D6.3. PDEC - Plan for the dissemination, exploitation, and communication activities

Reinventing High-performance pOwer converters for heavy-Duty electric trAnSport

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DISCLAIMER

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EXECUTIVE SUMMARY

This document (D6.3. PDEC - Plan for the dissemination, exploitation and communication activities) aims to present the plan for communication, dissemination and exploitation activities related to the implementation of the RHODaS project.

The first section, “Introduction”, describes the main aim of the document and its pursue. The deliverable is set as a living document and will be subject to periodic revisions according to the necessities arising from the development and novelties arising from project implementation. This document is part of the activities carried out in WP6, “Exploitation, communication and dissemination”, but it will actively follow the results and outputs from the other workpackages.

Section 2 presents the communication and dissemination plan. As communication and dissemination activities are deeply intertwined, for the sake of conciseness it has been decided to present them together. However, when needed, separated sections will be devoted separately to communication and dissemination. Communication activities under RHODaS brand will be boosted by KNEIA, which acts in RHODaS as WP6 leader (“Exploitation, Communication & Dissemination”) and as Communication, Dissemination and IP manager. It remains partner’s responsibilities to implement communication and dissemination activities related to RHODaS, while KNEIA will monitor and suggest further actions in order to put into place effective communication and dissemination campaigns to target all relevant and interested stakeholders. For dissemination, specific rules as regards the obligation to disseminate the results and to protect the IP were signed by partners and are detailed in the Grant Agreement and in the Consortium Agreement. The prior consent for dissemination shall be asked by partners intending to disseminate the results at least 15 days in advance to the dissemination activity.

The main objectives of the communication and dissemination activities are:

- To raise awareness about the project by informing on the project objectives, expected impacts and work;
- To contribute to the effective dissemination of the project results;
- To reach cooperation activities with the most relevant key stakeholders.

In order to reach those objectives, the communication plan has focused on defining the following points:

- The target audience(s): section 2.5 “Stakeholder’s identification and targeted audiences”;
- Message(s): section 2.6 “Communication and dissemination content”;
- Timing of the plan: section 3 “Communication phases”, and
- Method(s): section 4 “Communication and dissemination channels and techniques”.

In addition, RHODaS project will have different communications needs, according to the stages of development. From our analysis of the work to be carried out, we have identified 3 different phases, each with their specific messages which are outlined as it follows:

1. Project introduction and audience building (M1-M12);
2. Design and development of core components (M13-M29);

3. Validation of the solutions developed (M30-M42).

Section 3 of this document details the channels and techniques to be used in communication and dissemination activities. After the definition of brand identity, the main activities and indicators for offline and online communication and dissemination are detailed. Clustering activities will take place with related projects. It is also envisaged to make these projects collaborate in the multi-stakeholder platform due at M30. In section 3 there are also some suggestions to comply with the Open Science approach adopted in Horizon Europe.

Section 4, “Exploitation plan”, proposes presents the methodology that will allow to identify in detail the different KERs, in order to be able to analyse them according their exploitation potential according to the foreseen market related enablers and barriers. The report also includes information on IPR management and next steps.

The plan will be amended and supplemented as the project evolves.

1. INTRODUCTION

1.1. DESCRIPTION OF THE DOCUMENT AND PURSUE

This report describes the RHODAS plan for the dissemination, exploitation, and communication activities, due at M6 of the project implementation as deliverable D6.3. The plan, which is set out as a living document, aims at providing a general framework for all dissemination, exploitation and communication activities to take place during the entire project lifetime.

In order to establish a solid basis for long-term impacts, communication and dissemination activities aim at raising awareness about the project's undertakings and accomplishments, as well as generating the engagement of its relevant stakeholders. At the same time, exploitation activities aim to identify and describe identify the results of the project, and foresee and map their potential valorization routes.

The strategy presented below, as well as its actions and products, will be subject to periodic revisions and amendments, in case necessary, in full accordance with information received by work packages developers, and taking into account new challenges and opportunities, which may arise during project implementation and from the expanded stakeholders consultation process. Communications, dissemination and exploitation actions will be subject to monitoring and evaluation, which will be readjusted in accordance with the project evolvement.

Relevant information concerning the communication, dissemination and exploitation action can also be found in the following contractual documents, which are always taken as reference for the drafting of the current plan:

- Annex 1 to the Grant Agreement (Description of Action)
- Annex 5 to the Grant Agreement (Specific rules)
- Consortium Agreement

For the sake of clarity and conciseness, communication and dissemination have been grouped in the same section, while exploitation is presented in a different section.

This document will be updated during the whole duration of the project and resubmitted at M24 and M42.

1.2. WPS AND TASKS RELATED WITH THE DELIVERABLE

This deliverable D6.3 is part of the activities to be developed and reported within WP6 "Exploitation, communication and dissemination". D6.3 is also linked to all deliverables described within WP6. Additionally, this document sets the objectives and scope for the activities to be performed in the tasks of WP6.

The messages to be delivered in communication activities will be sustained by the results achieved in other WPs. More specifically, results to be shared with interested stakeholders will be coming mainly from WP2 "Design of electric and electronic components", WP3 "Thermal management system" and WP4 "Software design and development of digital tools". Confidentiality issues and IPR will be assessed before publishing anything related with the results achieved in RHODaS.

WP5 “Integration, testing and technical and environmental validation”, on the other hand, will complement the societal assessment performed in it by taking advantage of the critical mass reached by communication and dissemination activities.

1.3. BACKGROUND

RHODaS project aims at developing disruptive topologies of power converters using new semiconductor materials as well as cutting-edge digital technologies to improve architecture efficiency, power density, reliability, cost and sustainability.

Moreover, multi-disciplinary approaches of modular power electronics for Integrated Motor Drive (IMD) and ecodesign considerations are addressed, to create compact solutions that can be integrated in a wide range and heavy-duty vehicles, enabling these electric vehicles to be more sustainable and autonomous throughout the entire lifecycle of their components.

Nevertheless, power electronics solutions that use Wide Band Gap (WBG) devices can also be applied to light-duty vehicle types M and L, with competitive advantages on the efficiency and power densities compared with current technologies.

Finally, the RHODaS project targets the validation of the proposed solutions in electric drivetrains of 1200V for zero emissions class N3 (carriage of goods > 12 tonnes) and O4 (trailers >10 Tonnes), which correspond to USA Class 7-8 heavy duty vehicles (>12 tonnes) and beyond.

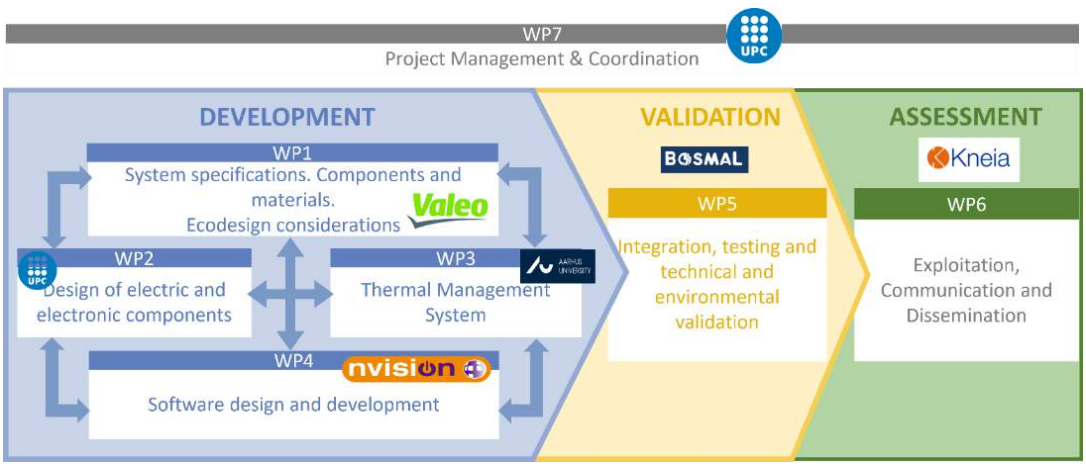

Figure 1: Links between WP6 and other workpackages

2. COMMUNICATION AND DISSEMINATION PLAN

2.1. DIFFERENCES BETWEEN "COMMUNICATION" AND "DISSEMINATION"

According to the European Commission, *communication* is "taking strategic and targeted measures for promoting the action itself and its results to a multitude of audiences, including the media and the public, and possibly engaging in a two-way exchange", while *dissemination* is "the public disclosure of the results by appropriate means, other than resulting from protecting or exploiting the results, including by scientific publications in any medium" (European Commission, 2021).

The focus of communication activities is the promotion of the project itself to multiple audiences in a way that can be understood by non specialists. The measures and activities undertaken must ensure the proper communication of the following points:

- Reach out to society as a whole;
- Demonstrate how EU funding contributes to tackling societal challenges;
- Strategically planned with pertinent messages, right medium and means. (European Commission, 2021)

On the other hand, dissemination activities focus on transferring the knowledge accumulated by the project with the aim of enabling the use of such results, maximizing the impact of EU funded research. Dissemination activities should comply with the indications of the following points:

- Circulating knowledge and results to the ones that can best make use of them;
- Enabling the value of results to be potentially wider than the original focus;
- Being an essential element of all good research practice and vital part of the project plan. (European Commission, 2021)

In the project implementation and in reporting of communication and dissemination activities, it can sometimes be challenging to distinguish between activities related to the project and activities related only to its results. For this reason and for the sake of conciseness, this plan addresses communication and dissemination as a unit. Where needed, distinction will be detailed.

2.2. COMMUNICATION AND DISSEMINATION PLAN MANAGEMENT

Communication activities using the project brand name will be boosted by KNEIA, which acts in RHODaS as WP6 leader ("Exploitation, Communication & Dissemination") and as Communication, Dissemination manager.

The Communication and Dissemination Manager, CDM, (Ms. Cristina Barragan, from KNEIA) will contribute developing and managing the dissemination strategy, monitoring the results and establishing contacts with other relevant projects. Moreover, the Communication and Dissemination Manager will be in charge for the organization of workshops, conferences, training sessions and other events relevant to project promotion.

KNEIA is in charge of defining, reviewing, updating and supporting the implementation of the Communication and dissemination Plan, and it is committed to provide the best possible support to the consortium as a whole, as well as to each partner in order to plan communication campaigns and individual activities, develop communication products, and establishing strategic collaborations for boosting the future dissemination of results. Together, they will put into place effective communication and dissemination campaigns to target all relevant and interested stakeholders.

2.2.1. DISTRIBUTION OF RESPONSIBILITIES

It is understood that it remains within the responsibility of each consortium member to develop specific communication and dissemination actions, and provide accurate information in relation to communication purposes (both planning and reporting). KNEIA will provide support and advice when required in relation to the communication strategy.

2.3. DISSEMINATION POLICY AND RULES

Communication and dissemination activities are subject to the legal framework described in the articles listed below.

Consortium Agreement

- 8 Results
  - 8.1 Ownership of Results
  - 8.2 Joint ownership
  - 8.3 Transfer of Results
  - 8.4 Dissemination
- 9 Access Rights
  - 9.1 Background included
  - 9.2 General Principles
  - 9.3 Access Rights for implementation
  - 9.4 Access Rights for Exploitation
  - 9.5 Access Rights for entities under the same control
  - 9.6 Additional Access Rights
  - 9.7 Access Rights for Parties entering or leaving the consortium
  - 9.8 Specific Provisions for Access Rights to Software
- 10 Non-disclosure of information

Grant Agreement

- ARTICLE 16 — Intellectual property rights (IPR) — Background and results — Access rights and rights of use
- ARTICLE 17 — Communication, dissemination and visibility
- Annex 5 – Specific Rules. Intellectual property rights (IPR) — Background and results — Access rights and rights of use (— ARTICLE 16)
- Annex 5 – Specific Rules. Communication, dissemination, open science and visibility (— ARTICLE 17)

The communication team ensured that all partners are aware of the legal obligations and shared communication and dissemination guidelines as regards the acknowledgement and disclaimer.

2.3.1. PRIOR CONSENT

When disseminating results, partners must ask for the prior consent to the dissemination to the whole consortium. The rules for the prior consent are explained in the Consortium Agreement and in the Grant Agreement - Annex 5. In the Consortium Agreement (Article 8.4.2.1), it is stated that during the project and for a period of 1 year after the end of the project, the dissemination of results shall be governed by the prior notice given at least 30 days prior to the publication and 15 days in case of poster presentations, slides and abstracts for oral presentations at workshops, conferences and summer schools. In the Grant Agreement (Annex 5 – Article 17) the prior notice is of 15 days. As the Grant Agreement prevails, partners intending to disseminate results must send the prior notice at least 15 days in advance.

2.3.2. INTELLECTUAL PROPERTY RIGHTS (IPR)

RHODaS aims to maximise the access to results generated throughout the project, while considering the need to balance openness and protection of scientific information, commercialisation, and Intellectual Property Rights (IPR), privacy concerns, security as well as data management and preservation questions.

The Project Coordinator, in collaboration with the Exploitation and IPR Manager, will take all the appropriate measures to make selected data (i.e. with exception of data that could lead to IPR and which diffusion would be against commercial interest) openly available and usable for third parties for study, teaching (according to training activities hereby described) and research purposes via licensing or other means.

It is important to be aware that Horizon Europe requires that enough intellectual property rights are maintained by beneficiaries or authors to ensure the required open access to scientific publications, as stated in the Horizon Europe Programme Guide (European Commission, 2022).

2.4. COMMUNICATION AND DISSEMINATION OBJECTIVES

The main aim of the RHODaS communication and dissemination strategy is to spread knowledge and insights on the project-specific topics as well as the project's research findings, challenges, results and expected impacts. The planned communication activities will be implemented to reach the following objectives:

- To raise awareness about the project by informing on the project objectives, expected impacts and work;
- To contribute to the effective dissemination of the project results;
- To reach cooperation activities with the most relevant key stakeholders.

Once defined the objectives of communication, the communication plan development must focus on the definition of:

- The target audience(s): section 2.5 "Stakeholder's identification and targeted audiences";
- Message(s): section 2.6 "Communication and dissemination content";
- Timing of the plan: section 3 "Communication phases", and
- Method(s): section 4 "Communication and dissemination channels and techniques".

The communication objectives have been adjusted according to the target audience identified in section 2.5., and aligned with the most suitable channels and techniques, as

defined in section 2.6 “Communication and dissemination content”.

2.5. STAKEHOLDERS’ IDENTIFICATION AND TARGETED AUDIENCES

A preliminary analysis of stakeholders has been performed during project proposal preparation and within the first months of the project. This analysis has helped to identify the most important audiences and has allowed to set up the first version of the website (due at M6) by identifying the needed sections and the information to be shown.

The stakeholders analysis is key during the first communication phase, “Project introduction and audience building (M1-M12)”, described in section 3.1.

Table 1 shows a summary of all the identified stakeholders, together with their target group. The column “RHODaS benefits to be communicated” informs about the main results achieved in RHODaS that can interest the target group. “Communication objectives” presents the general aim of the communication for that specific target group, while the column “Communication strategy and channels to be used” lists the main media to be used for communication activities.

Table 1: Stakeholder identified for the RHODaS project with their respective target group, scientific, social and economic impact deriving from the knowledge and adoption of RHODaS solutions, communication objectives and strategy for the communication and dissemination plan.

Stakeholder group	Target group	Scientific impact	Social and economic impact	Communication Objectives	Communication Strategy/Channels to be used
Decision makers and funders	Policy makers Government authorities Association and networks, industrial multipliers	Fostering knowledge on the value of heavy-duty EVs. Improve quantifiable effects/benefits of innovative electric powertrain concepts on economy.	Addressing EU policy priorities & global challenges in terms of climate change and sustainable road mobility. Contribute to create more jobs in the automotive industry and related SMEs, such as service/technology providers. Generating economic growth based on R&I. Leveraging investments in R&I on climate change and the role of heavy-duty EVs as strategy for reducing CO2 emissions.	Engage with policy makers in order to contribute to the development of relevant standards. Ensure a favourable regulatory environment to stimulate future adoption of the project results across the value chains; emphasize environmental sustainability, favourable impacts for growth and jobs.	White Papers; position papers; project reports; bilateral meetings; participation in relevant working groups, meetings and events; social media; public website.
Business and manufacturing	Automotive Manufacturers Distributors Service providers	Fostering knowledge on the value of heavy-duty EVs. Creating high-quality new knowledge on powertrain, converters combining research and business. Strengthening human capital in research on EVs and climate change. Increase knowledge on specific and innovative materials, topologies and intelligent control concepts, as well as the application of new digital tools and ecodesign concepts.	Provide affordable new generation of powertrain systems, tools and methodologies allowing more affordable and reliable heavy-duty EVs to improve long haul electric transportation. Improve the value proposition of their products, while reducing design, operation and end of life costs. Contribute to create more jobs in the automotive industry and related SMEs, such as service/technology providers. Generating economic growth based on R&I. Leveraging investments in R&I on climate change and the role of heavy-duty EVs as strategy for reducing CO2 emissions. Improve quantifiable	Generate industry awareness of the project aims and expected impacts; stimulate interest in future adoption and investment in the project results. Demonstrate the benefits of the new materials and their increased sustainability throughout the value chain.	Direct communication in specific online forums, mailing or in events and congresses; advertising in sector related magazines; articles in technical magazines and journals; participation in tradeshows and exhibitions, events and congresses; sector networking events, fairs and conferences; invitation to RHODaS Workshops and demo days; social media; public website.

Stakeholder group	Target group	Scientific impact	Social and economic impact	Communication Objectives	Communication Strategy/Channels to be used
			effects/benefits of innovative electric powertrain concepts on economy.		
Research	EU-funded projects focused on Nextgen EV components Research community, experts in electric mobility, circularity of EV components Academic stakeholders, professors and students Environmental consulting and engineering	Creation of high-quality new knowledge on powertrain, converters combining research and business. Strengthening human capital in research on EVs and climate change.	Contribute to fund more research in the field of EV. Create bonds between academia, automotive industry and related SMEs facilitating the passage from university to industry. Generating economic growth based on R&I. Leveraging investments in R&I on climate change and the role of heavy-duty EVs as strategy for reducing CO2 emissions. Improve quantifiable effects/benefits of innovative electric powertrain concepts on economy.	Identification of synergies between projects to improve value chain collaboration and amplify key messages. Communication of the project's findings, creation of new forms of collaboration and innovation, strengthening a sense of community and inclusion among experts who are pursuing a shared vision. Inform on the objectives of the project and the progress, strengthening a sense of community and inclusion among experts who are pursuing a shared vision.	Participation in existing clusters; articles in specialized journals and magazines; industry conferences, posters/oral presentations; seminars and lectures; knowledge open festivals; open day at Universities.
Society	EV drivers (end-users) Citizens interested in EV and electric mobility	Fostering knowledge on the value of heavy-duty EVs.	Increase the public's understanding of EVs science and benefits. Generating economic growth based on R&I.	Increase consumer awareness and understanding about the benefits derived from the adoption of new materials in the EV industry; ensure that consumers and citizens are aware of the developments and the associated societal benefits (positive impacts	Awareness raising materials; educational events; mass media (press releases); social media; public website; use of impactful videos, infographics and pictograms.

Stakeholder group	Target group	Scientific impact	Social and economic impact	Communication Objectives	Communication Strategy/Channels to be used
				for quality of life, health and wellbeing, environmental sustainability, favourable impacts for growth and jobs, etc.)	

2.6. CONTENT OF THE MESSAGES TO BE DELIVERED

In this case, according to differences between “Communication” and “Dissemination” explained in section 2.1, communication and dissemination can deliver different messages. This difference is mainly due to the channel chosen for the communication: while for online communication on social media or the website the message can be tailored for different audiences (e.g., a news on the latest results can be written both for technical audience and for the general public paying attention to the lexicon used), some channels are specific for dissemination (e.g. journal publications or scientific conferences). For this reason, we have developed specific separated guidelines for communication and dissemination content.

2.6.1. COMMUNICATION CONTENT

Once the purpose of the communication and the targeted audiences are clear, the content of the messages can be defined. The principal guidelines are:

- The message should be clear, simple and easy to understand. The language should be appropriate for the target audience;
- The content should be tailored for the target groups; it is of paramount importance to carefully consider what they should know about the project. It is possible to send the same message to different audiences, but the relevance of the message to the target group should be revised each time;
- Information should be correct and realistic.

In general terms, the messages will be tailored around the benefits of the knowledge developed within the project for each one of the stakeholders. The benefits to be communicated are listed in the columns “Scientific impact” and “Social and economic impact” in table 1.

2.6.2. DISSEMINATION CONTENT

As regards dissemination, the main guidelines are:

- Deliver high-quality materials;
- Enable the validation and reuse of the results obtained;
- Tailor the message according to the target groups, delivering only the messages that can be relevant for the specific target group;
- Respect the IP of the owner’s results.

2.7. MONITORING OF COMMUNICATION AND DISSEMINATION ACTIVITIES

In order to monitor the progress of communication and dissemination activities, partners will be asked to report their communication and dissemination activities periodically. They have also been encouraged to share their activities with the Communication and dissemination manager in order to verify if any assistance is needed and to verify that the prior notice terms and the use of the funding acknowledgement have been respected.

2.8. COMMUNICATION AND DISSEMINATION PHASES

This project will have different communications needs, according to the stages of development. From our analysis of the work to be carried out, we have identified 3 different phases, each with their specific messages which are outlined as it follows:

4. Project introduction and audience building (M1-M12);
5. Design and development of core components (M13-M29);
6. Validation of the solutions developed (M30-M42).

2.9. PHASE 1 (M1-M12)

The goal for the first communication phase is to create awareness of the project and clearly present the different activities for the implementation. Being at the starting phase of the research, the communication is focused on building the audience, after the first and basic stakeholders mapping, to identify the target audience and develop proper content. The focus of communication is on three different points:

A. The problem(s) being addressed;
B. The solutions developed in the project to tackle those challenges;
C. The expected benefits from the project.

2.10. PHASE 2 (M13-M29)

During the second phase of the project, the consortium will be ready to show the first significant achievements in relation with the definition of the specifications needed for the main components and materials. During this second phase of the communication plan, we will boost the participation and presence in international conferences, as long as they do not interfere with IP protection and exploitation interests.

2.11. PHASE 3 (M30-M42)

The last phase will be devoted to the communication of results in relation with the test and validation of the solutions developed in the framework of project's activities. More details will be defined at the end of phase 2.

3. COMMUNICATION AND DISSEMINATION CHANNELS AND TECHNIQUES

3.1. ACKNOWLEDGEMENT

In order to comply with the provisions presented in article 17.2 of the Grant Agreement (Visibility — European flag and funding statement), partners received the guidelines for the use of the European flag, the funding statement and the disclaimer. It has been remarked that all communication and dissemination activities must include the acknowledgement of the EU funding and the publicity disclaimer. It remains responsibility of each partner to correctly use the acknowledgement.

3.2. BRAND IDENTITY

The development of the RHODaS brand (visually identified through the project logo) has already been established throughout all of the project's owned communication channels. In order to help us engage with our stakeholders, the RHODaS brand will be further elaborated and documented.

3.2.1. LOGO

The logo of the RHODaS project was developed during the proposal preparation phase, based on the project acronym. After the acceptance of the project proposal, KNEIA suggested to update the project logo to involve all the partners in the decision process. KNEIA prepared three logos which were submitted to the partners for their vote. The logo below is the chosen one.

Figure 2: RHODaS final logo in different versions

3.2.2. TEMPLATES

Specific templates for RHODaS have been developed, including the general Power Point presentation template and the deliverables template. Those templates are available for all the partners on the private repository platform set up by UPC (the Project Coordinator) and accessible by partners using a username and password.

3.3. OFFLINE DISSEMINATION TOOLS

A set of off-line dissemination tools will be developed such as the project leaflets, infographics, factsheets, posters and roll-up. They will contain different facts and figures depending on the information to be exposed. The leaflet will be promoted in fairs and congresses as well as in everyday business life of all partners. Furthermore, potentially specific leaflets or posters for technical activities /technology will be developed in order to expose the main research and development activities to involve specific stakeholders in the project.

At least 2 posters will be designed, while we expect to distribute more that 500 leaflets and to show the roll up at at least 5 events. Infographics and fact sheets should be viewed at least 200 times. Moreover, a roll up will be developed to be used in events to present RHODaS.

3.4. CONSORTIUM PARTICIPATION IN EVENTS

Participation in and organisation of events is indicated as one of the main channels for

communication and dissemination.

We consider here two types of events:

1. Events directly organised by RHODaS, independently or in collaboration with other projects or initiatives;
2. Specialized events such as scientific conferences and fairs where the consortium partners participate to present their results achieved within the project.

Specific communication products will be designed for such instances, with different aims depending on the format and type of the event. For example, project templates will be of fundamental use, especially in online events, while project leaflets, brochures, fact sheets and merchandise will come handy at in person events.

The website features a dedicated section for events. When the consortium is involved in an event, it will be detailed in the event entry on the website.

The consortium committed to participate to at least 18 events by the end of the project. 2 intermediate workshops on the project execution and preliminary results together with related projects and clusters to increase the project's visibility and reach will be organised. At least 20 attendees from different target groups are expected to attend the intermediate workshop.

RHODaS consortium also plans to host a final conference event in M42 to release its results to all key stakeholders and maximise the project's impact. A policy makers' session will be organised, inviting members of the Commission expert group on electric mobility and road transport. It is foreseen a specific action also with the Industrial Advisory Board. Key aspects of the events will be accessible online to allow stakeholders unable to travel to participate. At least 60 participants are expected to attend the conferences.

3.5. SCIENTIFIC PUBLICATIONS

The consortium also aims to publish project findings and results in several scientific publications as well as specialist media outlets in order to engage the specific scientific/academic and industry audiences.

The consortium committed to publish at least 6 articles in Q1/Q2 journals and in Open Access and to participate to at least 4 conferences with publications, with the target of at least 1 paper accepted per year.

3.5.1. OPEN SCIENCE

The RHODaS project falls into the provisions set for Open Science by the Horizon Europe multiannual financial framework. According to the Horizon Europe Programme Guide (European Commission, 2022),

> "Open science is an approach based on open cooperative work and systematic sharing

> of knowledge and tools as early and widely as possible in the process. It has the potential to increase the quality and efficiency of research and accelerate the advancement of knowledge and innovation by sharing results, making them more reusable and improving their reproducibility. It entails the involvement of all relevant knowledge actors". (European Commission, 2022)

In addition, article 17 of Annex 5 of the Grant Agreement provides the rules for the dissemination of results following the approach of the Open Science guidelines. In order to comply with the commitment to Open Science, the publication of results will go in accordance to the following guidelines:

- Journal articles shall be published in full open access journals. A tool to be used to easily check the compliance is the *Journal Checker Tool* available at https://journalcheckertool.org/;
- Gold open access charges for papers in fully open access journals are paid from the RHODaS project grants, provided they are incurred during the duration of the project. Open Research Europe for rapid publication and open peer review for research resulting from the project is available after the end of the grant. Note that gold open access charges for papers in subscription/hybrid journals are not eligible for funding.
- Open peer review is suggested when possible;
- At the latest at the time of publication, a copy of the published version will be deposited in a trusted open access repository. The preferred repository will be Zenodo (https://zenodo.org/), where a RHODaS community (https://zenodo.org/communities/rhodas) was created to have a collection of the scientific outputs of the project on an open access repository;
- Data used in the research output shall comply with the FAIR data principles. The details of data management for each output and partner are available in D7.3 "Data management plan";
- Authors need to notify to the publisher the Grant Agreement obligations. If the publishing agreement is contrary to the grant agreement obligations, authors should negotiate its terms and, alternatively, look for a different publishing venue/options.
- Metadata of deposited publications must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent, in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: publication (author(s), title, date of publication, publication venue); Horizon Europe funding; grant project name, acronym and number; licensing terms; persistent identifiers for the publication, the authors involved in the action and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for any research output or any other tools and instruments needed to validate the conclusions of the publication.

Each partner will be responsible for the compliance of the Open Access mandate of the Grant Agreement.

3.6. ONLINE COMMUNICATION

The majority of the project's communication activities will take place or will be mirrored

on online communication channels, including the projects owned channels (website, social media profiles) as well as external online sources (media platforms, external online events, etc.). This way we will ensure that a greatest number and variety of stakeholders and target group audiences can be reached, especially the general public.

3.6.1. WEBSITE AND WEBSITE ANALYTICS

According to the DoA, the project website had to be developed by M6. The project website can be found at this address: https://www.rhodas.eu

The website has been designed as the centre of the attention of the project, in order to present the main activities and results to all interested stakeholders. The role of the website in the communications strategy is to provide a place for people interested in the project to get more in-depth information about the project activities and results. The dedicated website will produce an extensive record of all publications and communications originated on the course of the project.

The different sections of the website contain general information and news about the project, events and a contact form to allow the website visitors to have a direct link to the Consortium. Deliverable 6.1 “Project website” uploaded on Sygma describes the structure and technical features of the website.

Google Analytics has been implemented in order to monitor the access to the website, the engagement rate of the visitors and other performance indicators. Those retrieved data will be presented in the update of the communication plan for every reporting period.

The following table shows general target and indicators for each year of the project. Those targets refer to the optimal performance of the website according to different indicators, to measure the performance achieved communicating through the website:

Table 2: General indicators and target per year for the RHODaS project

CHANNEL	INDICATORS	TARGET/year
Website	N. total visitors/users	At least 2.000 visitors
	N. sessions	N. 1.000 sessions
	N. pages visited	N. 3.000 pages visited
	N. sessions per user	N. 2 sessions per user
	N. page visited per session	N. 3 page visited per session
	Average session duration	At least 2 minutes on page

3.6.2. SOCIAL NETWORKS AND SOCIAL MEDIA STRATEGY

The most suitable social networks for the purposes of the project are Twitter and Linkedin. During M1, a Twitter profile (https://twitter.com/rhodas_eu, @rhodas_eu), a LinkedIn profile (https://www.linkedin.com/company/rhodas) and a YouTube channel have been created.

3.6.2.1. TWITTER

Twitter has been identified as one of the main social media channels to be used during

the project. A Twitter profile was opened during M2 and a content plan is currently being developed. The communication on Twitter will be targeted at the general public, while also tailoring communication to other stakeholder groups, especially industrial and scientific stakeholders.

3.6.2.2. LINKEDIN

LinkedIn too has been identified as one tool to develop online communication. The communication content will be tailored towards industrial partners and decision makers, due to the nature of social network, more specialized for professionals.

3.6.2.3. YOUTUBE

YouTube will mainly be used as a repository for project videos that will then be shared on other specific online channels, such as the website or social media. The videos produced will be of different nature: at least three project videos will be released, one of them being D6.2 due at M24, and the other and introductory video to be published before M12 and a final report video at the end of the project.

3.6.3. INDICATORS TO MEASURE SOCIAL MEDIA PERFORMANCE

The table below shows the indicators and the target we are going to use to measure the performance of the communication on social media.

Table 3: Indicators to measure social media performance

CHANNEL	INDICATORS	TARGET/year
Twitter	N. total profile visits	300 visits
	N. impressions	6.000
	N. total followers	+30 followers
	Engagement rate (sum of likes, share and/or comments divided by the n. of visitors)	5% avg.
LinkedIn	N. total visitors	+300 visitors
	N. Impressions	6.000
	N. total followers	+60 followers
	Engagement rate (sum of likes, share and/or comments divided by the n. of visitors)	5% avg.
YouTube	Views per video	800 views avg.
	Unique viewers	600
	Impression (How many times the video thumbnail is shown to viewers)	500

3.6.4. NEWSLETTERS

Every year, a newsletter compiling the most important news from the RHODaS project will be written and sent to interested stakeholders. To foster the collaboration between related projects, one section of the newsletter will be dedicated to the information on other ongoing projects and exchange of newsletters from the other connected projects

will be pursued. The preferred platform to send the newsletter will be the “Newsletter” tool available on LinkedIn.

We aim to reach at least 200 subscribers by the end of the project.

3.7. CLUSTERING ACTIVITIES

One of the objectives of the RHODaS project is to promote collaborative research and interaction between academia and industry throughout the entire supply chain. For this reason, RHODaS will establish close collaboration and synergies with related projects, networks, clusters and initiatives at European and national/regional level to share information and maximise the visibility of the project results. The project will potentially exchange results and deliverables, organise possible joint dissemination events (2 intermediate workshops) and clustering activities with other European projects funded under the same topic (CL5-2021-D5-01-02) or other similar topics (CL5-2021-D5-01-xx).

At least 8 networking events are expected to be organized.

3.8. MULTI-STAKEHOLDER PLATFORM

One of the tools that will be used to strengthen the dissemination of results and the collaboration with related projects is the Multi-stakeholder platform. It provides an extended network of relevant stakeholders across Europe and internationally, including the Quadruple Helix –Government, Industry, Academia and Civil Society- plus policy makers, relevant associations and coordinators of projects in the same topic. It will organise, structure and offer a point of information on the topic of the project for supporting users in their valorisation decisions, and, meanwhile, collect feedback and expectation of relevant stakeholders & end-users on project activities and results. In this way, the planned communication activities will be used best to maximise future dissemination and exploitation of the project results.

The multi-stakeholder platform will be prepared by M30. Details will be available in D6.5 “Multi-stakeholder platform” due at M30. The Industrial Advisory Board will be invited to participate in the definition of the platform.

4. EXPLOITATION PLAN

The purpose of this section is to define and determine the basic information upon which the RHODaS Exploitation Plan will be established. The Exploitation plan will mainly focus on the Key Exploitable Results selected by the Consortium to define the different steps of the Exploitation plan and the measures to exploit the results at the end of RHODaS project.

The Exploitation plan will allow for the successful implementation and commercialization of the project results, which will take into account (Synergie, 2020) :

- the market needs addressed by the KERs;
- the market positioning and exploitation expectations by the different partners in the development of the KERs;
- the management of intellectual property rights between the partners on the different KERs.

The purpose of the exploitation plan is to multiply the impact of the proposed solutions and to prepare the transition towards industrialization and commercialization of the results. The exploitation plan describes the activities to be carried out (how and by whom) in order to prepare the exploitation of the project.

During the first period of the project, the exploitation activities of the project will focus on creating and achieving consensus among the different partners regarding the most important business strategy elements for the Exploitation Plan by analysing the different KERs and defining the preliminary Business Model aspects with the use of market analyses and Canvas Business Model.

4.1. KEY EXPLOITABLE RESULTS: DEFINITION

According to Article 16.2 of the Grant Agreement, a result can be defined as “Any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated in the action as well as any attached rights, including intellectual property rights”.

A Key Exploitable Result (KER) is an identified main result which has been selected and prioritized because of its high potential of exploitation, i.e. to make use and derive benefits from it about production, process and solution or as an important input to national policies, further research or education.

The first step for developing a comprehensive Exploitation Plan is to identify the list of Key Exploitable Results (KERs) developed in the project. To select and prioritise these results, we are going to follow three criteria:

1. degree of innovation;

2. exploitability;
3. impact.

In RHODaS project proposal, the consortium has selected five Key Exploitable Results that remain confidential. As this deliverable D6.3 is public, according to the Grant Agreement, a confidential annex will be developed including KERs details that must remain confidential.

4.2. KERS IDENTIFICATION

The second step for developing a comprehensive Exploitation Plan is to identify and define a methodology that all partners will use. The first aim in this methodology is to clearly identify and recognise the main information of each Key Exploitable Result within RHODaS project but also the exploitation expectations of the different partners. In order to achieve this goal, several tables are proposed to define and clarify all the information of each KER.

The first table (Elyntegration, 2017) is proposed in order to gather all the basic information of each KER such as description of the results, market prospective, early adopters, competitors, competing technologies or partners' roles. This table aims to have a global view on each KER to exploit them easily in the following steps of the Exploitation Plan.

Table 4: Key Exploitable Results' characteristics

KER's name:	**Short description:**
Description of the result	
Innovativeness introduced compared to already existing products / services	
Unique selling points i.e. competitive advantages	
Product/market size	
Market trends and public acceptance	
Product/service positioning	
Legal / normative / ethical requirements (compliance for standards, norms, need for authorization etc.)	
Competitors	
Prospects / customers	
Cost of implementation before exploitation	
Time to market (at the end of the project)	
Foreseen Product/service price	
Adequateness of consortium staff	
Partners to be involved	
Status of Intellectual Property Rights (IPR): background	
Status of IPR : foreground	

KER's name:	Short description:
Status of IPR: use the results from the Exploitation Form	
Partners involved expectations	
Sources of financing foreseen after the end of the project (venture capital, loans, other grants, etc.	

4.3. KERS EXPLOITABLE ROUTES

Once the basic information is identified for each Key Exploitable Result, it seems necessary to now identify how these KERs will be further exploited. To do this, an Exploitable Route is proposed. This table will gather information on the KER's possible exploitation, the potential users but also information about the different partners/actors involved in each KER.

The exploitable routes revolve around:

- The use for further research
- Developing and selling new products/services
- Spin-off activities
- Cooperation agreement/Joint Ventures
- Selling IP rights/Selling IP-related business
- Licensing IP rights
- Standardisation activities

If several partners are present on the same KER, then they will have to agree on the commercialization path.

When the project is completed, each partner will be responsible for implementing certain measures that will allow the valorization of the results of the project by various methods such as using the results in other research activities, developing and creating a product or process or providing a service for example.

The following table represents the Exploitable Route described above (COASTAL, 2021).

Table 5: KER's Exploitable Routes

KER n°	Key Exploitable Result	How results can be used	Potential users	Lead partner	Implemented actors	WPs
1						
2						
3						
4						
5						

4.4. RISKS ASSESSMENT

Once the main characteristics and operating paths are identified, it will be important to identify the different risks for each KER. Indeed, identifying the different risks that may be a threat to the project will allow to identify potential risks before they happen. It will also help to identify potential opportunities that may contribute to the commercialization of the project's results.

To identify the risks, six categories were created (FISSAC, 2018):

- technological risks
- partnership risks
- market risks
- legal/IPR risks
- management risks
- environmental, safety, regulation risks

In order to determine the severity of the risks selected by the partners, a risk matrix (table 6) will be made available to be able to determine the importance to be given to these risks according to whether they are an urgent and important threat or whether the risk is minimal.

Table 6: KER's risk matrix

	Impact				
Likelihood	negligible	minor	moderate	significant	severe
very likely	low med	medium	med high	high	high
likely	low	low med	medium	med high	high
possible	low	low med	medium	med high	med high
unlikely	low	low med	low med	medium	med high
very unlikely	low	low	low med	medium	medium

Table 7 will list the risks present for each KER and its severity. From this table, it will be possible to make a qualitative analysis of the main risks to be considered, evaluate the probability of their occurrence and estimate the impact they could have on the project. At the same time, it is necessary to define actions that could prevent and avoid the identified risks.

Table 7: KER's risk assessment

KER's name	Likelihood very unlikely to very likely	Impact negligible to severe	Global low to high
Technological risks: *describe the risk*			
Partnership risk factors: *describe the risk*			
Market risks: *describe the risk*			
Legal/IPR risks: *describe the risk*			
Management risks:			

KER's name	Likelihood very unlikely to very likely	Impact negligible to severe	Global low to high
describe the risk			
Environmental, safety, regulation risks: *describe the risk*			

4.5. PARTNERS' ROLES

In this section, the partner level draft Exploitation Plans (COASTAL, 2021) are presented. These are followed by the process of how the involvement of each partner in the related exploitable results will be evaluated for the final Exploitation Strategy and Plan.

In order to create a concrete action plan and a clear operational plan, it seems important to determine the exact role of each partner within the project but also in close connection with the KERs. Therefore, a table is proposed to each partner to clearly indicate their roles within the project, their commitment, background and strategies in terms of IPR for each KER involved. The second table (Elyntegration, 2017) is used to define the specific roles of each partner within the project and the different KERs.

Table 8: Partners' exploitation plan

Partner's name	Main results of interests	Motivation to exploit results	Main exploitation routes

Table 9: Role specification template

	UPC	KNEIA	TUW	AU	AIT	BOS	VAL	VS	NION
M									
A									
R									
C									
U									
S,D									
S									

Legend
M: Manufacturing, Realisation
A: Assembly
R: Research
C: Consultancy, Training
U: Utilisation in other business
S,D: Saling, Distribution
S: Services

4.6. IPR MANAGEMENT

Intellectual Property Rights (IPR) can be defined as "the rights given to people over the creations of their minds" (WTO, 2022). In RHODaS project, there will be different ways to protect these creations.

First of all, in order to protect the inventions created by RHODaS, a confidentiality clause

has been put in place. The Consortium has agreed to leave most of the information public in order to make the project, its objectives and the different stakeholders known. However, some information will remain confidential and will not be public, such as the business plan (D6.4) and the different KERs. Likewise, in order to protect the inventions, the KERs will be protected with IPR tools: trademarks, patent or copyright will be implemented.

The main IPR management will be executed by Task 7.3: Data Management Plan. Indeed, the deliverable of Task 7.3: Data Management Plan explains how the different data will be stored, managed, protected and re-used and on which occasions. Data can be defined as knowledge, invention or results.

4.7. NEXT STEPS

The precise identification and in-depth analysis of each Key Exploitable Result will allow for market analyses which will be centered on the KER selected for this purpose. With the information from the previous points, it will be possible to target certain markets and analyze them according to the needs of each KER. This will allow them to determine the relevant markets and to establish the different opportunities that each KER can claim.

Among these analyses, there will be analyses on:

- European Markets (size, trends, share the technology/product could reach, main competitors, competitive advantage,);
- Stakeholders;
- PEST and SWOT analysis;
- Competitive analysis;
- Other commercial initiatives.

These analyses will be conducted several times during the project to see if the market has changed in terms of needs and demand and whether or not it will be necessary to modify the various KERs as the project is implemented.

Once these analyses have been completed, it will be possible to create a business model, and more precisely a circular business model (D6.4), using Canvas Methodology and an action plan which will detail what actions will be implemented, when and why.

The Business Model Canvas (Annex 1), as a methodological instrument, allows an organization to divide its processes into segments, each describing how value is created, captured and delivered in economic, social, cultural or other contexts.

5. CONCLUSION

This deliverable “D6.3. PDEC - Plan for the dissemination, exploitation, and communication activities” contains the detailed plan for the implementation of the communication, dissemination and exploitation activities to be carried out in the framework of the RHODaS project. With this plan, we aim to define the communication content, the target and objectives to effectively create awareness and engage stakeholders about RHODaS.

The Exploitation Plan section aims to define and determine a methodology to analyse the KERs in detail and proposes a set of tools for the final exploitation plan, to anticipate how the results of the project will be exploited. The document therefore presents methodological and managerial aspects, but also the following steps that will lead to a business plan and a concrete action plan for the realisation of the RHODaS project.

Elements concerning the management of the IPR for communication, dissemination and exploitation activities are also mentioned in this report.

Next steps, starting from M6, include continuing communication activities related to the messages indicated within Phase 1. Activities will focus on progressing in the stakeholder analysis and building up on the content strategy for the website (news and blogs) and social media, in unison. Also, participation in events and communication of results will increase. The consortium is also going to organize events, most likely in Phase 2 of the communication activities.

New communication material will be developed, including a leaflet, and poster and factsheets, in order to support activities in the next months.

6. REFERENCES

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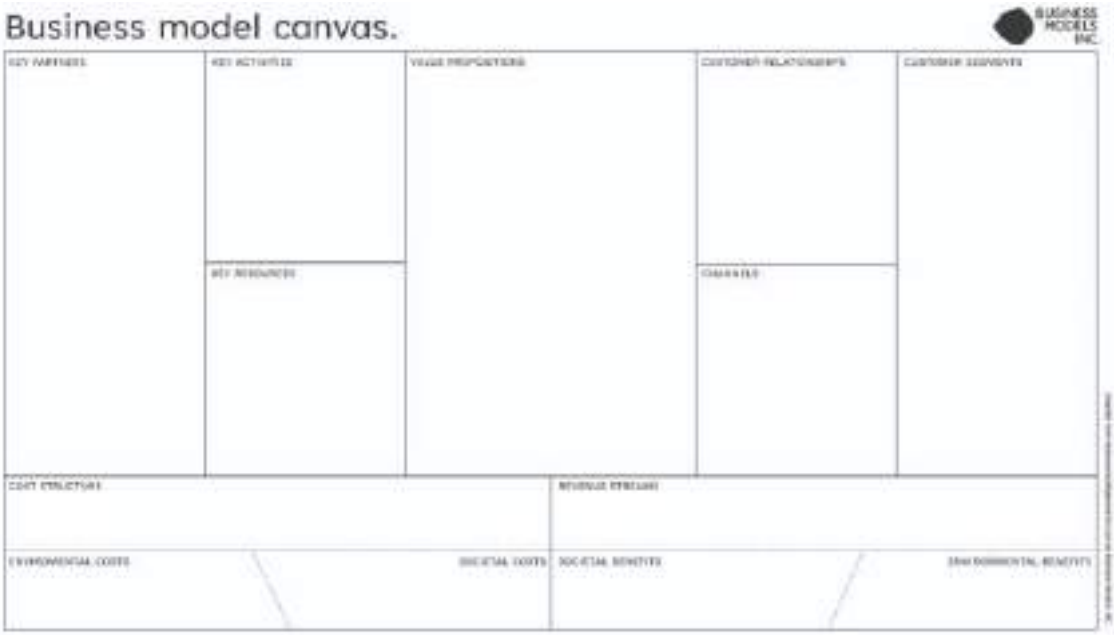
ANNEXES

6.1. ANNEX 1: BUSINESS MODEL CANVAS

Business model Canvas has been funded by the Swiss theorist Alexander Osterwalder in his book *"Business Model Generation - Innovation in Business Models*" who wanted to design a Business Model that allow companies to visualise the future in a simplified way.



The Business Model Canvas is composed of 9 blocks:

1. **Key partners**: Who are our main partners/suppliers? What key activities do partners perform?
2. **Key activities**: What key activities does our value proposition require? Our distribution channels? Relationship with customers? Source of revenue?
3. **Key resources**
4. **Value proposition**: what value do we deliver to our customers? What type of problem do we solve? How does it create value for the customers?
5. **Customer relationship**: What kind of relationship do each of our customer segments expect us to establish with them? Which ones have we established?
6. **Channels**: By what channels do our customer segments want to be contacted? How do we reach them now? Online/offline/physical?
7. **Customer segments**: who will you create value for? Who are the most important customers?
8. **Cost structure**
9. **Revenue streams:** revenue streams represent money generated from each customer segment.