MemCCSea

Innovative membrane systems for CO_2 capture and storage at sea

Deliverable D6.4

Communication, dissemination and exploitation plan

WP6. Coordination, management and dissemination

Version 0.1

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1 Introduction

This report includes information about the communication plan, the dissemination plan and the exploitation plan followed by all partners for the MemCCSea project. The communication plan provides a preliminary overview of measures that will be adopted by the consortium to ensure effective communication of the project and dissemination of its results. The dissemination plan reports on the full set of communication material produced within the MemCCSea project for promoting the project to a wider audience, while the exploitation of the final products will be investigated.

2 Communication plan

2.1 Introduction

The initial communication package is based on basic project information (objectives, expected impact and consortium). A second set and update version will be produced at later stage, alongside the project evolvement and in line with key milestones and achievements.

All communication materials will be made available on the dedicated project website (D6.5) for consultation or download.

2.1.1 Use of this document: license and disclaimer

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2.2 Project visual identity

Design rules have been set up in order to ensure a uniform and easily recognizable appearance of all MemCCSea outputs. These specifications will be applied by all partners in all outputs: presentations, printed and online documents, deliverables and publications related to the project.

2.2.1 Project logo

The project logo has already been established in proposal phase and is already being used since project start for all dissemination and communication activities.
Different variations of the logo have been prepared to be used: logos with/without including subtitle, solid and transparent, as well as small icons for website and social media use as shown in Figure 2.1.

Figure 2.1: MemCCSea logo designed for every purpose

2.2.2 Colour Guide

The two characteristic colors of the MemCCSea project are extracted also and can be found as described by Figure 2.2.

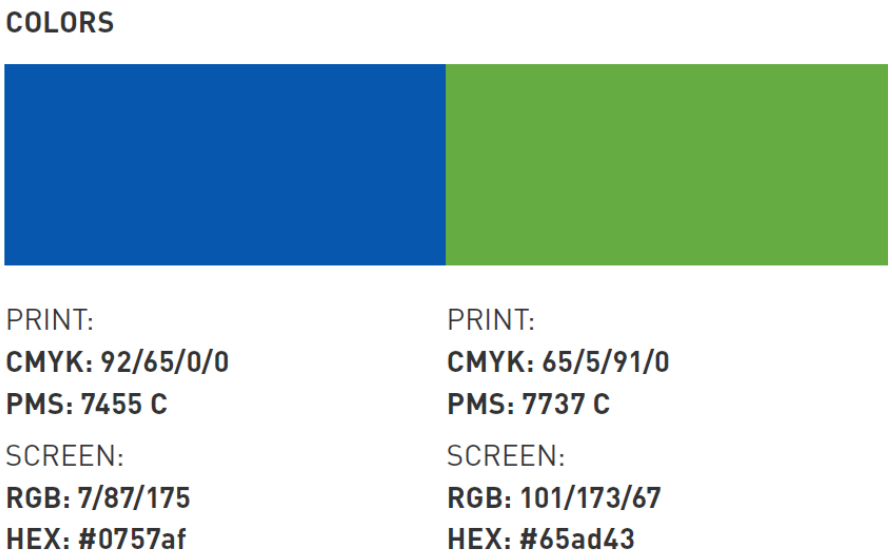

Figure 2.2: Characteristic MemCCSea project logo color code

2.2.3 Cover

A characteristic picture for back cover usage was also created and presented below.

Figure 2.3: MemCCSea back cover

2.2.4 Additional visual elements

2.2.4.1 EU and national funding agencies emblems and acknowledgment

In line with provisions established in the project Grant Agreement, all public project material must include the EU and national funding agencies emblems followed by the acknowledgement.

Figure 2.4: EU and national funding agencies emblems followed by the acknowledgement

2.3 Templates

Templates have been created for project documentation based on project's logos, colors and structure to ensure common appearance of all documents. The templates are available to all partners, found on the MemCCSea website Partners area. This area has been formed providing restricted access only to CA members.

More specifically, templates have been created for documents described below and presented as figures in Figure 2.5.

- Presentation
- Deliverables
- Events agenda
- Events participants list

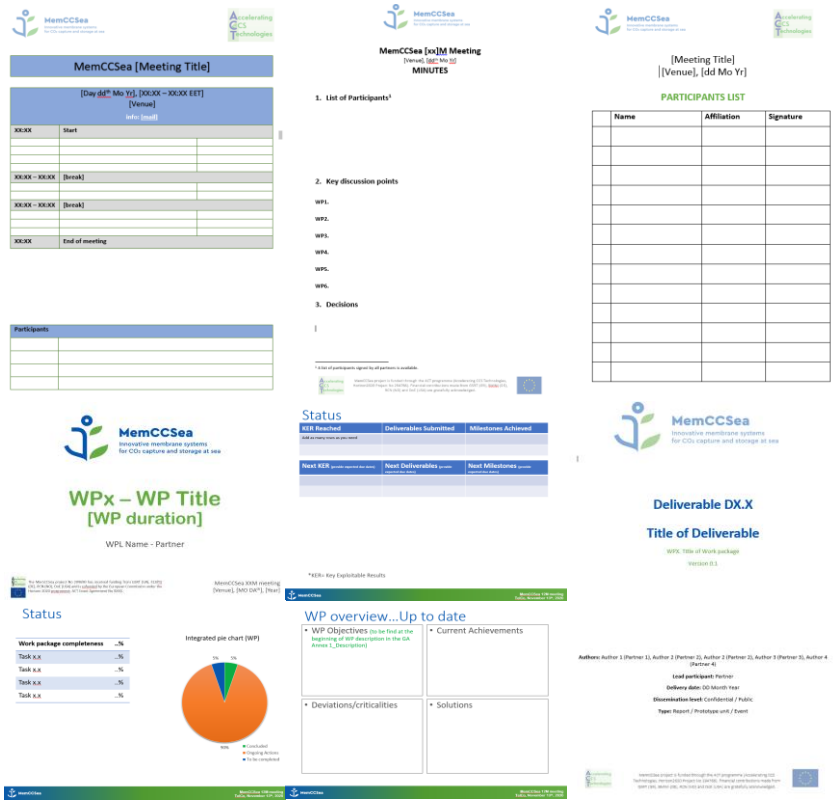

Figure 2.5: Quick view of templates created for project documentation

3 Dissemination plan

3.1 Introduction

Starting from information collected at proposal phase, the document has been elaborated based on a mapping carried out by each partner regarding the objectives of respective dissemination plans, expected target stakeholders, as well as planned communication and dissemination activities.

This document is intended to provide all necessary information and indications on MemCCSea dissemination, communication and exploitation issues. The catalogue collects all the identified target stakeholders and channels and is available to project partners on the MemCCSea platform.

3.1.1 Plan update

This deliverable is to be regarded as a living document along the project implementation.

Since the deliverable is submitted at early project stage, the analyses of targeted stakeholders and activities are to be considered as preliminary and subject to further elaboration in the course of the project. Indeed, an updated version of Communication, dissemination and exploitation plan, submitted in a later stage of the project, will provide an opportunity to consolidate such analyses and further detail the plan of activities, building on and complementing the elements of each plan.

3.1.2 Use of this document: license and disclaimer

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3.2 Policies and legal basis

Dissemination in MemCCSea is governed by provisions contained in the Grant Agreement (GA), Consortium Agreement (CA), Non-Disclosure Agreements and National Grant Agreements (NGA). These contractual documents will be complemented by Section **Error! Reference source not found.** and Data Management Plan (D6.6).

The dissemination rules presented here below are a simplified summary of the provisions included in the relevant sections of the Grant Agreement and Consortium Agreement, and specifically:

Grant Agreement

- Art 7 Reports

Consortium Agreement

- Art 8.1 Ownership of results
- Art 8.4 Dissemination

3.2.1 Obligation to disseminate results

According to Grant Agreement Art 7 "The ACT consortium will arrange annual Knowledge Sharing Workshops. The project is expected to participate and share results and knowledge on at least two workshops during the project period. The attendance to these workshops should be by invitation from the ACT consortium".

3.2.2 Visibility of National funding and disclaimer

Any dissemination of project results (in any form, including electronic) must indicate at all times that the project received funding from the National Funding Agencies. More in details, in all dissemination partners must:

- Display high resolution EU flag and National Funding Agencies emblems which should be given appropriate prominence when displayed with the project logo or any other logos.
- Include the following acknowledgement in the dissemination and communication material "MemCCSea project is funded through the ACT programme (Accelerating CCS Technologies, Horizon2020 Project No 294766). Financial contributions made from GSRT (GR), BMWi (DE), RCN (NO) and DoE (USA) are gratefully acknowledged."

3.2.3 Role and responsibilities

CERTH is responsible for Task 6.2 - Dissemination and Communication activities and will therefore retain overall responsibility for the carry out and monitoring of dissemination and specifically for keeping an updated dissemination register that will collect details on all dissemination activities related to MemCCSea performed by any member of the Consortium.

All partners are responsible for contributing to dissemination and communication activities of the project based on the information provided and included in the dissemination catalogue.

3.3 Dissemination and Communication Strategy

3.3.1 Objectives

The overall objective of this deliverable is to provide a comprehensive reference framework for the planning, implementation and monitoring of dissemination and communication activities. Indeed, this plan:

- Identifies the project stakeholders and target audiences
- Specifies the project's various communication tools/channels and preliminary messages
- Outlines a preliminary action plan for the implementation of activities
- Sets out guidelines for the dissemination of research/relevant polices and legal basis
- Identifies roles and responsibility within the consortium

Dissemination can be defined as "the public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium". Indeed, MemCCSea dissemination activities aim at:

- Informing key project stakeholders about MemCCSea results
- Facilitating and enabling the use and uptake of project results

Communication can be defined as "a strategically planned process, which starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results". Accordingly, the objective of MemCCSea communication activities is to inform both the identified project audience/target groups as well as society at large about the project and its results. More specifically, communication activities aim at:

- Raising public awareness on project objectives
- Increasing public visibility of MemCCSea activities
- Supporting the project dissemination objectives
- Demonstrating how national funding contributes to tackle relevant societal challenges

Communication and dissemination activities will be implemented through a number of complementary and mutually enforcing tools and channels described in Section 4. Tools and channels.

3.3.2 Stakeholders' analysis

MemCCSea dissemination and communication activities will target entities at local, national and international level which are operating the areas of maritime transport, CO_2 capture onboard, CO_2 short term storage and utilization and climate change abatement.

An analysis of potential specific categories of stakeholders has been carried out during the preparation of this dissemination plan. Six clusters of stakeholders that could be interested in the project outputs have been identified as reported in Table 3.1 below.

Table 3.1: MemCCSea stakeholders

Category	Description

Industry and/or commercial	• International maritime sector
	  - Shipowners
	  - Classification Societies
	  - Shipyards
	  - Others as relevant
	• Membrane manufacturers
	• International Maritime Organization (IMO)
	• Maritime Associations and other entities operating at national and internationa level
	• Network associations for science, industry, politics and society

Policy making/institutional	• Institutional and political entities at EU/USA level
	• Institutional/political entities at national/regional level:
	  - National governments, line ministries (e.g. industry, environment etc)
	  - Regional governments, Research Energy and Clean Technology Clusters, etc.
	  - Relevant European initiatives (e.g. EARPA)

Research and scientific community	• Universities • Research centers • Research alliances/networks
Entities involved in related projects and initiatives	• Consortium closed and ongoing relevant projects • Related external projects • EU and USA wide initiatives

Civil society	• Non-profit organisations and foundations • Others
General public	• EU citizens, USA citizens and beyond

Overall, it is expected that identified target stakeholders will play an important role by:

- Providing feedback on project activities and results
- Sharing knowledge and creating long term collaboration opportunities
- Supporting the identification of priorities and tailoring project activities to the needs of end-users
- Increasing the exploitation perspective of the project results
- Enhancing project visibility

3.3.3 Key messages

Consistently with MemCCSea objectives, expected impact and technological challenges, the following key messages have been identified:

- MemCCSea anchors for cleaner ships
- MemCCSea: a step towards decarbonizing maritime sector
- MemCCSea: contributing towards a sustainable future

Tailored messages targeting relevant target groups will be further developed along project evolvement in order to ensure effective dissemination of project results.

3.3.4 Plan of activities

The MemCCSea plan will be articulated in four dissemination phases as reported below. The four dissemination phases are strictly interconnected and mutually enforcing with the four project stages as summarized below:

- Phase 1 (M1 – M15): generating awareness about the MemCCSea project and its approach

At early project stage, results available will be limited as research activity will be primary focused on concept design and basic analysis of proposed solutions. Therefore, dissemination strategy will focus on: i) developing and setting up tools to be used along project implementation; ii) raising awareness among the stakeholders' community and general audience on the project objectives and expected impact.

Dissemination to the scientific community will also be implemented through the participation at ad hoc conferences and application to target journals.

- Phase 2 (M13 – M28): enhancing the understanding of the MemCCSea approach and its benefits

As the implementation/research activity progresses towards a higher level a maturity of proposed solutions, dissemination activities will focus on reaching target specialized audiences in order to enhance their understanding of MemCCSea ongoing scientific achievements. At the same time, communication will continue targeting the broader public through various channels.

- Phase 3 (M25 – M30): encouraging the active take-up of the MemCCSea results

At the final stage of project implementation, communication and dissemination will focus on spreading information on technology developed to potential customers and end-users in order to ensure their take up and exploitation. At the same time, the consortium will aim at informing the general public on how solutions developed can be effectively used to tackle societal challenges.

- Phase 4 (M30+): consolidating the dynamics created by the MemCCSea approach

Dissemination and communication activities will not be confined to the project duration. They will continue after the conclusion of the project with the view to promote exploitation of MemCCSea results in the medium-and long-term. Owing to the research and innovation focus of the MemCCSea project another valuable dissemination tool will be organization of a training event, which is programmed by the end of the project.

3.4 Tools and channels

In order to successfully convey the above listed messages to the respective target audiences and reach the highest impact possible, the project consortium will refer to a five level strategy involving different tools:

- **Project visual identity**: The visual identity of the project has been developed during the first month of project implementation aiming at ensuring a recognizable and uniform project design applicable to communication and dissemination activities by all consortium members. The visual identify of the MemCCSea project is comprised by logo, banners and key colors that are applied in a coherent manner in all project templates described in the Communication plan (Section 2 of the current Deliverable).
- **Print material**: A poster is produced at early project stage in order to provide the scientific audience with an overview of the MemCCSea project, its objectives and expected impact. Additional posters will be created along project implementation and will be tailored according to

the scientific conferences where partners will present the project and its scientific achievements. The posters will be produced in English.

- **Content material**: Standard presentations and a one-slide template has been developed and described in the Communication Plan (Section 2). Additional project presentations will be produced all along the project evolvement paying attention to tailor the message and language to the audience and goals. Press releases will be produced and shared among to national and international media on regular basis in order to inform selected stakeholders on project objectives and main results. These will be shared indicatively at key project milestone moments.
- **Audiovisual**: Photos will be regularly taken along project implementation in conjunction with key events, such as project periodical meetings, scientific events, project training/workshops/conferences. These will be shared through relevant dissemination tools, such as the public website "news section" as well as social media. A project video will be created in order to introduce selected audiences to project results through multimedia online channels. This possibility will be further explored along project implementation vis-avis actual project developments. Additional information will be included in the Dissemination Plan Update.

4 Exploitation plan

MemCCSea will pay particular attention to achieve a wide impact through the project's results. For such a reason a wide set of exploitation activities has been planned as in Figure 4.1. Starting from these tentative paths, to begin the exploitation phase, specific actions will be tailored along the project, adapting material to be produced and participation in events according to the specific development stage of the project.

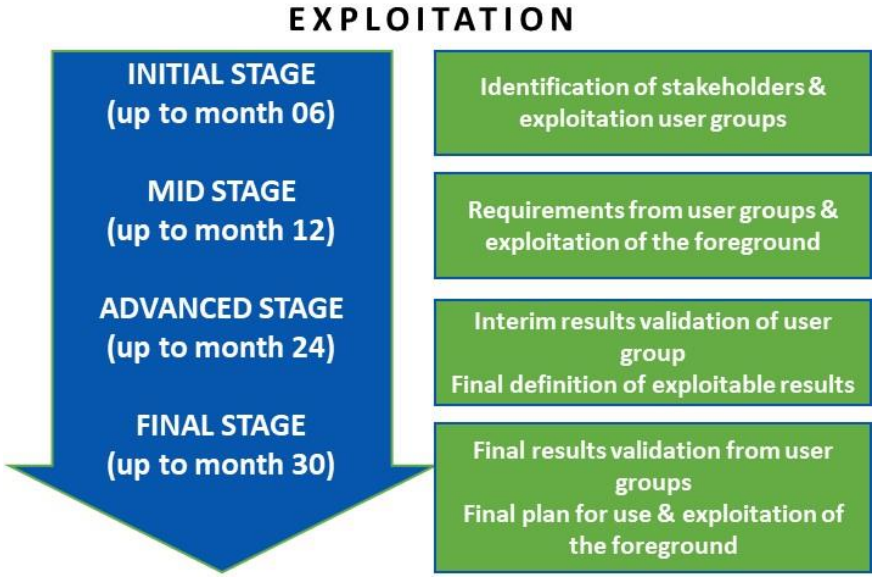

Figure 4.1: Exploitation paths in MemCCSea

Concerning exploitation, the consortium has already a clear idea of how to commercially exploit the project results, and during the project this exploitation path will be fine-tuned and adapted to users' feedback, in order to arrive at a final exploitation plan including commercial agreements. The outcome of the present Deliverable will strengthen their competitiveness at the international level and secure or create employment in the vital sectors of maritime transportation.

The MemCCSea's SMEs (DNV-GL, DBI) offer an effective route for the exploitation of the project results into the process industry field. The nature of the MemCCSea innovations has the potential of allowing, in case of success, a rapid growth of at least one of the SMEs involved. Extensive use of modelling and virtual engineering will be an essential step in component and pilot line manufacturing as well as in critical process choices, by providing a simulation tool for any of critical stages of the devised MemCCSea system, the manufacturing process of its components and their integration, the analysis of "virtual" demonstrators. This will allow integration of existing software, already in use, facilitating a quick industrial exploitation of results. Conversely, at an academic and research-centre level, CERTH, NETL, IKTS, NTNU, will surely produce a significant amount of discoveries that, if not strictly essential for future industrial exploitation, will be published in the highest impact factor journals as usually done by the groups involved. This will provide indirect benefits to the worldwide scientific community and to the reputation of the European research in this area of science and technology.

Specific efforts will be made to provide fast communication of any innovation results as soon as its intellectual property will be secured, so as to increase the worldwide awareness about the MemCCSea technologies. Among many others, a suitable media will be the www.innovationplace.eu platform. The

ultimate driver of the exploitation strategy will be the business case and market penetration scenario. The consortium is in charge of continuously updating the mentioned business plan over the entire project duration so as to be ready to exploit the project results at a commercial level within a couple of years after the project completion.

Exploitation beyond project execution will be carefully considered. MemCCSea aims to bring involved technologies to TRL5, so in a non-commercial stage. Interest of the Consortium is to identify further development and exploitation actions to bring the technology to TRL8-9. Actions will be performed to cover the following topics:

- Identification of early adopters of MemCCSea technology
- Public Funding opportunities for further development (SME instrument, Innovation Funds, HORIZON Europe programmes)
- Private funding (Maritime sector, valorization of IPR, Venture capitals).