusion of marginalized or less active groups?
- Based on your experience, how could you improve inclusivity?

2.. Outputs in Local Strategies / Influence on Decisions

- In what ways are contributions or participation from stakeholders incorporated into local strategies, planning processes, or measures, and how does this input take shape across different levels?
- Can you provide examples of decisions, recommendations, or projects that were shaped by stakeholder contributions?
- Are there stakeholders' conflicts of interest affecting decision making?

3. Climate Change Adaptation Measures in local maritime and coastal strategies

- How would you assess the level of stakeholders' awareness regarding climate change?
- To what extent are these measures discussed or co-developed with stakeholders?
- Are climate change adaptation measures sufficiently integrated in local maritime and coastal strategies? If so, could you give some examples? If not, what are barriers to the integration of these measures and how could these be overcome?



Annex 2 – Consent form used

INFORMATION OF INTERESTED PARTY

Project Name: INCORE-MED Project

Lead Partner:

Project Coordinator:

Data Protection Officer (DPO):

Project partners responsible for this activity:

Contact person for this activity:

Introduction to the project

This is the INCORE-MED project: Inclusive Coastal Resilience in the Euro Med. The project is funded by the Interreg Euro-Med program.

INCORE-MED brings citizens back into the heart of coastal planning. In Catalonia (SP), Kaštela (HR), Ria Formosa Natural Park (Algarve, PT) and Sardinia (IT), the project tests participatory planning methods and produces guidelines about their transferring and implementation in diverse planning and governance contexts of coastal and maritime areas such as Integrated Coastal Zone Management (ICZM), Maritime Spatial Planning (MSP), Climate Adaptation Strategies and Nature Conservation.

Through our applied research activities we engage with communities, public institutional, experts and social/economic stakeholders, to gain a precise understanding of the implementation of participatory planning approaches applied to coastal and maritime adaptation process and nature conservation solutions to prevent climate risks and reinforce inclusive coastal resilience.

This engagement will be, among others, through one-on-one interviews, discussion groups and participant and non-participant observation.

We are talking to people to know their opinions and experiences regarding coastal and maritime planning process and governance in the context of ICZM, MSP, Climate Adaptation and Nature Conservation in four pilot areas: Catalonia (SP), Kaštela (HR), Ria Formosa Natural Park (Algarve, PT) and Sardinia (IT).

The interview session will last from 60 to 120 minutes.

Your participation in this study is voluntary. You may ask the researcher any questions and/or refuse to continue at any point.

We would like you to answer interview questions about your experience and views on coastal & maritime planning & governance in (pilot site). We expect that your collective expertise, viewpoints, and responses to each other will enrich the insights gathered.

For what purposes is the data processed?

Your personal data are collected and processed only for the research purposes of the INCORE-MED project, which aims to test participatory planning methods and produce guidelines for inclusive and resilient coastal and maritime governance. The data are used to analyze participants' experiences, opinions, and insights on topics such as coastal and maritime planning, climate adaptation, and nature conservation. The results will contribute to the project's implementation, ensuring that your identity remains confidential at all times.

Your participation is voluntary, and we process your data with your consent

You don't have to participate in the study if you don't want to. By participating we will process your personal data because you have given us your consent. Even if you agree now, you can change your mind at any time and withdraw your consent.

We must inform you that the withdrawal of your consent does not affect the lawfulness of the processing of your personal data that took place before its withdrawal.

What data will be collected, and how long will it be retained

We will collect information about your experiences and views during the interview or discussion group, which may be audio- or video-recorded with your consent. If the interview/focus group session is online, it will be recorded using the program used (TEAMS, ZOOM, or similar). When the interview/focus group session is live, the interview / session will be audio- or video recorded.

Personal data (e.g., name, function, contact details) will be stored separately and securely. All data will be used only for research purposes and kept for five years after the completion of the INCORE-MED project.

We do not process your personal data in a way that makes automated decisions about you and we do not create a profile of you in this way

Who are the recipients of the personal data?

The data from this interview will be collected and processed by Plan Bleu.

All the information you give will be used for research purposes only and solely by involved researchers. Recorded interviews/sessions will be transcribed and shared with other researchers within the project, but not your personal data. Your identity and personal information will not be shared with anyone outside the project. The data may be transmitted in encrypted and pseudonymized form to partner organizations participating in the project, solely for research



purposes and in compliance with the General Data Protection Regulation (EU) 2016/679 (GDPR). No personal data will be transferred to countries outside the European Economic Area (EEA) or to international organizations. If, in exceptional cases, such a transfer becomes necessary, it will only occur where the recipient country ensures an adequate level of data protection as defined by the European Commission, or appropriate safeguards are in place. You will be informed in advance of any such transfer and of any potential risks if the receiving country does not meet the EU's data protection standards.

How we handle your personal data and what other rights you have

All personal data we collect, and store electronically are protected through appropriate technical and organizational security measures, including password-protected files and secure storage systems.

You have the following rights concerning your personal data: the right to access the information we hold about you, the right to request erasure (deletion) of your data, the right to rectification of inaccurate information, the right to restrict how we process your data, and the right to data portability (receiving your data in a transferable format). Please note that some of these rights may be subject to exceptions as provided for in Article 89.2 of the GDPR.

To exercise any of these rights, you may send your request by email to the organisation responsible for this interview, which will manage your personal data.

In any case, you can also exercise your rights by writing to the INCORE-MED Data Protection Officer, held by the National Kapodistrian University of Athens, at dpo@uoa.gr.

If you do not receive a satisfactory response, you have the right to lodge a complaint with the National Supervisory Authority by visiting their website at <https://interreg.gr/en/>

PARTICIPANT CONSENT

INCORE-MED PROJECT

The undersigned

Name: _____

email: _____

Phone: _____

I have read this information form, I understand the information it contains including the categories of my personal data, the purposes of processing, their transmission to others, my rights. All the questions I had were satisfactorily answered by the study leader.

With my signature, I give my consent to the processing of my personal data for the scientific purposes of **INCORE-MED** Project.

Date: __/__/__

Signature of participant

day/ month/ year

Full name



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di Venezia



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DELLA SARDEGNA



TALLINN UNIVERSITY



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