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Excellent peripheries for a strong

European Research Area

D4.1 Societal Challenges working groups and thematic action plans

Grant Agreement nº. 101071329

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Author(s)	Lucía Dobarro Delgado	ITC
	Dayana Martín Andana	ITC
	Tanausú Dávila	ULPGC
	Leví Aday García Romero	ULPGC
	Rodrigo Riera Elena	ULPGC
	Emanuel Mendonça	UAc
	Joana Barcelos e Ramos	UAc
	Andrea Zita Botelho	UAc
Reviewers	Tanausú Dávila	FCPCT-ULPGC

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Acronyms & Abbreviations	
CE	Consulta Europa
COST	European Cooperation in Science and Technology
D	Deliverable
DoA	Description of the Action
EC	European Commission
EMERGE	Asociación Canaria de Startups Empresas de Base Tecnológica
EU	European Union
GA	Grant Agreement
HEI	Higher Education Institution
IA	Innovation Actions
ITC	Instituto Tecnológico de Canarias
ORs	Outermost Regions
PC	Project Coordinator
PO	Project Officer
R&I	Research & Innovation
RIA	Research and Innovation Action
RIS3	Research and Innovation Smart Specialisation Strategy
RMA	Research Managers and Administrators
SCWGs	Societal Challenges Working Groups
SDGs	Sustainable Development Goals
SC	Steering Committee
SPEGC	Sociedad de Promoción Económica de Gran Canaria
UAc	Universidade dos Açores

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Acronyms & Abbreviations	
ULPGC	University de Las Palmas de Gran Canaria
UNICAL	Università della Calabria
UROS	Universität Rostock
TERINOV	Science and Technology Park
WP	Work Package

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EXECUTIVE SUMMARY

Promoting Excellent and Responsible Research is one of the key pillars of the EXPER project. To achieve impactful results, it is proposed to develop research and innovation roadmaps, fostering interdisciplinary cooperation, as well as to identify new research common areas between widening and leading HEI.

The purpose of this document, is to identify and establish working groups focused on societal challenges, as well as define specific action plans in order to launch new research activities to tackle those societal challenges, fostering long-term collaboration and networking among researchers and other actors, as well as developing new research proposals, including Horizon Europe funding.

Introduction

According to EXPER Grant Agreement, the WP4 - Promoting Excellent and Responsible Research, will foster the establishment of:

> *Transnational and cross-sectoral Societal Challenges Working Groups (SCWGs) composed of researchers, entrepreneurs, innovators and civil society representatives which will reflect research needs based on concrete challenges of Azores and Canary Islands and which will develop new research lines and new research projects answering those needs*.

The WP4 objectives are:

- Sharing research & innovation strategies and roadmaps to create directional and interdisciplinary critical mass, to be more effective and create **impact for society.**
- Create new research strands involving **multidisciplinary research groups** from both Widening and leading HEIs.
- Organize **joint workshops** to define new research activities and develop **new research proposals** (including Horizon Europe proposals).

Regarding the **establishment and coordination of societal challenges working groups** (task 4.1) **SCWGs are based on the priority societal challenges** identified under **WP1** (Regional ecosystems assessment and cooperation models) in connection with **RIS3** strategies and contributing to the achievement of **SDGs** and of solutions to societal challenges affecting peripheral areas.

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SCWGs will:

- Include researchers, entrepreneurs and representatives of relevant organizations (such as environmental authorities, ports, civil society organizations engaged in green transition and blue growth, etc.) from EXPER HEIs and other European organizations.
- Be promoted across the European Research Area.

The Implementation of Societal Challenges Action Plans (task 4.2) will include activities such:

- The identification of **new research strands**.
- The preparation of **joint research projects** under **Horizon Europe**.
- The **organization** of **summer schools**, **international seminars** and **attendance** to **international conferences**.

The groups will be provided with **logistical support** and advice for the development of **Horizon Europe** projects, **in particular of RIA, IA and Marie Curie networks involving businesses**. Also the establishment of **COST** network in the new research strands identified will be supported.

PART 1: Establishment and coordination of Societal Challenges Working Groups

According to EXPER Grant Agreement, SCWGs will be created following the model of the Thematic Working groups under FORWARD H2020 project.

FORWARD Thematic Working Groups background

FORWARD [1] (2019-2022) Boosting Research Excellence & Innovation Capacity in Outermost Regions, was a project funded by the European Commission under the Horizon 2020 programme (Grant agreement ID 824550) with overall objectives to Improve ORs' excellence in research and innovation; Improve their participation in EU research and innovation funded projects and link research activities with territorial development.

[1] https://forward-h2020.eu/

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One of FORWARD's work packages was the **co-creation and implementation of thematic action plans**[2].

ORs deals with challenges, such as decarbonisation of energy systems, conservation and ecological restoration, climate change mitigation, or blue and circular economy development and thus have developed knowledge, skills and specific added value in topics at the heart of current and future European policies.

FORWARD established 8 Thematic Working Groups (TWGs), inter-regional and based on common interest of the 9 ORs: increasing the number of FP projects submitted and financed. The TWGs were built on the diagnosis of ORs research and innovation ecosystems allowed identifying the common RIS3 domains, ranking on total EU Contribution, ranking of the different fields of expertise and potential fields of cooperation between the ORs. R&I experts and representatives from European and Third Countries' public or private organisations, were invited to actively participating in Forward.

Figure 1. FORWARD thematic working groups (Source: Forward project)

[2] https://forward-h2020.eu/thematics/

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Both the action plans[3] as well as explanatory Infographics[4] are available for consultation.

Regarding the coordination of the 8 TWGs, the different groups were coordinated by the different regions with the leadership of a research expert in each thematic area. In concrete, TWG1 'Biodiversity, conservation and restoration' was led by the region of Azores, with the support of University of the Azores (UAc), and TWG8 'Marine Science and Technologies' was led by University of Las Palmas de Gran Canaria (ULPGC).

TWG	Facilitator
1. Health, applied Medical Technologies, Diagnostics and Therapies	University of La Laguna. **Canary Islands**
2. Social sciences and social innovation*	Nexa. **La Réunion**
3. Earth system, on space and Universe Sciences	FRCT. **Azores**
4. Information and Communication Technologies*	CTM-SYNERGÎLE. **Martinique - Guadeloupe**
5. Climate Change and Renewable Energy	ARDITI. **Madeira**
6. Agriculture, applied life sciences, biotechnology, and bio-systems engineering	SYNERGÎLE. **Guadeloupe**
7. Biodiversity conservation and restoration	FRCT - UAc. **Azores**
8. Marine Science & technologies	University of Las Palmas de Gran Canaria. **Canary Islands**

Figure 2. FORWARD thematic working groups – coordination (Source: Forward project)

SCWGs definition

The EXPER societal challenge working groups are based on the FORWARD thematic working groups experience and the recommendations highlighted in the report named 'Sustainability solutions for thematic working groups'[5].

[3] https://forward-h2020.eu/content/uploads/2021/07/D3.1-Thematic-working-groups-and-thematic-action.pdf
[4] https://forward-h2020.eu/content/uploads/2021/07/infographics-all.pdf
[5] https://cordis.europa.eu/project/id/824550/results

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Two Societal Challenges Working Groups (SCWGs) have been established: Group 1) Adaptation to Climate Change and Group 2) Restore the Ocean and Waters. Both groups will be focused on the blue and circular economy.

The groups are established based on:

a) The **EU Missions** in Horizon Europe.
b) The **Canary Islands** and **Azores RIS3** strategies*.*
c) Contributions to the Sustainable Development Goals (**SDG**) and solutions to societal challenges affecting peripheral areas.
d) The **challenges** of the ULPGC and UAc **surrounding ecosystems** identified under **WP1** (Regional ecosystems assessment and cooperation models)**.**

The SCWGs are composed by multidisciplinary members, including research and managing profiles from quadruple helix (industry – academia – government – civil society) and multiregional representation, involving representatives of EXPER beneficiaries as part of the core group.

Identification of Societal Challenges

The **identification of Societal Challenges** is key for the creation of the working group. Both their composition and their action plans will be oriented to the resolution of these challenges, through the creation of new lines of research and the promotion of multidisciplinary teams.

Taking into account that the EXPER project focuses on the blue and circular economy, and the big challenges identified at European level, it was decided to build the SCWGs based on the Horizon Europe EU Missions and aligned to the Canary Islands and Azores RIS3 strategies. The SCWGs aim at planning and delivering multidisciplinary research projects contributing as well to the achievement of Sustainable Development Goals (SDGs) and solutions to societal challenges affecting peripheral areas. Finally, the groups will work on the challenges of the ULPGC and UAc surrounding ecosystems identified under WP1: Regional ecosystems assessment and cooperation models and Deliverable D.1.2: Azores and Canary Islands Regional ecosystem assessment reports[6].

The objectives and strategy of Horizon Europe EU Missions, RIS3 and SDGs, and their relevance within the framework of EXPER are conceptually presented below.

[6] https://exper-project.eu/wp-content/uploads/2024/02/EXPER_D1.2-PR_Azores-and-CI-regional-ecosystems-reports-ver.1_29-06-2023_5_SUBMITTED_ULPGC_TDH-2.pdf

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a) Horizon Europe EU Missions[7]: The EU Missions, launched by the European Commission, aim to deliver concrete solutions to big societal challenges, grounded on the idea that complex societal challenges require coordinated and interdisciplinary efforts across Europe. The EU Missions involve research and innovation, combined with new forms of governance, collaboration, and engaging citizens. They have ambitious goals and will deliver concrete results by 2030. The EU Missions aligned with the EXPER project are: "Adaptation to Climate Change" and "Restore our Ocean and Waters".

Figure 3. EU Horizon Europe Missions (Source: EU missions in Horizon Europe)

b) RIS3 Canary Islands[8] and Azores[9]: The research and innovation strategies for smart specialisation (RIS3) refers to the productive and entrepreneurial focus of a region and identifies the competitive advantages of a territory from a global perspective. Both, the Canary Islands and Azores regions include the priorities of **sustainability** and the **blue economy**, aligned with the EXPER project objectives.

Table 1. RIS3 Canary Islands and Azores priorities aligned with EXPER objectives

Region	Priority blue economy	Priority circular economy
Canary Islands	Blue Economy Industry	Sustainability
Azores	Fishing and sea	Sustainability

[7] EU Missions in Horizon Europe - European Commission (europa.eu)
[8] RIS3 Canarias (gobiernodecanarias.org)
[9] RIS3 Açores (azores.gov.pt)

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Figure 4. Smart Specialization Strategies Canary Islands and Azores (Source: RIS3 Canarias and Açores)

c) Sustainable Development Goals [10] : The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a blueprint for peace and prosperity for people and the planet. There are 17 Sustainable Development Goals (SDGs), which are a call for action in a global partnership. The SDGs aligned with the EXPER project are: “SDG 6: Clean water and sanitation”, “SDG 13: Climate action”, “SDG 14: Life below water” and “SDG 17: Partnerships for the goals”.

Figure 5. Sustainable Development Goals 5, 13, 14 and 17 (Source: UN)

d) D1.2 findings: Additionally, the groups will work on the challenges related with their surrounding ecosystems identified under WP1, D.1.2 Azores and Canary Islands Regional ecosystem assessment report[11], and in the EXPER pillar “Promoting Excellent and Responsible Research”, that identifies the need of fostering research projects with the surrounding ecosystem.

Under D1.2 several interviews were conducted and reviewed. The findings represent the most common suggestions that has been identified and have been summarized in 7 topics in the Azores, and 5 in the Canary Islands. They are ranked in order of

[10] https://sdgs.un.org/goals
[11] https://exper-project.eu/wp-content/uploads/2024/02/EXPER_D1.2-PR_Azores-and-CI-regional-ecosystems-reports-ver.1_29-06-2023_5_SUBMITTED_ULPGC_TDH-2.pdf

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importance, from highest to lowest priority, although it's often the case that improving one element might have a positive marginal effect on others. Nonetheless, as complex operations often exist holistically, it is recommended that adequate importance should be given to all these issues. Moreover, in Task 4.1, only some, and part of them, have been taken into consideration for practical reasons.

Key identified challenges are summarized below, per HEI in the widening region:

UNIVERSITY OF AZORES

1. Improving Collaboration and Communication: A recurring concern from organizations revolves around the current state of collaboration and communication with UAc. These organisations have voiced their concerns about the challenges they face due to inefficient communication, and a perceived lack of interest from UAc in **establishing partnerships**. To overcome these barriers, it's recommended that UAc should strive to enhance its communication processes, display a greater willingness to cooperate, and **actively recognize and appreciate the efforts and contributions of its partners**.

2. Enhancing Practical Application of Research: The practical application of academic research was a key point raised by organisations. The stakeholders emphasized the disconnection between the theoretical research produced by UAc and the practical needs of the market. By addressing these concerns, UAc could increase the value and impact of its research, enhancing its relevance to the industry and society.

3. Strengthening Community Relationships and Networking: The importance of networking and community integration was highlighted. The organisations urged UAc to foster better networking, promote local enterprises, and increase its integration and cooperation with the surrounding community.

4. Cultivating a Culture of Entrepreneurship and Innovation: the organisations advised UAc to improve its engagement with start-up incubators, encourage entrepreneurship among its students, and prioritise the recruitment of new talent geared towards applied science.

5. Addressing Bureaucratic and Management Challenges. Several organisations, pointed to various factors that hinder collaboration, including slow approach to partnerships, an inadequate rewarding system, high operational overhead costs, and difficulties securing funding for project development.

6. Addressing the Knowledge and Skill Gap: One of the most persistent issues across several organisations, is the recognised gap in the demand and supply of qualified personnel. This is particularly true for emerging scientific fields and areas

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such as engineering, IT, and artificial intelligence. UAc is urged to take an active role in addressing this issue by expanding its educational offerings and introducing specialised courses.

7. Leveraging Unique Geographical and Ecological Features: The unique geographical and ecological attributes of the Azores were highlighted as a potential advantage for research. These organisations suggested that UAc could utilise this unique aspect for studies in fields such as **climate science, biodiversity, ocean studies, and conservation, providing valuable insight into these critical areas**.

UNIVERSITY OF LAS PALMAS DE GRAN CANARIA

1. **Alignment of Educational Programs and Internships with Industry Needs**: the educational programs at ULPGC need to be better aligned with the real-world needs of businesses. This involves redesigning programs to address practical industry challenges and ensuring that students acquire both theoretical knowledge and applicable skills.

2. Skill Gaps in the Workforce: Many interview participants pointed to the existence of a significant skill gap in the workforce. Students often graduate with solid academic knowledge, but they lack the practical skills required in the industry.

3. Need for More Collaborative Research Programs: There is a strong call for more **joint research programs to strengthen the ties between academia and industry**. Research conducted should be industry-relevant, fostering innovation and driving economic growth in the region. However, **researchers often prioritize securing resources for their own work**, leading to a disconnect between the university and the needs of the private sector.

4. Communication and Collaboration Issues: Another recurring challenge is related to communication and collaboration between the university and industry partners. A perceived lack of mutual understanding and engagement was highlighted as an obstacle to forming effective partnerships.

5. Administrative Hurdles and Slow Response Times: One of the critical issues pointed out was the bureaucratic hurdles and slow response times from ULPGC. Navigating through red tape and facing slow reactions can impede the progress of research and collaborative projects. This issue can potentially dissuade future collaborations and limit opportunities for innovation and development.

The different challenges and barriers detected are summarized below:

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Table 2. Main findings, Assessment of the ULPGC / UAC surrounding ecosystem

Barrier/challenge detected	Impact/Consequence	Proposed measures/solutions
Collaborative research programs (ULPGC)	Low quantity of joint research programs between academia and industry.	*To foster industry-relevant research programs between academia and industry.*
Practical application of research (UAc)	Disconnection between the theoretical research produced by UAc and the practical needs of the market.	*To foster and promote projects and strategies with focus on ensuring the practical application.*
Community relationships and networking (UAc)	Improvable integration and cooperation of the UAc with the surrounding ecosystem.	*To enhance better networking, promote local enterprises, and increase its integration and cooperation with the surrounding community*

Following this approach, two main **societal challenges identified** were identified to build the working groups:

CHALLENGE 1: ADAPTATION TO CLIMATE CHANGE IN THE BLUE AND/OR CIRCULAR ECONOMY

Across the European Union, climate change affects regions in many ways, impacting economic sectors and individuals. The climate vulnerabilities and preparedness levels are different depending on the EU region, and the adaptation to climate change involves proactive measures to address both existing consequences and anticipated future impacts.

Despite the efforts reducing emissions to achieve carbon neutrality, we need to build resilience to adapt our way of living to a warmer climate. For this reason, it is important to support the regions to understand climate vulnerabilities, develop plans for adaptation, and implement innovative solutions.

Environmental degradation is an existential threat facing Europe and the rest of the world; however, nature might be an important ally in the fight to Climate Change. Europe's seas, oceans and environment are a source of natural and economic wealth. To preserve and protect them, and to ensure that they continue to sustain us in the future and are not compromised by threats such as climate change, the European Green Pact proposed a number of priorities, including: i) protecting our biodiversity and ecosystems; ii) reducing air, water and soil pollution; iii) moving towards a circular economy, iv) improving waste management; v) ensuring the sustainability of our blue economy and fisheries sectors.

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References: EU Mission on Adaptation to Climate Change[12] and SDG 14 Climate action[13]

The **SCWG1: Adaptation to Climate Change in the blue and/or circular economy** is proposed to tackle this challenge**.**

Figure 6. SCWG1: Adaptation to Climate Change in the blue / circular economy (Source: own source)

CHALLENGE 2: RESTORE OUR OCEAN AND WATERS IN THE BLUE AND/OR CIRCULAR ECONOMY

Restoring our oceans and waters is a major challenge to heal water systems, ensuring a healthy planet for future generations. It is also a call to action for the EU regions, to protect and restore the health of the ocean and waters through research and innovation, citizen engagement and blue investments.

The protection and regeneration of oceans and freshwater can play a key role in nature, both in biodiversity and in marine and freshwater ecosystems, elimination of pollution and/or minimization based on nature-based solutions and provide circularity and carbon neutrality in the blue economy. In the case of the Canary Islands and Azores, it will be focused on the Atlantic Ocean basin, one of the “EU lighthouses”.

[12] Adaptation to climate change - European Commission (europa.eu)
[13] Goal 13: Climate action - The Global Goals

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This objective will be addressed by cross-cutting actions, including widespread public engagement and the development of a digital ocean knowledge system called Digital Twin Ocean.

References: EU Mission Restore our Ocean and Waters[14], SDG 6 – Clean water and sanitation[15] and SDG 14: Life below water[16]

The **SCWG2: Restore our Ocean and Waters in the blue and/or circular economy** is proposed to tackle this challenge**.**

Figure 7. SCWG2: Restore our Ocean and Waters in the blue / circular economy (Source: own source)

Establishment of the Societal Challenges Working Groups

Promoting excellent and responsible research, alongside interdisciplinary collaboration and multi-stakeholder engagement (including society, industry, and government), is key to developing impactful research strategies and effectively tackling societal challenges.

The general objectives of the SCWGs are:

a) Share research & innovation roadmaps to create interdisciplinary teams to create impact for society.

[14] Restore our Ocean and Waters - European Commission (europa.eu)
[15] Goal 6: Clean water and sanitation - The Global Goals
[16] Goal 14: Life below water - The Global Goals

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b) Identify new research strands involving multidisciplinary research groups from both Widening and leading HEIs and organize joint workshops to define and develop new research proposals.
c) Prepare joint research projects under Horizon Europe, and in particular, RIA, IA and Marie Curie networks involving businesses. Also, the establishment of COST network in the new research strands identified will be supported.

Each SCWG is created by multidisciplinary and multiregional teams, including: a governance team, a core group and external stakeholders.

The following figure summarizes the SCWG structures. Coordination of the SCWGs: Roles and Management.

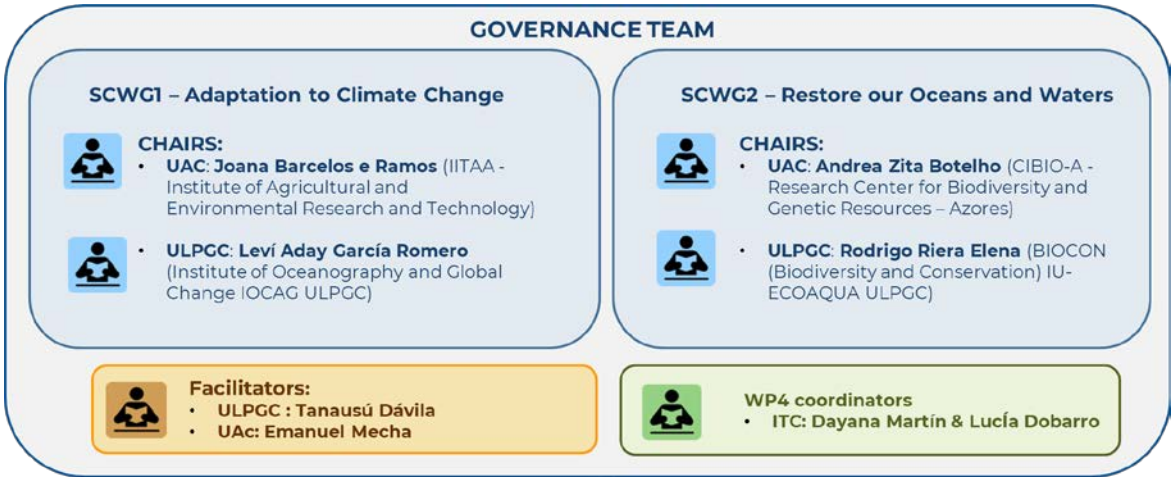

Figure 8. Governance team (Source: own source)

GOVERNANCE TEAM

SCWGs are required to be led by the CHAIRS, FACILITATORS and GROUP COORDINATORS / WP LEADER:

2 CHAIRS, one from ULPGC and one from UAc. Main researchers from both widening universities with a good knowledge of the established SCWGs. Chairs have the main role to propose the research strands and guidelines for the knowledge bases of the implementation of the SCWG itself.

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Profile:

1. Experienced profile on R&I area linked with ‘Adaptation to Climate Change’ or ‘Restore our Ocean and Waters’ in the blue and circular economy.
2. ULPGC or UAc research staff.
3. Participation in at least one EU funded project, consortium creation experience or granted by an excellence program.
4. Interest in common projects with Canary Islands, Azores and other EU regions.
5. Interest in solving societal challenges.
6. Interest in leading a teamwork with multidisciplinary profiles.

Tasks to be performed:

1. Managing the SCWG, web-meetings and online communication tools.
2. Leading and defining the SCWG Action Plan.
3. Coordination with other members of the group, in order to share and integrate the contributions from all regions.
4. Leading meetings, networking activities in the CSWG.
5. Communicating with other SCWG, the Facilitator and WP4 coordinator.

Advantages to become a CHAIR:

1. Choose and focus the specific thematic addressing both regions within the blue and circular economy: Canary Islands and Azores, linked with either ‘Adaptation to Climate Change’; or ‘Restore our Ocean and Waters’.
2. Leading the creation and implementation of the Action Plan with specific tasks to address the societal challenge.
3. Meet with multidisciplinary experts with interest in the same challenge.
4. Enlarge networks and connections (Canary Islands, Azores, Germany, Italy as EXPER project partners, and more).
5. Lead and participate in R&I projects addressing the challenge.
6. Applying to Horizon Europe finance to launch the projects.

2 Facilitators, one from ULPGC and one from UAc: EXPER Project managers who knows in deep the previous project results as well as the objectives of other WPs. Facilitators also control well the different departments of their universities and have good communication with them in order to support the rest of the Action Plan implementation. They can keep the cooperation created within the group in the long term.

Requested profile:

1. Experienced profile on R&I area linked with ‘Adaptation to Climate Change’ or ‘Restore our Ocean and Waters’ in the blue and circular economy.
2. ULPGC or UAc, EXPER project staff.
3. Participation in at least one EU funded project, consortium creation experience or granted by an excellence program.
4. Interest in common projects with Canary Islands, Azores and other EU regions.

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5. Interest in solving societal challenges.
6. Interest in leading a team work with multidisciplinary profiles**.**

Tasks to be performed:

1. Coordinating meetings, networking activities in the SCWG + support with minutes reporting.
2. Communicating with other SCWG, the Chairs, the core group and WP4 leader.
3. Reporting data for each event / activity, supporting with writing reports.

2 Group coordinators - WP4 leader, from ITC**:** this role is needed in order to assure the communication among the groups, and the proper integration of the rest of the partners and members along the whole WP4 implementation linking properly Task 4.2 and Task 4.3.

Tasks to be performed:

1. Communication with CHAIRS, FACILITATORS, CORE TEAM and rest of members.
2. Coordinate SCWGs communication and Action Plans.
3. Participate in the meetings and be informed about the networking activities.
4. Reporting coordination and responsible of the deliverables.

The **organisations involved in the Governance team** and their profile are detailed below:

Universidad de Las Palmas de Gran Canaria – Fundación Canaria Parque Científico Tecnológico (ULPGC – FCPCT) ULPGC is the only public university on the island of Gran Canaria since 1989. It has six campuses, three are located in Las Palmas de Gran Canaria, one in the municipality of Arucas (Gran Canaria) and two on the islands of Lanzarote and Fuerteventura. The University counts with more than 1,600 professors who carry out important research activity, organized in more than one hundred research groups and eleven research institutes and has **a strong implication with the blue sector**. It has undertaken a modernization process in the last years in order to gain in attractiveness and in research excellence and has in fact improved its participation in H2020 projects and its integration in the European Research Area (ERA). ULPGC will be supported by FCPCT.

Universidade dos Açores (UAc) UAc will represent the R&I ecosystem and is one of the widening countries universities to learn from the leading ones. It is the only University in Azores and is organized in three campuses located in different islands (Sao Miguel, Terceira and Faial). Due to their location and biodiversity, UAc is committed to creating and promoting knowledge and technology on particular on **biodiversity**, volcanology, tourism, **marine** and transnational issues. Azores has also participated in H2020 programmes in other regional innovation supporting initiatives financed with national funds or through Interreg.

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Instituto Tecnológico de Canarias (ITC) ITC is a Canary Islands R&I center. It is in charge of providing support to the regional government in setting-up different regional strategies, being the most relevant for EXPER project: the **Canary Island Circular Economy Strategy** (2020), implementing the **Canary Island Blue Economy Strategy** (2020 – 2024), and the **Canary Islands Smart Specialisation (S3) strategy** (2021-2027). In EXPER, ITC will bring its experience in managing international multidisciplinary groups and enhance the networking among society, research experts, local institutions and companies. It will also ensure the dissemination of the project activities and results as members of the Enterprise Europe Network.

EXPER TEAM

Figure 9. Members of the SCWGs (Source: own source)

The **core group** is established with the Governance team plus the three EXPER project partners with relevant participation under WP4. The core group is assigned certain responsibilities and commitments within the Action Plan. The core group has contributed to the Task 4.1 and D4.1.

The SCWGs **core group**, is composed by **UROS, UNICAL** and **TERinov**.

Tasks to be performed:

1. Promoting the SCWGs within their organizations.

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2. Fostering the networking within each of the entities.
3. Fostering the networking among the regional different stakeholders needed.
4. Support in identification of EU calls related with the challenges.
5. Support in project consortium creation.
6. Involvement of the University project office.
7. Support in project writing and application.
8. Ensure the practical scope of the research strands identified to support the societal challenge.
9. Participate in SCWG meetings.
10. Get involved in networking activities, project proposals, etc.

Profiles of the organizations:

Universität Rostock (UROS) UROS is located in northern Germany. As leading University in EXPER, UROS will **contribute with capacity building activities and facilitating networking among Widening Universities researchers and their researchers** as well through the integration of Widening HEIS in their international network. As member of the U-CONEXUS European University Alliance (EUA), UROS will transfer to EXPER the lessons learnt in a EUA.U-CONEXUS - European University for **Smart Urban Coastal Sustainability** – is relevant not only as Alliance but also because of their **focus on sustainability on semi-urban coastal regions**. UROS will thus act as bridge between the EXPER Widening partners and other nine European universities. Through UROS, Widening HEIs in EXPER will coordinate with researchers and innovators for **jointly develop possible solutions to climate change societal challenges.**

Università della Calabria (UNICAL) UNICAL is one of the two leading Universities of EXPER. Located in the south of Italy and close to the sea, UNICAL shares with other partners the **focus on green and blue economy as key sectors for the transition to a new sustainable development model**. UNICAL is in fact a reference organization in Italy for the deployment of the C-LAB capacity building trainings, involving both students, researchers, and companies.

Science and Technology Park (TERinov) TERINOV is the Azores Technological park. TERINOV activities aim at enhancing the local and regional business ecosystem by reaffirming technological-based entrepreneurship grounded on technology and knowledge, adapted to the needs of Azores. TERINOV will ensure the involvement of companies as contributor and beneficiaries of EXPER activities in Azores and provide the vision of business to the modernization efforts of UAC.

Other **EXPER members**, that will be involved in the SCWGs are SPEGC, EMERGE, ATRINEO and CE.

Tasks to be performed:

1. Participate in SCWG meetings.

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2. Get involved in regular meetings, networking activities (activities under Task 4.2 and Task 4.3)
3. Getting involved in project proposals, etc.

Profiles of the organizations:

Sociedad de Promoción Económica de Gran Canaria (SPEGC) SPEGC, the Canary Islands Society for Economic Promotion, is the Gran Canarian Island authority supporting business development and innovation, with a long experience in multiple collaborative projects at regional level. SPEGC will ensure the involvement both of enterprises and of local policy makers in the co-design of the EXPER strategy and action plans and their relevance to Smart Specialisation (S3) strategy.

Asociación Canaria de Startups Empresas de Base Tecnológica (EMERGE) EMERGE, Canary Islands Association of Technological Entrepreneurs, will focus its activities on the involvement of technological-based companies ensuring that their knowledge needs are reflected in modernization efforts of both ULPGC and UAc for making more responsive education and research activities. EMERGE has participated in multiple collaborative projects at regional level.

aTRineo Atrineo, based in Karlsruhe, Germany, is an independent, owner-managed company active throughout Europe in the field of commercial exploitation and marketing of knowledge and technologies. The two initiators of Atrineo have been active for over 25 years in the field of knowledge and technology transfer at non university research institutes and academia. Through strategic cooperation, technology transactions (deals) and / or start-up creation, Atrineo is able to unlock in partnership with its customers the full commercial potential of technologies and inventions maximising value creation for all involved partners. Furthermore, Atrineo has a longstanding track record in market studies as assessments utilised to support commercialisation activities of both corporates and SMEs (including start-up companies).

Consulta Europa (CE) CE is an SME which pursues sustainable and inclusive development in remote areas by applying a place and community-based approach for regional development strategies. CE is currently involved in several H2020, HE and EMFAF projects. Among them, CE enhances projects ensuring gender equality and promoting diversity among others and also leads dissemination. CE will bring thus a long track experience in communication, stakeholder engagement and co-creation activities.

The **EXPER project will provide support** to address the societal challenges. Such support will be built around this structure, under Task 4.2 Implementation of Societal Challenges Action Plans and Task 4.3 Transversal skills for excellent and responsible research, providing the following:

1. Support to international exchange, attending international conferences/meetings related with the SCWG, mainly under EXPER summer school and seminars.

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2. Support in writing EU project proposals related with the SCWG and application process.
3. EU funding opportunities search related with the SCWG.
4. Training in EU project funding, EU project management, research management skills for a) Open Science practices and b) research data management in Horizon Europe projects and skills to better connect the work of researchers with the society such as c) responsible research d) scientific education to foster the use of Horizon Europe research results into education.
5. Partner search related with the SCWG.
6. Support from the Universities project office.
7. Digital platform to be in contact with the team members (TEAMS).
8. Connection with the society and business sector (stakeholders and beneficiaries of the research done under the challenge scope).

The Core group will work hand in hand with the Governance team, in order to provide the support needed by the CHAIRs and achieve the following **expected outcomes:**

1. Creation of consortia to address the challenge.
2. Collaboration among international and multidisciplinary members.
3. New research activities and develop new research proposals.
4. Workshops and training.

EXTERNAL STAKEHOLDERS

The implementation of the Action Plans of both societal challenges (Task 4.2) requires the involvement of the whole society, mainly: **researchers, entrepreneurs and representatives of relevant organizations** (such as environmental authorities, ports, civil society organizations engaged in green transition and blue growth, etc.).

As part of the SCWGs Action Plans, **other entities** will be invited to join the group, and it is desirable that all the regions participating in EXPER project are involved.

New entities from the **leading regions**, Calabria and Rostock, as well as new ones from the widening regions, are intended to be identified and invited to the group's activities within the implementation of the Action Plan.

Some entities, from the **widening regions**, have already been identified (described below):

- In WP1, D1.2 Azores and Canary Islands Regional ecosystem assessment reports, due to the different interviews hold.
- External stakeholders identified by the Chairs during the Action Plan co-creation.

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The participation of the invited members is not compulsory. Their involvement consists on inviting them to be part of the group activity, to encourage them to join the regular group meetings (online or in place). Their role consist on providing support and feedback to potential research activities to conduct improvements to the societal challenge situation, moreover it should be taken into consideration that having them as a group member means mainly trying to make improvements on some of the 'findings' pointed in D1.2.

Tasks to be performed:

1. Participate in SCWG meetings.
2. Get involved in regular meetings, networking activities (activities under Task 4.2 and Task 4.3)
3. Getting involved in project proposals, etc.

Profiles of the organizations identified:

Below, it is summarised in 4 categories, the institutions that have already been identified from the widening regions. A total of 22 institutions were interviewed for D1.2, 11 from Azores and 11 from Canary Islands, plus others were identified by the Chairs.

The updated list per region is the following:

BUSINESS COMPANIES / BUSINESS ASSOCIATIONS

Table 3. Business Companies / Business Associations

Azores	Canary Islands
Grupo Marques	Sensorlab
Finançor	Environmental Studies and Oceanography, ECOS
seaExpert	Elittoral
Algicel	Canary Island Excelent in Technology Cluster
Futurismo	Canary Island Maritime Cluster (CMC)
Angra do Heroísmo Chamber of Commerce	

GOVERNMENT DEPARTMENTS

Table 4. Government Departments

Azores	Canary Islands
Regional Directorate for Science and Technology (DRCT)	Canary Island Society for Economic Development Abroad (PROEXCA)

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Azores	Canary Islands
Regional Directorate for Entrepreneurship and Competitiveness (DREC)	Canary Island Special Zone (ZEC)
Regional Civil Engineering Laboratory (LREC)	Regional Ministry of Ecological Transition and Energy- Canary Islands Government
Regional Directorate for Planning and Structural Funds (DRPFE)	Regional Ministry of Territorial Policy, Territorial Cohesion and Water, Canary Islands Government
Regional Secretariat for the Environment and Climate Action and Regional Directorate for the Environment and Climate Change, Azores Government, Portugal	
Sea and Fisheries, Azores Government, Portugal	

NON-GOVERNMENTAL ORGANISATIONS

Table 5. Non-Governmental Organisations

Azores	Canary Islands
Amigos dos Açores	

OTHER RESEARCH CENTRES

Table 6. Other Research Centres

Azores	Canary Islands
Institute of Agricultural and Environmental Research and Technology (IITAA), Azores University	Spanish Algae Bank (BEA)
	Oceanic Platform of the Canary Islands (PLOCAN)
	Institute for Tourism and Sustainable Economic Development (TIDES), University of Las Palmas de Gran Canaria
	Oceanography and Global Change Institute (IOCAG), University of Las Palmas de Gran Canaria

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Azores	Canary Islands
Research centers from other regions: • University of Porto, Portugal. Interdisciplinary Centre of Marine and Environmental Research (CIIMAR/CIMAR). • Cádiz University, Spain. Instituto de Investigación Marina (INMAR). • Cantabria University, Spain. Instituto de Hidráulica Ambiental (IHC). • University of Twente, the Netherlands. Water Engineering and Management.	

SCWG MEMBERSHIP

As it has been mentioned before, the involvement of new members from other regions is foreseen as part of the Action Plans themselves.

The EXPER partners, are asked to present potential participants within the group, and the Governance team will evaluate and validate their participation, taking into consideration:

- The current size of the group, due to practical reasons must be limited up to 30 people.
- The level of participation.
- They should correspond to one of these profiles:

1. **Government Agencies**: Government bodies responsible for environmental protection, marine conservation, and economic development play a crucial role in policymaking, regulation, and funding allocation related to ocean and water restoration and circular economy initiatives.

2. **Non-Governmental Organizations (NGOs) and Conservation Organization**s: Environmental advocacy groups, conservation organizations, and community-based NGOs often engage in grassroots initiatives, awareness-raising campaigns, and advocacy efforts related to ocean conservation and sustainable development.

3. **Policymakers**: At local, national, and international levels are responsible for formulating laws, regulations, and policies that govern environmental management, marine conservation, and economic development. They play a pivotal role in setting the agenda, allocating resources, and coordinating efforts to address pressing challenges such as marine pollution, habitat degradation, overfishing, and climate change impacts on ocean and coastal communities.

4. **Research Institutions**: Universities, research centres, and academic institutions contribute expertise, resources, and research findings to inform policy decisions, develop innovative solutions, and advance scientific knowledge in areas related to ocean and water restoration and circular economy practices.

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5. **Industry Partners**: Businesses operating in sectors such as fisheries, aquaculture, shipping, tourism, renewable energy, and waste management have an interest in sustainable ocean management and circular economy practices. Collaboration with industry partners can drive innovation, technology transfer, and the implementation of sustainable business models.

6. **Local Communities**: Coastal communities, indigenous peoples, and residents of coastal areas are directly impacted by changes in marine ecosystems and coastal environments. Their knowledge, perspectives, and participation are essential for the success of initiatives aimed at restoring oceans and waters and promoting circular economy practices that benefit local livelihoods and well-being.

7. **International Organizations**: Multilateral institutions, such as the United Nations, European Union, and regional bodies, provide frameworks, guidelines, and funding opportunities for international cooperation and capacity-building efforts related to ocean conservation, sustainable development, and circular economy initiatives.

8. **Educational Institutions**: Schools, colleges, and educational programs play a crucial role in raising awareness, building capacity, and fostering a culture of environmental stewardship and sustainability among students, educators, and future generations.

9. **Media and Communication Channels**: News outlets, social media platforms, and communication channels serve as important avenues for disseminating information, raising awareness, and mobilizing public support for initiatives related to ocean conservation, circular economy practices, and sustainable development.

10. **Civil Society and Community Groups**: Grassroots organizations, community associations, and civil society networks play a vital role in mobilizing public participation, advocating for policy change, and implementing on-the-ground projects and initiatives to address environmental challenges and promote sustainable practices.

11. **End Users and Consumers**: Individuals, households, and communities are end users of products and services derived from marine resources and circular economy practices. Their consumption patterns, lifestyle choices, and behaviour can influence market demands, industry practices, and policy outcomes related to ocean conservation and sustainable development.

As it has been mentioned before, the member's role is to benefit from the activities and results of the Action Plan as well as to provide feedback on the research strands and project design within the activity of the group.

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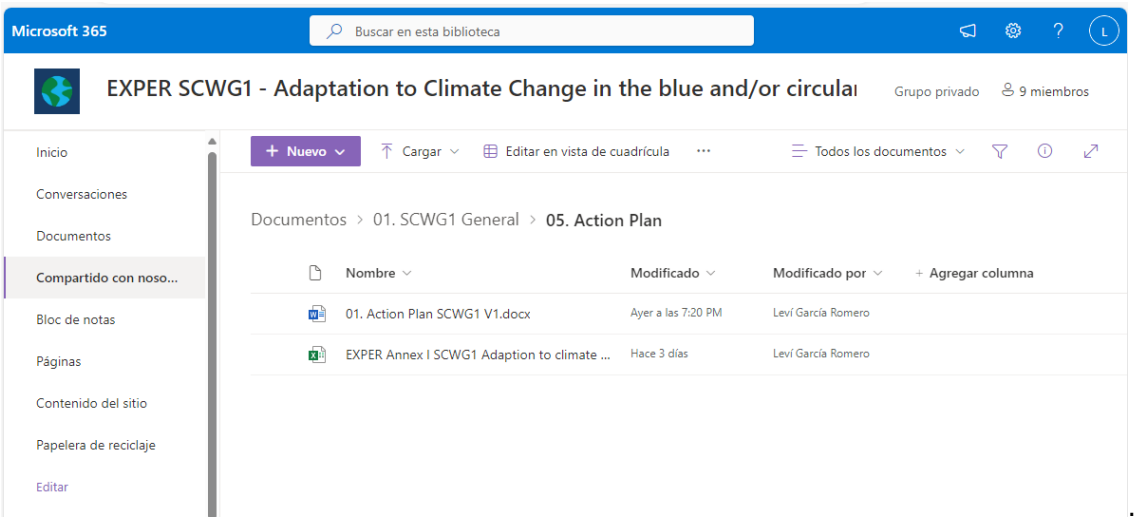
Communication tool

A digital collaborative space is needed in order to gather all the information and inputs from the different members, as well as for enhancing the communication among them. Such tool is very useful, first to foster the networking among the members, secondly to track the group activity.

Two groups were established, one for the SCWG 1 and another for SCWG2. Each of the groups have two sections: 1) General, in which the information related to the Action Plan, and other documents are saved. 2) Meetings, a space to plan, communicate, hold the meeting and record them.

All EXPER partners plus the Chairs have access to both groups, while the rest of member's participation, in one or two groups, will be chosen by each participant.

The collaborative space (Microsoft Teams) is an **online space** where information about events, training and any other relevant information can be shared. It also provides a video-call tools, among others.



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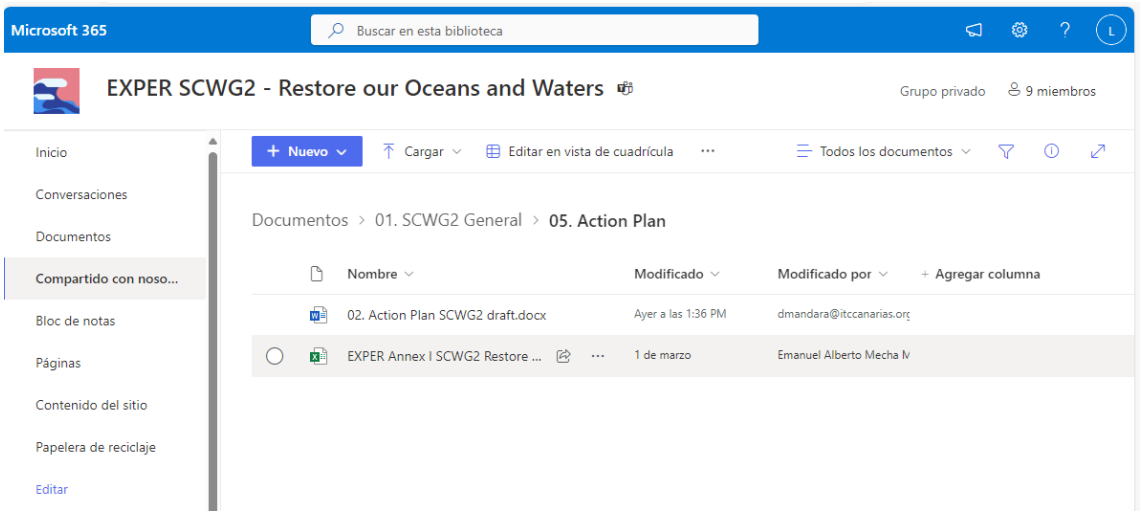

Figure 10. SCWG TEAMS space (Source: own source)

PART 2: ACTION PLANS

This section contains:

- The action plans methodology.
- The action plan structure.
- Annexes: The specific action plans are included in annexes as individual documents of work for each group. Annex 1: SCWG1. Annex 2: SCWG 2.

Action plans methodology

WP4 leader, ITC, was in charge of establishing the methodology for the SCWG Action Plan creation.

The CHAIRS were appointed by the widening universities, and the Governance Team started to work in defining the action plans.

TEMPLATES

Templates were created to guide the work of the Governance team.

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Templates were created in Excel format in order to first establish the structure of the Action Plan into: Objectives, Actions, Tasks, proper description and details, start and end date, resources needed for fulfilling the actions, responsible contact for the action, co-responsible contact, expected results, level of advancement for tracing the implementation level. Also, a template referring to a calendar to better track the time frame of the implementation of the objectives, the actions, and also to facilitate the visualization of the supporting documents for the objective implementation.

Also, a template in Word format was created to enhance the communication and agreement among the Chairs to first know each-other and then establish the cooperation within the societal working group. The template contains reference to the Chairs background and main topics related to the SCWG as Governance team, challenge definition, objectives, priorities, university background, etc.

MEETINGS AND OFFLINE WORK

Different online meetings took place among the Chairs, Facilitators and WP4 leaders. The meetings supported the offline work done on the templates, and are the best tool to agree on the Action Plan structure and content.

Offline work on the templates was produced by all the Governance team.

- Involving the rest of the Core group:
    a. Involvement of UNICAL, UROS and TERINOV
    UNICAL, UROS and TERINOV, due to their expertise, will have an important role as Group managers.
    Once the Action Plan was sufficiently developed, a meeting with the mentioned partners took place, in order to confirm their commitment with the Action Plan proposal.
    b. Involvement of the rest of EXPER project members
    Another meeting took place in order to explain all partners their role as Core group within the Action Plan.

- Implementation of Societal Challenges Action Plan
    a. Coordination with the Core group
    This coordination is needed for the implementation of their tasks under Task 4.2 Implementation Societal Challenges Action Plan.
    b. Involvement of external stakeholders
    Task 4.2 Implementation Societal Challenges Action Plan.

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Action Plan structure

Each action plan follows the same structure:

- Group composition
- Societal challenge definition
- Objectives
- Background and previous experience
- Priorities
- Work plan (activities and calendar)
- Indicators
- Contingency Plan

OBJECTIVES

The Action Plan has five main objectives:

- **MANAGEMENT O1:** Successful development of the SCWGs management tasks to achieve goals within the set scope, time, quality and budget specifications.
- **FOCUSING O2:** Selecting key research fields and subjects related with the Adaptation to Climate Change and Restore our Oceans and Waters in the blue and/or circular economy.
- **NETWORKING O3:** Establishment of networks between the widening and the leading actors to build consortia on Adaptation to Climate Change and Restore our Oceans and Waters in the blue and/or circular economy;
- **IMPLEMENTATION O4:** fostering the joint research projects in European R&D&I programmes in the area of Adaptation to Climate Change and Restore our Oceans and Waters in the blue and/or circular economy;
- **DISSEMINATION O5:** Disseminating SCWG activities.

WORK PLAN

Each objective is divided in specific actions and tasks, responsibilities, objectives, time frame, etc. The objectives, actions, details, start and end dates are showed below:

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Table 7. Objectives, actions and details

Objective	Actions	Details	Start date	End date
OBJ 1	**Management: Successful development of the SCWG management tasks to achieve goals within the set scope, time, quality and budget specifications.**	All the documents, online conferences and results will be uploaded in TEAMS		
1.1	Implementation of cooperation and communication tools	All members communicate online through the platform	Feb 2024	March 2025
1.2	SCWG Meetings	Group meetings to achieve the goals of the Action Plan	Feb 2024	March 2025
1.3	Reporting	Documenting the meetings and conclusions	Dec 2023	Mach 2024
OBJ 2	**Focusing: Selecting key research fields and subjects**	The subject in which the SCWG will be focused is established by the Chairs of the group		
2.1	Identification of new research strands involving multidisciplinary research groups from both Widening and leading HEIs according to the societal challenge	Identifying new potential stakeholders	Feb 2024	April 2024
OBJ 3	**Networking: Establishment of networks between the widening and the leading actors to build consortia**	Networking is needed to foster long-term cooperation among the participants		
3.1	Identifying key institutions/actors/stakeholders	Identify current stakeholders	June 2024	October 2024
3.2	Identifying External Networking Events	Identifying new potential stakeholders	April 2024	March 2025
3.3	Promoting SCWG Networking Activities	Related with other WP and project activities	May 2024	Mach 2025
OBJ 4	**Implementation: fostering the participation of joint research projects in European R&D&I programmes**	Focusing efforts in establishing cooperation into concrete projects applying to EU funding		
4.1	Identifying funding opportunities		April 2024	March 2025

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Objective	Actions	Details	Start date	End date
4.2	Building potential consortiums to develop new research proposals	Development of Horizon Europe projects, in particular of RIA, IA and Marie Curie networks involving businesses. Establishment of COST networks Promoting Excellent and Responsible Research.	April 2024	March 2025
4.3	Involvement of the business sector in the group	Connection with business environment must be promoted in EXPER project: knowledge transfer and spin-offs	April 2024	March 2025
4.4	Organization of Summer Schools, international seminar and attending to conferences in line with the selected research topics	Budget availability pending to be checked. Proposal: June 2024.	March 2024	March 2025
4.5	Capacity building plan	The Plan will integrate the training activities under WP3 and address in particular research management skills for a) Open Science practices and b) research data management in Horizon Europe projects and skills to better connect the work of researchers with the society such as c) responsible research d) scientific education to foster the use of Horizon Europe research results into education.	March 2024	Sept 24
OBJ 5	**Dissemination: Disseminating SCWG activities.**	Getting awareness of the societal challenges and the support provided within EXPER project		
5.1	Dissemination of SCWG activities	Disseminate the group results according to the phase of development	March 2024	Mach 2025

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ANNEX 1: SCWG1 ACTION PLANS

SCWG1: ADAPTATION TO CLIMATE CHANGE IN THE BLUE AND/OR CIRCULAR ECONOMY

GROUP COMPOSITION

GOVERNANCE TEAM

CHAIRS

UAC: Joana Barcelos e Ramos (IITAA - Institute of Agricultural and Environmental Research and Technology). Joana Barcelos e Ramos is an assistant investigator and sub-director of IITAA, UAc. Since 2003, JBR has been developing research about phytoplankton, completing her PhD in 2009 in natural sciences awarded by the Christian-Albrechts University of Kiel (Germany). She has published a total of 19 articles in international peer-reviewed journals, 2 book chapters, PI of 2 national and coordinator of an international project, and co-oriented with the PI a total of 4 students (total 20 students, 2 PhDs, 5 Masters). JBR has a current h-index of 12, and a total of 734+ citations (Scopus).

ULPGC: Leví Aday García Romero (Institute of Oceanography and Global Change, IOCAG, ULPGC) Leví García-Romero has a degree in Geography (ULPGC), an Expert degree in Geographic Information Systems (International University of Andalusia) and a Master degree in Coastal Management (ULPGC). Finally, he has a Doctorate in Oceanography and Global Change. Before his experience as a researcher, he worked at Gesplan (a territorial planning company in the Canary Islands) and companies dedicated to the environmental education sector. He is currently hired as a postdoctoral fellow. The main projects in which he has participated are related to the multiscale analysis (spatiotemporal) of eco-anthropogenic processes associated to the dynamics of coastal ecosystems, and how these are adapting to Climate Change.

FACILITATORS

UAc: Emanuel Mendonça. EXPER project manager

ULPGC: Tanausú Dávila. EXPER project manager

GROUP COORDINATOR - WP4 leader

ITC: Dayana Martín Andara. EXPER project manager

ITC: Lucía Dobarro Delgado. EXPER project manager

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In the table below, the role and appointed activities are summarised.

Table 8. Members of SCWG Group 1. Adaptation to Climate Change in the blue and/or circular economy

Affiliation	Region / Country	Role	Activity
ULPGC - FCPCT	Canary Islands / Spain	Chair + Facilitator	Leading the research strands + invite other researchers
UAc	Azores / Portugal	Chair + Facilitator	Leading the research strands + invite other researchers
ITC	Canary Islands / Spain	WP4 leader	Coordination
UROS	Rostock / Germany	Core group	SCWG meeting management + Project proposal co-creation + invite other researchers and members
UNICAL	Calabria / Italy	Core group	SCWG financing opportunities + Project proposal co-creation + invite other researchers and members
TERINOV	Azores / Portugal	Core group	Project proposal co-creation + companies involvement + promotion across the ERA to attract the talents
SPEGC	Canary Islands / Spain	EXPER Member	Government connections + companies involvement
EMERGE	Canary Islands / Spain	EXPER Member	Society connection + companies involvement
CE	Canary Islands / Spain	EXPER Member	Stakeholders involvement + communication
ATRINEO	Karlsruhe / Germany	EXPER Member	Technology transfer assessment
EXTERNAL STAKEHOLDERS*	EU	Member	Participating in SCWG activities

*Each of the external stakeholders will be part of the group after accepting the invitation of the EXPER project partners.

SOCIETAL CHALLENGE DEFINITION

Across the European Union, climate change affects regions in many ways, impacting economic sectors and individuals. The climate vulnerabilities and preparedness levels are different depending on the EU region, and the adaptation to climate change involves proactive measures to address both existing consequences and anticipated future impacts.

Despite the efforts reducing emissions to achieve carbon neutrality, we need to build resilience to adapt our way of living to a warmer climate. For this reason it is important to support the regions to understand climate vulnerabilities, develop plans for adaptation, and implement innovative solutions.

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Environmental degradation is an existential threat facing Europe and the rest of the world; however, nature might be an important ally in the fight to Climate Change. Europe's seas, oceans and environment are a source of natural and economic wealth. To preserve and protect them, and to ensure that they continue to sustain us in the future and are not compromised by threats such as climate change, the European Green Pact proposed a number of priorities, including: i) protecting our biodiversity and ecosystems; ii) reducing air, water and soil pollution; iii) moving towards a circular economy, iv) improving waste management; v) ensuring the sustainability of our blue economy and fisheries sectors.

OBJECTIVES

The **general objectives** of the SCWG1 are:

- Share research & innovation roadmaps to create interdisciplinary teams to create impact for society.
- Identify new research strands involving multidisciplinary research groups from both Widening and leading HEIs and organize joint workshops to define and develop new research proposals.
- Prepare joint research projects under Horizon Europe, and in particular, RIA, IA and Marie Curie networks involving businesses. Also, the establishment of COST network in the new research strands identified will be supported.

The SCWG1 **action plan objectives** are:

- MANAGEMENT O1: Successful development of the SCWGs management tasks to achieve goals within the set scope, time, quality and budget specifications.
- FOCUSING O2: Selecting key research fields and subjects related with the Adaptation to Climate Change in the blue and/or circular economy.
- NETWORKING O3: Establishment of networks between the widening and the leading actors to build consortia on Adaptation to Climate Change in the blue and/or circular economy;
- IMPLEMENTATION O4: fostering the joint research projects in European R&D&I programmes in the area of Adaptation to Climate Change in the blue and/or circular economy;
- DISSEMINATION O5: Disseminating SCWG1 activities.

As **specific goals**, the drafting process of the Societal Challenges Action Plan on “Adaptation to Climate Change” want to develop synergies with key actors, mainly in the ORs to:

- To development an Adaptation to Climate Change Roadmap around the coastal and ocean areas with extensive participation of ORs members leading towards an Action

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Plan of the Societal Challenges associated with Canary Islands and Azores RIS3, Sustainable Development Goals (SDG) and peripheral areas.

- To promote an Inter-regional platform to foster research collaboration with Experts from ORs, other European regions and Third Countries´ Institutions, especially with islands territories and with a common research domain: “Mitigation and Adaptation to Climate Change” around the coastal and sea areas.
- Increase both the number of European Frame Programme projects submitted and finance in the ORs, and the promotion of a deeper integration of ORs scientists into the ERA of the island's territories.
- To propose specific European call for ORs where high relevant research groups can be integrated within local consortiums about “Mitigation and Adaptation to Climate Change” topics associated to coastal and sea areas.

BACKGROUND AND PREVIOUS EXPERIENCE

The following tables summarize the relevant UAc and ULPGC participation in European funding schemes related with “Adaptation to Climate Change in the blue and/or circular economy”:

Table 9. UAc relevant participation in EU co-financed projects related with Adaptation to climate change and Blue and/or Circular Economy

Program	Topic	Acronym	Title	Coordinating Entity
Horizon Europe	HORIZON-MISS-2021-CLIMA-02-04	R4C	Regions4Climate - Develop and demonstrate a socially-just transition to climate resilience	Vtt Technical Research Centre Of Finland Ltd
Horizon Europe	HORIZON-CL6-2021-BIODIV-01	MARINE SABRES	Marine Systems Approaches for Biodiversity Resilience and Ecosystem Sustainability	University College Cork - National University Of Ireland, Cork - Ucc
Horizon Europe	HORIZON-CL6-2021-BIODIV-01-12	MSP4BIO	Improved Science-Based Maritime Spatial Planning to Safeguard and Restore Biodiversity in coherent Europen MPA network	S.PRO-Sustainable Projects Gmbh
EEA Grants	BlueGrowth call #2 - Business Development, Innovation and SMEs	PHYSALYA PHYSALIS	Innovative and unexploited source of high added- value cosmetic products	Mesosystem, S.A.
EEA Grants	BlueGrowth call #3 - Support for increasing the efficiency of resources linked to companies in the maritime sector	AZEB	Azores EcoBlue - Development of new raw materials and new by-products, using marine and beach litter and waste from marine activities as raw material	Circular Blue, Lda

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Program	Topic	Acronym	Title	Coordinating Entity
ERA-NET	BIODIVERSA Joint Call "Conservation and restoration of degraded ecosystems and their biodiversity, including a focus on aquatic systems".	DEEP REST	Conservation & restoration of deep-sea ecosystems in the context of deep-sea mining	Ifremer

Table 10. ULPGC relevant participation in EU co-financed projects related with Adaptation to climate change and Blue and/or Circular Economy

Program	Topic	Acronym	Title	Coordinating Entity
HORIZON EUROPE	HORIZON-INFRA-2022-TECH-01-01	GEORGE	Next generation multiplatform Ocean observing technologies for research infrastructures	Integrated Carbon Observation System European Research Infrastructure Consortium
HORIZON EUROPE	HORIZON-CL6-2022-GOVERNANCE-01-03	BlueGreen Governance	BlueGreen Governance	University of Portsmouth
H2020	LC-CLA-02-2019	OceanNETs	Ocean-based Negative Emission Technologies - analyzing the feasibility, risks, and cobenefits of ocean-based negative emission technologies for stabilizing the climate	HELMHOLTZ-ZENTRUM FUR OZEANFORSCHUNG KIEL (GEOMAR)
H2020	BG-08-2018-2019	TRIATLAS	Tropical and South Atlantic - climate-based marine ecosystem prediction for sustainable management	Universitetet I Bergen
H2020	SC5-06-2016-2017	SOCLIMPACT	DownScaling CLImate imPACTs and decarbonisation pathways in EU islands, and enhancing socioeconomic and non-market evaluation of Climate Change for Europe, for 2050 and beyond.	Universidad de Las Palmas de Gran Canaria

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PRIORITIES

Adaptation to climate change within the context of the blue economy involves strategies and practices aimed at reducing vulnerability to the impacts of climate change on ocean ecosystems and coastal communities. This includes measures to mitigate and adapt the effects of the **sea level rise, ocean acidification, increased frequency of extreme weather events, and changes in marine biodiversity.**

Some adaptation strategies within the blue economy framework may include among others: **i) Sustainable fisheries management**; **ii) Sea and Coastal zones management**; **iii) Renewable energy development**; **iv) Climate-smart aquaculture**; **v) Land-Sea spatial planning**; **vi) Community resilience building**.

Overall, integrating adaptation measures into the blue economy can help ensure the sustainable management of ocean resources and contribute to the resilience of coastal communities in the face of climate change.

Regarding Canary Islands and Azores RIS 3, EXPER Project would be related to blue economy strategy and the second political objective associated with the blue economy among other is: “A greener, low-carbon Europe in transition towards an economy with zero net carbon emissions and resilient, promoting a clean and equitable energy transition, green and blue investment, the economy circular, mitigation and adaptation to climate change, risk prevention and management and sustainable urban mobility”. And with the fifth political objective which is “A Europe closer to its citizens, promoting the integrated and sustainable development of all types of territories and local initiatives”.

In this sense, below are some research strands for the action plans, ordered from highest priority to lowest priority which are included to promote excellent and responsible research. The three first strands are the ones prioritized by the Chairs of the groups:

1. **Biodiversity conservation and protection**

Climate change is expected to continue affecting ecosystems, with consequences to biodiversity already being verified. Promoting the protection and conservation of natural ecosystems that are notable for their geodiversity and biodiversity could lead to strengthening them and keeping them healthy to climate change. Furthermore, the main objective of protection and conservation should be aimed at maintaining the ecological functionality provided by these ecosystems.

These actions should be associated with key, toxic or endangered species and important habitats from open ocean to the coast socio-ecological systems.

To protect, conserve and therefore adapt these locations to climate change, it is crucial to evaluate the potential changes and their origin, to then be able to promote the use of these spaces in a sustainable way. The human activities that should be prioritized are those related with blue / green economy of coastal resources such as eco and geotourism. In this sense, coastal ecosystems show great relevance due to the high geoheritage values associated with their geodiversity and biodiversity that are

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maintained through important processes and dynamics. It is also imperative to analyse the potential need for adaptation of aquaculture structures and their location as well as fishing sites due to shifts on microbial biodiversity and, concomitantly, upper trophic levels.

For example, it is important to continue protecting, conserving and in some cases restoring beach-dune systems because among other ecosystem services, these act as natural barriers that protect inland areas from coastal hazards such as marine storms, high waves, and erosion. Their ability to absorb and dissipate wave energy helps stabilize shorelines, especially the beaches which are an important Socio-ecological system and reduce the risk of flooding and property damage during extreme weather events.

2. **Environmental impacts**

Environmental Impact Assessment (EIA) is a tool used to assess the significant effects of the human activities or natural events. In this sense, to keep natural ecosystems strong and healthy to climate change, it is necessary to detect the main environmental impacts, analyse, control and reduce them, especially those of anthropogenic origin (In this action plan, priority will be given to these), which have a negative effect on coastal and marine areas.

Environmental impacts behave in a pyramidal, or scalar, manner from a spatio-temporal perspective, ranging from ephemeral micro impacts (generated, for example, by users or the inappropriate management on a place) to permanent macro impacts. Related to the latter are associated to marine storms versus permanent /long time exposure, such as increased average temperature, sea level rise and ocean acidification., all integrated in a context of global change. In this sense, it is important to investigate impacts at different spatio-temporal scales.

For example, a large-scale and short-term impact, both the effect and correcting it, it has been detected that the use of heavy machinery by beach cleaning services affects the natural morphology of the beach, changing the beach profile and reducing the sediment transport to the backshore and to the dunes (if there are). This increases the vulnerability of beaches to climate change, especially to sea level rise and the marine storms frequency.

Other example, where cleanup efforts can be challenging and may have long-term ecological and economic consequences are the sewage and wastewater Discharges. The untreated or poorly treated sewage and wastewater discharges from urban areas, agriculture, and industrial facilities can introduce pollutants such as nutrients, pathogens, heavy metals, and chemicals into coastal waters. This can lead to water quality degradation, harmful algal blooms, and health risks for humans and marine life.

3. **Sustainable environmental policy and governance**

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Environmental and sustainability policies have become increasingly important in recent years as the world faces issues such as climate change, biodiversity loss and resource depletion. With the urgent need to take action to protect the environment and promote sustainability, is important to make objective political decisions to achieve adaptive management to climate change.

Sustainable environmental policy integrates environmental considerations into all aspects of decision-making, including economic development, land use planning, and resource management. It recognizes the interconnectedness of social, economic, and environmental systems and seeks to balance competing interests and priorities.

For example, to conserve, protect and finally adapt biodiversity in the face of climate change, and achieve a consensus to select which environmental impacts most urgently need to be managed, a series of components must be included:

Stakeholder Engagement: Effective environmental governance involves engaging stakeholders, including government agencies, businesses, civil society organizations, indigenous peoples, local communities, and the public, in decision-making processes. Stakeholder participation fosters transparency, accountability, and inclusivity in policy development and implementation.

Science-Based Decision Making: Environmental policies and regulations should be informed by scientific research, data, and evidence-based assessments of environmental impacts and risks. Incorporating scientific expertise ensures that policies are effective, credible, and responsive to emerging environmental challenges.

Policy Instruments: Sustainable environmental policy employs a mix of regulatory, economic, and voluntary instruments to achieve environmental goals. These may include regulations, incentives, market-based mechanisms, certification schemes, public-private partnerships, and community-based initiatives tailored to specific contexts and objectives.

4. **Sustainable land and sea use planning and ecosystem services**

An ecosystem service is any positive benefit that natural ecosystems provide to people. However, these have been affected by human activities, especially due to urban development or marine pollution. For this reason, it`s important the evaluation of the socioeconomic impacts due to ecosystem services loss on coastal and marine socioecological systems and their effects on the value functions of the different components of the system.

For this, it is necessary to detect the affected ecosystem services, considering the CICES (Common International Classification of Ecosystem Services) classification system. It is also important to economically value the loss of the recreational functions of the systems, for different types of users (bathers, athletes, divers, etc.), residents and tourists, using techniques based on discrete choice models. And finally, estimate the

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impact of the loss of the recreational functions of the coastal areas on the economy of Atlantic archipelagos using techniques based on the use of multiplier effects.

In addition, to develop construction and deconstruction projects on the coast adapted at Climate Change, or Restoration of obsolete occupied areas on the coast to decongest, reduce and avoid occupation or marine pollution in areas with high vulnerability, or areas with high ecological value, could be examples to respect natural ecosystems through territorial planning and management to achieve green/blue economic development and to keep ecosystem services.

For example, the European Union has implemented MSP as a tool for sustainable management of marine resources and activities in European waters. MSP aims to balance competing uses such as shipping, fishing, renewable energy development, conservation, and tourism, while minimizing conflicts and environmental impacts. Countries like the Netherlands, Germany, and the United Kingdom have developed comprehensive MSP frameworks to guide decision-making and promote sustainable development in their marine territories.

5. **Green infrastructures**

Green infrastructure has a critical role to reach adaptation to Climate Change in the green, blue and circular economy. Green infrastructure is defined by "*its capacity to provide a series of ecosystem services through a strategically planned network of high-quality green spaces that can further boost resilience*". Climate change and infrastructure development make disaster-prone areas more vulnerable to extreme weather events and natural disasters (e.g., floods, landslides, forest fires) that cause loss of life and result in billions of euros of damage.

Green infrastructure solutions or also known as nature-based solutions (NBS) can, however, limit the impacts of such events on human society and the environment and support the wider vision of circular economy for increased resilience and effectively addressing the challenges posed by climate change. NBS can act as complementary interventions to the decarbonization of sectors' operations by neutralizing emissions that businesses and enterprises cannot eliminate due to technological barriers. In this sense, evidence-based outcomes already highlight that NBS can facilitate the transition to circular economy, not only through a more sustainable management of resources but also by providing additional benefits and ecosystem services.

6. **Education and raising awareness**

Climate change education and raising awareness is the process of teaching people about the science, causes, impacts, and solutions related to climate change. To carry out raising activities on climate change adaptation including awareness raising campaigns where the information shown in the rest of research strands is used and can be available to the population. This research strand is needed to increase the knowledge of the population about protecting the environment with more specific focus on the

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context of the adaptation to Climate Change and foster a culture of real stewardship. In addition, should help individuals understand the complex nature of climate change, and to empower them to take action to adapt to its effects. Climate change education can take many forms, including classroom instruction, public awareness campaigns, community-based initiatives, and online resources.

By raising awareness and fostering a deeper understanding of the causes and consequences of climate change through different education goals (Raising awareness, building knowledge, fostering critical thinking, encouraging action and Supporting policy development), climate change education could help individuals and communities to work together to create a more sustainable future.

7. **Coastal and Marine Socio-ecological systems**

Between the socio-ecological systems, for example in the coast (beaches and dunes systems) or in open ocean (protected marine areas) have been and will be an important natural resource for the economy.

For this reason, it is necessary the monitoring and modelling the physical changes in the coastline, especially in the socio-ecological systems of beaches and dunes, due to coastal squeeze by artificial structures that favour the loss of these systems, or due to the current coastal narrowing due to the combination between the increase in the frequency of sea storms and sea level rise.

Furthermore, knowledge of the behaviour of these systems and predicting their variations, understanding them through socio-environmental variables and indicators would be tools that would help manage these spaces to adapt them to climate change.
It is important to analyse the effects of spatio-temporal variation on ecosystem services, such as on primary producers standing stocks, and resulting cascading to upper trophic levels, affecting whale watching and fisheries.

8. **New tools, techniques and technology for the marine and coastal socio-environmental management**

Canary Islands and Azores are archipelagos of oceanic islands, which means that because they are islands, they are also the most vulnerable territories to Climate Change according to the VI IPCC report published in 2021. For this reason, the opportunity arises to strengthen the development of tools, techniques and technology for smart monitoring that allows adaptation to Climate Change. taking advantage of that double condition of being, on the one hand, oceanic islands and, on the other hand, highly vulnerable to Climate Change. In this sense, six technologies could support tools and techniques, which are critical for climate adaptation, according to the World Economic Forum's new report, Innovation and Adaptation in the Climate Crisis. These are related to artificial intelligence, drones, Earth observation, advanced computing, the Internet of Things and virtual and augmented reality.

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Developing tools, techniques and technology validated with real data associated with events and environmental effects produced by the Climate on oceanic islands could also be an opportunity to export to other archipelagos in the world.

9. Strategies for adaptative management

After compiling the knowledge, concerns and experiences of the different stakeholders involved in the configuration of the coast and sea on oceanic islands, the need to generate methodologies for monitoring sea and coastal well-being within the identified management objectives arises. Adaptive management is proposed through tools that evolve periodically to incorporate new processes into the monitoring model through multidisciplinary work networks. In this way, a living model is generated that adapts to the systemic variations that occur through the social and environmental changes that occur on the coastal or in open ocean as highly changing environments.

Figure 11. SCWG1 priorities (Source: own source)

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Work Plan Act

SCWG1 : Adaptation to Climate Change in the blue and/or circular economy. Work Plan activities

Version Date

Objective	Actions	Details	Start date	End date	Resources	Comments	Responsisble contact (Member of the SCWG in charge of this activity)	Co-responsible contact (EXPER partner in charge of this activity)	Expected results	Level of advancement
OBJ 1	**Management: Succesful development of the SCWG management tasks to achieve goals within the set scope, time, quality and budget specifications.**	All the documents, online conferences and results will be uploaded in TEAMS								
1.1	Implementation of cooperation and communication tools	All members communicate online through the platform	Feb 2024	March 2025						
1.1.1	Setting up and implementation of online tools	Teams Collaborative Space	February 2024	March 2025	Team collaborative space with different Folders (action plan, training, researchers' profiling)	check if it is working for everybody	ULPGC / Facilitator	ULPGC / ITC	Guarantee the clear and effective communication among the groups members.	
1.1.2	Prepare meeting schedule	Schedule SCWG meetings and activities for action plan implementation.	45352	March 2025	Planning calendar		ITC	ULPGC / UAC / ITC	At the end of each meeting, concrete where the next meeting will take place. If possible, the next two. This way the members of the group can book the date.	
1.2	SCWG Meetings	Group meetings to achieve the goals of the Action Plan	Feb 2024	March 2025						
1.2.1	Co-creation of the Action Plan	Azores and Canary Islands meetings, once a week	45337	February-24	Excel and word template	Excel, this file. Word file in process	Chairs / ITC /UAc / ULPGC		Having a guide of the next steps for achiving the group goals.	
1.2.2	Validation of the Action Plan	EXPER partners make contributions to the Action Plan	45362	March-24	Excel and word template		ITC	All partners	Getting the inputs, comments of all EXPER partners to improve the plan,	
1.2.3	Invite members to join the group	Invitations from the Chairs + EXPER members (up to 15 members)	45376	March-24	Mail invitation template		ITC	All partners	All EXPER partners must be involved in other to garantee the multidisciplinarity within the group. HEIs must have an active participation in other to garantee the objective of the group, in particular Objective 4 from the Action Plan	
1.2.4	SCWG Kick-off meeting	Presenting the Action Plan to others group members	45390	April-24	Presentations	To check if both SCWG can present jointly	Chairs / ITC /UAc / ULPGC	All partners	Share the action plan with the members and explain how they can benefit from it and how they can contribute.	
1.2.5	Governance team SCWG meetings	Twice a month to check the Action Plan implementation. Core group will meet every two-weeks to check SCWG activities (Short meeting with Chairs and facilitators)	45352	March-25	Excel file to check level of advancemente and comments		Chairs + facilitators + WP leader	UNICAL / UROS / TERINOV	Correct implementation of the Action Plan	
1.2.6	SCWG meetings	Every two months to implement Action Pan	April 2024	March 2025	Template for short summary including: nº of meetings, dates, nº of participants, main topics adressed.		Chairs / ITC /UAc / ULPGC	UNICAL / UROS / TERINOV	Networking and better knowledge among the members.	
1.3	Reporting	Documenting the meetings and conclusions	Dec 2023	Mach 2024						
1.3.1	Action Plan	Full description of the plan	February-24	March-24	Word template	11/03/2024 Action Plan draft D4.1 15/03/2024 Feedback from partners on D4.1 20/03/2024 Final D4.1	ITC / Chairs	ULPGC / UAC	Deliverable 4.1	
OBJ 2	**Focusing: Selecting key research fields and subjects**	The subject in which the SCWG will be focused is established by the Chairs of the group			All the documents, online conferences and results will be uploaded in TEAMS					
2.1	Identification of new research strands involving multidisciplinary research groups from both Widening and leading HEIs according to the societal challenge	Identifiyng new potential stakeholders	Feb 2024	April 2024						
2.1.1	Setting up common interest on research fields	Put in common current research strands and identify the common interest among the ORs regions.	February-24	March 2024	ULPGC prepared a document to check by UAC and compleate it.	Leví and Rodrigo share a proposal to Joana and Andrea. Check during one week to find common research strands.	Chairs	UAC/ ULPGC	Focusing the scope of the group	
2.1.2	Filling in SCWG Members' profiles	SCWG Collaborative Space	April 24	March 2025	Tailored Member Profile template (ERC pannels + past projects)		ITC	UNICAL / UROS	Draft catalogue of member profiles	
OBJ 3	**Networking: Establishment of networks between the widdening and the leading actors to build consortia**	Networking is needed to foster long-term cooperation among the participants								
3.1	Identifying key institutions/actors/stakeholders	Identify current stakeholders	June 2024	October 2024						
3.1.1	Creation of a list of institutions with ongoing collaborations	Identify actors that the group wants to take into account to develop projects (researchers, business, other stakeholders, public institution) Potential partners for projects. Collaborators and beneficiaries, associated partners.	March-24	August 24	Template of the data base taking into account GDPR		Chairs	All partners	Common catalogue of stakeholders at the EXPER partners regions with ongoing collaborations or easy to reach for future collaborations	
3.1.2	Creation of a list of key institutions/actors for future collaboration (Ors, EU - EXPER partners regions)	Collaborators and beneficiaries, associated partners.	September 24	October 24	Template of the data base taking into account GDPR		UAC / ULPGC / UNICAL / UROS / TERINOV	All partners	Common catalogue of stakeholders at the EXPER partners regions which are of interest to invite to a project proposal	
3.2	Identifying External Networking Events	Identifiyng new potential stakeholders	April 2024	March 2025						
3.2.1	Identification and dissemination among SCWG members of (regional, national or/and EU level) events	Participation of the researchers on events of the other EXPER projects location. Introduce the research work in the context of the other archipielago / region. Ex Levi presents their research activities in an Azores group.	April 2024	March 2025	Teams group dissemination. Email dissemination. Template of list of events identified and disseminated on the Teams platorm	Check if Chairs can join (online) on-going meeting at EXPER universities Link with participation of International conference, objective 4.5.4 and 4.5.5	Chairs / UAC / ULPGC / UNICAL / UROS /	All partners	Networking among group members that could deal into future projects.	
3.3	Promoting SCWG Networking Activities	Related with other WP and project activities	May 2024	Mach 2025						
3.3.1	SCWG thematic event	Members of the group present their research strands and if possible, collaboration with business sector, society, etc.	May-24	March 2025	Template of the invitation. Template for the agenda. Template for the presentation. Template for disseminating conclusions. Template to reporting list of events attended /participants, etc.	Do not forget to invite other EXPER universities	Chairs / UAC / ULPGC / UNICAL / UROS /	All members	Increase the opportunities to build and to promote new projects. Enhance collaboration with business sector and society.	

OBJ 4	**Implementation: fostering the participation of joint research projects in European R&D&I programmes**	Focusing efforts in establishing cooperation into concrete projects applying to EU funding			All the documents, online conferences and results will be uploaded in TEAMS				
4.1	Identifying funding opportunities		April 2024	March 2025					
4.1.1	Identification of **on-going** specific calls and topics of interest + networking platforms (linked with brokerage events finding)	SCWG Collaborative Space: Excel with comming open calls, collaborative document.	April 2024	March 2025	Database with information about comming calls and events connected (infodays) Template for listing the funding opportunities identified and disseminated in the TEAMS collaborative space	Short term: Identify ongoing calls that ULPGC and UAC are planning to prepare. Long term: Propose objectives in a longer period of time.	Facilitators		Partnerships between leading Universities and UAC and ULPGC
4.1.2	Identification of **new** specific calls and topics of interest + networking platforms (linked with brokerage events finding)	SCWG Collaborative Space: Excel with comming open calls, collaborative document.	April 2024	March 2025	Database with information about comming calls and events connected (infodays) Template for listing the funding opportunities identified and disseminated in the TEAMS collaborative space		UNICAL / UROS	ULPGC / UAC / ITC	Partnerships between leading Universities and UAC and ULPGC
4.1.3	Dissemination among SCWG members of (regional, national or/and EU level) events	Dissemination at the Teams collaborative space	April 2024	March 2025	TEAMS collaborative space		UNICAL / UROS	All partners	Partnerships between leading Universities and UAC and ULPGC
4.2	Building potential consortiums to develop new research proposals	Development of Horizon Europe projects, in particular of RIA, IA and Marie Curie networks involving businesses. Establishment of COST networks Promoting Excellent and Responsible Research.	April 2024	March 2025					
4.2.1	Identification of a pool of partners	SCWG Collaborative Space Connected with 3.1.1 Not widening universities must be part of the consortium	April 2024	March 2025	Database of group members profile		Chairs/ UAC / ULPGC	UNICAL / UROS / TERINOV	Identify right partners for a project proposal
4.2.2	Identification of needed profiles with EXPER consortium ressources (contacts)	SCWG Collaborative Space	April 2024	March 2025	Template of list of partners search		UNICAL / UROS	All partners	Identify right partners for a project proposal
4.2.3	Knowledge exchange with EXPER universities partens - Best practices, for the proposal writting.	Online Seminar - Hands on	May-24	July 2024	Good practices on how to be sucessful in EU projects		UNICAL / UROS	ULPGC / UAC / ITC	UAC and ULPGC learn good practices from UNICAL and ROSTOCK
4.2.4	Proposal writting	Writting proposals ready to apply to funds	June 2024	March 2025	EXPER project members experience	Demand help to other EXPER universities	UNICAL / UROS / TERINOV	ULPGC / UAC / ITC	At least 2 proposals written ready to apply to funding
4.2.5	Joint online meetings	Meetings when needed in order to fulfil the proposal writting in time.	April 2024	March 2025		Once the proposal is being built, partners may have extra meetings, different to the regular ones.	UNICAL / UROS / TERINOV	All members	Preparing proposals to participate in EU funding
4.3	Involvement of the business sector in the group	Connection with business environment must be promoted in EXPER project: knowledge transfer and spin-offs	April 2024	March 2025					
4.3.1	EXPER business partners involvement	EXPER parterns invite companies to join the group	April 2024	March 2025	Invitation to events		TERINOV	EMERGE, UROS, SPEGC, all	Involvement of the business sector and society
4.3.2	Consultation with industry and public entities to identify synergies within existing and future infrastructures	Consult in case of need	June 2024	March 2025			TERINOV	All partners	Involvement of the business sector and society
4.3.3	Open day to share the research areas and business	Searching connections between business and research. Linked with	April 2024	March 2025	Invitation to events		UNICAL / UROS / TERINOV		Involvement of the business sector and society
4.3.4	Expose research areas and business sector demands	Online and inplace event. One research from each of the EXPER university will present their research area. 2 collaborative companies will explain their collaboration with the Universty (hopufully the same deparment). After the online meeting, there will be inplace catering (pizza + beer) to promote the ideas exchanges localy or connections with other EXPER universities	April 2024	March 2025	Template of the invitation. Template for the agenda. Template for the presentation. Template for disseminating conclusions. Template to reporting list of events attended /participants, etc.	Based on previous identification of group members	UAC / ULPGC / UNICAL / UROS / TERINOV	All	Involvement of the business sector and society
4.4	Organization of Summer Schools, international seminar and attending to conferences in line with the selected research topics	Budget availability pending to be checked. Proposal: June 2024.	March 2024	March 2025					
4.4.1	Pre - design of the summer school	Make a proposal of summer school taking into account the 2 SCWG Topics will be allign with Objective 4.6, topics identified for the Capacity Action Plan	March 24	Apr 24			ULPGC / UAC	ITC	Proposal of the summer school to chairs for validation
4.4.2	Design the summer school	Defining topic, interests, duration, availability, etc. Information about the focused research strands	March 24	Agust 24			Chairs / UAC / ULPGC	ITC	Fine tune the summer school agenda
4.4.3	Dissemination of the summer school	Among partners and elsewhere	April 2024	May-24			ULPGC	All partners	Get at least 50 participants
4.4.4	Implementation of the summer school	All members will be invited	June 2024	July-24	List of events organized and attended		ULPGC / UAC	All partners	Face to face meetings among chairs, group members to enhace future collaborations.
4.4.5	International Conference		March 2024	March 2025	List of events organized and attended		ULPGC / UAC		Networking dealing into proposal contacts
4.4.6	Attending conference		March 2024	March 2025	List of events organized and attended		ULPGC / UAC		Networking dealing into proposal contacts
4.5	Capacity building plan	The Plan will integrate the training activities under WP3 and address in particular research management skills for a) Open Science practices and b) research data management in Horizon Europe projects and skills to better connect the work of researchers with the society such as c) responsible research d) scientific education to foster the use of Horizon Europe research results into education.	March 2024	Sept 24					
4.5.1	Identification of SCWG member's training needs	Researcher will provide incomes	March 2024	May 2024	Template		ULPGC	Chairs	Researchers express their needs in capacity building
4.5.2	Development of the Plan	taking into account assestment and objectives of the strategies involving external experts	May-24	August 2024	Deliverable 4.2. capacity building training contents should be linked to the ones from the Summer School		ULPGC	UAC, ITC	Capacity building plan adapted to the researchers demands
4.5.3	Inform the researcher and the consotium		august 24	sept 24	Email		ULPGC		All partners are aware of the Building Action Plan
OBJ 5	**Dissemination: Disseminating SCWG activities.**	Getting awareness of the societal challenges and the support provided within EXPER project			All the documents, online conferences and results will be uploaded in TEAMS				
5.1	Dissemination of SCWG activities	Disseminate the group results according to the phase of	March 2024	Mach 2025					
5.1.1	Disseminate the SCWG activities done through EXPER channels (social media, web...)	Disseminate the group results according to the phase of development	January 2024	March 2025	Template List of publications on EXPER website		ITC	CE	Inform the partners and society about the activities done under the WP4 and within the group in particular

SCWG1 : Adaptation to Climate Change in the blue and/or circular economy. Work Plan calendar

SCWG Objectives	Actions	Supporting documents	2024 February	March	April	May	June	July	August	September	October	November	December	2025 January	February	March
Obj 1 Management: Succesful development of the SCWG management tasks to achieve goals within the set scope, time, quality and budget specifications.	1.1 Implementation of cooperation and communication tools	TEAMS collaborative space														
	1.2 SCWG Meetings	Short summary: nb of meetings, dates, nb of participants, main topics adressed.														
	1.3 Reporting	D 4.1 + Action Plan														
Obj 2 Focusing: Selecting key research fields and subjects	2.1 Identification of new research strands involving multidisciplinary research groups from both Widening and leading HEIs according to the societal challenge	D4.1 + Member's profile														
Obj 3 Networking: Establishment of networks between the widening and the leading actors to build consortia	3.1 Identifying key institutions/actors/stakeholders	Data base of stakeholders														
	3.2 Identifying External Networking Events	List of events identified and disseminated on the Teams platorm														
	3.3 Promoting SCWG Networking Activities	List of events attended														
Obj 4 Implementation: fostering the participation of joint research projects in European R&D&I programmes	4.1 Identifying funding opportunities	List of funding opportunities identified and disseminated in the TEAMS collaborative space														
	4.2 Building potential consortiums to develop new research proposals	List of partners search + Proposals written														
	4.3 Involvement of the business sector in the group	Nº of business members within the group + Nº of companies attending to meetings														
	4.4 Organization of Summer Schools, international seminar and attending to conferences in line with the selected research topics	List of events organized and attended														
	4.5 Capacity building plan	D 4.2														
Obj 5 Dissemination: Disseminating SCWG activities	5.1 Dissemination of SCWG activities	List of publications on EXPER website														

INDICATORS

A list of indicators will help to monitor the implementation of the activities and help to detect and correct possible deviations.

Table 11. Indicators to monitor SCWG1 Actions

Area	Task	Indicator	Nº
Management	1.2	Nb meetings	> 6
Management	1.2	Nb participants/meeting	10
Focusing	2.1	Nb members profile	> 10
Networking	3.1	Nb stakeholders identified	> 10
Networking	3.2	Nb external events identified	> 2
Implementation	4.1	Nb calls/topics identified	> 5
Implementation	4.2	Nb proposals submitted	> 1
Dissemination	5.1	Nb news generated	> 6

CONTINGENCY PLAN

A contingency plan will help us to anticipate potential risks and redirect efforts in helping to achieve SCWG1 goals.

Table 12. SCWG1 Contingency Plan: potential risks and levels

Area	Risk	Level (Low, Medium, High)	Contingency Plan
Management	Lack of knowledge on the use of Microsoft TEAMS Platform	L/M	Training material on how to use the platform available for the members.
Management	Lack of time to reach the objectives of the SCWG	M	Governance team, planning and efficient coordination among participants.
Management	Poor attendance of participants in meetings	L	Organization of short meetings (maximum 1 hour) sending the agenda at least 1 week in advance.

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Area	Risk	Level (Low, Medium, High)	Contingency Plan
Focusing	Low number of “members’ profile” filled and received from members.	L/M	Communicate the importance to have their profiles to be able to identify common fields of interest and potential match.
Networking	Lack of interest to participate on the webinars to present a selection of successful projects	M	Offer these webinars as an achievement in terms of dissemination in their current funded projects.
Implementation	Lack of interest to build joint proposals due to confidentiality issues.	M/H	Signature of confidentiality and Non-disclosure Agreements
Dissemination	Low number of news generated	L/M	Use of templates and models to help writing news and communicate to WP8 the activities developed within the group.

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ANNEX 2: SCWG2 ACTION PLAN

SCWG2: RESTORE OUR OCEAN AND WATERS IN THE BLUE AND/OR CIRCULAR ECONOMY

GROUP COMPOSITION

GOVERNANCE TEAM

CHAIRS

UAC: Andrea Zita Botelho (CIBIO-A - Research Center for Biodiversity and Genetic Resources – Azores) Andrea Z. Botelho has a Degree in Biology (University of the Azores), a Master in Nature Conservation and Management (University of the Azores) and a PhD in Marine Sciences – marine ecology (University of the Azores). The main research focus is Marine Sciences, Marine Ecology, and in particular Biodiversity and Conservation, Planning and Management. Participated in international and national projects, with highlight for HORIZON projects - Research and Innovation Actions, Marine SABRES (2022-2026), MaCoBioS (2020-2024), Paddle (H2020-MSCA-RISE-2016) and NATOUR - Joint Post-Graduate Study Programme in Ecotourism and Nature Guiding (ERASMUS+ capacity building in the field of higher education) (2021-2024). Involved in the proposals applications to European projects (HORIZON; INTERREG; Biodiversa, LIFE). Principal Investigator in the project SCAPETOUR (ACORES-01-0145-FEDER-000083). Member of the scientific and organizing committee of congress, workshops, and lectures. Participation in various scientific expeditions. Research interests in Functions and Services of Coastal Ecosystems, Maritime Spatial Planning, Assessment and Environmental Monitoring, Modeling, Management of Marine Management, Ecology of Marine Invasions, Aquaculture and Tourism. Currently a Researcher at the University of the Azores, Faculty of Sciences and Technology, and member of the CIBIO (Research Center of Biodiversity and Genetic Resources).

ULPGC: Rodrigo Riera Elena (BIOCON (Biodiversity and Conservation) IU-ECOAQUA ULPGC) Rodrigo Riera, PhD in Biological Sciences specialized in Marine Biology, with an academic and professional trajectory forged in various national and international universities. He has worked in the private sector (marine environmental consultancy), from 2005 to 2018. He is an experienced researcher who has worked in 10 countries. His network of collaborators spans countries such as Australia, the USA, the Netherlands, Qatar, Switzerland, Sweden, Portugal, and Chile, among others. Since 2020, he has been a Professor at the University of Las Palmas de Gran Canaria, with a scientific output of over 145 SCI publications, and ca. 50 international invited talks and panels. Prof Riera has obtained funding (ca. 2,650,000 €) from seven countries, Spain, Australia, Qatar, Brazil, Germany, Sweden, and Chile. I have coordinated 5 projects in 3 countries (Qatar, Sweden and Chile) since 2015, and now involved in the coordination and partnership of European proposals to be submitted to Horizon Europe on the field of

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Climate Change reversibility and mitigation, as well as integration of Theory on marine ecology.

FACILITATORS

UAC: Emanuel Mendonça. EXPER project manager

ULPGC: Tanausú Dávila. EXPER project manager

GROUP COORDINATOR - WP4 leader

ITC: Dayana Martín Andara. EXPER project manager

ITC: Lucía Dobarro Delgado. EXPER project manager

In the table below, the role and activities appoint are summarised.

Table 13. Members of SCWG Group 2. Restore our Ocean and Waters in the blue and/or circular economy

Affiliation	Region / Country	Role	Activity
ULPGC - FCPCT	Canary Islands / Spain	Chair + Facilitator	Leading the research strands + invite other researchers
UAc	Azores / Portugal	Chair + Facilitator	Leading the research strands + invite other researchers
ITC	Canary Islands / Spain	WP4 leader	Coordination
UROS	Rostock / Germany	Core group	SCWG meeting management + Project proposal co-creation + invite other researchers and members
UNICAL	Calabria / Italy	Core group	SCWG financing opportunities + Project proposal co-creation + invite other researchers and members
TERINOV	Azores / Portugal	Core group	Project proposal co-creation + companies involvement + promotion across the ERA to attract the talents
SPEGC	Canary Islands / Spain	EXPER Member	Government connections + companies involvement
EMERGE	Canary Islands / Spain	EXPER Member	Society connection + companies involvement
CE	Canary Islands / Spain	EXPER Member	Stakeholders involvement + communication
ATRINEO	Karlsruhe / Germany	EXPER Member	Technology transfer assessment
EXTERNAL STAKEHOLDERS*	EU	Member	Participating in SCWG activities

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*Each of the external stakeholders will be part of the group after accepting the invitation of the EXPER project partners.

SOCIETAL CHALLENGE DEFINITION

Restoring our oceans and waters is a major challenge to heal water systems, ensuring a healthy planet for future generations. It is also a call to action for the EU regions, to protect and restore the health of the ocean and waters through research and innovation, citizen engagement and blue investments.

The protection and regeneration of oceans and freshwater can play a key role in nature, both in biodiversity and in marine and freshwater ecosystems, elimination of pollution and/or minimization based on nature-based solutions, and provide circularity and carbon neutrality in the blue economy. In the case of the Canary Islands and Azores, it will be focused on the Atlantic Ocean basin, one of the “EU lighthouses”.

This objective will be addressed by cross-cutting actions, including widespread public engagement and the development of a digital ocean knowledge system called Digital Twin Ocean.

OBJECTIVES

The **general objectives** of the SCWG2 are:

- Share research & innovation roadmaps to create interdisciplinary teams to create impact for society.
- Identify new research strands involving multidisciplinary research groups from both Widening and leading HEIs and organize joint workshops to define and develop new research proposals.
- Prepare joint research projects under Horizon Europe, and in particular, RIA, IA and Marie Curie networks involving businesses. Also, the establishment of COST network in the new research strands identified will be supported.

The SCWG2 **action plan objectives** are:

- MANAGEMENT O1: Successful development of the SCWGs management tasks to achieve goals within the set scope, time, quality and budget specifications.
- FOCUSING O2: Selecting key research fields and subjects related with Restoring our Ocean and Waters in the blue and/or circular economy.

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- NETWORKING O3: Establishment of networks between the widening and the leading actors to build consortia on Restoring our Ocean and Waters in the blue and/or circular economy;
- IMPLEMENTATION O4: fostering the joint research projects in European R&D&I programmes in the area of Restoring our Ocean and Waters in the blue and/or circular economy;
- DISSEMINATION O5: Disseminating SCWG2 activities.

The **specific objectives** for the SCWG2 are the following:

- Facilitate Interdisciplinary Collaboration: Organize interdisciplinary workshops and events to foster collaboration between researchers from various disciplines within both Widening and leading Higher Education Institutions (HEIs), aimed at addressing challenges related to ocean and water restoration, and promoting circular economy practices.
- Research Proposal Development: Coordinate joint workshops to identify emerging research strands and develop new research proposals that align with the objectives of restoring oceans and waters while promoting a blue and circular economy.
- Project Preparation Under Horizon Europe: Support the preparation of joint research projects under Horizon Europe, specifically focusing on Research and Innovation Actions (RIA), Innovation Actions (IA), and Marie Curie networks involving businesses. Additionally, facilitate the establishment of COST networks to further support research in identified areas.
- Effective SCWG Management: Ensure successful development and execution of SCWG management tasks, adhering to set scope, time, quality, and budget specifications to achieve the defined goals.
- Identification of Key Research Fields: Select and prioritize key research fields and subjects pertinent to restoring oceans and waters within the context of the blue and circular economy, considering the principles of sustainability and environmental conservation.
- Establishment of Consortia Networks: Build networks and consortia between Outermost Regions (ORs) and external actors, including academic institutions, industry stakeholders, and non-governmental organizations, to strengthen collaboration and facilitate joint initiatives focused on ocean and water restoration and circular economy practices.
- Promotion of Outermost Regions Participation in R&D&I Programs: Encourage and support the active participation of organizations from Outermost Regions (ORs) in European Research, Development, and Innovation (R&D&I) programs related to restoring oceans and waters, providing necessary guidance and resources for successful involvement.
- Dissemination of SCWG Activities: Develop and implement strategies for disseminating the activities and outcomes of the SCWG2, including research findings, project developments, and collaborative initiatives, to relevant stakeholders and the wider community, ensuring transparency and knowledge sharing.

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BACKGROUND AND PREVIOUS EXPERIENCE

The following tables summarize the relevant UAc and ULPGC participation in European funding schemes related with “Restore our Ocean and Waters in the Blue and/or circular economy”:

Table 14. UAc relevant participation in EU co-financed projects related with Restore our Ocean and Waters in the Blue and/or circular economy

Program	Topic	Acronym	Title	Coordinating Entity
Horizon Europe	HORIZON-MISS-2021-CLIMA-02-04	R4C	Regions4Climate - Develop and demonstrate a socially-just transition to climate resilience	Vtt Technical Research Centre Of Finland Ltd
Horizon Europe	HORIZON-CL6-2021-BIODIV-01	MARINE SABRES	Marine Systems Approaches for Biodiversity Resilience and Ecosystem Sustainability	University College Cork - National University Of Ireland, Cork - Ucc
Horizon Europe	HORIZON-CL6-2021-BIODIV-01-12	MSP4BIO	Improved Science-Based Maritime Spatial Planning to Safeguard and Restore Biodiversity in coherent Europen MPA network	S.PRO-Sustainable Projects Gmbh
EEA Grants	BlueGrowth call #2 - Business Development, Innovation and SMEs	PHYSALYA PHYSALIS	Innovative and unexploited source of high added-value cosmetic products	Mesosystem, S.A.
EEA Grants	BlueGrowth call #3 - Support for increasing the efficiency of resources linked to companies in the maritime sector	AZEB	Azores EcoBlue - Development of new raw materials and new by-products, using marine and beach litter and waste from marine activities as raw material	Circular Blue, Lda
ERA-NET	BIODIVERSA Joint Call "*Conservation and restoration of degraded ecosystems and their biodiversity, including a focus on aquatic systems".*	DEEP REST	Conservation & restoration of deep-sea ecosystems in the context of deep-sea mining	Ifremer
H2020	H2020 research and innovation programme (GA no. 869710)	MACOBIOS	Marine Coastal Ecosystems Biodiversity and Services in a Changing World -	University of Portsmouth

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Table 15. ULPGC relevant participation in EU co-financed projects related with Restore our Ocean and Waters in the Blue and/or circular economy

Program	Topic	Acronym	Title	Coordinating Entity
HORIZON EUROPE	BIODIVERSA+	EUROSIGN	Promoting action on broad ocean challenges by delving into the past, present, and future of European syngnathids	ULPGC
HORIZON EUROPE	HORIZON-MISS-2021-OCEAN-02-01	OCEAN CITIZEN	Marine forest coastal restoration: an underwater gardening socio-ecological plan	Universidad de Salento
HORIZON EUROPE	HORIZON-CL6-2021-BIODIV-01-10	Marine SABRES	Marine Systems Approaches for Biodiversity Resilience and Ecosystem Sustainability	University of Ireland, Cork
H2020	LC-BG-03-2018	SUMMER	Sustainable management of mesopelagic resources	FUNDACION AZTI - AZTI FUNDAZIOA
CINEA	European Climate, Infrastructure and Environmental Executive Agency	MARSP	Macaronesian Spatial Planning.	ULPGC
H2020	LC-CLA-08-2018	COMFORT	Our common future ocean in the Earth system – quantifying coupled cycles of carbon, oxygen, and nutrients for determining and achieving safe operating spaces with respect to tipping points	Universitetet i Bergen (Norway)
H2020	BG-08-2018-2019	TRIATLAS	Tropical and South Atlantic - climate-based marine ecosystem prediction for sustainable management	Universitetet i Bergen (Norway)

PRIORITIES

In developing action plans to address societal challenges related to restoring seas and oceans in the Macaronesia region, several thematic areas should be considered. These thematic areas help organize efforts and focus on specific aspects of marine conservation and restoration.

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Here are some thematic areas for action plans:

1. **Marine Biodiversity Conservation**: Develop strategies and actions to protect and conserve marine biodiversity, including endangered species, key habitats such as rocky reefs and seagrass beds, Vulnerable Marine Ecosystems (VMEs) and important ecological processes. This may involve establishing marine protected areas (MPAs) networks and Ecologically or Biologically Significant Marine Areas (EBSMA), implementing species-specific conservation measures, genomic and biotech innovations.

2. **Marine Pollution Prevention and Control**: Focus on reducing pollution from various sources, including plastic debris, agricultural runoff, industrial discharges, and oil spills. Implement measures to improve waste management, promote recycling and circular economy initiatives, and enhance enforcement of environmental regulations.

3. **Sustainable Fisheries Management/Aquaculture**: Develop and implement sustainable fisheries management practices to ensure the long-term health and productivity of fish stocks while minimizing negative impacts on marine ecosystems and coastal communities. This may involve implementing fisheries quotas, promoting selective fishing gear, and supporting alternative livelihoods for fishermen.

4. **Climate Change Adaptation and Resilience**: Address the impacts of climate change on marine ecosystems, including ocean acidification, sea-level rise, and increased frequency of extreme weather events. Develop adaptation strategies to enhance the resilience of marine habitats and species, including restoring coastal wetlands, implementing coral reef restoration projects, and promoting ecosystem-based adaptation approaches and Nature based solutions.

5. **Marine Spatial Planning**: Implement marine spatial planning processes to balance competing uses of marine resources, including fishing, shipping, tourism, and conservation. Identify areas of ecological importance, establish marine corridors and connectivity networks, and integrate conservation objectives into coastal development plans.

6. **Community Engagement and Empowerment**: Empower local communities and stakeholders to actively participate in marine conservation and restoration efforts. Foster community-based monitoring and management initiatives (e.g. citizen-science), promote traditional ecological knowledge, and support local conservation projects that enhance community livelihoods and well-being.

7. **Education and Awareness-raising**: Promote environmental education and awareness-raising campaigns to increase public understanding of marine conservation issues and foster a culture of stewardship. Target diverse audiences, including schools, coastal communities, NGOs, policymakers, and the public, through outreach programs, workshops, multimedia campaigns and gamification process.

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8. **Scientific Research and Monitoring**: Support scientific research and monitoring programs to improve understanding of marine ecosystems, assess the effectiveness of conservation measures, and identify emerging threats (e.g. invasive species). Invest in research infrastructure, capacity building, and data sharing initiatives to inform evidence-based decision-making and adaptive management approaches. Explore the use of Artificial Intelligence into the monitoring optimization and modelling process. Improvement of the technologies (e.g. sensors, robotics) used to obtain and processing real-time data.

9. **International Cooperation and Partnerships**: Foster collaboration and partnerships at regional, national, and international levels to address transboundary marine conservation challenges and promote collective action. Engage with neighbouring countries, international organizations, and global initiatives to share best practices, mobilize resources, and support capacity-building efforts.

10. **Policy and Governance**: Advocate for the development and implementation of effective policies, regulations, and governance frameworks to support marine conservation and restoration objectives. Ensure coherence between sectoral policies, integrate marine conservation into national development plans, efficiency and effectiveness and strengthen enforcement mechanisms to combat illegal activities (e.g. illegal fishing).

By addressing the above ten thematic areas through coordinated action plans, European stakeholders can work together to overcome societal challenges and achieve meaningful progress towards restoring seas and oceans for the benefit of present and future generations.

The following proposed research projects are strategically aligned with the thematic areas identified for action plans in marine conservation and restoration. By integrating these initiatives into a comprehensive framework, we can address the multifaceted challenges facing our seas and oceans. By addressing the former thematic areas through coordinated action plans, we can effectively navigate the complexities of marine conservation and restoration, fostering a sustainable future for Europe and beyond.

Proposed research projects:

(i) Enhancing Marine Biodiversity Conservation Through Genomic Innovations

Aim: This research proposal aims to utilize genomic and biotech innovations to enhance marine biodiversity conservation. By leveraging advancements in genetic technology, the project seeks to improve our understanding of marine species' genetic diversity, population dynamics, and adaptation mechanisms, thereby informing more effective conservation strategies.

(ii) Integrated Coastal Zone Management for Climate Resilience

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Aim: This proposal focuses on developing an integrated approach to coastal zone management in Europe and worldwide, aimed at enhancing resilience to climate change impacts. The project aims to combine ecosystem-based adaptation approaches with nature-based solutions, such as restoring coastal wetlands and implementing sustainable coastal infrastructure, to mitigate the effects of sea-level rise, ocean acidification, and extreme weather events.

(iii) Empowering Coastal Communities Through Citizen Science

Aim: This research project aims to empower coastal communities to actively participate in marine conservation efforts through citizen science initiatives. By engaging local stakeholders in monitoring and management activities, the project seeks to harness traditional ecological knowledge and promote community-led conservation projects that enhance both marine biodiversity and community livelihoods.

(iv) AI-Driven Monitoring and Modelling for Biodiversity and sustainable Fisheries Management

Aim: This proposal aims to integrate artificial intelligence (AI) into biodiversity and fisheries monitoring and modelling processes to support baselines for conservation and for sustainable fisheries management in European waters and worldwide. By utilizing AI algorithms for data analysis and predictive modelling, the project seeks, as use-cases, to improve the accuracy of fish stock assessments, optimize fishing practices, promote conservation actions and minimize the ecological impact of human-driven activities.

(v) Interdisciplinary Strategies for Climate Change Mitigation and Reversibility

Aim: This research proposal aims to develop interdisciplinary approaches to effectively mitigate and reverse the impacts of climate change. By integrating expertise from various fields such as environmental science, policy analysis, social sciences, and technology innovation, the project seeks to identify and implement comprehensive strategies that address both the root causes and the consequences of climate change. Through a collaborative and interdisciplinary framework, the aim is to devise innovative solutions that promote resilience, sustainability, and long-term environmental health in ecosystems and communities.

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Figure 12. SCWG2 priorities (Source: own source)

WORK PLAN

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Work Plan Act

SCWG2 : Restore our Ocean and Waters in the blue and/or circular economy. Work Plan activities

Version Date

Objective	Actions	Details	Start date	End date	Resources	Comments	Responsisble contact (Member of the SCWG in charge of this activity)	Co-responsible contact (EXPER partner in charge of this activity)	Expected results	Level of advancement
OBJ 1	**Management: Succesful development of the SCWG management tasks to achieve goals within the set scope, time, quality and budget specifications.**	All the documents, online conferences and results will be uploaded in TEAMS								
1.1	Implementation of cooperation and communication tools	All members communicate online through the platform	Feb 2024	March 2025						
1.1.1	Setting up and implementation of online tools	Teams Collaborative Space	February 2024	March 2025	Team collaborative space with different Folders (action plan, training, researchers' profiling)	check if it is working for everybody	ULPGC / Facilitator	ULPGC / ITC	Guarantee the clear and effective communication among the groups members.	
1.1.2	Prepare meeting schedule	Schedule SCWG meetings and activities for action plan implementation.	March-24	March 2025	Planning calendar		ITC	ULPGC / UAC / ITC	At the end of each meeting, concrete where the next meeting will take place. If possible, the next two. This way the members of the group can book the date.	
1.2	SCWG Meetings	Group meetings to achieve the goals of the Action Plan	Feb 2024	March 2025						
1.2.1	Co-creation of the Action Plan	Azores and Canary Islands meetings, once a week	February-24	February-24	Excel and word template	Excel, this file. Word file in process	Chairs / ITC /UAc / ULPGC		Having a guide of the next steps for achiving the group goals.	
1.2.2	Validation of the Action Plan	EXPER partners make contributions to the Action Plan	March-24	March-24	Excel and word template		ITC	All partners	Getting the inputs, comments of all EXPER partners to improve the plan,	
1.2.3	Invite members to join the group	Invitations from the Chairs + EXPER members (up to 15 members)	March-24	March-24	Mail invitation template		ITC	All partners	All EXPER partners must be involved in other to garantee the multidisciplinarity within the group. HEIs must have an active participation in other to garantee the objective of the group, in particular Objective 4 from the Action Plan	
1.2.4	SCWG Kick-off meeting	Presenting the Action Plan to others group members	April-24	April-24	Presentations	To check if both SCWG can present jointly	Chairs / ITC /UAc / ULPGC	All partners	Share the action plan with the members and explain how they can benefit from it and how they can contribute.	
1.2.5	Governance team SCWG meetings	Twice a month to check the Action Plan implementation. Core group will meet every two-weeks to check SCWG activities (Short meeting with Chairs and facilitators)	March-24	March-25	Excel file to check level of advancemente and comments		Chairs + facilitators + WP leader	UNICAL / UROS / TERINOV	Correct implementation of the Action Plan	
1.2.6	SCWG meetings	Every two months to implement Action Pan	April 2024	March 2025	Template for short summary including: nº of meetings, dates, nº of participants, main topics adressed.		Chairs / ITC /UAc / ULPGC	UNICAL / UROS / TERINOV	Networking and better knowledge among the members.	
1.3	Reporting	Documenting the meetings and conclusions	Dec 2023	Mach 2024						
1.3.1	Action Plan	Full description of the plan	February-24	March-24	Word template	11/03/2024 Action Plan draft D4.1 15/03/2024 Feedback from partners on D4.1 20/03/2024 Final D4.1	ITC / Chairs	ULPGC / UAC	Deliverable 4.1	
OBJ 2	**Focusing: Selecting key research fields and subjects**	The subject in which the SCWG will be focused is established by the Chairs of the group			All the documents, online conferences and results will be uploaded in TEAMS					
2.1	Identification of new research strands involving multidisciplinary research groups from both Widening and leading HEIs according to the societal challenge	Identifiyng new potential stakeholders	Feb 2024	April 2024						
2.1.1	Setting up common interest on research fields	Put in common current research strands and identify the common interest among the ORs regions.	February-24	March 2024	ULPGC prepared a document to check by UAC and compleate it.	Leví and Rodrigo share a proposal to Joana and Andrea. Check during one week to find common research strands.	Chairs	UAC/ ULPGC	Focusing the scope of the group	
2.1.2	Filling in SCWG Members' profiles	SCWG Collaborative Space	April 24	March 2025	Tailored Member Profile template (ERC pannels + past projects)		ITC	UNICAL / UROS	Draft catalogue of member profiles	
OBJ 3	**Networking: Establishment of networks between the widdening and the leading actors to build consortia**	Networking is needed to foster long-term cooperation among the participants								
3.1	Identifying key institutions/actors/stakeholders	Identify current stakeholders	June 2024	October 2024						
3.1.1	Creation of a list of institutions with ongoing collaborations	Identify actors that the group wants to take into account to develop projects (researchers, business, other stakeholders, public institution) Potential partners for projects. Collaborators and beneficiaries, associated partners.	March-24	August 24	Template of the data base taking into account GDPR		Chairs	All partners	Common catalogue of stakeholders at the EXPER partners regions with ongoing collaborations or easy to reach for future collaborations	
3.1.2	Creation of a list of key institutions/actors for future collaboration (Ors, EU - EXPER partners regions)	Collaborators and beneficiaries, associated partners.	September 24	October 24	Template of the data base taking into account GDPR		UAC / ULPGC / UNICAL / UROS / TERINOV	All partners	Common catalogue of stakeholders at the EXPER partners regions which are of interest to invite to a project proposal	
3.2	Identifying External Networking Events	Identifiyng new potential stakeholders	April 2024	March 2025						
3.2.1	Identification and dissemination among SCWG members of (regional, national or/and EU level) events	Participation of the researchers on events of the other EXPER projects location. Introduce the research work in the context of the other archipielago / region. Ex Levi presents their research activities in an Azores group.	April 2024	March 2025	Teams group dissemination. Email dissemination. Template of list of events identified and disseminated on the Teams platorm	Check if Chairs can join (online) on-going meeting at EXPER universities Link with participation of International conference, objective 4.5.4 and 4.5.5	Chairs / UAC / ULPGC / UNICAL / UROS /	All partners	Networking among group members that could deal into future projects.	
3.3	Promoting SCWG Networking Activities	Related with other WP and project activities	May 2024	Mach 2025						
3.3.1	SCWG thematic event	Members of the group present their research strands and if possible, collaboration with business sector, society, etc.	May-24	March 2025	Template of the invitation. Template for the agenda. Template for the presentation. Template for disseminating conclusions. Template to reporting list of events attended /participants, etc.	Do not forget to invite other EXPER universities	Chairs / UAC / ULPGC / UNICAL / UROS /	All members	Increase the opportunities to build and to promote new projects. Enhance collaboration with business sector and society.	

OBJ 4	**Implementation: fostering the participation of joint research projects in European R&D&I programmes**	Focusing efforts in establishing cooperation into concrete projects applying to EU funding			All the documents, online conferences and results will be uploaded in TEAMS				
4.1	Identifying funding opportunities		April 2024	March 2025					
4.1.1	Identification of **on-going** specific calls and topics of interest + networking platforms (linked with brokerage events finding)	SCWG Collaborative Space: Excel with comming open calls, collaborative document.	April 2024	March 2025	Database with information about comming calls and events connected (infodays) Template for listing the funding opportunities identified and disseminated in the TEAMS collaborative space	Short term: Identify ongoing calls that ULPGC and UAC are planning to prepare. Long term: Propose objectives in a longer period of time.	Facilitators		Partnerships between leading Universities and UAC and ULPGC
4.1.2	Identification of **new** specific calls and topics of interest + networking platforms (linked with brokerage events finding)	SCWG Collaborative Space: Excel with comming open calls, collaborative document.	April 2024	March 2025	Database with information about comming calls and events connected (infodays) Template for listing the funding opportunities identified and disseminated in the TEAMS collaborative space		UNICAL / UROS	ULPGC / UAC / ITC	Partnerships between leading Universities and UAC and ULPGC
4.1.3	Dissemination among SCWG members of (regional, national or/and EU level) events	Dissemination at the Teams collaborative space	April 2024	March 2025	TEAMS collaborative space		UNICAL / UROS	All partners	Partnerships between leading Universities and UAC and ULPGC
4.2	Building potential consortiums to develop new research proposals	Development of Horizon Europe projects, in particular of RIA, IA and Marie Curie networks involving businesses. Establishment of COST networks Promoting Excellent and Responsible Research.	April 2024	March 2025					
4.2.1	Identification of a pool of partners	SCWG Collaborative Space Connected with 3.1.1 Not widening universities must be part of the consortium	April 2024	March 2025	Database of group members profile		Chairs/ UAC / ULPGC	UNICAL / UROS / TERINOV	Identify right partners for a project proposal
4.2.2	Identification of needed profiles with EXPER consortium ressources (contacts)	SCWG Collaborative Space	April 2024	March 2025	Template of list of partners search		UNICAL / UROS	All partners	Identify right partners for a project proposal
4.2.3	Knowledge exchange with EXPER universities partens - Best practices, for the proposal writting.	Online Seminar - Hands on	May-24	July 2024	Good practices on how to be sucessful in EU projects		UNICAL / UROS	ULPGC / UAC / ITC	UAC and ULPGC learn good practices from UNICAL and ROSTOCK
4.2.4	Proposal writting	Writting proposals ready to apply to funds	June 2024	March 2025	EXPER project members experience	Demand help to other EXPER universities	UNICAL / UROS / TERINOV	ULPGC / UAC / ITC	At least 2 proposals written ready to apply to funding
4.2.5	Joint online meetings	Meetings when needed in order to fulfil the proposal writting in time.	April 2024	March 2025		Once the proposal is being built, partners may have extra meetings, different to the regular ones.	UNICAL / UROS / TERINOV	All members	Preparing proposals to participate in EU funding
4.3	Involvement of the business sector in the group	Connection with business environment must be promoted in EXPER project: knowledge transfer and spin-offs	April 2024	March 2025					
4.3.1	EXPER business partners involvement	EXPER parterns invite companies to join the group	April 2024	March 2025	Invitation to events		TERINOV	EMERGE, UROS, SPEGC, all	Involvement of the business sector and society
4.3.2	Consultation with industry and public entities to identify synergies within existing and future infrastructures	Consult in case of need	June 2024	March 2025			TERINOV	All partners	Involvement of the business sector and society
4.3.3	Open day to share the research areas and business	Searching connections between business and research. Linked with	April 2024	March 2025	Invitation to events		UNICAL / UROS / TERINOV		Involvement of the business sector and society
4.3.4	Expose research areas and business sector demands	Online and inplace event. One research from each of the EXPER university will present their research area. 2 collaborative companies will explain their collaboration with the Universty (hopufully the same deparment). After the online meeting, there will be inplace catering (pizza + beer) to promote the ideas exchanges localy or connections with other EXPER universities	April 2024	March 2025	Template of the invitation. Template for the agenda. Template for the presentation. Template for disseminating conclusions. Template to reporting list of events attended /participants, etc.	Based on previous identification of group members	UAC / ULPGC / UNICAL / UROS / TERINOV	All	Involvement of the business sector and society
4.4	Organization of Summer Schools, international seminar and attending to conferences in line with the selected research topics	Budget availability pending to be checked. Proposal: June 2024.	March 2024	March 2025					
4.4.1	Pre - design of the summer school	Make a proposal of summer school taking into account the 2 SCWG Topics will be allign with Objective 4.6, topics identified for the Capacity Action Plan	March 24	Apr 24			ULPGC / UAC	ITC	Proposal of the summer school to chairs for validation
4.4.2	Design the summer school	Defining topic, interests, duration, availability, etc. Information about the focused research strands	March 24	Agust 24			Chairs / UAC / ULPGC	ITC	Fine tune the summer school agenda
4.4.3	Dissemination of the summer school	Among partners and elsewhere	April 2024	May-24			ULPGC	All partners	Get at least 50 participants
4.4.4	Implementation of the summer school	All members will be invited	June 2024	July-24	List of events organized and attended		ULPGC / UAC	All partners	Face to face meetings among chairs, group members to enhace future collaborations.
4.4.5	International Conference		March 2024	March 2025	List of events organized and attended		ULPGC / UAC		Networking dealing into proposal contacts
4.4.6	Attending conference		March 2024	March 2025	List of events organized and attended		ULPGC / UAC		Networking dealing into proposal contacts
4.5	Capacity building plan	The Plan will integrate the training activities under WP3 and address in particular research management skills for a) Open Science practices and b) research data management in Horizon Europe projects and skills to better connect the work of researchers with the society such as c) responsible research d) scientific education to foster the use of Horizon Europe research results into education.	March 2024	Sept 24					
4.5.1	Identification of SCWG member's training needs	Researcher will provide incomes	March 2024	May 2024	Template		ULPGC	Chairs	Researchers express their needs in capacity building
4.5.2	Development of the Plan	taking into account assestment and objectives of the strategies involving external experts	May-24	August 2024	Deliverable 4.2. capacity building training contents should be linked to the ones from the Summer School		ULPGC	UAC, ITC	Capacity building plan adapted to the researchers demands
4.5.3	Inform the researcher and the consotium		august 24	sept 24	Email		ULPGC		All partners are aware of the Building Action Plan
OBJ 5	**Dissemination: Disseminating SCWG activities.**	Getting awareness of the societal challenges and the support provided within EXPER project			All the documents, online conferences and results will be uploaded in TEAMS				
5.1	Dissemination of SCWG activities	Disseminate the group results according to the phase of	March 2024	Mach 2025					
5.1.1	Disseminate the SCWG activities done through EXPER channels (social media, web...)	Disseminate the group results according to the phase of development	January 2024	March 2025	Template List of publications on EXPER website		ITC	CE	Inform the partners and society about the activities done under the WP4 and within the group in particular

SCWG2 : Restore our Ocean and Waters in the blue and/or circular economy. Work Plan calendar

			2024											2025		
			February	March	April	May	June	July	August	September	October	November	December	January	February	March
SCWG Objectives	Actions	Supporting documents														
Obj 1 Management: Succesful development of the SCWG management tasks to achieve goals within the set scope, time, quality and budget specifications.	1.1 Implementation of cooperation and communication tools	TEAMS collaborative space														
	1.2 SCWG Meetings	Short summary: nb of meetings, dates, nb of participants, main topics adressed.														
	1.3 Reporting	D 4.1 + Action Plan														
Obj 2 Focusing: Selecting key research fields and subjects	2.1 Identification of new research strands involving multidisciplinary research groups from both Widening and leading HEIs according to the societal challenge	D4.1 + Member's profile														
Obj 3 Networking: Establishment of networks between the widening and the leading actors to build consortia	3.1 Identifying key institutions/actors/stakeholders	Data base of stakeholders														
	3.2 Identifying External Networking Events	List of events identified and disseminated on the Teams platorm														
	3.3 Promoting SCWG Networking Activities	List of events attended														
Obj 4 Implementation: fostering the participation of joint research projects in European R&D&I programmes	4.1 Identifying funding opportunities	List of funding opportunities identified and disseminated in the TEAMS collaborative space														
	4.2 Building potential consortiums to develop new research proposals	List of partners search + Proposals written														
	4.3 Involvement of the business sector in the group	Nº of business members within the group + Nº of companies attending to meetings														
	4.4 Organization of Summer Schools, international seminar and attending to conferences in line with the selected research topics	List of events organized and attended														
	4.5 Capacity building plan	D 4.2														
Obj 5 Dissemination: Disseminating SCWG activities	5.1 Dissemination of SCWG activities	List of publications on EXPER website														

INDICATORS

A list of indicators will help to monitor the implementation of the activities and help to detect and correct possible deviations.

Table 16. Indicators to monitor SCWG1 Actions

Area	Task	Indicator	Nº
Management	1.2	Nb meetings	> 6
Management	1.2	Nb participants/meeting	10
Focusing	2.1	Nb members profile	> 10
Networking	3.1	Nb stakeholders identified	> 10
Networking	3.2	Nb external events identified	> 2
Implementation	4.1	Nb calls/topics identified	> 5
Implementation	4.2	Nb proposals submitted	> 1
Dissemination	5.1	Nb news generated	> 6

CONTINGENCY PLAN

A contingency plan will help us to anticipate potential risks and redirect efforts in helping to achieve SCWG1 goals.

Table 17. SCWG1 Contingency Plan: potential risks and levels

Area	Risk	Level (Low, Medium, High)	Contingency Plan
Management	Lack of knowledge on the use of Microsoft TEAMS Platform	L/M	Training material on how to use the platform available for the members.
Management	Lack of time to reach the objectives of the SCWG	M	Governance team, planning and efficient coordination among participants.
Management	Poor attendance of participants in meetings	L	Organization of short meetings (maximum 1 hour) sending the agenda at least 1 week in advance.

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Area	Risk	Level (Low, Medium, High)	Contingency Plan
Focusing	Low number of “members’ profile” filled and received from members.	L/M	Communicate the importance to have their profiles to be able to identify common fields of interest and potential match.
Networking	Lack of interest to participate on the webinars to present a selection of successful projects	M	Offer this webinars as an achievement in terms of dissemination in their current funded projects.
Implementation	Lack of interest to build joint proposals due to confidentiality issues.	M/H	Signature of confidentiality and Non-disclosure Agreements
Dissemination	Low number of news generated	L/M	Use of templates and models to help writing news and communicate to WP8 the activities developed within the group.

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