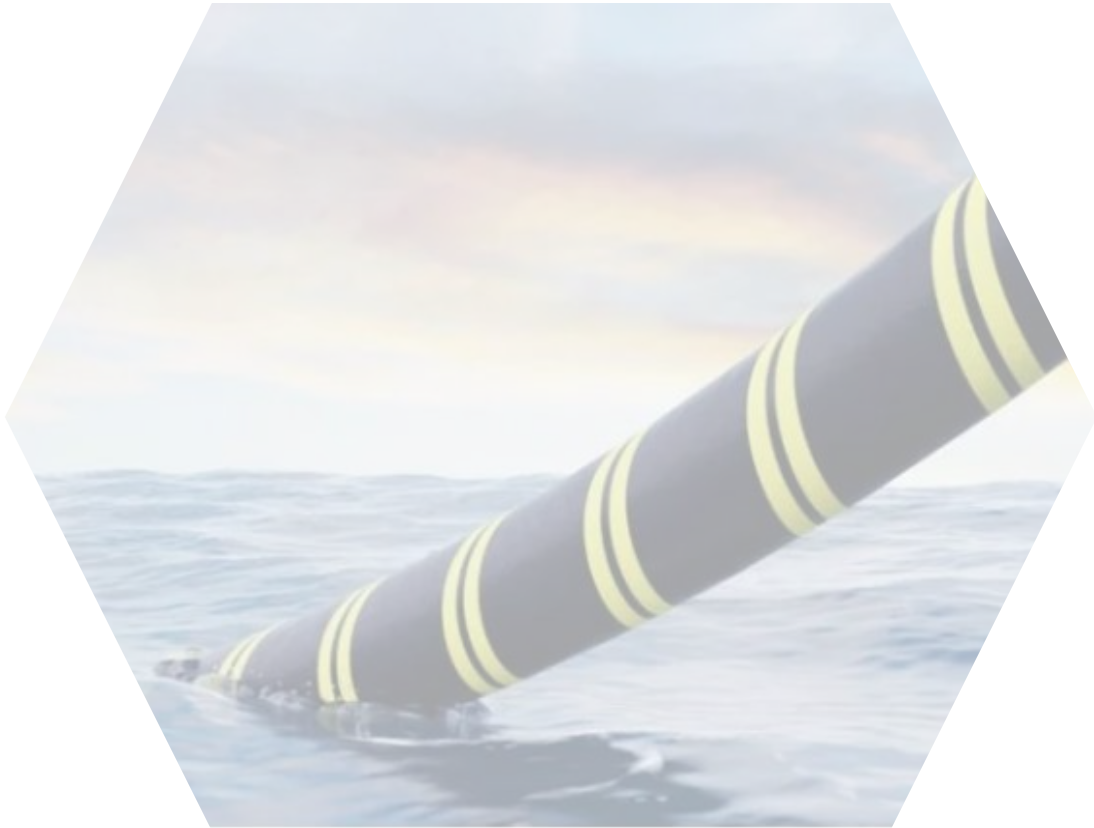




D9.1



Funded by
the European Union

EasyDC-FOS

Project: Towards a wide-spread HVDC-based power system enabled by new highly efficient cable & fibre optic monitoring systems	
Project number:	101172806
Project acronym:	EasyDC-FOS
Call:	HORIZON-CL5-2024-D3-01
Topic:	HORIZON-CL5-2024-D3-01-15
Type of action:	HORIZON - RIA
Project starting date:	1/09/2024
Project duration:	36 months

Deliverable D9.1

Plan for Communication, Dissemination & Exploitation

Due date of deliverable	Month M3
Actual submission date	2024-11-29
Organization name of lead contractor for this deliverable	ACE
Dissemination level	PU
Version	1.0



Authors	
Author(s)	Begoña Molinete (ACE) Amaia Ojanguren (ACE)
Contributor(s)	Feedback and comments from all partners

DISCLAIMER

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the granting authority can be held responsible for them.

DOCUMENT HISTORY			
Version	Date	Description	Author
0.1	2024/10/30	First draft of the document	Amaia Ojanguren (ACE)
0.7	2024/11/14	Updated version according to partners' feedback for internal review	Begoña Molinete (ACE) Amaia Ojanguren (ACE)
0.8	2024/11/21	Updated version according to NEX input	Begoña Molinete (ACE) Amaia Ojanguren (ACE)
0.9	2024/11/22	Updated version according to ZAB's internal review	Begoña Molinete (ACE) Amaia Ojanguren (ACE)
1.0	2024/11/26	Final version after Technical Committee's review	Begoña Molinete (ACE) Amaia Ojanguren (ACE)
1.0	2024/11/27	Reviewed version by COO	Manuel Muñoz (LMK)
1.0	2024/11/29	Final version uploaded to the F&T portal	Paula Blanco (ZAB)



EXECUTIVE SUMMARY

The present document constitutes Deliverable D9.1: Plan for Communication, Dissemination and Exploitation, in the framework of the project “Towards a wide-spread HVDC-based power system enabled by new highly efficient cable & fibre optic monitoring systems” (Project Acronym: EasyDC-FOS; Grant Agreement No 101172806).

The document provides a detailed description of the overall strategy and communication, dissemination and exploitation plan of the project. Its content can be summarized as follows:

- Section 1 introduces the definition of the communication and dissemination terms in order to understand the structure and approach of the activities envisaged.
- Section 2 provides an overview of the Communication, Dissemination and Exploitation strategy, defining its objectives, target groups and potential collaborations with other projects.
- Section 3 details the Communication Strategy, presenting the main communication tools, channels and activities.
- Section 4, related to the previous one, shows the Monitoring and Management Plan for the Communication Strategy.
- Section 5 details the Dissemination Strategy, presenting the dissemination activities that will be carried out to ensure the maximum outreach and impact of the project results.
- Section 6, related to the previous one, shows the Monitoring and Management Plan for the Dissemination Strategy.
- Section 7 details the Exploitation Strategy, including a preliminary identification of the Key Exploitable Results and the proposed approach to assess their potential business potential and market impact.



TABLE OF CONTENTS

DISCLAIMER	3
EXECUTIVE SUMMARY	4
TABLE OF CONTENTS	5
LIST OF FIGURES	6
LIST OF TABLES	6
ABBREVIATIONS AND ACRONYMS	7
1 INTRODUCTION AND CONTEXT	8
1.1 ARTICLE 17 OF THE GRANT AGREEMENT	8
1.2 DIFFERENCES BETWEEN COMMUNICATION AND DISSEMINATION	13
2 COMMUNICATION, DISSEMINATION AND EXPLOITATION STRATEGY	15
2.1 OBJECTIVES	15
2.2 TARGET GROUPS	16
2.2.1 TG1: Cable Materials Providers	17
2.2.2 TG2: Deep-tech Companies and Suppliers of DC Technologies	17
2.2.3 TG3: Transmission System Operators (TSOs), Renewable Energy Asset Owners and End-Users	18
2.2.4 TG4: Academia and Research Community	18
2.2.5 TG5: Government, Regulatory and Standardisation Bodies	19
2.2.6 TG6: Other Stakeholders	19
3 COMMUNICATION STRATEGY	21
3.1 PROJECT IDENTITY	21
3.1.1 Project logo	21
3.1.2 Graphical layout guidelines	22
3.1.3 Templates	23
3.2 COMMUNICATION MATERIAL	23
3.2.1 General presentation	24
3.2.2 Infographics	24
3.2.3 Project roll-up	24
3.2.4 Brochure	25
3.2.5 Newsletters	25
3.3 PROJECT WEBSITE	25
3.3.1 Articles	28
3.4 PROJECT VIDEOS	28
3.4.1 Introductory video	28
3.4.2 Final video	29
3.5 SOCIAL MEDIA	29
3.6 PRESS RELEASES	32
4 COMMUNICATION MONITORING & MANAGEMENT	34



4.1	COMMUNICATION MONITORING.....	34
4.2	COMMUNICATION MANAGEMENT.....	35
5	DISSEMINATION STRATEGY	36
5.1	EVENTS ORGANIZED BY THE EASYDC-FOS CONSORTIUM.....	36
5.2	PARTICIPATION IN INTERNATIONAL EVENTS.....	37
5.3	ADVISORY BOARD.....	42
5.4	OPEN SCIENCE PRACTICES.....	43
5.5	CLUSTERING WITH OTHER EU INITIATIVES AND PLATFORMS.....	43
5.6	FEEDBACK TO POLICY AND REGULATORY FRAMEWORK.....	45
5.7	TRAINING AND EDUCATION.....	46
6	DISSEMINATION MONITORING & MANAGEMENT.....	47
6.1	DISSEMINATION MONITORING.....	47
6.2	DISSEMINATION MANAGEMENT.....	47
7	EXPLOITATION STRATEGY	49
7.1	EXPLOITATION PLAN	49
7.2	KEY EXPLOITABLE RESULTS.....	51

LIST OF FIGURES

FIGURE 1 - 'COMMUNICATION, DISSEMINATION & EXPLOITATION: WHAT IS THE DIFFERENCE AND WHY THEY ALL MATTER. SOURCE: EUROPEAN COMMISSION HTTPS://REA.EC.EUROPA.EU/DISSEMINATION-AND-EXPLOITATION_EN	14
FIGURE 2 - KEY ELEMENTS OF A CDEP.....	16
FIGURE 3 - LOGO OF EASYDC-FOS	22
FIGURE 4 - EASYDC-FOS BRAND COLOURS AND TYPEFACE.....	22
FIGURE 5 - DELIVERABLE TEMPLATE	23
FIGURE 6 - PRESENTATION TEMPLATE.....	23
FIGURE 7 – PRELIMINARY MOCKUP FOR THE PROJECT WEBSITE HOMEPAGE	27
FIGURE 8 - LINKEDIN PROFILE OF THE EASYDC-FOS PROJECT.	30
FIGURE 9 - EXAMPLE OF A POST PUBLISHED ON THE LINKEDIN PROFILE.	31
FIGURE 10 - X PROFILE OF THE EASYDC-FOS PROJECT	32
FIGURE 11 - EXPLOITATION METHODOLOGY FOR THE EASYDC-FOS EXPLOITATION STRATEGY	50

LIST OF TABLES

TABLE 1 - COMMUNICATION MILESTONES	34
TABLE 2 - COMMUNICATION MONITORING SCOREBOARD.....	34
TABLE 3 - DISSEMINATION MONITORING SCOREBOARD	47
TABLE 4 - KEY EXPLOITABLE RESULTS SUMMARY.....	53

ABBREVIATIONS AND ACRONYMS

Abbreviations / Acronyms	Description
ACE	Asociación Cluster de Energía
AMP	Ampacimon
APS	AP Sensing
BAR	Barbara
CDEP	Communication, Dissemination & Exploitation Plan
CDES	Communication, Dissemination & Exploitation Strategy
CINEA	European Climate, Infrastructure and Environmental Executive Agency
DSO	Distribution System Operator
EC	European Commission
ENER	Energinet
FTO	Freedom to Operate
GD	Green Delta
HVDC	High Voltage Direct Current
IPR	Intellectual Property Rights
KER	Key Exploitable Results
LMK	Lumiker
NEX	Nexans
OEM	Original Equipment Manufacturer
ORE	Open Research Europe
RDT	RDT Ingenieros
SAB	Stakeholder Advisory Board
STAT	Statnett
TG	Target Group
TSO	Transmission System Operator
UCA	Universidad de Cantabria
UVA	Universidad de Valladolid
ZAB	Zabala Innovation



1 Introduction and context

This document is a deliverable of the EasyDC-FOS project, funded by the European Commission (EC) under its call HORIZON-CL5-2024-D3-01 (Sustainable, secure and competitive energy supply). The project aims to develop a new generation of high voltage direct current (HVDC) cables with reduced environmental impact, able to operate at voltages above 525 kV and paired with an intelligent monitoring system based on fibre optics and integrated in a cyber-secure digital environment.

The document is the first deliverable of Work Package (WP) 9 “Communication, Dissemination and Exploitation I” and intends to outline the communication and dissemination activities to be carried out along the project lifecycle to achieve its objectives, as well as the exploitation strategy.

The Communication, Dissemination and Exploitation Plan (CDEP) is the cornerstone for WP9 activities. It is key for a good coordination of all the communication and dissemination initiatives and for defining the messages about the project and its results that should be targeted to different audiences. Effective communication and dissemination will enhance the visibility of the project results and encourage interested stakeholders to participate actively, thus achieving a successful integration among technological outcomes and market demands. Specifically, this CDEP aims to:

- Outline the **main objectives** of the project communication, dissemination and exploitation strategies.
- Identify the **target groups** for the communication and dissemination objectives and actions.
- Define the **tools and channels** to be implemented and the most suitable **activities** to reach the target groups.
- Measure the **impact and effectiveness** of EasyDC-FOS communication and dissemination activities through a set of KPIs and measurable target values.
- Establish effective rules and procedures on how the communication and dissemination activities will be **managed and administrated**.
- Maximize the **exploitation potential** of the project's results by ensuring their transferability to industry stakeholders and facilitating their commercial uptake, ensuring alignment with market needs and regulatory frameworks.

1.1 Article 17 of the Grant Agreement

Article 17 of the EasyDC-FOS Grant Agreement with the European Climate, Infrastructure and Environment Executive Agency (CINEA) covers activities related to “Communication, Dissemination and Visibility”. Due to its relevance for the deployment of the Communication, Dissemination and Exploitation Plan, its text is shown in this chapter and should be considered



when developing all communication and dissemination activities. Especially relevant are the instructions regarding the acknowledgement of EU funding.

ARTICLE 17 — COMMUNICATION, DISSEMINATION AND VISIBILITY

17.1 Communication — Dissemination — Promoting the action

Unless otherwise agreed with the granting authority, the beneficiaries must promote the action and its results by providing targeted information to multiple audiences (including the media and the public), in accordance with Annex 1 and in a strategic, coherent and effective manner.

Before engaging in a communication or dissemination activity expected to have a major media impact, the beneficiaries must inform the granting authority.

17.2 Visibility — European flag and funding statement

Unless otherwise agreed with the granting authority, communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge the EU support and display the European flag (emblem) and funding statement (translated into local languages, where appropriate):



Funded by the
European Union



Co-funded by the
European Union



Funded by the
European Union



Co-funded by the
European Union

The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text.

Apart from the emblem, no other visual identity or logo may be used to highlight the EU support.

When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos.



Funded by
the European Union

For the purposes of their obligations under this Article, the beneficiaries may use the emblem without first obtaining approval from the granting authority. This does not, however, give them the right to exclusive use. Moreover, they may not appropriate the emblem or any similar trademark or logo, either by registration or by any other means.

17.3 Quality of information — Disclaimer

Any communication or dissemination activity related to the action must use factually accurate information.

Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them.”

17.4 Specific communication, dissemination and visibility rules

Specific communication, dissemination and visibility rules (if any) are set out in Annex 5.

17.5 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

SPECIFIC RULES

COMMUNICATION, DISSEMINATION, OPEN SCIENCE AND VISIBILITY (— ARTICLE 17)

Dissemination

Dissemination of results

The beneficiaries must disseminate their results as soon as feasible, in a publicly available format, subject to any restrictions due to the protection of intellectual property, security rules or legitimate interests.

A beneficiary that intends to disseminate its results must give at least 15 days advance notice to the other beneficiaries (unless agreed otherwise), together with sufficient information on the results it will disseminate.

Any other beneficiary may object within (unless agreed otherwise) 15 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly harmed. In such cases, the results may not be disseminated unless appropriate steps are taken to safeguard those interests.

Additional dissemination obligations



Where the call conditions impose additional dissemination obligations, the beneficiaries must also comply with those.

Open Science

Open science: open access to scientific publications

The beneficiaries must ensure open access to peer-reviewed scientific publications relating to their results. In particular, they must ensure that:

- at the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications
- immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights; for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND) and
- information is given via the repository about any research output or any other tools and instruments needed to validate the conclusions of the scientific publication.

Beneficiaries (or authors) must retain sufficient intellectual property rights to comply with the open access requirements.

Metadata of deposited publications must be open under a Creative Commons 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 or Euratom 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.

Only publication fees in full open access venues for peer-reviewed scientific publications are eligible for reimbursement.

Open science: research data management

The beneficiaries must manage the digital research data generated in the action ('data') responsibly, in line with the FAIR principles and by taking all of the following actions:

- establish a data management plan ('DMP') (and regularly update it)
- as soon as possible and within the deadlines set out in the DMP, deposit the data in a trusted repository; if required in the call conditions, this repository must be federated in the EOSC in compliance with EOSC requirements
- as soon as possible and within the deadlines set out in the DMP, ensure open access — via the repository — to the deposited data, under the latest available version of the Creative Commons



Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC 0) or a licence with equivalent rights, following the principle ‘as open as possible as closed as necessary’, unless providing open access would in particular:

- be against the beneficiary’s legitimate interests, including regarding commercial exploitation, or
- be contrary to any other constraints, in particular the EU competitive interests or the beneficiary’s obligations under this Agreement; if open access is not provided (to some or all data), this must be justified in the DMP
- provide information via the repository about any research output or any other tools and instruments needed to re-use or validate the data.

Metadata of deposited data must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent (to the extent legitimate interests or constraints are safeguarded), in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: datasets (description, date of deposit, author(s), venue and embargo); Horizon Europe or Euratom funding; grant project name, acronym and number; licensing terms; persistent identifiers for the dataset, the authors involved in the action, and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for related publications and other research outputs.

Open science: additional practices

Where the call conditions impose additional obligations regarding open science practices, the beneficiaries must also comply with those.

Where the call conditions impose additional obligations regarding the validation of scientific publications, the beneficiaries must provide (digital or physical) access to data or other results needed for validation of the conclusions of scientific publications, to the extent that their legitimate interests or constraints are safeguarded (and unless they already provided the (open) access at publication).

Where the call conditions impose additional open science obligations in case of a public emergency, the beneficiaries must (if requested by the granting authority) immediately deposit any research output in a repository and provide open access to it under a CC BY licence, a Public Domain Dedication (CC 0) or equivalent. As an exception, if the access would be against the beneficiaries’ legitimate interests, the beneficiaries must grant nonexclusive licenses — under fair and reasonable conditions — to legal entities that need the research output to address the public emergency and commit to rapidly and broadly exploit the resulting products and services at fair and reasonable conditions. This provision applies up to four years after the end of the action (see Data Sheet, Point 1).

Plan for the exploitation and dissemination of results including communication activities

Unless excluded by the call conditions, the beneficiaries must provide and regularly update a plan for the exploitation and dissemination of results including communication activities.



1.2 Differences between communication and dissemination

Communication and Dissemination have different goals and targets:

- Communication: Focuses on strategically **promoting the project** and its results to a **wide range of audiences**, including the general public, media, and other stakeholders. The goal is to **raise awareness and visibility**, often fostering a two-way interaction to engage the audience and create broader interest beyond the technical community.
- Dissemination: Refers to sharing the project's results with **specific target groups**, such as research peers, industry experts, policymakers, and other potential users. The aim is to **distribute scientific and technical knowledge**, allowing others to build on the findings, thereby contributing to scientific and technological progress.

This distinction highlights that communication is broader, involving non-specialists, while dissemination focuses on the expert community.

The main differences between communication, dissemination, and exploitation are illustrated in the following figure, extracted from the European Commission's publication titled '*Communication, dissemination & exploitation: What is the difference and why they all matter*', provided as part of Horizon Europe guidelines.





Figure 1 - 'Communication, dissemination & exploitation: What is the difference and why they all matter. Source: European Commission ¹

¹ https://rea.ec.europa.eu/dissemination-and-exploitation_en

2 Communication, Dissemination and Exploitation Strategy

2.1 Objectives

The Communication, Dissemination, and Exploitation Strategy (CDES) is key to ensure the successful promotion and long-term sustainability of the EasyDC-FOS project's outcomes. The main objectives of this strategy are:

- **O1. Raise Awareness and Visibility:** To raise awareness and inform stakeholders, including industry, academia, policymakers, and the general public, about the innovations and results achieved by the EasyDC-FOS project. This includes demonstrating the project's contribution to HVDC technology and environmental sustainability.
- **O2. Knowledge Transfer:** To facilitate the transfer of technical and scientific knowledge to relevant stakeholders, ensuring that the project's advancements in HVDC systems can be understood, adopted, and built upon by other researchers, industries, and innovators.
- **O3. Stakeholder Engagement:** To foster and amplify interaction with stakeholders and potential users to gather valuable feedback and insights. This engagement will help refine the project outcomes and identify additional exploitation opportunities, ensuring the results meet user needs.
- **O4. Market Readiness and Regulatory Alignment:** To ensure the broad applicability and readiness of the project's results, considering relevant regulations, standards, and market trends. This will position the EasyDC-FOS solutions for successful integration into current and future HVDC systems.
- **O5. Capacity Building and Training:** To guarantee that stakeholders and users, including operators, engineers, and technical personnel, have a basic understanding of the EasyDC-FOS system, its methods, and how to operate it effectively. Tailored dissemination materials and resources will be developed to support this goal.
- **O6. Exploitation Beyond Project Lifetime:** To encourage the exploitation of the EasyDC-FOS system beyond the project's lifetime by developing suitable business models, exploitation pathways, and strategic partnerships. This will ensure that the technology continues to evolve and provide value after the project concludes.
- **O7. Innovation Impact Maximization:** To maximize the societal and economic impact of the project by actively promoting the environmental benefits of HVDC cables with reduced ecological footprints. The project's green innovations will contribute to European decarbonization goals and foster sustainable energy systems.
- **O8. Public Outreach and Education:** To engage with the public and increase general awareness of the role of HVDC technologies in the energy transition. This will be achieved

through targeted public outreach campaigns, workshops, and educational content tailored to different audience groups.

These objectives will be achieved through a combination of strategic communication channels, targeted dissemination activities, and a robust exploitation plan designed to maximize the project's long-term impact on both the energy sector and society as a whole. In this regard, the key elements of the CDEP are summarised in the following figure and later described in the document, where the optimal and relevant interactions among these elements are defined.

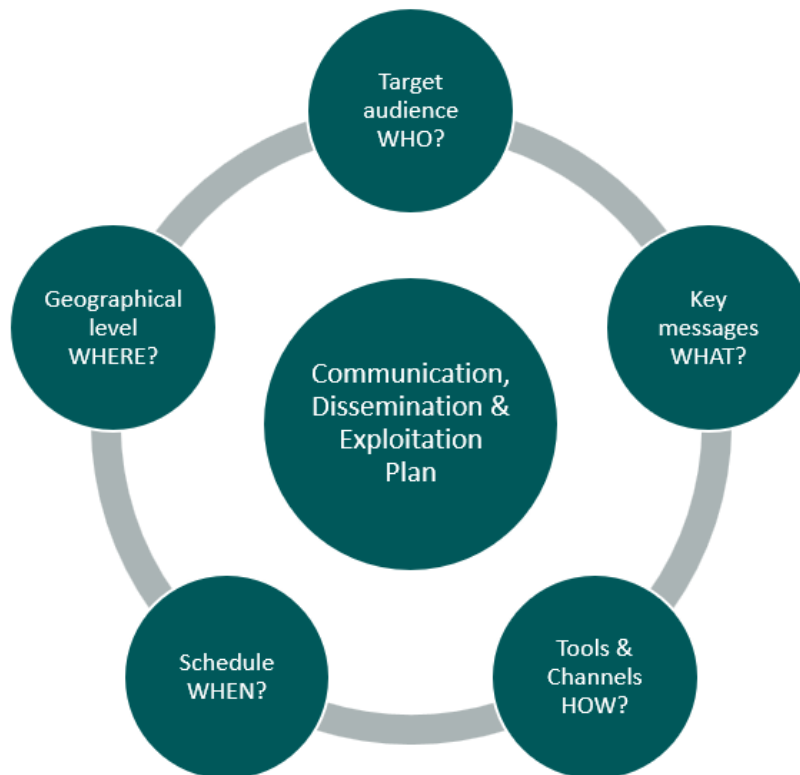


Figure 2 - Key elements of a CDEP

2.2 Target groups

Seven target groups have been identified for the EasyDC-FOS communication and dissemination strategies. Depending on their specific profiles, tailored materials and activities will be developed to effectively engage each group. Target Groups 1 through 6, being highly specialized and focused on industry, academia, and regulatory issues, will receive both communication and dissemination materials. In contrast, the final target group, which addresses a broader audience, will primarily engage with communication-focused materials. This approach ensures that the content delivered is relevant and makes an impact for each audience segment.

2.2.1 TG1: Cable Materials Providers

This target group includes companies that specialise in the development and processing of advanced materials used in the manufacturing of high-performance HVDC cables. These companies are at the forefront of material science, focusing on creating innovative materials that can withstand the extreme conditions to which HVDC cables are exposed, such as high electrical stresses, thermal cycling, and harsh environmental factors. They are responsible for supplying the raw materials or intermediate products that are critical for improving the reliability, efficiency, and longevity of HVDC systems.

Their interest in the EasyDC-FOS project stems from the opportunity to enhance their materials through collaboration with cutting-edge technological developments. As the project aims to reduce the environmental impact of HVDC cables while maintaining or increasing operational capacity, material providers will be keen to explore how their products can be adapted or optimized to meet these new technical specifications. Furthermore, their involvement in the project allows them to stay at the forefront of innovation, ensuring that their materials remain competitive in a market increasingly driven by the demand for sustainability and performance.

Type of information: Requirements, technologies and results related to material innovations that enhance cable durability, efficiency and environmental performance.

Channels and tools: Industry workshops and webinars, project newsletters, technical reports, and joint sessions at relevant trade fairs.

2.2.2 TG2: Deep-tech Companies and Suppliers of DC Technologies

This target group consists of companies at the cutting edge of innovation in the development and supply of advanced monitoring systems, smart grid solutions, and digital technologies specifically designed for direct current (DC) systems. These companies focus on designing and implementing sophisticated technologies that enhance the performance, safety, and efficiency of DC power systems, such as HVDC grids. Their expertise ranges from hardware solutions like sensors and monitoring equipment to software for data analysis, automation, and integration into cyber-secure environments.

The interest of these companies in the EasyDC-FOS project arises from the project's focus on developing a new generation of HVDC cables paired with an intelligent monitoring system based on fibre optics. As the project integrates real-time monitoring capabilities with advanced digital platforms in a cyber-secure environment, these companies may see an opportunity to learn and/or provide their expertise in these technologies.

Type of information: Requirements, features and performance of the intelligent monitoring system based on fibre optics. Enabling technologies for integration with digital and cyber-secure environments.

Channels and tools: Industry workshops and webinars, project newsletters, technical reports, and joint sessions at relevant trade fairs.



2.2.3 TG3: Transmission System Operators (TSOs), Renewable Energy Asset Owners and End-Users

Transmission System Operators (TSOs), Renewable Energy Asset Owners, and End-Users form a critical target group for the EasyDC-FOS project, each with distinct roles and interests in the advancement of HVDC technology.

TSOs are directly responsible for the transmission of high-voltage electricity over long distances, ensuring the reliability and security of the overall grid. Given that TSOs are the entities that will install and operate HVDC cables, their primary interest lies in the project's technological advancements, particularly the new generation of HVDC cables operating at voltages above 525 kV. They are keen on improvements in cable performance, durability, and integration with smart monitoring systems, which will enhance grid reliability and reduce both operational and maintenance costs. These innovations align with their goal of upgrading the grid to accommodate larger-scale renewable energy sources and high-voltage transmission.

Renewable Energy Asset Owners and End-Users—such as industrial consumers—are equally interested in how the EasyDC-FOS project can support a more efficient and sustainable energy grid. Improved HVDC cable technology facilitates the transmission of renewable energy over long distances, which is essential for the integration of renewable power into national grids. This leads to cost savings, increased energy security, and enhanced sustainability, all of which benefit these stakeholders directly.

Finally, although **Distribution System Operators (DSOs)** are not the primary target group for the project outcomes, their involvement could be significant in cases of offshore wind developers which are responsible for constructing transmission cables to land.

Type of information: Performance data, technical specifications and case studies that highlight the impact of HVDC cables on grid efficiency, reliability, and renewable energy integration.

Channels and tools: Engagement via the Stakeholder Advisory Board (SAB), industry conferences, as well as technical publications that provide insights into HVDC cable performance and operational benefits.

2.2.4 TG4: Academia and Research Community

This target group encompasses universities and research centres specializing in high voltage direct current (HVDC) systems, smart grids, and energy systems digitalization. They play a crucial role in advancing knowledge and innovation in the energy sector. The EasyDC-FOS project provides valuable research data, methodologies, and findings that can support further academic and industrial research. By sharing project results through scientific papers, academic conferences, and specialized journal publications, researchers can gain insights into cutting-edge developments in HVDC technology and foster collaborative initiatives to address emerging challenges in energy systems.



Type of information: Research data, models, methodologies, and findings related to the EasyDC-FOS project, supporting further academic and industrial research.

Channels and tools: Scientific conferences and papers.

2.2.5 TG5: Government, Regulatory and Standardisation Bodies

This target group consists of policy makers, regulatory agencies, and standardisation bodies responsible for shaping the framework of energy and technology regulations. These entities play a crucial role in establishing guidelines and standards that govern the energy sector, ensuring compliance, safety, and sustainability in energy production and distribution. Their focus includes not only current regulations but also the anticipation of future needs and challenges within the energy landscape.

The EasyDC-FOS project holds significant relevance for this group as it provides insights into how its innovations can align with and enhance the development of future energy standards, particularly in the field of high voltage direct current (HVDC) technology. By engaging with the project results, these bodies can better understand emerging technologies and their implications for regulatory frameworks, ultimately contributing to the establishment of more effective and forward-thinking standards.

Type of information: Insights into how EasyDC-FOS aligns with and supports the development of future energy standards, especially in the HVDC field.

Channels and tools: Participation in regulatory working groups and contributions to the development of new standards. Industry conferences. Engagement via the Stakeholder Advisory Board (SAB).

2.2.6 TG6: Other Stakeholders

This target group encompasses **energy consumers and aggregators, technology and industrial communities**, and the **general public, mass media, and students**. These groups have a vested interest in the outcomes of the EasyDC-FOS project due to its potential to impact energy efficiency, technological advancement, and sustainability.

- **Energy Consumers and Aggregators:** These include end-users and energy communities involved in consumption and distribution, who will benefit from information on how the project can improve energy efficiency, reduce costs, and contribute to a more sustainable energy grid.
- **Technology and Industrial Communities:** European initiatives, industrial associations, and technology platforms in the energy and digital sectors. They are interested in how the project's results could influence technological developments and industrial strategies.
- **General Public, Mass Media, and Students:** This group consists of individuals, media professionals, and students interested in energy, technology, and sustainability. The general public will receive updates on how EasyDC-FOS is helping reduce environmental



impacts, while media professionals will be engaged through press releases. Students will have access to educational content related to the project's innovations.

Type of information: Potential impacts on energy efficiency and costs, as well as contributions to grid sustainability.

Channels and Tools: Social media, project website, communication materials, outreach events, and press releases.



3 Communication Strategy

The main objective of the communication activities is to inform target audiences about project objectives and activities and to promote its results to increase awareness and stimulate the interest of multiple stakeholders.

Focused communication activities have been planned and will be carried out through different tools and channels to maximize the project impact on the identified target groups. All the activities related to dissemination and communication will be reported in deliverables D9.3 (M12) “Report on Communication & Dissemination activities I” and D10.2 (M24 and M36) “Report on Communication & Dissemination activities II & III”.

As mentioned before, this chapter describes all marketing tools generated for the project (identity, website, video, communication material) as well as activities mostly connected to non-specialist audiences (articles in general media, social media, press releases).

Key communication activities will be informed to CINEA so that it may use its channels to increase the reach of the project.

Whenever possible, communication material will be published in a repository on the EasyDC-FOS project website.

The communication activities planned for EasyDC-FOS address all the target groups considered (TG1-TG6).

3.1 Project identity

A dedicated project identity is necessary for coherent and effective communication. In the case of EasyDC-FOS, this identity is composed of three items: logo, graphical layout guidelines and templates.

All components of the project identity are available for partners since M1.

3.1.1 Project logo

The project logo is the main identifier of the project. It should be clear and reach the main topics involved in its development. The logo for the EasyDC-FOS project visually represents the integration of high voltage direct current (HVDC) technology and intelligent monitoring systems. The left side illustrates the robust layered structure of the HVDC cable, characterized by a dark colour, thick envelope, and traditional text font, symbolizing its strength and reliability. Conversely, the right side showcases the lighter structure of fibre optics, featuring a bright colour palette (excluding white and yellow for readability) and a modern text font, reflecting innovation and progress. At the centre, the "DC" highlights the connection between these two elements, utilizing the shape of the letters to resemble two connecting endpoints, one in green and the other in orange, signifying their integration and synergy.





Figure 3 - Logo of EasyDC-FOS

3.1.2 Graphical layout guidelines

Based on the project logo, additional graphical layout guidelines were defined to convey a unified image in all communication materials. As shown below, these mainly refer to brand colours and brand typeface, which is Helvetica Neue.

Brand colours

GREEN	ORANGE	WARM GREY
CMYK 100 70 70 0 HEX #105A5F RGB 16 90 95 PMS 5473 C — 100%	CMYK 0 55 100 0 HEX #F68B1F RGB 246 139 31 PMS 715 C — 30%	CMYK 0 2 4 5 HEX #F1EBE5 RGB 241 235 229 PMS 663 C — 60%

Brand typeface

Helvetica Neue

Figure 4 - EasyDC-FOS brand colours and typeface

3.1.3 Templates

Following graphical layout guidelines, templates to be used throughout the project have also been developed for deliverables (Word) and presentations (PowerPoint).



Project: Towards a wide-spread HVDC-based power system enabled by new highly efficient cable & fibre optic monitoring systems	
Project number:	101172806
Project acronym:	EasyDC-FOS
Call:	HORIZON-CLS-2024-D3-01
Topic:	HORIZON-CLS-2024-D3-01-15
Type of action:	HORIZON - RIA
Project starting date:	1/09/2024
Project duration:	36 months

Deliverable DX.X
XXX

Due date of deliverable: Month X
Actual submission date: 20XX-XX-XX
The organization name of the lead contractor for this deliverable: XXX
Dissemination level: XX
Version: 0.0

Funded by the European Union

GA 101172806

Page 2 of 12

Figure 5 - Deliverable template



EasyDC FOS

Towards a wide-spread HVDC-based power system enabled by new highly efficient cable & fibre optic monitoring systems

Insert the title of the presentation

Date Place

Consortium

Coordinator: Luniker, Ampocimon, ARTEMIS, barbara, ENERGINET, GreenDelta

Members: Nexans, RDT, Statnett, UC, Ure, zobolo, Cluster Energy

Funded by the European Union

Thank you!

Consortium

Coordinator: Luniker, Ampocimon, ARTEMIS, barbara, ENERGINET, GreenDelta

Members: Nexans, RDT, Statnett, UC, Ure, zobolo, Cluster Energy

Funded by the European Union

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

Figure 6 - Presentation template

3.2 Communication material

Aim: Promote the project and raise awareness of its objectives, development and results by providing relevant information to potential adopters of its results.

Key messages: Project objectives, why it is necessary (context) and its foreseen benefits and impact.

The communication material package contains five elements that will be used for communicating general aspects of the project throughout all activities.

3.2.1 General presentation

A general presentation of the project will be produced as the primary information resource for the partners communication activities. This comprehensive presentation serves as a foundational tool that partners can adapt and enhance with additional material, such as updates on project advancements and specific contributions from each partner. It is designed to effectively convey key aspects of the project to various stakeholders, ensuring a consistent and informative narrative across all communications. The structure of the presentation will include the following sections: The presentation will have the following structure:

0. Front cover + Consortium
1. Context & Challenges
2. Objectives
3. Work Packages & Activities
4. Advisory Board
5. Outcomes
6. Expected impacts

3.2.2 Infographics

To effectively communicate complex information and engage a broader audience, a visually appealing infographic will be developed. These infographics will clearly illustrate key concepts, main activities, scope, and expected results of the project, making it easier for different stakeholders to understand essential messages quickly. By using attractive visuals and straightforward messaging, the infographics will not only improve understanding but also serve as effective tools for outreach, fostering greater awareness and interest in the project's objectives and outcomes. Furthermore, the infographic could be periodically updated to reflect advancements or modifications throughout the project, ensuring that stakeholders have access to up-to-date and relevant information.

3.2.3 Project roll-up

A roll-up will be designed to visually present key information about the project, including its objectives, main activities and expected results. This roll-up will be particularly useful for events and different activities, providing a clear and engaging way to communicate the project basics to



a wider audience. It will be made available to all consortium partners to be used in their communication activities.

3.2.4 Brochure

The brochure will display the key elements of EasyDC-FOS. It will be used to provide additional information on printed material for trade fairs and other events so that all partners can distribute it individually to potential end-users and other stakeholders.

3.2.5 Newsletters

An EasyDC-FOS newsletter will be issued to provide information on project progress, developments and results, as well as on stakeholder activity. It will be delivered quarterly, starting in M8.

The first issue will give visibility to the project by providing an overview of the objectives, presenting the partners involved and outlining the expected results.

The intermediate issues (M12, M16, M20, M24, M28, M32) will focus on reporting the activities carried out, preliminary results emerging from the research activity and the progress on stakeholder engagement.

Finally, the eighth issue, foreseen at the last project year (M36), will highlight the project achievements and the main results from the whole activity.

The newsletter will be released on the project website and social media in order to improve the project's visibility and will also be emailed to consortium partners that will distribute it, when available, to their own contact groups.

3.3 Project website

Aim: Build a community of interested stakeholders to promote interaction and engagement with the EasyDC-FOS innovations in HVDC cable systems, focusing on advanced materials, intelligent monitoring, and digitalization. The website will serve as a central hub for sharing key information about project activities, results, and benefits, facilitating collaboration and knowledge exchange across sectors involved in energy transmission and smart grid technologies.

Key messages: The unique features of EasyDC-FOS HVDC cable technology, including its reduced environmental impact, enhanced performance through intelligent monitoring, and its integration into a secure, cyber-protected digital environment.

The website (www.easydcfos-project.eu) will be the main communication tool for the project and the primary information source for the EasyDC-FOS target groups. Hence, the website address will feature in all project's communication material.

The purpose of the website will be to proactively promote the project and its results by providing targeted information to various audiences within and beyond the project's own community. Its specific goals are the following:



- To raise awareness about the project objectives, its results, its benefits, use and applicability.
- To recruit and seek the support of interested stakeholders and the general public.
- To build understanding and facilitate the adoption of project results.
- To assure that all interested parties are involved, participate and are informed about the status of the project.
- To share the main project outcomes, the calendar of the events, the public documents released by the consortium and a selection of relevant news to the sector related to the project activity.

ACE will be responsible for the design, creation and hosting of the website. Nevertheless, all partners will be committed to keeping the website alive by providing content and materials for the different sections (news, events, pictures, documents, publications, etc.).

The website structure will follow the Best Practice Guidelines made by the European Commission [EUWEB]. It will be updated continuously in contents and structure throughout the project duration, being the domain name renewed on a yearly basis.

The graphical layout will be designed by professionals to promote the project towards interested users and attract potential stakeholders to exchange views and standpoints on the project, while at the same time assuring an easy and user-friendly navigation experience.

The website includes the following sections:

- **Concept:** An overview of the project rationale, concept and objectives
- **Partners:** A brief description of each partner profile
- **Results:** A summary of the expected results and the use cases in which they will be demonstrated and validated.
- **News:** Press releases following the progress, highlights and events where the project is present.
- **Resources:** Communication and Dissemination materials (brochure, videos, newsletters..) and project publications, including public deliverable reports and scientific publications.
- **Contact:** Contact details for the project coordinator and communication manager.

The website contains information regarding the main challenges of the project, its specific objectives and technology. Furthermore, the website will allow the dissemination of public deliverables, publications and presentations and will foster the active involvement of the target audience in project activities by providing updated news produced by the consortium or that could impact the project activities.

To measure the website traffic, gather more information on how visitors find and use the website and determine how to ensure periodic visits, careful monitoring of the website activity will be performed through Google Analytics.



The website is expected to be ready and operational by the end of M4. It will be updated on a monthly basis with sectoral news and project events and activities, aiming to reach 10,000 visits.



The mockup shows a website homepage for the EasyDC-FOS project. At the top is a navigation bar with the project logo and links: CONCEPT, PARTNERS, RESULTS, NEWS, RESOURCES, and CONTACT. The main header features a large orange banner with the text 'EasyDC-FOS Project' and a sub-header: 'Towards a wide-spread HVDC-based power system enabled by new highly efficient cable and fibre optic monitoring systems'. A 'Discover more' button is present. Below this is a paragraph describing the project's goals: 'EasyDC-FOS will develop a new generation of HVDC >525kV cable systems with optimized energy transport capability and reduced environmental impact, paired with fibre optic-based intelligent tools for ageing monitoring and efficient fault detection hosted in a cybersecure digital environment.' A central section displays five key benefits in teal boxes, each with an icon: 'Reduction of energy losses' (cable icon), 'Increase of grid capacity' (tower icon), 'Less environmental impact' (circular arrows icon), '>50km without compensation' (wave icon), and 'Easier installation' (wrench icon). The bottom section is a dark teal box containing project details in a table format.

Project Acronym	EasyDC-FOS		
Project Title	Towards a wide-spread HVDC-based power system enabled by new highly efficient cable & fibre optic monitoring systems		
Type of Action	HORIZON Research and Innovation Actions		
Call	HORIZON-CL5-2024-D3-01		
Topic	HORIZON-CL5-2024-D3-01-15		
Project number	101172806	Start Date	1 September 2024
Coordinator	LUMIKER	End Date	31 August 2027
EU Grant	~ 5.5 M€		

At the bottom left is the 'Funded by the European Union' logo. On the right, a disclaimer states: 'This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement 101172806. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the granting authority is responsible for any use that may be made of the information contained in this document.'

Figure 7 – Preliminary mockup for the project website homepage

3.3.1 Articles

Aim: Raise awareness among the general public and stakeholders about the ongoing progress and activities of the EasyDC-FOS project through regular updates on the project website. These articles will cover key project milestones, including meetings, organized workshops, project advancements, and any significant news or developments. The content will be tailored to inform readers on how EasyDC-FOS contributes to HVDC cable technology and to the energy transition.

Key messages: EasyDC-FOS is focused on innovative HVDC cable technology to improve energy transmission, reduce environmental impact, and ensure system reliability through secure, real-time monitoring solutions. Updates will reflect the project's ongoing efforts toward these goals.

Approximately 30 articles and pieces of news related to the project progress will be published on the project website throughout the project. These will be shared with relevant stakeholders and media outlets to provide broader visibility.

3.4 Project videos

Aim: Promote the project and raise awareness of its objectives, development and results by providing relevant information to potential adopters of its results.

Key messages: Project objectives, why it is necessary (context) and its foreseen benefits and impact.

Marketing material will include two videos of the project:

- A short introductory video of motion graphics at the beginning of the project providing an overview of its objectives, main challenges, technological approach and the expected results and their benefits.
- A final promotional video showcasing the project results.

YouTube will be used to advertise the videos which also will be featured on the website and on the social media profiles. Videos are to be used whenever possible in other communication and dissemination activities such as participation in international events, the partners' own websites or the final project conference. The objective is to reach at least 750 video views on YouTube and 1,000 on LinkedIn + X.

3.4.1 Introductory video

The introductory video will be a motion graphics video and is expected to be ready by M7. Its main goal will be to introduce easy-to-grasp concepts of the project. Preliminarily, it will consist of 6 parts of approximately 25 seconds each:

- Context & Challenges.
- Objectives.



- Work packages & Activities
- Outcomes
- Expected Impacts
- Consortium & Advisory Board.

The plot will be elaborated by the Basque Energy Cluster. Duration is expected to be 2 minutes and 30 seconds. Language will be English.

3.4.2 Final video

The final promotional video will be recorded during the last year and is expected to be ready in M34. It will consist mostly of interviews to partners recorded during a General Assembly meeting as well as other resources recorded in facilities of the hosting partners and during testing activities of the case studies.

A guide will be elaborated by the Basque Energy Cluster with instructions about how to record and appropriate content. All partners will participate at least once. Duration is expected to be 4 minutes. The language will be English.

3.5 Social media

Aim: Increase visibility and engagement around the EasyDC-FOS project on social media platforms by sharing bite-sized updates on key activities, milestones, and results. The goal is to create a dynamic online presence that fosters interest among stakeholders, promotes the project's innovations, and raises awareness of its contributions to sustainable energy solutions.

Key messages: EasyDC-FOS is transforming HVDC cable technology with innovative materials and intelligent monitoring systems, enhancing energy transmission efficiency and reliability while reducing environmental impact. The project aligns with EU sustainability goals and ensures secure, cyber-protected energy infrastructure, contributing to Europe's green energy transition.

EasyDC-FOS will build up a community including project posts on relevant and existing social networks, contributing to raise awareness and maintain the visibility on activities and achievements. X ([EasyDC-FOS](#)) will support communication towards the general public while LinkedIn ([EasyDC-FOS EU Project](#)) will be used for professional exchanges. Furthermore, YouTube will be used to advertise the project videos.



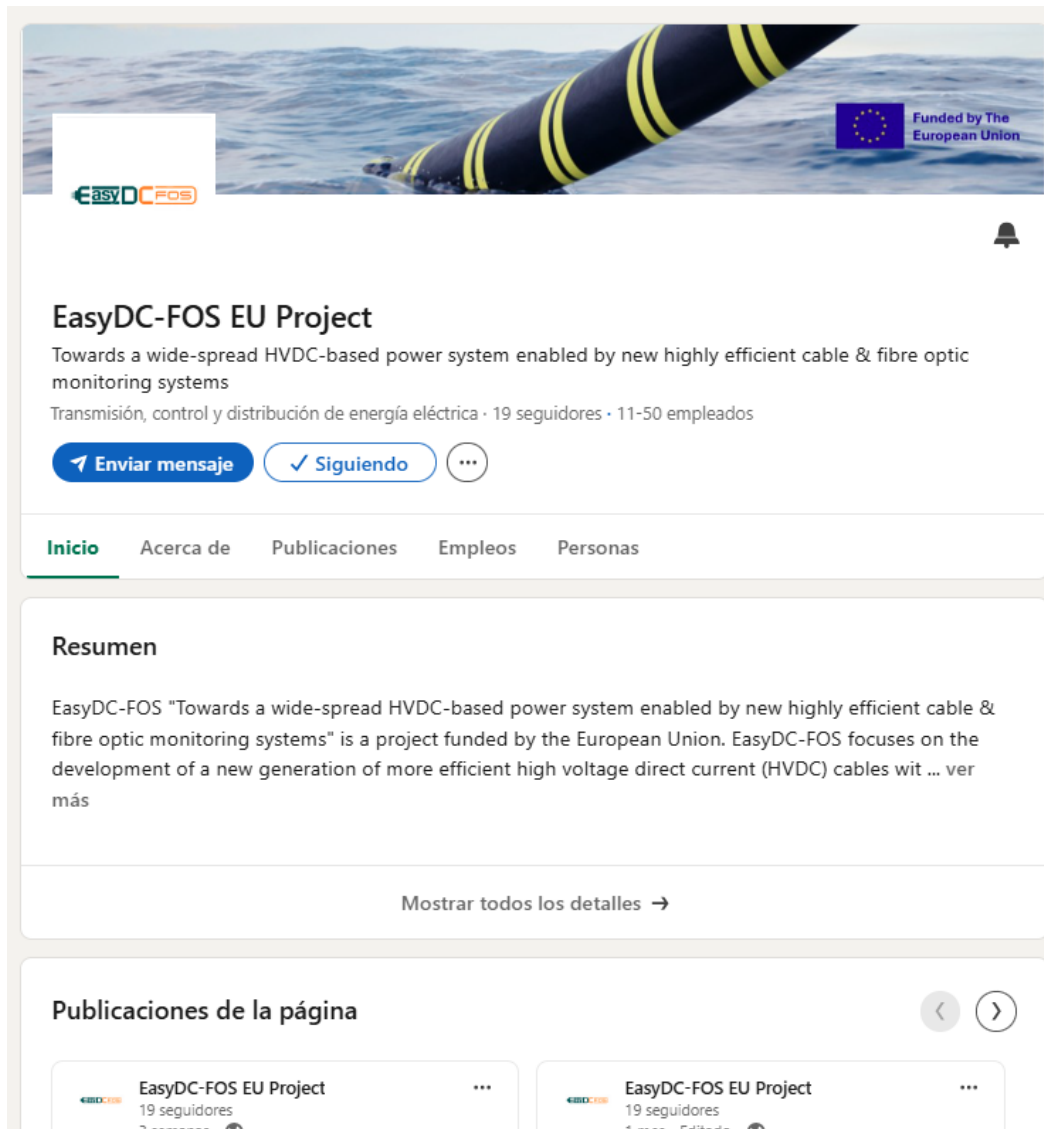


Figure 8 - LinkedIn profile of the EasyDC-FOS project.

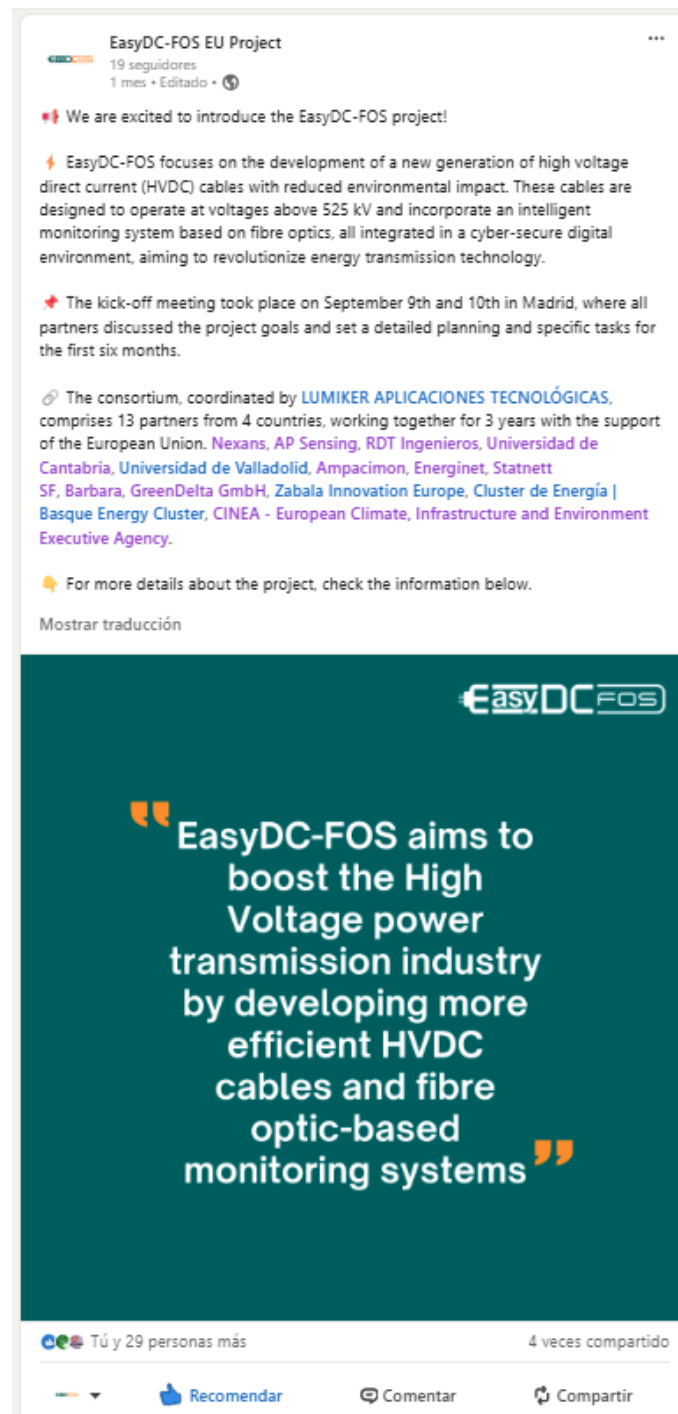


Figure 9 - Example of a post published on the LinkedIn profile.


[Edit profile](#)

EasyDC-FOS

@EasyDC_FOS

EasyDC-FOS "Towards a wide-spread HVDC-based power system enabled by new highly efficient cable & fibre optic monitoring systems" is a project funded by the EU

Joined September 2024

1 Following 1 Follower

Posts

Replies

Highlights

Articles

Media

Likes

EasyDC-FOS @EasyDC_FOS · Oct 25

Thrilled to launch #EasyDC-FOS's communication campaign at @Enlit_Europe in Milan! 🌍 First international showcase under 'Smart Grids Basque Country,' promoting HVDC cable tech for efficient energy transmission.

Project coordinated by #LUMIKER (@RDTIngenieros) ➡ @cinea_eu



Figure 10 - X profile of the EasyDC-FOS project

The EasyDC-FOS consortium will start using these channels in M2 with the goal to achieve at least 500 followers (M24) and 800 followers (M36) for all the accounts.

3.6 Press releases

Aim: To continuously communicate key developments, achievements, and milestones of the EasyDC-FOS project to the media, emphasizing its transformative impact on the energy sector and its contributions to the EU's green energy transition. Press releases will focus on how the project's innovations in HVDC cable technology enhance energy transmission efficiency, improve



Funded by
the European Union

GA 101172806

Page 32 of 54

system reliability, and reduce environmental impact while aligning with EU sustainability and climate goals.

Key Messages: EasyDC-FOS is at the forefront of developing groundbreaking HVDC cable technology, integrating innovative materials with advanced, intelligent monitoring systems. These solutions contribute to more efficient and reliable energy transmission, addressing key sustainability challenges by reducing environmental impacts and supporting secure, cyber-protected energy infrastructure. Through these advancements, EasyDC-FOS directly aligns with the EU's efforts to accelerate the green energy transition.

To ensure broad visibility, **two press releases will be issued per year**, achieving a total of 50 media impacts throughout the project. The press releases will cover a range of activities, including:

- **Project kick-off:** Announcing the project launch, consortium partners, and initial objectives.
- **Consortium and Stakeholder Advisory Board meetings:** Highlighting strategic decisions, progress reviews, and collaborative efforts during regular consortium gatherings.
- **Workshops and webinars:** Promoting knowledge-sharing sessions, including events focused on HVDC technology, Smart Grids, etc.
- **Project milestones:** Highlighting the progress achieved throughout the project's implementation.
- **Partnerships and collaborations:** Announcing new collaborations or partnerships that enhance the project's impact.
- **Final results and impact:** Communicating the successful outcomes at the end of the project, including the tested technologies, market potential, and contributions to EU energy and climate goals.

4 Communication Monitoring & Management

4.1 Communication monitoring

All communication activities will be monitored according to Key Performance Indicators (KPIs) as shown in the following tables.

Table 1 - Communication milestones

Communication activity	Key milestones	Dates
3.1 Project identity	Project identity (logo, guidelines and templates)	M1
3.2 Communication material	General presentation	M3
	Infographic	M3
	Roll-up	M6
	Brochure	M6
	Newsletter	M8, M12, M16, M20, M24, M28, M32, M36
3.3 Website	Website up and running	M4
	Published articles/news	30
3.4 Videos	Introductory and final video	M7, M34
3.5 Social media	Creation of social media channels (X, LinkedIn)	M2
3.6 Press releases	Publication of press releases	2/year

Table 2 - Communication monitoring scoreboard

Communication activity	KPI	Y1	Y2	Y3	Total
3.1 Project identity	Logo and Graphical layout guidelines	1	0	0	1
	Templates	2	0	0	2
3.2 Communication material	General presentation	1	1	1	3
	Infographic	1	0	0	1
	Roll-up	1	0	1	2
	Brochure	1	0	1	2
	Newsletter	2	3	3	8
	Number of distributed materials	220	230	300	750
3.3 Website	Number of visits	2,000	3,000	5,000	10,000
	Number of articles	5	10	15	30

3.4 Videos	Number of views	525	525	700	≥750 YouTube and ≥1000 LinkedIn + X
3.5 Social media	Number of followers	200	300	300	800
3.6 Press releases	Number of press releases	2	2	2	6
	Number of media impacts	10	15	25	50

The Basque Energy Cluster (ACE), as Work Package Leader, will be responsible for monitoring the impact of the communication strategy in order to apply corrective actions whenever necessary and identify opportunities that can maximize the impact and visibility of the project.

4.2 Communication management

Communication activities will be managed by the Communication Manager (Basque Energy Cluster), who will work in close coordination with the Project Coordinator. All relevant communications will be checked with all partners prior to its publication.

As a general rule, every communication activity planned by any partner in relation to the project or its contribution to it shall be notified in advance to ACE, in order to keep track of the actions, provide and update the necessary material and ensure coherence with the communication objectives. Once the activity has been carried out, the partner shall briefly report the result to the Communication Manager (ACE).

Moreover, while ACE will be responsible for all communication activities, partners will need to actively contribute to some of them, either supplying ACE with updated information about project developments or participating directly in the activity.

5 Dissemination Strategy

The dissemination activities of EasyDC-FOS aim to ensure that the project results are shared and accessible for further use by relevant stakeholders. This section outlines the types of knowledge and results that will be disseminated to each target group, along with the channels and tools that will be used to reach them effectively.

Focused dissemination efforts will be carried out through various tools and platforms to maximize the project impact on identified specialist audiences. These activities will include scientific outreach, participation in EU events, workshops, clustering with other EU-funded projects and related initiatives, webinars, and the EasyDC-FOS final event. All the activities related to dissemination and communication will be reported in deliverables D9.3 (M12) “Report on Communication & Dissemination activities I” and D10.2 (M24 and M36) “Report on Communication & Dissemination activities II & III”.

Key dissemination activities will also be communicated to CINEA to leverage its networks and platforms, extending the project reach. Additionally, whenever possible, papers, presentations, and other dissemination materials will be made available in a public repository on the EasyDC-FOS project website.

Even after the official project duration, partners will continue to present EasyDC-FOS results at events, sharing lessons learnt and fostering knowledge exchange with other related projects.

5.1 Events organized by the EasyDC-FOS consortium

Aim: Present the EasyDC-FOS project results and their impacts, foster replicability, and establish strong relationships between the consortium and the target groups to boost collaboration and cooperation. These events will also help cultivate a supportive community around the project.

The **Smart Grids Forum of the Basque Energy Cluster (ACE)**, co-chaired by **Iberdrola** and based in the **Basque Country**, gathers the main stakeholders in the regional Smart Grids value chain, focusing on knowledge sharing and collaborative R&D activities. The Forum holds regular meetings twice a year hosted at Iberdrola headquarters in Bilbao, providing a suitable environment for disseminating key project progress and results, fostering strategic partnerships and driving the development of solutions that effectively integrate renewable energy sources into the grid. ACE and Iberdrola coordinate the agenda and contents for the meetings, which LMK and BAR (as Forum members) attend regularly. The project will be showcased at least 3 times at the Forum between 2024-2027 to update its members on the research activity performed and the outcomes obtained.

The **Workshops and Meetings with the Stakeholder Advisory Board (SAB)** are key components of the project collaborative framework, taking place every six months—or more frequently as required by each work package. These gatherings are essential to engage key stakeholders in in-depth discussions about the project context, progress, and results. During these



sessions, participants share insights and feedback, facilitating a comprehensive analysis of the project's developments and aligning strategic objectives with stakeholder expectations. The collaborative nature of these workshops not only enhances transparency but also ensures that the project remains responsive to emerging trends and challenges in the energy sector. By fostering dialogue and collaboration, these meetings are instrumental in driving innovation and refining project outcomes.

An **Internal Workshop** will be organized by STAT to showcase the pilot outcomes, where team members will present and discuss their findings in detail. Through hands-on demonstrations and presentations, participants will gain valuable insights into the practical applications of the project innovations.

The **Project Results Showcase Day**, organized by LMK, is a pivotal event aimed at engaging Transmission System Operators (TSOs) and Regulator Representatives across Europe. Following the demonstration of the Use Case, this event will serve as a platform to highlight the innovative remote diagnosis tools developed throughout the project. The Showcase Day will be held towards the end of the project at LMK headquarters in Madrid, comprising presentations and interactive sessions that will allow participants to explore the capabilities and benefits of these tools in enhancing operational efficiency and reliability. Around 30 to 40 participants are expected to attend.

The **Workshops with Sister EU Projects** are events generally promoted by the EC and designed to enhance collaboration and promote knowledge sharing among EU-funded projects. These workshops facilitate the exchange of best practices, insights and innovative approaches developed across different initiatives.

An **EasyDC-FOS Final Event** will be organised around M36 to showcase the project results and lessons learnt. This event will engage stakeholders from "HV" industries such as TSOs, policymakers and decision-makers linked to cable operational projects, engineering and cable monitoring departments, as well as representatives from other related European projects. To maximize attendance and visibility, the event will be preferably co-located with a major industry event or exhibition linked to the HV industry, allowing the project results to be presented on a broader platform.

The dissemination strategy targets the goal of attracting more than 50 stakeholders per event, organising over 3 showcases and workshops, and ensuring at least 100 participants at the final event.

5.2 Participation in International events

Aim: Maximize the exploitation opportunities of the EasyDC-FOS project results and generate interest among potential end-users. By engaging in Open Science and Innovation practices, the consortium seeks to raise awareness of the project advancements and encourage collaboration.

Participation at Events, Trade Fairs, Conferences & Workshops: The multidisciplinary expertise of EasyDC-FOS partners allows for participation in a wide portfolio of international



events, with strong focus on HVDC and innovative technologies for the Transmission Grid. These include:

- **JICABLE** HVDC symposium is a highly regarded international event dedicated to advancing scientific and technical discussions in the field of insulated power cables. It serves as a key platform for industry experts, researchers, and innovators to exchange insights on the current state and future developments of High-Voltage Direct Current (HVDC) transmission systems. The event features a variety of activities including conferences, tutorials, technical visits, and a poster session aimed at young researchers.

Main topics of focus include the design, production, and environmental considerations of HVDC cables and accessories, as well as performance testing, mechanical innovations, and sustainability aspects. This event is critical for staying up to date with innovations in HVDC technology, particularly in areas such as monitoring, service life, and the impact of HVDC systems on energy efficiency and environmental sustainability.

The EasyDC-FOS consortium will participate in the 2025 and 2027 JICABLE editions. For more information visit: <https://hvdc25.jicable.org/>

- **CIGRE Paris** is a prestigious biennial event that brings together over 9,000 power system professionals from more than 100 countries. It offers a comprehensive program, with key activities including technical conferences and working group discussions that synthesize new ideas, technical paper presentations, and interactive poster sessions, all aimed at addressing the latest trends and challenges in the power industry. In addition, a large exhibition showcases cutting-edge technologies from more than 300 international companies, providing networking opportunities for participants to connect with industry leaders and peers.

The EasyDC-FOS consortium will participate in the 2026 CIGRE edition (Aug 23-28) (<https://session.cigre.org/>). There is also potential to engage in other editions, thus broadening the reach and impact of the project at an international scale.

- **GRIDCON 2025 - POWERGRID in association with CIGRE India**, Mar 9–11, 2025 (New Delhi, India), <https://apps.powergrid.in/gridcon/home>
- **CIGRE Symposium 2025 - Nordic Regional Council of CIGRE (NRCC)**, May 12–15, 2025 (Trondheim, Norway), <https://cigrenrccsymposium2025.com/>
- **CIGRE 2025 International Symposium - CIGRE Canadian National Committee**, Sep 29 – Oct 2, 2025 (Montreal, Canada), <https://www.cigre.org/event/symposium/2025/CA/montreal/cigre-2025-international-symposium>
- **GCC – CIGRE International Conference and Exhibition for Electrical Equipment 2025** (Middle East, *date/venue to be determined*), <https://cigre-gccpower.com/>



The list will be updated as details for upcoming events are available. For further information visit: <https://www.cigre.org/GB/events/next-events>

- **ACDC Global 2025 - 22nd IET International Conference on AC and DC Power Transmission**, Mar 17 – 19, 2025 (Birmingham, UK). Leading conference on HVDC and meeting point for TSOs and transmission operators from across the world as well as for AC and DC power transmission engineers organized by IET, <https://acdc.theiet.org/>. Details for the upcoming 2026 and 2027 editions will be updated when available.
- **5th Annual Subsea Cable Installation, Asset Management and Reliability Forum**, Apr 29-30, 2025 (Amsterdam, The Netherlands). The event brings together key experts from the wind power community globally to discuss the current challenges in continuous risk assessment for cables, cable burial, route optimization, cost reduction, cable repairs, operation and maintenance, and life extension to identify best practices, <https://www.leadventgrp.com/events/5th-annual-subsea-cable-installation-asset-management-reliability-forum/details>. Details for the upcoming 2026 and 2027 editions will be updated when available.
- **OFS29 – 29th International Conference on Optical Fibre Sensors**, May 25-30, 2025 (Porto, Portugal). Leading annual conference on all topics related to photonic sensing principles and technologies supported in fiber optics, providing a forum for reporting and exchanging ideas on the latest advances in the field. It has also contributed significantly to industrialization and standardization of the related devices and systems for field deployment, <https://ofs29.org/>. Details for the upcoming 2026 and 2027 editions will be updated when available.
- **HVDC Power Transmission & Technology 2025** (*date/venue to be determined*). Leading international event dedicated to advancing the knowledge and innovation in high-voltage direct current technologies. This conference offers a unique platform for industry leaders, researchers, engineers, and policymakers to come together and discuss the latest developments in the world of HVDC, <https://hvdc-power-transmission.com/>. Details for the upcoming 2025, 2026 and 2027 editions will be updated when available.
- **28th Nordic Insulation Symposium on Materials, Components and Diagnostics**, to be held in June 2025 in Sweden (Stockholm area). The Nordic Insulation Symposium (Nord-IS) is a biennial symposium rotating between the four Nordic countries Denmark, Finland, Norway and Sweden, <https://www.ntnu.edu/nordis21>
- **Optica Sensing Congress**, Jul 20-24, 2025 (California, USA). This event presents the latest developments in optical sensing and sensors and their use in various applications. Hot topics include photonic integrated circuits (PICS), fiber-based sensing, quantum sensing technology, THz sensing, sensing solutions in manufacturing and the latest developments in comb spectroscopy, including fiber lasers and mid-IR sources.

https://www.optica.org/events/congress/optical_sensors_and_sensing_congress/



- **IEEE Conference on Electrical Insulation and Dielectric Phenomena - CEIDP**, Sep 14-17, 2025 (Manchester, U.K.). This annual Conference brings together researchers in all disciplines from industry, universities, government, and other laboratories to discuss the latest results and developments in the fields of electrical insulation and dielectric phenomena, <https://ceidp.org/>. Details for the upcoming 2026 edition will be updated when available.
- **IEEE Power and Energy Society Transmission and Distribution Conference and Exposition**, May 4-7, 2026 (Chicago, USA). This biennial event delivers practical, solution-oriented training on key trends impacting the T&D industry, including case studies and lessons learned, <https://ieeet-d.org/2026-save-the-date/>.
- **IEEE International Conference on Dielectrics – ICD 2026** (*date/venue to be determined*). Interdisciplinary biennial forum covering research in the field of insulating materials and dielectric phenomena, and on the behaviour and properties of the electrical insulation in devices, under operational stresses. Topics of power devices as well as all systems involving insulations and dielectrics are covered, <https://ieee-icd.org/>.

An additional **set of events with a broader scope**, not only but also linked to HVCD and Transmission technologies, have been identified.

- **Enlit Europe** is one of the largest and most comprehensive energy events in Europe, bringing together the entire energy ecosystem. The conference covers a wide range of topics related to energy generation, transmission, distribution, storage, and digitalization. It serves as a hub for industry professionals, policy makers, innovators, and investors to engage in discussions and showcase technologies that will shape the future of the energy sector.

Transmission and distribution, crucial elements of the energy value chain, are central themes at Enlit Europe. The event focuses heavily on innovations that modernize these systems, particularly in the context of the energy transition towards greener, more sustainable power grids. It features in-depth discussions on smart grid technologies, the integration of renewable energy sources, the digitalization of transmission systems, and advancements in High Voltage Direct Current (HVDC) technology—key to enhancing the efficiency and reliability of long-distance electricity transmission.

EasyDC-FOS project has been showcased at the latest edition of Enlit Europe held in Milan (October 22-24) in the Smart Grids Basque Country booth coordinated by the Basque Energy Cluster, together with 9 companies, Barbara and Iberdrola among them. Participation is also planned at the 2025 edition in Bilbao. For more information visit: <https://www.enlit-europe.com/>

- **WindEurope Annual Event** is a key international gathering for the wind energy sector, attracting industry leaders, innovators, and policymakers to discuss the future of wind power and renewable energy. The 2025 event will be held in Copenhagen and will focus



on a range of issues, from technological advancements in wind turbine design to policies supporting the global energy transition.

Although primarily centred on wind energy, this event presents an important platform to discuss the role of **HVDC** systems in enabling the large-scale integration of offshore wind power into national grids. This ties directly into the green energy goals promoted at events like WindEurope, which emphasize the necessity of resilient, efficient transmission infrastructure to fully realize the potential of renewable energy sources.

The EasyDC-FOS consortium will participate in the 2025 (Copenhagen), 2026 and 2027 WindEurope Annual Event editions. For more information visit: <https://windeurope.org/>

- The **Offshore Wind IPF (International Partnering Forum)** is a significant gathering dedicated to the offshore wind energy sector, focusing on fostering collaboration and innovation in the industry. This event brings together key stakeholders, including developers, manufacturers, and policymakers, to discuss the latest trends and technologies driving the growth of offshore wind. The forum features networking opportunities, presentations, and panel discussions that cover various aspects of offshore wind development, including project financing, environmental considerations, and technical advancements.

Given the increasing importance of distributed energy generation and its integration into existing infrastructures, the advancements in HVDC technology will be of notable interest. Offshore Wind IPF serves as a vital platform for promoting collaboration and advancing the industry's objectives in the renewable energy transition.

The EasyDC-FOS consortium will explore – whenever possible – its participation in the next IPF editions (2025 in Virginia Beach, April 28-May 1). For more information visit: <https://oceantic.org/>

- The **WindEnergy Hamburg** fair is a leading global event for the onshore and offshore wind energy sectors, designed to encourage collaboration and drive innovation across the industry. Hosted in Hamburg, this biennial event gathers major stakeholders, including technology developers, manufacturers, and policy makers, to explore and discuss key trends and advancements in the wind energy landscape. The fair features a comprehensive program with networking opportunities, product showcases, and panel discussions on a wide array of topics, from policy and financing to technical solutions and sustainability strategies. Given the rising focus on distributed energy generation and grid integration, advancements in HVDC technology and their role in supporting wind energy infrastructure are of particular interest.

The EasyDC-FOS consortium will participate in WindEnergy Hamburg 2026 to present and exchange insights with other industry experts. For more information, visit: <https://www.windenergyhamburg.com/>



- **EU Sustainable Energy Week:** EUSEW is the largest event dedicated to renewable energy and energy efficiency in Europe. It gathers policymakers, energy professionals, and researchers to discuss sustainable energy initiatives at the EU level. By participating in this event, the EasyDC-FOS consortium will actively contribute to discussions on the future of sustainable energy and promote the project's contributions to the energy transition. https://sustainable-energy-week.ec.europa.eu/index_en
- **InnoGrid:** InnoGrid focuses on the future of Transmission and Distribution (T&D) networks, exploring how grid innovation can meet Europe's sustainability goals. It provides a unique platform for discussions around future energy systems and is a critical event for EasyDC-FOS to engage with experts in grid innovation. The project's innovative HVDC cable solutions will be highly relevant to these discussions, ensuring a strong presence and impact. <https://www.innogrid.eu/>

The project aims to participate in an average of three events and three trade fairs or workshops per year.

5.3 Advisory Board

A Stakeholder Advisory Board (SAB) will be established, comprising key representatives from targeted profiles such as **Transmission System Operators (TSOs)**, **systems and components manufacturers**, and **Research and Technology Organizations (RTOs)**. The primary objective of the SAB is to provide consolidated advice on relevant technical and economic goals associated with the project, ensuring the highest potential for innovation and market uptake throughout its development. The contribution from stakeholders will be key for validation and improvement at critical stages of the project lifetime, where checkpoints on the work performed are required.

The Advisory Board members will **commit** themselves to:

- Assume a supporting role to EasyDC-FOS project during the project lifetime.
- Be involved from the very beginning by providing advice and guidance to point the activities in the right (industry-relevant) direction.
- Contribute to the dissemination and communication of project results using their outreach and industry-pertinent networks.
- Play a crucial role in the exploitation of results, advising EasyDC-FOS partners on the needs and requirements of future end-users.

To initiate this process, stakeholder mapping will be conducted to engage entities that have already expressed interest and support for the project. The SAB role is crucial for delivering **external expert advice** regularly and maintaining alignment between project developments and business perspectives. The interaction will focus on discussing technical specifications, market needs, and barriers, particularly in collaboration with WP8 (integration and pilots) and Task 9.5 (business model requirements).



Workshops and online/face-to-face meetings with the SAB will be regularly held, starting at M6 and every six months, or at the need of each WP to analyse context and results.

Annual reports on stakeholder activities will be compiled in **Deliverables D9.2 and D10.1**, which will include a detailed account of stakeholder engagement efforts, the formal establishment of the SAB, periodic meetings, technical feedback received, and subsequent actions taken by the consortium.

The Advisory Board will be strongly focused on the TSO profile, being the main beneficiary of the project innovations and results. Its members will offer their external perspective on the quality of the project outcomes and help guide it toward successful implementation. In this sense, representatives from **Amprion** (German TSO) and **Elewit** (technology platform for Spanish TSO Redeia) have already expressed their interest in joining the SAB at the proposal preparation stage. Additional stakeholder profiles have also expressed their support to the project such as **DTU** (RTO profile) **EDP Redes España** (DSO profile).

5.4 Open science practices

Aim: The objective is to transfer knowledge and raise awareness among key scientific communities through active participation and publication.

Participation will target renowned scientific conferences such as the **Spanish Smart Grids Conference** (organized by FutuRed), **Optica Sensing Congress**, **International Conference on Optical Fibre Sensors**, **IEEE Sensors**, **IEEE Transmission & Distribution**, **IEEE Conference on Electrical Insulation and Dielectric Phenomena**, **6th Annual Subsea Cable Installation**, **Asset Management & Reliability Forum** and **CIGRE's International Conference** on Condition Monitoring. Additionally, the project will engage in seminars and lectures at the Basque Energy Cluster “**Grid Digitalisation**” and the **Congreso de Redes Eléctricas** in Spain, as well as **Jicable HVDC**.

To disseminate research findings, partners will focus on publishing in international reference journals, including **IEEE Transactions on Smart Grid**, **IEEE Transactions on Power Systems**, **IEEE Transactions on Dielectrics and Electrical insulation**, **IEEE Electrical Insulation Magazine** and several other prominent journals in the field. Strong efforts will also be dedicated to publishing under the **Open Research Europe (ORE)** platform and the **Horizon Results Booster** provided by the EC.

The project aims to participate in 12 conferences (6 for industry and 6 for academia) and produce 6 journal publications during its duration.

5.5 Clustering with other EU initiatives and platforms

EasyDC-FOS will closely follow the development of several related projects and initiatives in order to promote effective collaboration through different channels. This will include exploring synergies in the areas of HVDC cable technology, smart grids, and renewable energy integration. By fostering cooperation with other EU-funded projects, EasyDC-FOS aims to leverage shared



knowledge and innovations that support sustainable energy solutions and advanced transmission technologies.

Some of the initiatives supported by EU programs that have been preliminarily identified to match this profile are **INTEROPERA** (enabling multivendor HVDC grids), **SoFin** (Software-enabled Fibre Optic Multisensing Network), **NEWGEN** (New generation of HVDC insulation materials, cables, and systems) and **HVDC-WISE** (HVDC-based grid architectures for reliable and resilient WIdeSprEad hybrid AC/DC transmission systems). The consortium will also promote collaboration with the projects funded under the same topic as EasyDC-FOS (HORIZON-CL5-2024-D3-01-15): **DCDYNAMIC** and **CABLEGNOSIS**, to foster synergies and knowledge sharing, initially focusing on existing work and subsequently making results accessible for further development by others.

- **NEWGEN** - New generation of HVDC insulation materials, cables and systems (<https://www.newgen-project.eu/> 2022-2026). The NEWGEN project aims to develop and demonstrate key innovations in HVDC cable technology. This includes creating space charge mitigating additives for extruded HVDC insulation materials, new manufacturing solutions for cost-effective, defect-free thermoplastic HVDC cables, and a comprehensive pre-fault monitoring system for real-time condition assessments of HVDC cable systems. Additionally, the project will develop tools and models to evaluate the reliability and lifespan of HVDC cables, joints, and terminations under real operating conditions within HVAC and HVDC grids.
- **InterOPERA** – Enabling interoperability of multi-vendor high-voltage direct current (HVDC) grids (<https://interopera.eu/> 2023-2027). The main objective of InterOPERA is to make future HVDC systems mutually compatible and interoperable by design, and to improve the grid forming capabilities of offshore and onshore converters. Future HVDC systems will be modular. Thanks to common functional specifications and standard interfaces, modules based on different technologies and modules supplied by different manufacturers will be able to integrate seamlessly and operate together. EasyDC-FOS partners Statnett and Energinet are also part of InterOPERA consortium.
- **SoFin** – Software enabled fiber optic multisensing network (<https://sofin-project.eu/> 2022-2026). The SoFin project focuses on developing a cutting-edge photonic multi-sensing system that is adaptive, modular, and highly integrated for various sensing applications. It also aims to establish new digital signal processing methods and integrate the sensor system with a cloud-based monitoring platform to enhance performance. Finally, the project will validate the system through extensive lab tests and demonstrate its effectiveness in three real-world use cases – being HV power cables one of them - to ensure that it meets end-user needs. EasyDC-FOS partner Energinet is also part of SoFin consortium.
- **HVDC-WISE** – HVDC-based grid architectures for reliable and resilient WIdeSprEad hybrid AC/DC transmission systems (<https://hvdc-wise.eu/> 2022-2026). The project aims to develop a comprehensive planning toolset for hybrid AC/DC grids, focusing on HVDC-based grid architecture concepts that enhance reliability and resilience. It will identify and



compare different HVDC architectures, assess emerging technologies for their implementation, and validate the toolset in an industrial setting. EasyDC-FOS partners Statnett and Energinet are also part of HVDC-WISE consortium.

- **DCDYNAMIC** – Accelerating DC DYNAMIC cable technology for sustainable European electricity grid (2024-2028). The project will: (i) validate the insulation reliability of a new dynamic HVDC export cable, (ii) establish fundamental understanding of combined electro-mechanical-thermal aging mechanisms, facilitating the development of test protocols that qualify and verify the integrity of HVDC dynamic cables, (iii) identify routes for material sustainability for the cable to meet the EU's circular economy ambitions, and (iv) use the underpinning technical knowledge gained to reduce risk and build confidence for deploying the new cable technology and thus enhancing the insurability and financial viability of future floating offshore infrastructure. As a result, a prototype 320 kV dynamic HVDC export cable core will be designed, manufactured, and validated in this project.
- **CABLEGNOSIS** – Life Cycle Center for Power CABLE diagnosis (2024-2027). CABLEGNOSIS project will develop innovative insulation and conductor design technologies, high performance and environmentally friendly cable insulation materials, ageing studies of superconducting cables, recyclability technologies for the materials used in power cables, as well as pre-fault condition, aging and remote monitoring AI-based tools. A feasibility assessment framework and detailed analysis for the use of superconducting cables for submarine connections. A respective feasibility analysis will be developed for the offshore wind parks in The Netherlands and Germany. The CABLEGNOSIS technologies will be validated in five European countries (Italy, UK, Greece, Hungary, Cyprus).

Moreover, several **consortium** partners are actively **engaged with various platforms and initiatives**, including the Technical Committee of the Spanish Smart Grids Conference organized by FutuRed, the Spanish Smart Grids Technology Platform, the Basque Country Smart Grid Hub, and the Spanish Association of Maintenance of Electrical Grids. Additionally, they participate in **international initiatives** such as Enlit Europe, GAIA, CYBASQUE, the International Data Spaces Association, Edge for Smart Secondary Substation (E4S) Alliance, WindEurope, WATT, Wires, and CIGRE.

The project aims to reach the target of participating in 4 clustering workshops and organising 2 clustering sessions. However, as current project results are yet to be achieved, the consortium will assess the relevance of these sessions for related projects and their interest in our findings. The ultimate objective remains to foster collaboration with related projects and with sister projects to enable knowledge and best practices sharing.

5.6 Feedback to policy and regulatory framework

EasyDC-FOS intends to ensure interoperability of solution technologies, maintain transparency in the market, promote replicability across different use cases, and contribute to EU priorities. The



project outcomes are expected to support the EU's long-term plan for HVDC connections, helping pave the way for a reliable, secure, and interconnected HVDC grid across Europe.

In this regard, efforts will focus on raising awareness of the project results among relevant organizations in the regulatory and standardization fields, such as National regulators from European countries (Norway, Denmark, Germany, Spain, among others) and global communities like CIGRE, to enable them to assess the applicability of these outcomes within their working groups. Furthermore, the project results may be of interest to European standardization bodies like CEN, CENELEC, and IEEE, particularly in areas such as power electronics, grid monitoring, protection, cybersecurity, and cable materials and manufacturing technology.

The communication and dissemination activities planned in the project will help raise awareness among these organizations about the results, allowing them to analyse the possibility of incorporating them into their working groups, roadmaps, and regulatory documents.

5.7 Training and education

The aim of this initiative is to ensure the acceptance of project results among workforces and facilitate the reskilling and upskilling of future users. This will involve the preparation and delivery of two factsheets (due at M24 and M36) and one training session by M36 involving the industrial partners along with a group of undergraduate students.



6 Dissemination Monitoring & Management

6.1 Dissemination monitoring

All dissemination activities will be monitored with KPIs as shown in the following figure.

Table 3 - Dissemination monitoring scoreboard

Dissemination activity	KPI	Y1	Y2	Y3	Total
5.1 Events organisation	Number of showcases and workshops	1	2	2	5
	Number of stakeholders in events (50 stakeholder/event)	50	100	50	200
	Participants in the final event	0	0	100	100
5.2 International events	Number of exhibitions/workshops	3	3	3	9
5.3 Advisory board	Number of meetings	1	2	2	5
5.4 Open science practices	Number of conferences	2	4	6	12
	Number of journals	0	2	4	6
5.5 Clustering with other EU initiatives and platforms	Number of clustering workshops	1	1	2	4
	Organized clustering sessions	0	1	1	2
5.7 Training and education	Number of sessions	0	0	1	1
	Number of participants	0	0	30	30

The Basque Energy Cluster, as Work Package Leader, will be responsible for monitoring the impact of the dissemination strategy in order to apply corrective actions whenever necessary and identify opportunities that can maximize the impact and visibility of the project.

6.2 Dissemination management

Dissemination activities will be managed by the Dissemination Manager (Basque Energy Cluster), who will work in close coordination with the Project Coordinator.

As a general rule, every dissemination activity planned by any partner in relation to the project or its contribution to it shall be notified in advance to ACE, in order to keep track of the actions, provide and update the necessary material and ensure coherence with the dissemination objectives. Once the activity has been carried out, the partner shall briefly report on the result to the Dissemination Manager.

When a partner intends to disseminate results that may affect other partners or involve knowledge generated in collaboration or by other partners, it must give advance notice to these other partners at least 45 days, together with sufficient information on the results it will disseminate. Other partners may object within 30 days of receiving notification if it can show that its legitimate interests

in relation to the results or background would be significantly harmed. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

While ACE will be responsible for coordinating all dissemination activities, partners will need to actively contribute to some of them, either supplying ACE with updated information about project developments or directly carrying out the activity.



7 Exploitation strategy

7.1 Exploitation Plan

The exploitation strategy of EasyDC-FOS, led by ACE, is designed to ensure that the project results generate tangible impacts during and after the project lifecycle. This plan focuses on both commercial opportunities and contributions to policy development and societal challenges, especially regarding the integration of renewable energy into HVDC grids. The strategy will be aligned with open innovation practices, fostering collaboration across sectors.

Key activities are the identification, protection, and commercialization of *Key Exploitable Results (KERs)*, covering both primary and secondary outcomes. The exploitation activities of the EasyDC-FOS project are embedded in tasks T9.5 and T10.4, which are designed to maximize the impact of the project's results. Those tasks, led by ACE, are focused on the exploitation of results and intellectual property rights (IPR) management, running from month 4 to month 36. This task involves the identification and analysis of Key Exploitable Results (KERs), ensuring that they meet market and societal needs beyond the project's completion. A comprehensive IP management strategy will be implemented to protect the knowledge generated, offering key recommendations on suitable IPR mechanisms and maintaining up-to-date freedom-to-operate (FTO) analyses through patent searches. The exploitation plan builds on the following key steps:

1. Identification and Update of Key Exploitable Results (KERs)

The first step involves systematically identifying the KERs and updating them regularly throughout the project. A tailored process will be followed to collect and analyse data from partners via questionnaires and virtual meetings. This continuous dialogue will ensure that all relevant project results are captured, including potential secondary results that may not have been originally anticipated.

2. Holistic Evaluation of KERs

Once identified, the KERs will undergo a comprehensive evaluation, leveraging an *exploitation scoring tool* that measures both the innovation and commercial potential of each result. This tool will allow the consortium to filter and prioritize those results that hold the highest business promise. The evaluation will also consider the readiness level of each KER, balancing technological innovation with market applicability.

3. Business Model Generation Using Lean Canvas Methodology

For each prioritized KER, business models will be developed using the Lean Canvas approach. This methodology is highly adaptable and focuses on the following aspects:

- **Value Proposition:** Defining how each KER meets market needs and brings value to potential users.
- **Customer Segmentation:** Identifying the target market segments, particularly focusing on TSOs and other relevant stakeholders across the energy sector.



4. Market Orientation and Competitor Analysis

In parallel with business model generation, the exploitation plan will include a comprehensive market analysis. This will focus on understanding the competitive landscape and positioning EasyDC-FOS innovations within the market.

5. Technology Assessment and Industrial Upscaling

A technology assessment will be performed to evaluate the readiness of the KERs for industrial application. These plans will address the scalability of the innovations, focusing on the transition from small-scale testing to full-scale industrial deployment, with particular emphasis on overcoming the integration challenges posed by existing power grid infrastructures.

6. Creation of Individual and Joint Exploitation Plans

The consortium will draft both joint and individual exploitation plans, depending on the nature of the KERs. These plans will include:

- **Exploitation Routes:** Defining specific paths for commercialization, including product development, licensing, industrial transfer, and consultancy services.
- **Stakeholder Engagement:** A detailed stakeholder analysis to identify key partners, investors, and clients who can support the KERs' market entry.
- **Risk Assessment:** Identifying and mitigating potential risks in the exploitation process, such as technical challenges, market fluctuations, and intellectual property issues.

After the project's completion, the consortium will focus on upscaling the KERs to large-scale industrial deployment and refining the technologies. A go-to-market strategy will be created, outlining product definitions, market entry plans, and business agreements. Additionally, funding and investment plans will be secured to support the scale-up process, alongside ensuring proper certification and intellectual property protection.

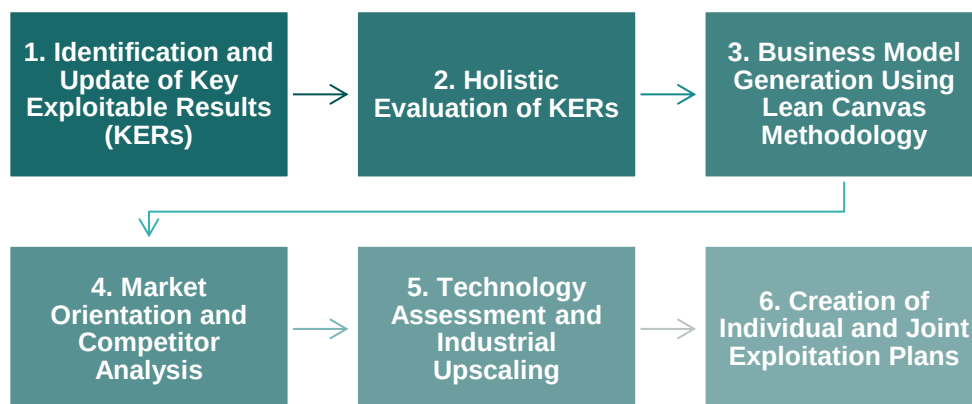


Figure 11 - Exploitation Methodology for the EasyDC-FOS Exploitation Strategy

7.2 Key Exploitable Results

The exploitation strategy of EasyDC-FOS centres around the identification and commercialization of 18 Key Exploitable Results (KERs), which hold substantial potential for market development and innovation within the HVDC sector. Each KER represents a distinct technological advancement or tool, with defined ownership and specific exploitation routes designed to maximize their societal, technological, and commercial impact. In the initial phase of KER identification, the KERs listed below have been selected; however, as the project progresses, some KERs may be adjusted according to the project development and the results obtained from the research activity.

KER1 - Full-scale cable using alternative XLPE insulation material (NEX)

This KER focuses on the development of an HVDC cable with an innovative cross-linked polyethylene (XLPE) insulation material. The new material aims to enhance the cable's thermal and electrical performance, improving the overall lifespan and reliability of HVDC systems. The use of this alternative material will contribute to a more sustainable and efficient energy transmission infrastructure.

KER2 - Space charge phenomena models (RDT, LMK)

These models will help to better understand and predict space charge behaviour within HVDC insulation materials, a key factor in determining the electrical performance of high-voltage cables. By addressing these phenomena, the project can enhance the safety and durability of the cables under high electrical stress conditions.

KER3 - Insulation ageing algorithm (RDT, LMK, AMP)

The insulation ageing algorithm will be used to estimate the lifespan of HVDC insulation materials by predicting how they degrade over time. This will help to improve maintenance planning and reduce the risk of unexpected failures, ensuring more reliable long-term operation.

KER4 - HVDC thermal and ampacity cable models (UCA, LMK, NEX)

These models will be used to simulate the thermal behaviour and current-carrying capacity (ampacity) of HVDC cables. Accurate thermal models are essential for optimizing cable design and ensuring safe operation under varying load conditions.

KER5 - Thermal rating algorithms (APS, LMK)

The thermal rating algorithms will help determine the maximum current that HVDC cables can safely carry under different conditions, based on real-time thermal data. These algorithms are key to optimizing grid performance and preventing overheating.

KER6 - Extended range DTS and DAS (APS)

Distributed Temperature Sensing (DTS) and Distributed Acoustic Sensing (DAS) systems will be developed with an extended range, allowing for more accurate monitoring of cable conditions over



longer distances. This will improve fault detection and enhance the safety and efficiency of HVDC cable networks.

KER7 - Fibre-based vibration monitoring systems for cable connections and terminations (LMK)

This innovation introduces advanced fibre optic-based systems for monitoring vibrations in HVDC cable connections and terminations. These systems are critical for detecting potential mechanical issues that could lead to faults, improving overall system reliability.

KER8 - Fault location systems for long cable corridors (APS, LMK)

The fault location systems will be able to pinpoint the exact location of faults along long HVDC cable corridors, minimizing downtime and reducing repair costs. This will significantly improve response times in the event of cable failures.

KER9 - New online PD (Partial Discharge) monitoring system (LMK, AMP)

This KER involves the development of an online system for monitoring partial discharges in real time. Partial discharges are an early indicator of insulation failure, and this system will help prevent catastrophic failures by allowing early detection and intervention.

KER10 - IA Model Serving in Edge Infrastructure (BAR)

The AI model developed will serve real-time processing tasks within the edge infrastructure, enabling smart, data-driven decisions to optimize cable performance and predict potential issues. This will enhance the responsiveness and efficiency of HVDC systems.

KER11 - Orchestration and remote management of Edge Infrastructure and models running in it (BAR)

This innovation allows for the orchestration and remote control of edge infrastructure where the AI models operate. It facilitates smoother management and integration of multiple monitoring systems, leading to more reliable HVDC networks.

KER12 - Integrated real-time fault monitoring system with on- and offline action protocols, based on interoperable fibre optic solutions (BAR, LMK, AMP)

This system integrates real-time monitoring of HVDC faults with both online and offline protocols, using fibre optic solutions. The integration will provide comprehensive insights into cable conditions, enabling quick and efficient fault detection and repair.

KER13 - Virtualised dashboard of the integrated monitoring system (BAR, LMK, AMP)

A virtual dashboard will be created to visualize all the data gathered by the integrated monitoring system. This user-friendly tool will enable operators to monitor and manage HVDC systems more effectively, offering a comprehensive overview of cable performance.

KER14 - Novel LCA/LCC models service (GD)

Life Cycle Assessment (LCA) and Life Cycle Cost (LCC) models will be developed to evaluate the environmental and economic impacts of HVDC cable systems over their entire lifecycle. These models will guide decision-making towards more sustainable and cost-efficient solutions.

KER15 - Training in the use of EasyDC-FOS solutions (ACE)

Training programs will be developed to ensure that stakeholders are able to effectively use the EasyDC-FOS solutions. These programs will help bridge the gap between technology development and practical application, promoting widespread adoption of the project's innovations.

KER16 - Stakeholder engagement and Smart Grids value chain development (ACE)

This KER focuses on creating value within the smart grids ecosystem by engaging with key stakeholders. By fostering collaboration across the smart grid value chain, this result will help facilitate the integration of HVDC solutions into future energy infrastructure.

The following table outlines the key aspects of each KER:

Table 4 - Key Exploitable Results Summary

KER Ownership	Potential Clients / Users	Business / Exploitation route	Market use
Full-scale cable using alternative XLPE insulation material NEX	TG1, TG2	Internal product development/ Knowhow licensing/ Industrial transfer	4-5 years after M36
Space charge phenomena models RDT, LMK	TG2, TG3, TG4	Internal product development/ Knowhow licensing/ SW licensing	2 years after M36
Insulation ageing algorithm RDT, LMK, AMP	TG2, TG3	Know-how licensing/ SW licensing/ Industrial transfer	2 years after M36
HVDC thermal and ampacity cable models UCA, LMK, NEX	TG2, TG3, TG4	Internal product development/ knowhow licensing/ SW licensing/ Industrial transfer	<1 year after M36
Thermal rating algorithms APS, LMK	TG2, TG3	Know-how licensing/ SW licensing/ Industrial transfer	<1 year after M36
Extended range DTS and DAS APS	TG2, TG3	Internal product development/ Industrial transfer/ Commercialisation	2 years after M36
Fibre based vibrations monitoring systems for cable connections and terminations LMK	TG2, TG3	Industrial transfer/ Commercialisation	2 years after M36



Fault location systems for long cable corridors APS, LMK	TG2, TG3	Industrial transfer/ Commercialisation	2 years after M36
New online PD monitoring system LMK, AMP	TG2, TG3	Industrial transfer/ Licensing/ Commercialisation	2 years after M36
IA Model Serving in Edge Infrastructure BAR	TG2, TG3, TG6	SW licensing/ Service provision/ Consultancy for solutions customisation	1 year after M36
Orchestration and remote management of Edge Infrastructure and models running in it BAR	TG2, TG3, TG6	SW licensing/ Service provision	1 year after M36
Integrated real-time fault monitoring system with on and off -line action protocols, based on interoperable fibre optic solutions BAR, LMK, AMP	TG2, TG3, TG4, TG6	Licensing/ Commercialisation/ Service provision	2-3 years after M36
Virtualised dashboard of the integrated monitoring system BAR, LMK, AMP	TG3	SW licensing/ Service provision	2 years after M36
Novel LCA/LCC models service GD	TG2, TG3, TG5, TG6	Industrial transfer/ Consultancy for services/ Collaborative research	<1 year after M36
Training in the use of EasyDC-FOS solutions ACE	TG2, TG3, TG4, TG5, TG6	OA publication/ Collaborative research/ New training programmes	Up to 5 years after M36
Stakeholder engagement and Smart Grids value chain development ACE	All TGs	OA publication/ Collaborative research/ Consultancy for services	Up to 5 years after M36