

INFINITE

Aerospace composites digitally sensorized
from manufacturing to end-of-life

D7.3

Final Plan for the Exploitation and Dissemination of Results (PEDR)

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ABSTRACT / EXECUTIVE SUMMARY

Abstract

This deliverable is the final updated version of the Plan for the Exploitation and Dissemination of Results (PEDR), building upon the preliminary deliverable D7.2 submitted in month 18.

The Plan for the Exploitation and Dissemination of Results (PEDR) is a strategic document that incorporates the strategic activities for the successful commercialization of INFINITE results. As defined by EU Horizon Europe program, it is a document that summarises the beneficiaries' strategies and concrete actions related to protection, dissemination and exploitation of project results. In addition, it describes key dissemination activities, target audiences, intellectual property considerations, and exploitation pathways tailored to relevant market and policy contexts. By refining the initial plan and incorporating feedback from project developments, this PEDR ensures that results are communicated and utilized efficiently, fostering innovation and societal benefit.

So, this final update of the PEDR, deliverable D7.3, includes:

- Results Identification: Final updated list of exploitable results of INFINITE project
- Product / Service Design: explanation of the work done. Completion of the P/S Design of the KERs.
- Business Plan Development: explanation of what has been done for KERs Business Plan development, following Horizon Results Booster Service rules and templates.
- Communication and Dissemination: continuous activities of content creation on social media, websites, popular press, newsletters, peer-reviewed articles, conferences, trade fairs and others.

During the second reporting period (M18-M36), the project has gone ahead according to plan and tasks foreseen for a proper communication, dissemination, and exploitation of INFINITE project's results.

Keywords

Final PEDR, Communication, Dissemination, Exploitation, Key Exploitable Results, IPR.

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1. INTRODUCTION

1.1 SCOPE AND OBJECTIVES OF THIS DELIVERABLE

This deliverable is the final updated version of the Plan for the Exploitation and Dissemination of Results (PEDR), building upon the preliminary deliverable D7.2 submitted in month 18.

The Plan for the Exploitation and Dissemination of Results (PEDR) is a strategic document that incorporates the strategic activities for the successful commercialization of INFINITE results. As defined by EU Horizon Europe program, it is a document that summarises the beneficiaries' strategies and concrete actions related to protection, dissemination and exploitation of project results. In addition, it describes key dissemination activities, target audiences, intellectual property considerations, and exploitation pathways tailored to relevant market and policy contexts. By refining the initial plan and incorporating feedback from project developments, this PEDR ensures that results are communicated and utilized efficiently, fostering innovation and societal benefit.

This final update of the PEDR, deliverable D7.3, includes:

- Results Identification: Final updated list of exploitable results of INFINITE project.
- Business Model Drafting: explanation of the work done. Completion of the Product/Service (P/S) Design of the KERs.
- Business Plan Development: explanation of what has been done for KERs Business Plan development, following Horizon Results Booster Service rules and templates.
- Communication and Dissemination: continuous activities of content creation on social media, websites, popular press, newsletters, peer-reviewed articles, conferences, trade fairs and others.

During the second reporting period (M18-M36), the project has gone ahead according to plan and tasks foreseen for a proper communication, dissemination, and exploitation of INFINITE project's results.

2. SECTION A: EXPLOITATION PLAN

2.1 METHODOLOGY

As described in the previous submitted PEDR deliverable (D7.2), the EXPLOITT methodology has been followed by INFINITE project to carry out all tasks related to exploitation of INFINITE project's exploitable results.

EXPLOITT is a methodology for industrial exploitation and take-up developed by IDEKO. It is a structured and guided process, composed by different modules and divided into two main parts (see Figure 1): Technology Assessment and Business Model Draft & Plan.

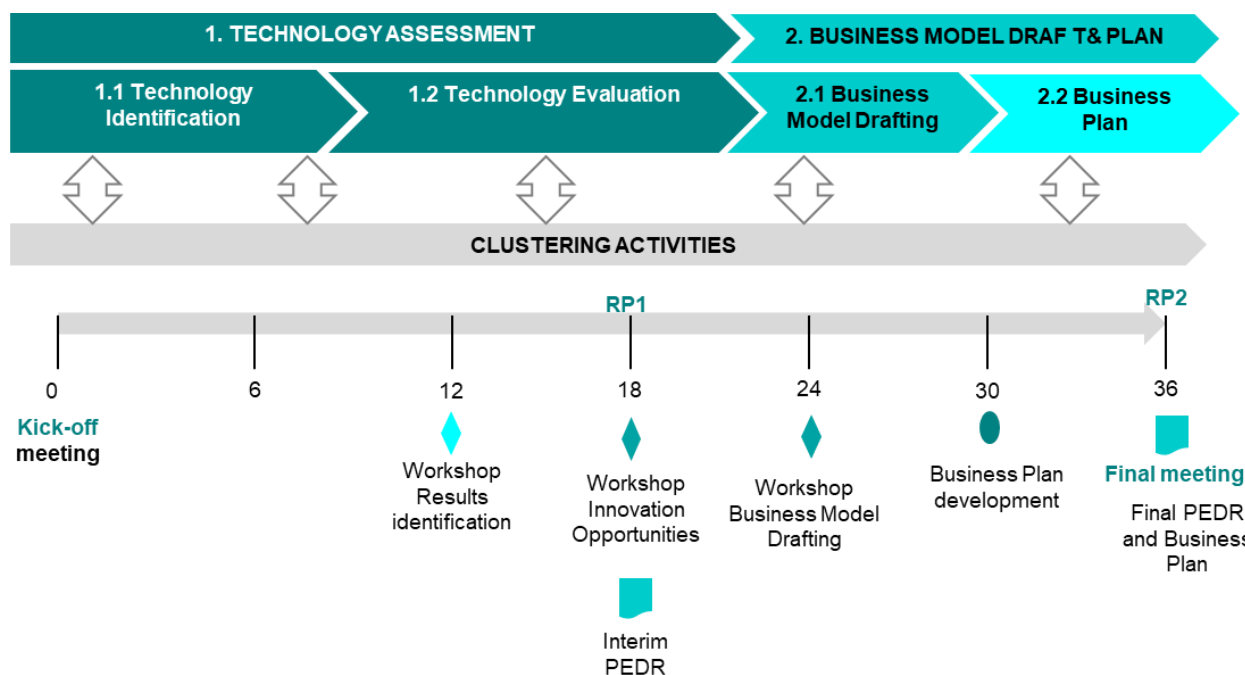


Figure 1 - EXPLOITT methodology for INFINITE

All process steps defined in the EXPLOITT methodology have been accomplished satisfactorily for all INFINITE KERs.

The second reporting period (M18-M36) has mainly been focused on the completion of Business Model drafting and Business Plan for all selected KERs. While updating and completing the technology assessment tasks referred to results identification, description and characterization. In addition, to carry out all these tasks, INFINITE project has taken advantage of templates and rules promoted by the Horizon Exploitation Booster. The Horizon Exploitation Booster is a support service provided by the European Commission to help projects funded under Horizon 2020 and Horizon Europe to maximize the impact and exploitation of their research results. It offers tailored guidance and expert advice to ensure that project outcomes can be effectively translated into concrete applications, whether in the form of market innovations, policy contributions, or societal benefits. Although INFINITE project hasn't requested this service, IDEKO has made use of it in other EU projects. So, knowledge, templates, etc. acquired from these previous experiences have been implemented within the INFINITE project.

But before starting with the Business model drafting and Business plan development stage, initially a more detailed analysis of Technology Evaluation phase was done through the project results characterisation task (Key Exploitable Results were analysed in aspects such as market research, competitors, IPR assessment, standardisation, regulations, etc.).

Following, the relevant activities included under Business model drafting and Business plan development are detailed:

- B1 Business Model Drafting
 - B1.1 Description of the Value Proposition
 - B1.2 Description of Competitors landscape & Benchmarking (patent & competitors)

- B1.3 Market Analysis
- B1.4 Technology Status
- B2 BUSINESS PLAN
 - B2.1 Business Model Design
 - B2.2 Stakeholders analysis
 - B2.3 Financial Analysis
 - B2.4 Risk Analysis

In addition, two workshops have been performed during the execution of these tasks:

- Business Model Drafting Workshop (M24)
- Business Plan Development Workshop (M36)

Thanks to the work performed during and after these workshops, business profitability and potential sales have been estimated, and the best exploitation strategies have been chosen for the exploitable results.

The subsequent section provides a comprehensive breakdown of the second phase of the EXPLOITT methodology. This includes an elaborate account of the planned tasks along with their respective execution methods, as this phase was scheduled for implementation within the project's second reporting period (M18 – M36).

2.1.1 B1 BUSINESS MODEL DRAFTING

2.1.1.1 BACKGROUND

The continuous review and update of project results list is essential to ensure that all exploitable results achieved in the project have been identified, analysed and evaluated to ensure a proper exploitation of the most promising ones. As it has been mentioned in this document before, not all project results are exploitable. For this reason, a technology assessment phase has been developed before making the business plan. In that phase, some most promising KERs have been identified.

After an in-depth analysis of the selected KERs, 3-5 of them should be selected to develop a business plan (EXPLOITT's recommendation is not to exceed 3 KERs). The selection of the KERs for the business plan were made from among those best evaluated in the previous assessment carried out (>7). See deliverable D7.2 for more details.

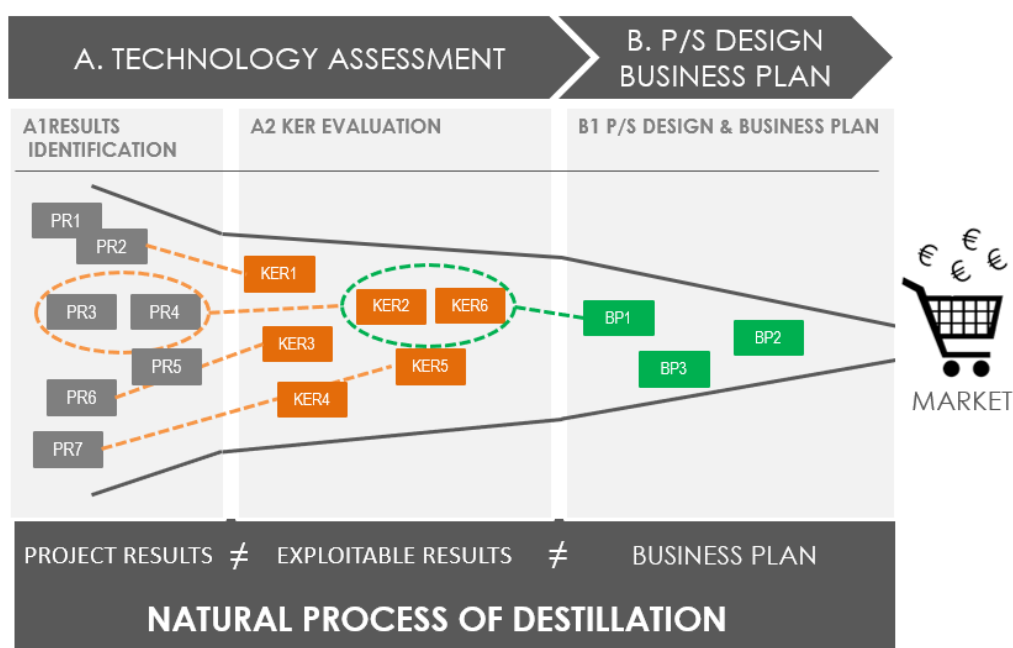


Figure 2. - Transforming project results into business plan within EXPLOITT

For these Key exploitable results, next tasks and steps were defined and executed:

2.1.1.2 DESCRIPTION OF THE VALUE PROPOSITION

The value proposition helps to exploitation leaders to design the business model accurately and effectively. When describing a value proposition it is very important to take into consideration how much technology, businesses and consumers have evolved. Ultimately, whether what an organization delivers actually matters or is relevant to a customer's need must be understood.

To define the value proposition of the selected KER, the Value Proposition Canvas by Alexander Osterwalder (*Osterwalder, A, Pigneur, Y, Bernarda, G & Smith, A 2014, How to create products and services customers want. Get started with... Value Proposition Design, 1st Edition, Wiley*) is used. This tool helps structure and test how well a business offering meets customer needs.

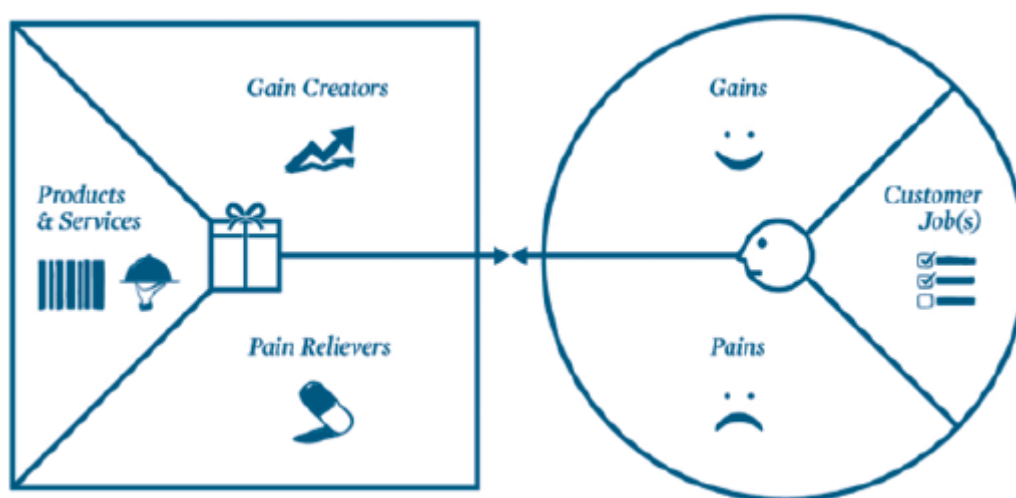


Figure 3. - Value Proposition CANVAS

The canvas focuses on two key areas:

- Customer Segment – Understanding customer needs by analyzing their jobs, pains, and gains.
- Value Proposition – Mapping products and services to show how they relieve pains and create gains.
- Fit – Ensuring alignment between the customer profile and the value offered.

As technology, businesses, and consumer expectations evolve, it's crucial to assess whether what an organization delivers truly matters to its customers.

2.1.1.3 DESCRIPTION OF COMPETITORS LANDSCAPE & BENCHMARKING (PATENT & COMPETITORS)

The competitors identified in the Technology Assessment phase will be analysed in detail. In this step, an in-depth analysis will be made focusing only on those direct competitors in the field of the KER selected to develop the business plan. A benchmarking of the competitors will also be made.

After obtaining a global view of each competitor, it should analyse the products that competitors offer, and look at their functionalities and characteristics. In addition, it is very important to analyse if competitors have any patent which protects the technology of their products and acts as an entry barrier to the market. At this point, a previous patent analysis will be very useful.

Once this information is collected, it will benchmark each product's functionalities and characteristics against the features of the partners involved in the exploitation of the KER.

This benchmarking will give a view of the position of the partners regarding their main competitors. Moreover, it will allow for matching their successes and pinpointing their shortcomings and will help in finding ways to improve quality and performance.

The final step will be defining actions to improve the partnership situation concerning the competitors. For that aim, it will focus on functionalities and characteristics in which the situation with respect to the competitors is worse and actions to enhance deficient areas will be defined.

2.1.1.4 MARKET ANALYSIS

A macroeconomic analysis around the selected KER and SWOT analysis.

With the aim of better understanding of the target market and macroeconomy, some different factors will be analysed as economic, social, technological and environmental factors. This is a tool used to analyse and monitor the macroenvironmental factors that have an impact on future business and combined with information collected in previous processes will be used to identify threats and weaknesses in the SWOT analysis.

	HELPFUL to achieving the objective	HARMFUL to achieving the objective
EXTERNAL ORIGIN (attributes of the environment)	STRENGTHS	WEAKNESSES
INTERNAL ORIGIN (attributes of the organization)	OPPORTUNITIES	THREATS

Figure 4. - SWOT Template

The macroenvironmental analysis with the description of competitors and benchmarking output will help partners to have a better understanding of their strengths and weaknesses, and to identify the opportunities open to them and the threats they face. These four aspects will be reflected in a SWOT analysis. Using this tool, partners will identify internal and external factors that will have a positive as well as negative impact on the exploitation of the KER.

2.1.1.5 TECHNOLOGY STATUS

To develop a business model, it is very useful to analyse the status of the technologies developed during the project. This analysis will provide valuable information to define actions to carry out with these technologies to bring them closer to the market and develop a successful business. EXPLOITT defines a table to summarize the technology status of the project.

Table 1. – Template for technology status analysis

Technology	Description	TRL	Evidence	Lacks	Actions

In this table, the following aspects are determined:

- **Technology:** name of the technology developed in the project.
- **Description:** a brief description of the technology.
- **TRL:** the level of technology readiness.
- **Evidence:** the proof that the technology really belongs to this TRL.
- **Lacks:** the lack this technology has to go to market or be closer to it.
- **Actions:** actions needed to develop this technology and be able to go to market with it.

2.1.2 B2. BUSINESS PLAN

The relevant activities include:

- **B2.1 Business Model Design**
- **B2.2 Stakeholders analysis**

- B2.3 Financial Analysis
- B2.4 Risk Analysis

2.1.2.1 BUSINESS MODEL DESIGN

Every business model needs to be able to tell the story of how it will create, deliver, and capture value. The Business Model Canvas (Osterwalder, A & Pigneur, Y 2010, *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, 1st Edition, Wiley.) will be used to define all aspects that affect the business.

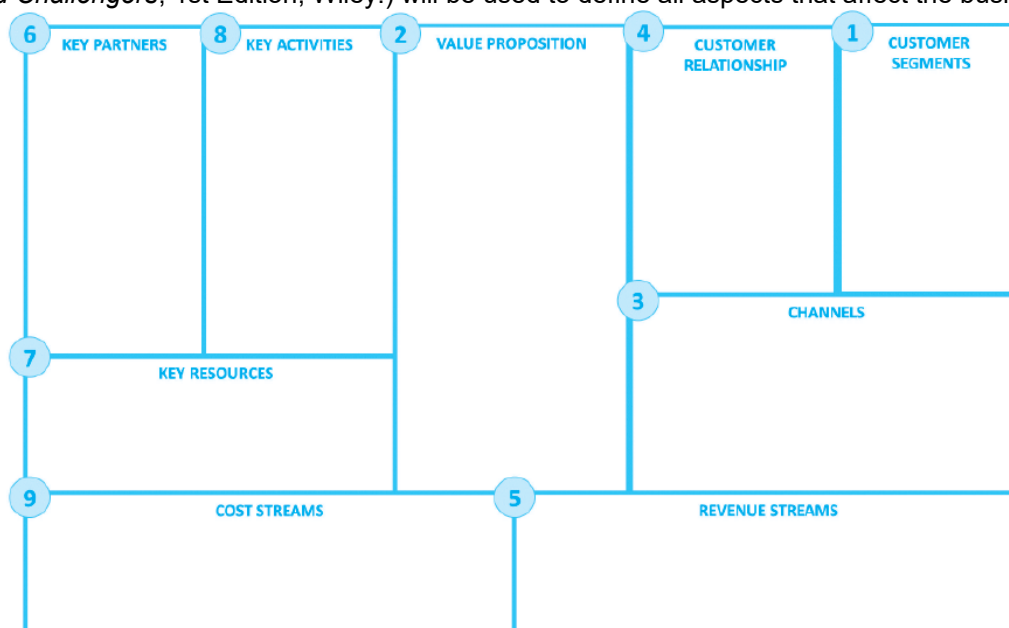


Figure 5. - Business Model CANVAS

Depending on the TRL of technologies developed in the project, the Business Model Canvas can describe a new business oriented to the market (with TRL 8 or TRL 9 for example), or it can help to describe the impact of a new project proposal (when the TRL is low as in INFINITE project).

The Business Model Canvas can help to determine and align business activities simply and creatively. The Exploitation Manager will fill out a first draft of the Canvas and the partners involved in the exploitation of the key exploitable result will have a first big picture of the business. The Canvas provides key business elements to make sure that no business vital part is missed.

- Customer Segments
- Value Proposition
- Competitors
- Channels
- Customer Relationship
- Revenue Streams
- Key Partners
- Key Resources
- Key Activities
- Cost Structure

2.1.2.2 STAKEHOLDERS ANALYSIS

A stakeholder is defined as “any group or individual who can affect or is affected by the achievement of the organization’s objectives”. At this point, the information included in the characterisation documents will be reviewed and completed with the stakeholders that have not been considered. To identify the new business stakeholders, consider those who are affected by the business, who have influence or power over it, or who have an interest in its successful or unsuccessful conclusion.

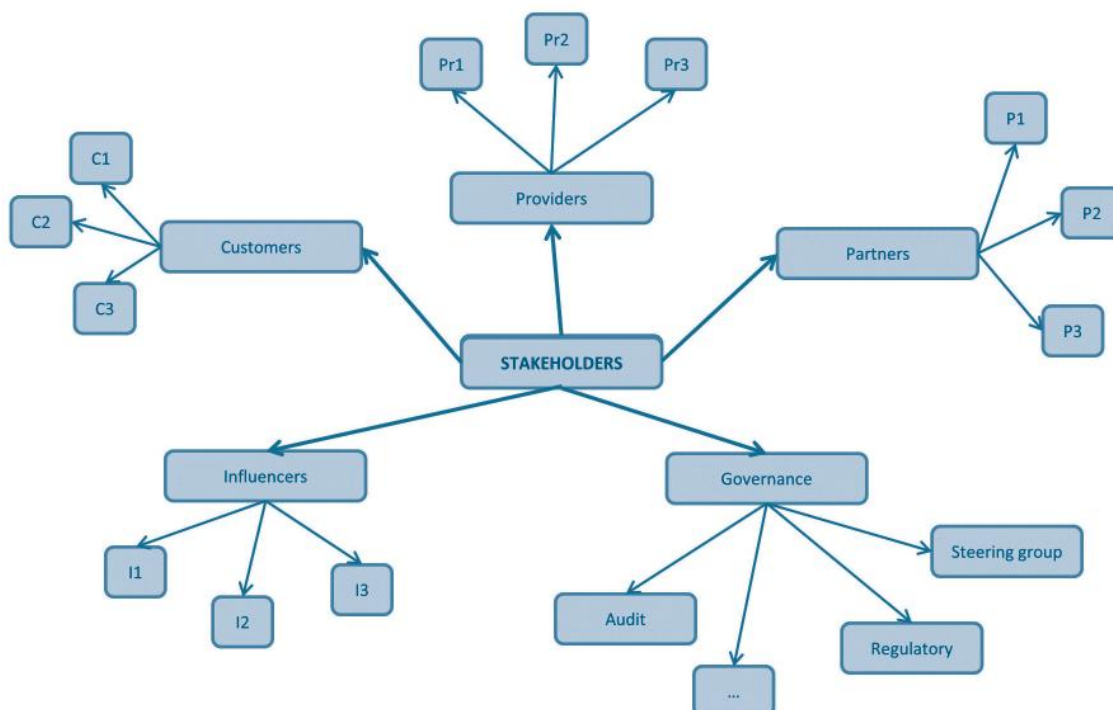


Figure 6. - Stakeholders identification (EXPLOITT)

2.1.2.3 FINANCIAL ANALYSIS

The financial analysis will tell whether the business has a chance to be viable and will objectively evaluate the business' potential for success. When making a financial analysis of a KER derived from a European project, EXPLOITT proposes calculating ROI and/or Payback Period indicators to analyse its profitability.

- **Return on investment:** Compares overall benefits to overall costs. The result is expressed as a percentage or a ratio and can be used to compare different investment opportunities against each other. If ROI is positive, it means that the business is profitable. The higher the ROI is, the more efficient is the business in using capital to generate profits.
- **Payback period:** The payback period is the length of time required to recover the cost of an investment. The payback period of a given investment is an important determinant of whether to undertake the business, as longer payback periods are typically not desirable for investment businesses.

2.1.2.4 RISK ANALYSIS

The information included in the characterisation documents should be sufficient but will be reviewed at each KER and completed if deemed necessary.

2.2 EXECUTION OF EXPLOITATION TASKS DURING THE SECOND REPORTING PERIOD (M18-M36)

2.2.1 TECHNOLOGY IDENTIFICATION

As a result of an application of the Exploit methodology, as an initial step during the second reporting period was a final review and update of Results Identification. A total of 13 results have been achieved in INFINITE project at the end of the Project.

Next table presents the final list of INFINITE results and Key Exploitable results:

Table 2. - Prioritization of exploitable results and selection of Key Exploitable Results

N°	Description of exploitable Results	Lead Partner
1	Compact and portable reader system	RISE

2	Sensorised NCF (and other Dry Reinforcements)	TCE
3	Automated wireless monitoring lay-up system	IDEKO
4	Automated monitored preforming process	IDEKO
5	Tuneable Microwires design and manufacturing	TAMAG
6	Digital twin - Temperature & stress signal modelling and calibration methods in CF composites	CAE
7	Improved repair capability for NCFs	AEROFORM
8	LCA: Sustainability for sensorised composites	GAIKER
9	Recyclability of sensed composite materials	TCE
10	New testing services for microwire sensed materials	TITANIA
11	Modified free-space system for evaluation of carbon fibre NCF reinforcement composites with microwires inclusions	UPV
12	Sensorized Micro Wire preform manufacture using Tailored Fibre Placement (TFP) & infusion techniques	USFD
13	Automated monitored liquid molding process	IDEKO

Key Exploitable Results

In addition, prioritisation of Key Exploitable Results was updated following the criteria and methodology established in D7.2. They are highlighted in the above table with green colour.

Then, for INFINITE project exploitable results identification, a template based on tools provided by the Horizon Results Booster of the European commission was used to update and complete the description that consortium partners had already done of each exploitable result during the final stages of the first reporting period. The information collected in these templates was the following:

- Result N°
- Title
- WP in which the project result is developed.
- List of deliverables where and when details can be identified.
- Lead Partner
- Nature of the result
- Level of achievement nowadays
- Expected completion date
- Partners interested in exploitation
- Partners with Background for this result
- Partners with Foreground for this result
- Description of the result
- Brief description for a wider community
- Natures of the exploitation
- Form of the exploitation
- Confidentiality level
- Dependency analysis between the exploitable results

See section [6.1](#) to visualize the final identification of each exploitable result of INFINITE project.

2.2.2 CHARACTERIZATION OF EXPLOITABLE RESULTS

The characterization of exploitable results is the second task within the Technology Assessment phase of the EXPLOITT methodology and next tasks were performed for each exploitable result (including KERs):

- Characterization table
- IPR and Exploitation claims
- Use Option
- Roadmap

2.2.2.1 CHARACTERIZATION TABLE

For each Exploitable Result, in D7.2 a detailed characterization table was completed. The identified results were characterized from a market-oriented viewpoint, considering aspects such as:

- Customer detection (focus on factors that affect purchasing decisions).
- Features of the target market (size, growth rate, share that the technology/product could reach, driving factors likely to change the market, legal, technical and commercial barriers, other technologies likely to emerge in the near future, etc.).
- Positioning (how the company entitled to the technology exploitation is positioned or should be positioned in the market).

However, during this second reporting period an entire review and update process has been performed for each Exploitable Result with the objective of detailing and characterizing as much as possible them.

See section [6.1](#) to visualize INFINITE project's final results characterization.

2.2.2.2 IPR AND EXPLOITATIONS CLAIMS

Once project implementation has started, efficient knowledge management including the management of the IP has been developed for the project. The following image shows steps followed during the project lifetime concerning IP.

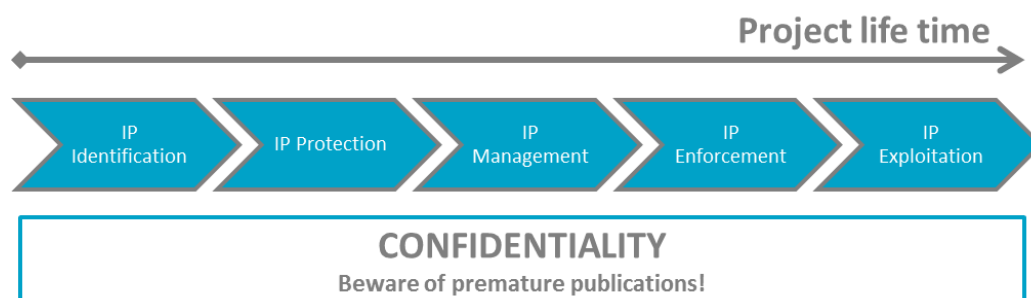


Figure 7. - Intellectual Property during project lifetime

See section [6.1](#) to visualize INFINITE IPR and exploitation claims related to exploitable results of INFINITE project.

2.2.2.3 USE OPTION

This section intended to identify the selected exploitation route for each Exploitable result, determine if it will have a direct or indirect use and evaluate the implementing actors.

See section [6.1](#) to visualize the use option selected for each exploitable results of INFINITE project.

2.2.2.4 INITIAL EXPLOITATION ROADMAP

A research exploitation roadmap is a strategic blueprint delineating the essential steps and actions required to translate the results of research activities into tangible applications and commercial opportunities. Following it, the INFINITE consortium made use of the template provided by the Horizon Results Booster for exploitation roadmap design.

See section [6.1](#) to visualize the use option selected for each exploitable results of INFINITE project

2.2.3 BUSINESS MODEL DRAFTING

2.2.3.1 DESCRIPTION OF THE VALUE PROPOSITION

Value propositions are essential to clarify the relevance and benefits of the research to potential users or stakeholders. By defining who benefits and how, they guide strategic decisions around commercialization, partnerships, or further development. A strong value proposition increases the likelihood of real-world impact by aligning the research with actual needs. It also plays a critical role in securing funding and support by highlighting the potential return on investment. Ultimately, it ensures that research outcomes are applied meaningfully.

See section [6.2](#) to visualize the value proposition of each Key Exploitable Result of INFINITE project.

2.2.3.2 DESCRIPTION OF COMPETITORS LANDSCAPE & BENCHMARKING (PATENT & COMPETITORS)

In this section, the exploitation leader of each Key Exploitable Result conducted an analysis of potential competitors and a benchmarking (analysing patents) trying to evaluate the positioning of their result in the market.

See section [6.2](#) to visualize the competitor landscape & benchmarking of each Key Exploitable Result of INFINITE project.

2.2.3.3 MARKET ANALYSIS

To carry out the Market analysis, two tasks have been performed. In one hand a market research was conducted to evaluate the trends and forecasts of their objective markets. In the other hand a SWOT analysis was carried out for each KER to evaluate the positioning of each result in the Market and identify their exploitation opportunities.

MARKET RESEARCH

The market research conducted for the three selected Key Exploitable Results (KERs) under the INFINITE project aims to assess the current demand and potential business volume in the relevant technology markets:

Carbon fiber market

The carbon fiber market is projected to reach \$15.3 billion by 2030, growing at an 11% CAGR from 2024. Carbon fiber's strength, light weight, and resistance to heat and corrosion drive its appeal across industries. Aerospace, defense, automotive, and wind energy sectors are key growth drivers due to a demand for lightweight materials. The construction sector in emerging economies also boosts demand for carbon fiber in structural reinforcement. In consumer electronics, carbon fiber enables lighter, thinner, and more textured products. Automotive adoption is rising as carbon fiber helps improve fuel efficiency and performance, especially in electric vehicles. Advancements in production and cost reductions are making carbon fiber viable for mass-market vehicle applications. Sustainability trends are encouraging eco-friendly carbon fiber production using recycling and bio-based inputs.

Source: <https://www.industryarc.com/Report/11645/carbon-fiber-market.html>

Carbon fiber in aerospace market

The global aviation carbon fiber market is projected to grow from USD 2.58 billion in 2025 to USD 6.04 billion by 2034, at a CAGR of 9.90%. North America led the market in 2024 with USD 800 million and continues strong growth, while Asia Pacific is expected to grow the fastest. Demand is driven by the need for lightweight, fuel-efficient aircraft and rising environmental standards. PAN-based carbon fiber held a 79% market share in 2024, with pitch-based fiber set for fastest growth. Commercial fixed-wing aircraft dominated applications, but military segments show rising adoption. AI and automation are enhancing manufacturing efficiency, reducing costs, and accelerating R&D. Technological advancements and electric aircraft adoption are expanding carbon fiber use, including in 3D printing. Increased military spending and the global aviation sector's expansion are further fueling market growth.

Source: <https://www.precedenceresearch.com/aviation-carbon-fiber-market>

Aircraft Sensors Market

The global aircraft sensors market, valued at USD 2.23 billion in 2019, is projected to reach USD 12.97 billion by 2032, growing at a CAGR of 14.50%. North America led the market in 2019 with a 39.91% share. Aircraft sensors play a critical role in detecting anomalies and ensuring flight safety, driving demand in both commercial and defense sectors. Increased automation has led to a rise in sensor usage, improving accuracy and system performance. Advances in MEMS technology have significantly influenced the market, offering compact, cost-effective, and high-functionality solutions. MEMS sensors enhance aircraft performance by reducing drag and improving aerodynamics while operating reliably in harsh environments. Growing demand for UAVs and wireless sensor technologies is opening new opportunities in the sector. The development of advanced, miniaturized sensors is expected to continue propelling the market forward.

Source: <https://www.fortunebusinessinsights.com/industry-reports/aircraft-sensors-market-101816>

Automotive market

The Automotive Carbon Fiber Composites Market is projected to grow from USD 28.77 billion in 2025 to USD 46.80 billion by 2030, at a CAGR of 10.22%. Carbon fiber's lightweight, strength, and fuel efficiency benefits are driving its adoption in high-performance and electric vehicles. Automakers like BMW, GM, and Hyundai are forming strategic partnerships with carbon fiber producers to enable mass production and innovation. The growing demand for electric vehicles and strict emission regulations further accelerate this trend. Carbon fiber significantly reduces vehicle weight, enhancing EV range and performance. However, high production costs and limited recycling infrastructure pose challenges to widespread adoption. Passenger cars lead this market segment, driven by urbanization, fuel economy

needs, and government incentives. As shown by models like Lotus Eletre Carbon, luxury and mainstream brands alike are embracing carbon fiber to meet future mobility goals.

Source: <https://www.mordorintelligence.com/industry-reports/automotive-carbon-fiber-composites-market>

Wind power market

The Wind Turbine Composite Materials Market is projected to grow from USD 14.4 billion in 2024 to over USD 25.3 billion by 2032, driven by a 7.3% CAGR. Growth is fueled by global demand for renewable energy, particularly wind power, alongside advances in composite technologies enabling lighter, more durable turbine components. Larger turbines and carbon reduction goals further accelerate demand for high-performance materials. North America and Europe lead the market, supported by strong investments and government initiatives. Key players include Vestas, Siemens Energy, and Toray Industries, focusing on sustainability and innovation. Major trends include recyclable materials, carbon fiber adoption, and automated manufacturing. However, challenges remain around high costs and limited recycling infrastructure.

Source: <https://www.credenceresearch.com/report/wind-turbine-composite-materials-market>

Emerging Trends in the Carbon Fiber Market

Emerging trends in the carbon fiber market shaping its future applications and market dynamics:

- **Increasing Adoption in Automotive:** Increasing use of carbon fiber in mainstream automotive applications to reduce vehicle weight, improve fuel efficiency, and extend electric vehicle range.
- **Advanced Manufacturing Techniques:** Innovations in automated layup, additive manufacturing (3D printing), and resin transfer molding (RTM) to enhance production efficiency, reduce costs, and enable complex geometries.
- **Recycling and Sustainability:** Development of recycling technologies and sustainable manufacturing practices to address environmental concerns and improve lifecycle sustainability of carbon fiber materials.
- **Smart Materials:** Incorporation of sensors, actuators, and functional coatings into carbon fiber composites for applications in structural health monitoring, adaptive structures, and smart textiles.
- **Bio-based and Bio-inspired Materials:** Exploration of bio-based precursors and bio-inspired structural designs to enhance sustainability and reduce dependency on fossil fuels in carbon fiber production.

Source: <https://www.lucintel.com/carbon-fiber-market.aspx>

SWOT ANALYSIS

SWOT analysis is a strategic planning tool to identify internal Strengths and Weaknesses, as well as external Opportunities and Threats when carrying out a Product/Service design. It enables better decision-making by providing a clear snapshot of the current situation. By recognizing strengths, businesses can leverage them for competitive advantage. Identifying weaknesses helps in addressing gaps and improving performance. Opportunities highlight areas for growth and innovation, while threats alert businesses to potential risks. So, SWOT fosters strategic thinking, aligns teams on key issues, and supports goal setting.

See section [6.2](#) to visualize the SWOT analysis done for each Key Exploitable Result of INFINITE project.

2.2.3.4 TECHNOLOGY STATUS

This analysis of Key Exploitable Results (KER) based on the TECHNOLOGY READINESS LEVELS (TRL) addresses the entire innovation chain and provides a common understanding of technology status. By evaluating a technology against the parameters for each Technology Readiness Level, one can assign a TRL rating to the project based on its stage of progress.

This analysis will provide valuable information to define actions to carry out with these technologies to bring them closer to the market, and develop a successful business.

See section [6.2](#) to visualize the Technology analysis done for each Key Exploitable Result of INFINITE project.

2.2.4 BUSINESS PLAN DEVELOPMENT

2.2.4.1 BUSINESS MODEL DESIGN

To develop a business model for each KER, a Business Model Canvas proposed by Osterwalder was used.

In this model, depending on the TRL of technologies developed in the project, the business model canvas can describe a new business oriented to the market (with TRL 8 or TRL 9 for example), or it can help to describe the impact of a new project proposal (when the TRL is low like in INFINITE project).

In addition, the business model canvas can help to determine and align business activities in a simple and creative way. The canvas provides 9 key business elements to make sure that no business vital part is missed.

See section [6.2](#) to visualize the Business Model done for each Key Exploitable Result of INFINITE project.

2.2.4.2 FINANCIAL ANALYSIS

It is worth explaining that the financial section of a business plan is not the same as accounting. Many people get confused about this because financial projections include profit and loss, balance sheet and cash flow, which look similar to accounting statements a business generates. But accounting looks back in time, starting today and taking a historical view. Conversely, the financial statement of a business plan is a forward-looking view, starting today and going into the future.

Well done financial analysis will tell whether the business has a chance to be viable and objectively evaluate the business's potential for success.

See section [6.2](#) to visualize the Financial Analysis done for each Key Exploitable Result of INFINITE project.

2.2.4.3 RISK ANALYSIS

The risk analysis process is focused on identifying what could go wrong, evaluating which risks should be dealt with and implementing strategies to deal with those risks. Businesses that have identified the risks will be better prepared and have a more cost-effective way of dealing with them. The objective of the risk analysis is to implement an effective risk management plan which can increase business's chances of success and reduce the possibility of failure.

See section [6.2](#) to visualize the RISK Analysis done for each Key Exploitable Result of INFINITE project.

2.2.4.4 BOSAT – BUSINESS OPPORTUNITY SELF-ASSESSMENT TOOL

The Business Opportunity Self-Assessment Tool (BOSAT) is valuable for evaluating the viability of a business idea before committing resources. Its main advantage lies in helping entrepreneurs systematically analyze critical success factors like market demand, competitive advantage, financial feasibility, and personal readiness. BOSAT encourages informed decision-making by highlighting strengths and potential challenges of the opportunity. It reduces the risk of failure by identifying weak areas early, allowing for timely adjustments. The tool also aids in refining business concepts, aligning them with market needs and personal goals.

See section [6.2](#) to visualize the BOSAT Analysis done for each Key Exploitable Result of INFINITE project.

3. SECTION B: COMMUNICATION AND DISSEMINATION STRATEGY

3.1 INTRODUCTION

Throughout its three-year journey, the INFINITE project has implemented a comprehensive **communication and dissemination strategy** to increase visibility, share its scientific and technological breakthroughs, and foster engagement with relevant stakeholders.

The strategy was structured in **three key phases** —awareness-building, engagement, and exploitation— aligning communication actions with the maturity of project outcomes. From the initial months focused on branding and visibility, to the final phase centred on promoting results and supporting sustainability and replication, INFINITE has remained active across multiple channels and audiences.

Dissemination efforts were tailored to five main audiences:

- **Industry stakeholders**, especially SMEs and large enterprises, were engaged through case studies, videos, newsletters, and presence at trade fairs.
- The **scientific community** was reached through 25+ publications and active participation in conferences.
- The **general public** was approached through accessible storytelling, audiovisual content, social media, and media outreach.
- The **project's own community** benefited from structured internal communication tools like Microsoft Teams and shared planning resources.
- INFINITE also promoted **collaboration and clustering** with other EU-funded projects, especially those in the same Horizon Europe call.

Over the life of the project, INFINITE produced:

- A branded **website** and social media profiles (LinkedIn, YouTube).
- A **project video**, brochures, posters, and press materials.
- **Four video interviews** with partners and **two newsletters**.
- A wide range of **scientific publications**, participation in **industrial and scientific events**, and contributions to **international conferences**.

Dissemination indicators show strong activity, exceeding initial targets in many areas (e.g., >42 LinkedIn updates, >1,000 YouTube views, 25 scientific publications).

Finally, the project emphasized **monitoring and adaptability**, using KPIs and feedback to refine its action plan and ensure communication efforts remained impactful and relevant.

For more details, please consult:

- **Deliverable D7.1: Communication Plan**
- **Deliverable D7.3. Final PEDR**

3.2 ACTIVITIES AND IMPACT LAST REPORTING PERIOD PLAN

During the final reporting period of the project, efforts have focused on consolidating the outreach and communication strategy, building upon the foundations established during the initial phases. This section provides an overview of the dissemination and exploitation activities carried out over the last period, highlighting both their scope and their contribution to project visibility and stakeholder engagement.

The activities outlined here are designed to maximize the project's impact, not only in terms of awareness but also in fostering collaboration and knowledge transfer across the industrial and scientific communities. Lessons learned from the previous reporting periods have been instrumental in refining the dissemination approach, ensuring greater alignment with project milestones and target audiences.

We also detail the Key Performance Indicators (KPIs) achieved. These indicators reflect both quantitative and qualitative metrics, serving as a reference for assessing the effectiveness of the communication efforts.

3.3 DISSEMINATION IMPACT INDICATORS MEASURED DURING PROJECT COMPLETION.

Table 3. - Communication & Dissemination KPIs

Communication and dissemination activity	Done (M36)	Target
Communication activities		
Web page updates	50	>15
Website visits	5.000	500
Linkedin impressions	24.620	10.000
Linkedin followers	223	200
Twitter followers	18	200
Youtube's views	582	1000
Press releases/Newsletters	3	>4
Press appearances	196	
Project videos	18	>3
Dissemination activities		
Scientific publications	51	25
Participation of scientific conferences	20	20
Participation on relevant events, Trade Fairs	7	2

3.5.2. Communication materials.

In this section, new communication materials have been produced to deepen the visibility of project partners. All partners have access to the full set of graphic resources produced during the previous reporting period. These materials have been adapted as needed to fit various formats and communication channels, ensuring consistency while meeting the specific requirements of each dissemination activity.

In the last period have been generated a series of videos and personalized interviews where selected partners reflect on the results achieved, the value of their participation in the project, and the importance of being involved in a European initiative. Interviews also explored the quality of collaboration and synergies developed among partners throughout the project.

Videos

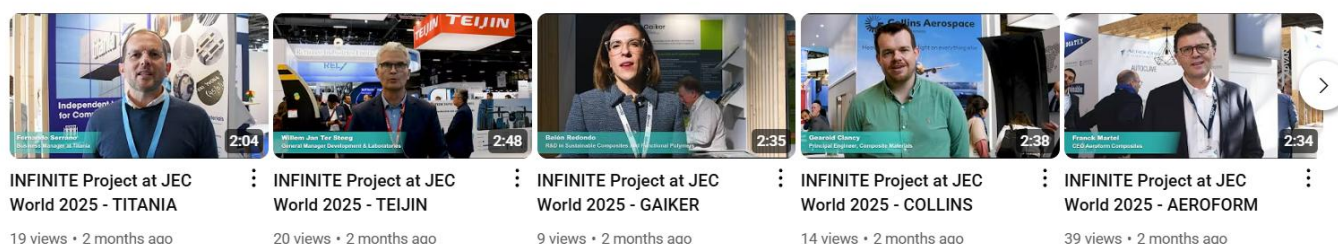


Figure 8. - Interview videos to project partners

Website and social media channels

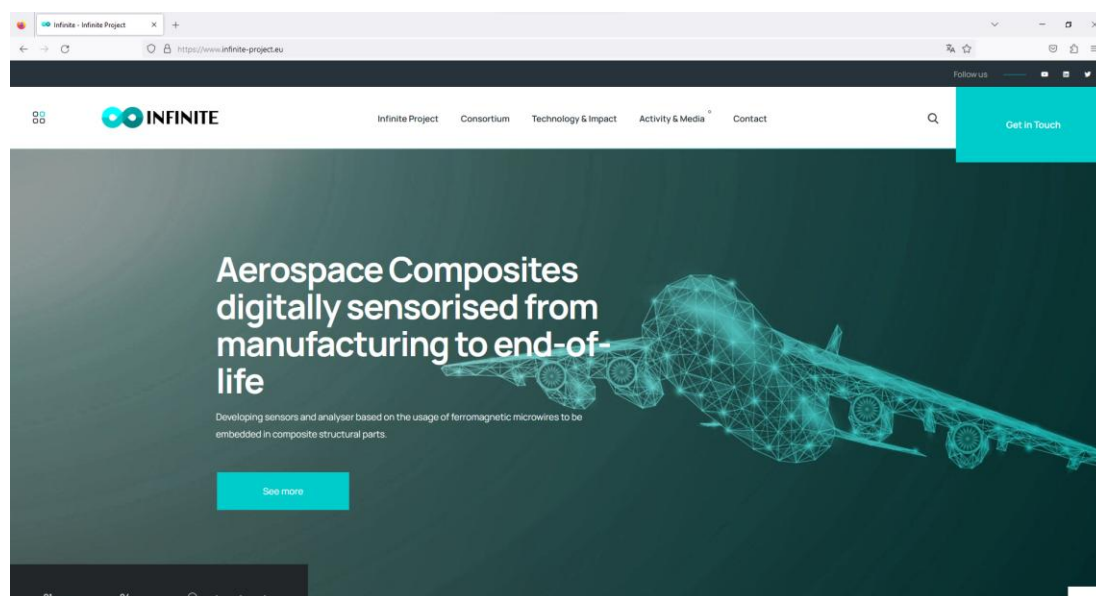


Figure 9. - INFINITE project website

As described in the D7.1 deliverable, the project website was developed and launched during the initial months and has remained active throughout the project. It has served as a central hub for sharing general information about the project, including its objectives, technological developments, expected impact, consortium partners, related sister projects, events, and project outcomes.

Social media channels, also established at the beginning of the project, have been consistently maintained. They played a key role in disseminating updates, showcasing milestones, and fostering engagement with partners, the broader project community, and sister initiatives.

The website's **News** section has functioned as a dynamic blog space, where relevant updates, articles, and dissemination content were published regularly to reflect the project's ongoing progress and milestones.

Since the activation of website analytics in July 2023, the site has shown a consistent level of activity. Between September 2023 and May 2025, the website registered over 5,000 views, with approximately 2,100 active users—2,000 of whom were new visitors—and a total of 16,000 tracked events. The average engagement time was 44 seconds, with notable spikes in traffic aligning with key communication moments and dissemination campaigns. The most visited sections were the homepage, followed by the pages dedicated to Aerospace Composites, the Consortium, and Technology & Impact.

These metrics reflect sustained user interest and confirm the effectiveness of the website as a central communication tool for the INFINITE project, supporting both outreach and stakeholder engagement.

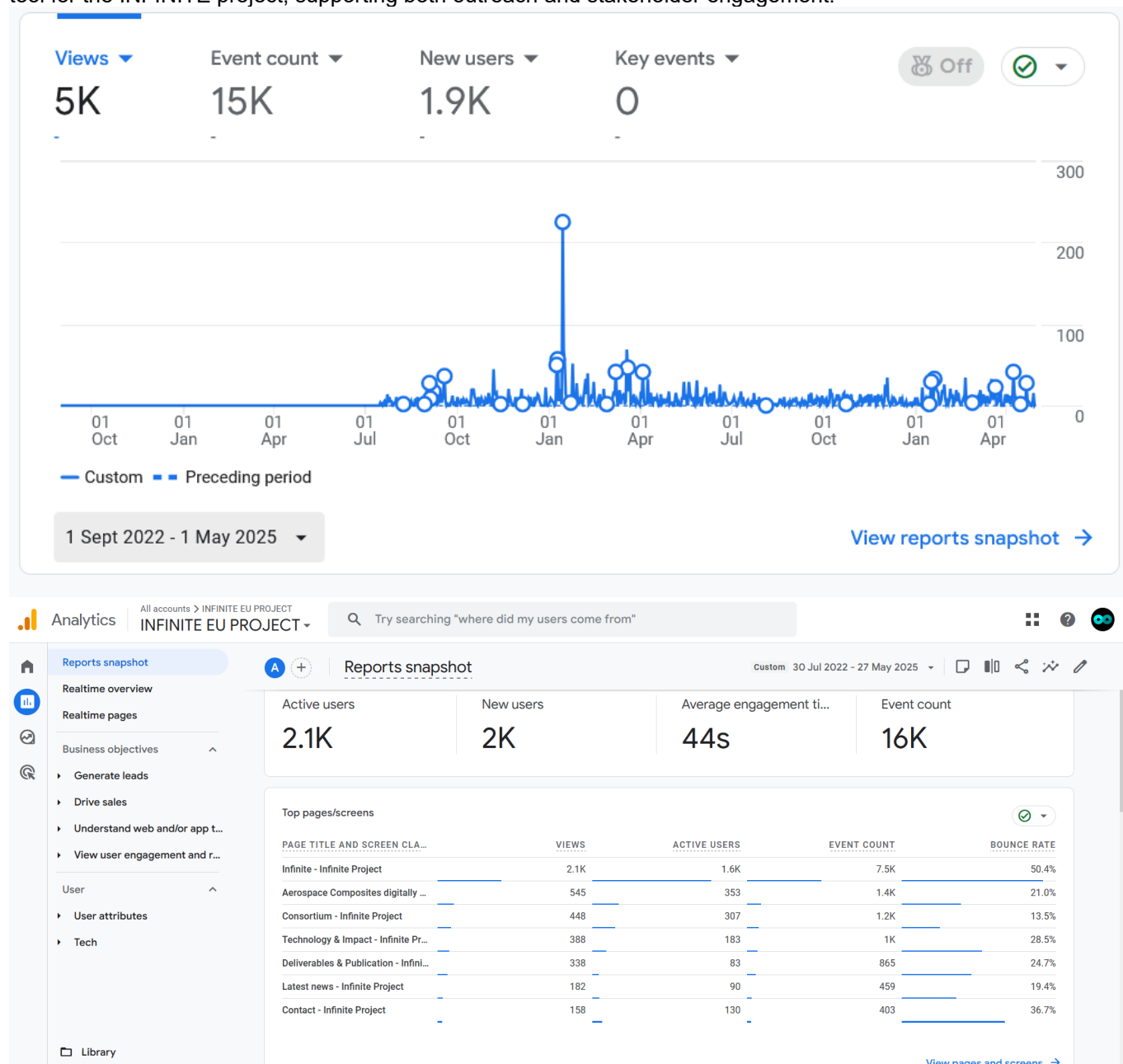


Figure 10. - Visits to INFINITE website

Publications in the blog during project lifetime have been the following ones:

Table 4 - Publications in the blog

Post content	publication date	Company
Project launching new	28/09/2022	All
General meeting 3M	29/09/2022	All
General meeting 8M	27/01/2023	All
Publication of 1 Newsletter	13/03/2023	IDEKO
Participation at JEC World 23	31/05/2023	IDEKO, Titania, Teijin, Aeroform
Presence at MATCOMP23	12/06/2023	IDEKO, UPV
Partner video: Teijin	7/11/2023	Teijin
Partner video: AMRC	7/11/2023	AMRC
Partner video: CAE	10/11/2023	CAE
INFINITE joins SUSTAINair Conference on sustainable aviation	2024-06-04	IDEKO
INFINITE – EU Project shines at BIEMH 2024	2024-03-05	IDEKO
INFINITE Project's Successful Exhibition at JEC 2024	2024-02-06	IDEKO, Titania, Teijin, Gaiker, Aeroform, Collins
Deep Dive in project partners #5 GAIKER	2023-12-05	Gaiker
Revolutionizing NCF sensorized materials: Aeroform Composite's breakthroughs in the INFINITE Project	2024-12-05	Aeroform
Titania innovating in composite material testing	2024-10-21	Titania
General Meeting at Collins Aerospace	2024-10-11	All partners
INFINITE project showcased at EASN conference in Thessaloniki, Greece	2024-09-20	IDEKO
INFINITE project at the XVII GEP polymer meeting in Madrid	2024-08-30	Gaiker
Innovative magnetic microwire technology showcased at ISAMMA conference	2024-07-05	MU
Breakthroughs in ferromagnetic microwire technology presented by INFINITE's researchers at Rome and Bologna conferences	2024-06-24	MU
Partner video. Deep Dive in project partners #4 TITANIA	2025-03-26	Titania
Partner video. Collins Aerospace drives AI innovation within the INFINITE project	2025-01-21	Collins
Showcasing Innovation at MRO Europe 2024	2025-01-21	Aeroform
INFINITE showcases its technological breakthroughs at JEC 2025	2025-03-18	IDEKO, Titania, Teijin, Gaiker, Aeroform, Collins

Partner video. Deep Dive in project partners #4 TITANIA	2025-03-26	Titania
INFINITE Case Study. Advancing smart composites for real-time structural monitoring.	2025-06-03	AMRC
INFINITE project gains international visibility at ICAUMS 2025 in Japan	2025/06-05	MU
INFINITE Keynote at ICEMA 2025 explores advances in magnetic microwires for wireless sensing applications	2025/06/10	MU

The links to the developed website and the set-up social media channels are listed below:

- **Website:** <https://www.infinite-project.eu/>

4 updates in Events and News section. 2100 visits to the webpage.

Latest news



2025-03-01

INFINITE showcases its technological breakthroughs at JEC 2025

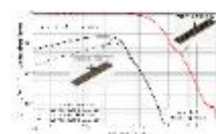
The INFINITE project took center stage at JEC World 2025, the

	UK	UK	UK	UK	UK
Ben	1.5%	1.5%	1.5%	1.5%	1.5%
Ben	1.5%	1.5%	1.5%	1.5%	1.5%
Ben	1.5%	1.5%	1.5%	1.5%	1.5%
Ben	1.5%	1.5%	1.5%	1.5%	1.5%

2025-03-26

Collins Aerospace drives AI innovation within the INFINITE project

The INFINITE - EU Project, focused on advancing smart manufacturing and



2025-03-06

Design of electromagnetic sensors for structural health monitoring using simulation

The investigation of the structural integrity of composite components is a



2024-03-21

Showcasing innovation at MRO Europe 2024

In October 2024, Aeroform proudly participated in the MRO Europe Show!



2024-03-28

Revolutionizing NCF sensorized materials: Aeroform Composite's breakthroughs in the INFINITE Project

Aeroform Composite announces significant advancements in developing innovative repair technologies for



2024-03-05

Titania innovating in composite material testing

Over the past few months, Titania has been focused on developing



2024-03-21

General Meeting at Collins Aerospace

Last week, the INFINITE - EU Project consortium gathered for a



2024-03-11

INFINITE project showcased at EASIN conference in Thessaloniki, Greece

Last week, Peko Oikaranta, the coordinator of the INFINITE project, presented



2024-03-21

INFINITE project at the XVII OEP polymer meeting in Madrid

The INFINITE project was recently featured at the XVII Meeting of



2024-03-01

Innovative magnetic microwave technology showcased at ISAMMA conference

In August, researchers from the University of the Basque Country (UPV-EHU)



2024-03-05

Breakthroughs in ferromagnetic microwave technology presented by INFINITE's researchers at Rome and Bologna conferences

The INFINITE project made a strong impact at two leading conferences.



2024-03-05

INFINITE showcases innovation at EMSA 2024

We are delighted to announce that the INFINITE project was

« Anterior 1 2 3, Sigüiente »

Figure 11 - News published at INFINITE website

- Twitter: <https://twitter.com/euinfinit>

14 posts and 18 followers

There has been no activity on Twitter during the last year of the project, following a strategic decision to discontinue use of the platform. This was due in part to ongoing uncertainty regarding the platform's future direction and the emergence of alternative, Europe-backed social networks such as Bluesky, which align more closely with the values of data sovereignty and responsible digital communication promoted by the project.

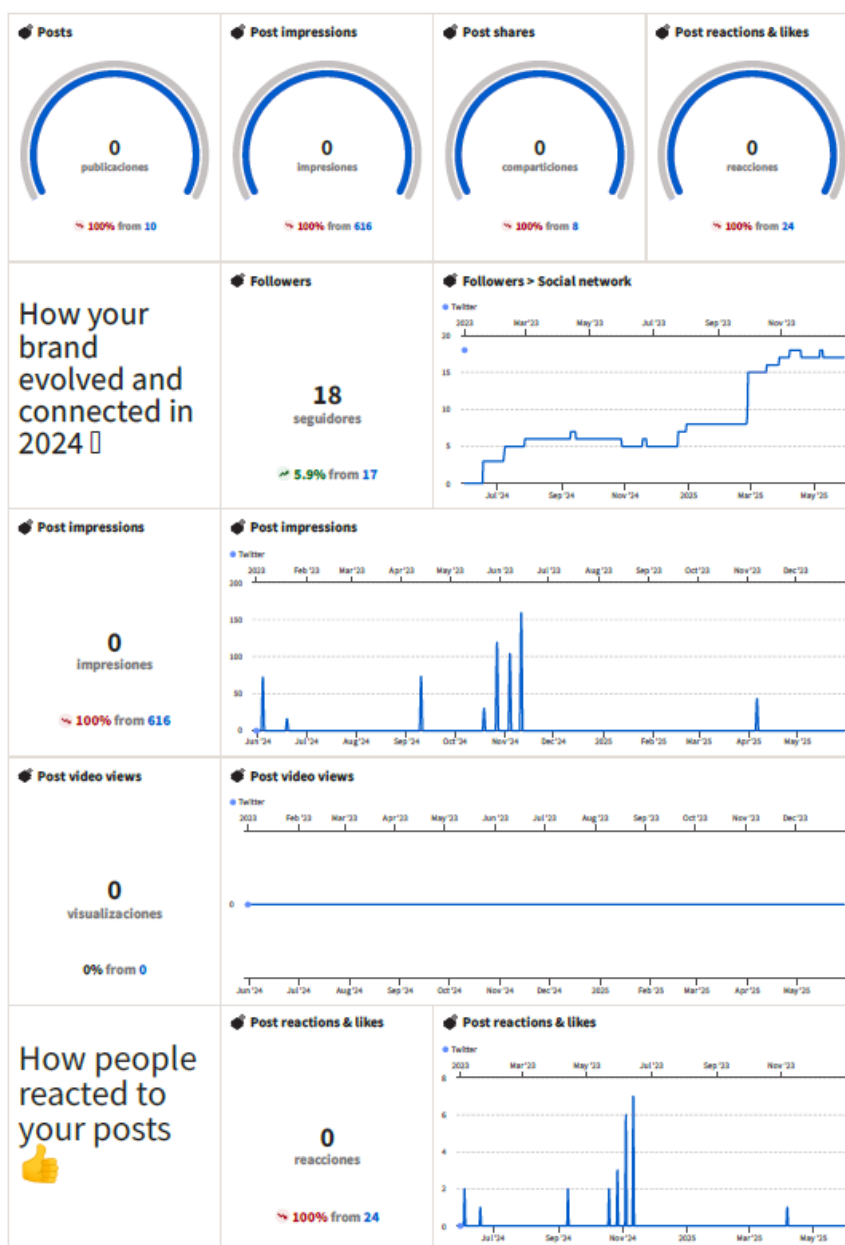


Figure 12 - Tweets published

-[LinkedIn](https://www.linkedin.com/company/infinite-eu-project/):https://www.linkedin.com/company/infinite-eu-project/

LinkedIn has been, alongside the website, the primary communication channel for dissemination activities throughout the project. With **223 followers**, During the last reporting period, the page accumulated a total of **24,620 impressions**, reflecting a steady engagement with the content. Posts generated **921 reactions**, **16 comments**, and were **shared 21 times**, indicating an active and interested audience. Peaks in impressions correlate with key project

milestones and events, demonstrating the effectiveness of the platform in amplifying project visibility. The qualitative feedback and interactions observed on LinkedIn also supported community-building among stakeholders and reinforced the positioning of the project within the European R&D ecosystem.

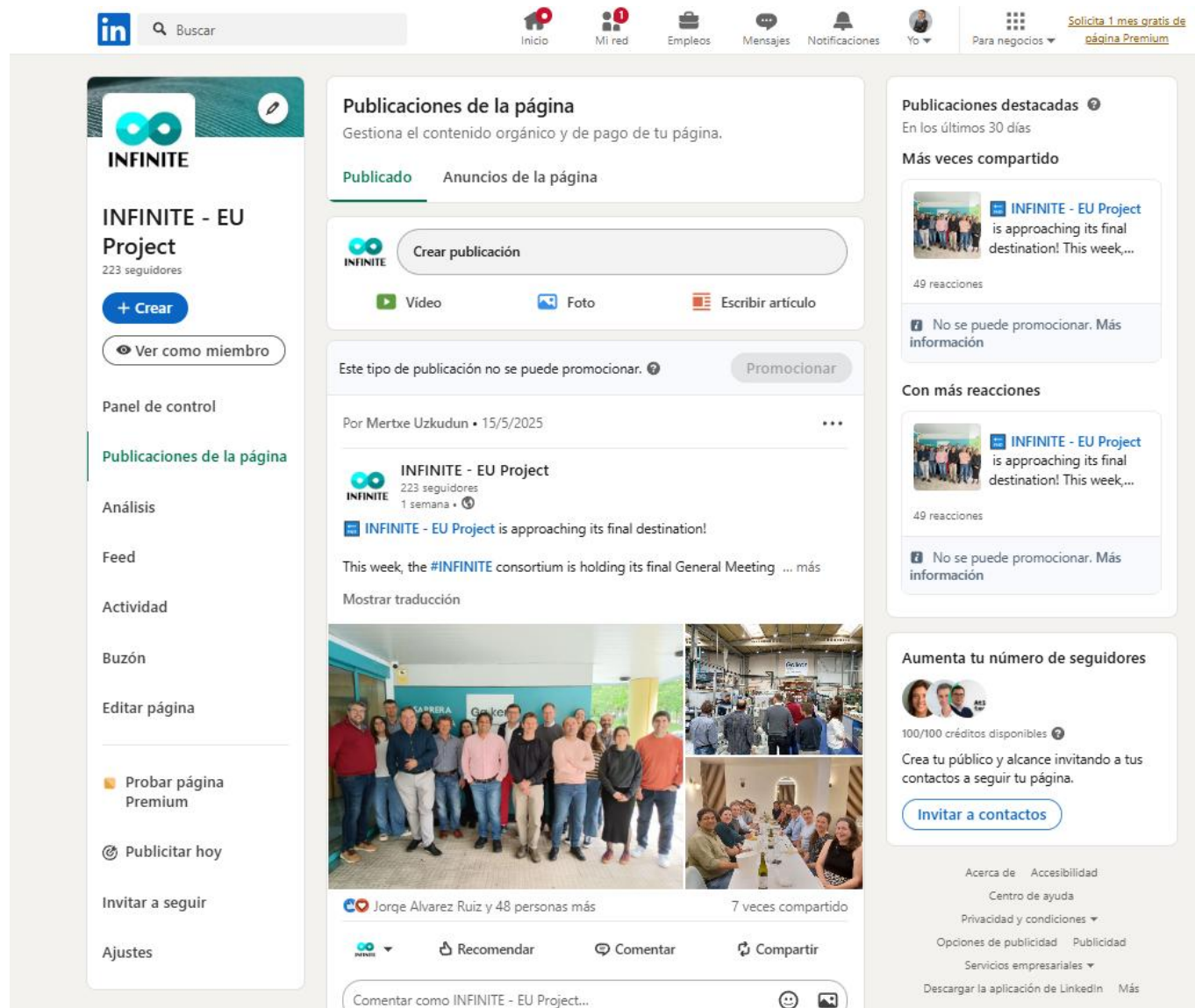


Figure 13 - Posts in LinkedIn

- **Youtube:** <https://www.youtube.com/channel/UCfeomD5amksXlGfg9OBz6-w/featured>

The project's YouTube channel has also played a complementary role in the dissemination strategy, serving as a visual platform to amplify project milestones and partner contributions. Containing 18 videos and 18 subscribers and **582 views** in total, the channel recorded **328 views** and a total **watch time of 7.7 hours**, representing a **38% increase** compared to the previous period. Although subscriber growth was modest (+4), the content reached a stable and targeted audience, with notable peaks aligning with the publication of key videos, such as partner interviews and event highlights. This channel has proven to be an effective format for presenting the project's narrative in a more engaging and accessible way.



INFINITE - EU Project

@infinite-euproject214 · 16 subscribers · 18 videos

Aerospace composites digitally sensorised from manufacturing to end-of-life | Horizon Es...more

infinite-project.eu

Customise channel

Manage videos

Home Videos Posts

For you



Beelen Roodendo
R&D in Sustainable Composites and Industrial Polymers

INFINITE Project at JEC World 2025 - GAIKER

9 views · 2 months ago



Willem Jan Ter Gooij
General Manager Development & Laboratories

INFINITE Project at JEC World 2025 - TEIJIN

20 views · 2 months ago



Gerard Cleary
Principal Engineer, Composites Manufacturing

INFINITE Project at JEC World 2025 - COLLINS

14 views · 2 months ago



Frank Martel
CEO Aerospace Composites

INFINITE Project at JEC World 2025 - IDEKO

39 views · 2 months ago

Videos



INFINITE Project at JEC World 2025 - TITANIA

19 views · 2 months ago



INFINITE Project at JEC World 2025 - TEIJIN

20 views · 2 months ago



INFINITE Project at JEC World 2025 - GAIKER

9 views · 2 months ago




INFINITE Project at JEC World 2025 - COLLINS

14 views · 2 months ago



INFINITE Project at JEC World 2025 - AEROFORM

39 views · 2 months ago



INFINITE Project at JEC World 2025 - IDEKO


16 views · 2 months ago

Figure 14 - Some Youtube videos published

INFINITE in the press published by project partners during the project

196 impacts published in project partners webpages, media and magazines. See next picture as an example and click in the attached Link or go to Annexes section for further details.

Table 5 - Communication activities during last reporting period

							
Communication Activity Name	Description	Who? Target audience	How? Communication channel	Outcome	Status	Publication date	Comments
INFINITE)	specialized media	INDUSTRY & CITIZE	MEDIA_ARTICLE	https://www.linkedin.com/feed/update/urn:li:activity:7306290775175172097	Delivered	9/03/2025	
#INFINITE at #JEC2025 – Partner insights trailer!	Project awareness in Fairs	INDUSTRY & CITIZE	MEDIA_ARTICLE	https://www.linkedin.com/feed/update/urn:li:activity:7307712242496503810	Delivered	9/03/2025	
the great work carried out by our partner CAE	Project post	INDUSTRY & CITIZE	SOCIAL_MEDIA	https://www.linkedin.com/feed/update/urn:li:activity:7308157797840355328	Delivered	9/20/2025	
INFINITE Partner Interviews #1 – Insights from JEC2025!	Project awareness by AEROFORM	INDUSTRY & CITIZE	VIDEO	https://www.linkedin.com/feed/update/urn:li:activity:7309938197520695297	Delivered	24/03/2025	
Partner Interviews #2 – Teijin	Project awareness by TEIJIN	INDUSTRY & CITIZE	VIDEO	https://www.linkedin.com/feed/update/urn:li:activity:7310298193278197760	Delivered	25/03/2025	
Collins Advancement in the project	Project awareness by Collins	INDUSTRY & CITIZE	SOCIAL_MEDIA	https://www.linkedin.com/feed/update/urn:li:activity:7315744130737815553	Delivered	25/03/2025	
Gaiker's webinar introducing INFINITE	Project awareness by Gaiker	INDUSTRY & CITIZE	SOCIAL_MEDIA	https://www.linkedin.com/feed/update/urn:li:activity:7320811761031426048	Delivered	03/04/2025	
Partner Interviews #3 – Collins	Project awareness by Collins	INDUSTRY & CITIZE	VIDEO	https://www.linkedin.com/feed/update/urn:li:activity:7323248572827648004	Delivered	23/04/2025	
Partner Interviews #4 – Titania	Project awareness	INDUSTRY & CITIZE	VIDEO	https://www.linkedin.com/feed/update/urn:li:activity:7328686226134159960	Delivered	30/04/2025	
final General Meeting at Gaiker	Project awareness by Gaiker	INDUSTRY & CITIZE	SOCIAL_MEDIA		Delivered	15/05/2025	
Ideko lidera un proyecto de monitorización sin contacto para aeronáutica	Project awareness in magazines	INDUSTRY & CITIZE	MEDIA_ARTICLE	Estrategia empresarial	Delivered	1-15/04/2025	
New standards in aerospace composite manufacturing	Project awareness in magazines	INDUSTRY & CITIZE	MEDIA_ARTICLE	jec composites magazine / N°162		June 2025	

FEATURE

XXXXX

New standards in aerospace composite manufacturing



PEDRO OLASKINDAGA,
AEROSPACE PROJECT MANAGER,
IDEKO

The Basque technology centre Ideko is a leading reference in the development of automation and digitalisation solutions for aerospace composite manufacturing processes, aiming to reduce emissions in the sector. Equipment manufacturers, OEMs and tier suppliers in the industry integrate Ideko's solutions to enhance the performance of their equipment and improve the efficiency and robustness of production processes.

The aerospace industry is continuously seeking new solutions to optimise manufacturing processes, ensuring maximum efficiency, precision and sustainability. The CORSIA plan, adopted by the International Civil Aviation Organization (ICAO), has set clear goals for sustainable growth and net-zero emissions by 2050. Through new, more sustainable production processes based on cutting-edge technologies such as Artificial Intelligence (AI), Ideko, headquartered in Elgoibar, Spain, enhances the efficiency, flexibility and optimisation of aerospace component manufacturing for engines and structural elements, using a wide range of materials, from titanium to composites.

Real-time monitoring for optimised production

Digitalisation is crucial for optimising industrial production systems. Ideko implements advanced solutions that enable real-time monitoring of key composite manufacturing processes, such as lamination, preforming, infusion and

curing. Additionally, the research centre has developed continuous vibration monitoring systems with embedded sensors in robotic systems, ensuring superior quality control and production traceability. For example, within the European Infinite project, Ideko is leading the development of a wireless monitoring system designed to track both structural health and the manufacturing process of aerospace components throughout their entire lifecycle. Through the development of digitally

sensorised composites (Figure 1), the structural health of components can be monitored in real-time from manufacturing to end of life, enhancing safety and reducing maintenance costs.

State-of-the-art facilities for composite innovation

Committed to sustainable development, Ideko focuses on researching manufacturing and automation technologies designed to reduce emissions and the

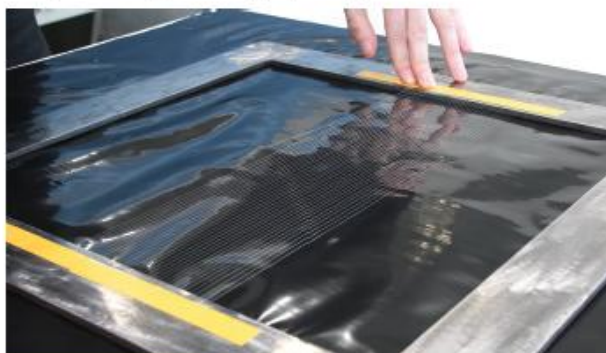


Fig. 1: Sensorised composites



(https://www.premioempresaysociedad.com/ignacioarrieta.aun/Bases_Premio_empresa_y_Sociedad_caso_Ignacio_Arrieta_2025.pdf)

Economía / Economía (<https://estrategia.net/seccion/economia-economia>)

Ideko lidera un proyecto de monitorización sin contacto para aeronáutica

Estrategia Empresarial (<https://estrategia.net/autor/estrategia-empresarial>) - 07-Abril-2025



El proyecto Infinite, liderado por el centro tecnológico Ideko, en el que participa Gaiker y que partió de unos trabajos del Grupo de Magnetismo de la escuela de ingeniería de la UPV, encara su recta final. Después de 36 meses de trabajo, esta iniciativa que ha contado con una financiación de 5,5 millones del programa Horizonte 2020 y que busca desarrollar un sistema de monitorización sin contacto de todo el ciclo de vida de estructuras aeronáuticas fabricadas con fibra de carbono, finalizará en junio. A través de este sistema se podrán controlar las diferentes etapas de fabricación de la fibra de carbono para asegurar su calidad, sin necesidad de equipar las piezas con sensores cableados. Para ello, la idea que desarrolla el proyecto es la de incorporar microhilos ferromagnéticos en la materia prima. Esta solución, de igual manera, permitirá controlar el estado de salud de dicho material durante toda su vida útil.

Figure 16 - article published in [Estrategia empresarial magazine 05/04/2025](#)

Dissemination Activities Monitoring

INFINITE activities have been presented at various conferences, congresses, and trade fairs. A total of **64 presentations** have been delivered by project partners throughout the project's duration. See the image below as an example, and click on the attached link for further details.

Table 6 - Dissemination activities carried out during [the whole life of the project](#)

Dissemination activity name	Autor Company	What? Type of activity	Who? Target audience Reached	Why? Description of the objective(s) with reference to a specific project output (max 200 characters)	Publication date
The 2022 IARIA Annual Congress on Frontiers in Science, Technology, Services, and Applications (UPV/EHU)	UPV/EHU	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	24-28/07/2022
12th INTERNATIONAL ADVANCES IN APPLIED PHYSICS & MATERIALS SCIENCE CONGRESS & EXHIBITION (UPV/EHU)	UPV/EHU	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	13-19/10/2022
8th International Conference on Sensors and Electronic Instrumentation Advances (UPV/EHU)	UPV/EHU	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	21-23/09/2022
67th Annual Conference on Magnetism and Magnetic Materials (UPV/EHU)	UPV/EHU	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	31/10-4/11/2022
International Conference On Quantum Materials And Technologies (UPV/EHU)	UPV/EHU	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	16-22/10/2022
IEC World 2023 (IDEKO)	IDEKO	Other	Industry, business partners	Presentation of INFINITE projects objectives, innovations, challenges, consortium, etc. to the aeronautic industry and IDEKO's role in the project.	25-27/04/2023
2nd Intl. Meet on Magnetism and Magnetic Materials, MAGNETISMMEET 2023, Rome	UPV/EHU	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	March 16-18, 2023,
9th International Conference on Antennas and Electromagnetic Systems (AES2023)	UPV/EHU/ GAIKER	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	June 5-8, 2023
8th International Congress on Biomaterials and Biosensors (BIOMATSEN)	UPV/EHU	Conferences	Research communities	Presentation of INFINITE projects objectives, results, etc. to the scientific and industrial community and UPV/EHU's role in the project.	April 13-19, 2023

Some examples of the participation of INFINITE in different events.



Figure 17: Picture of INFINITE partner participants at Dominio final workshop



Figure 18: Webinar in Gaiker about INFINITE's results"

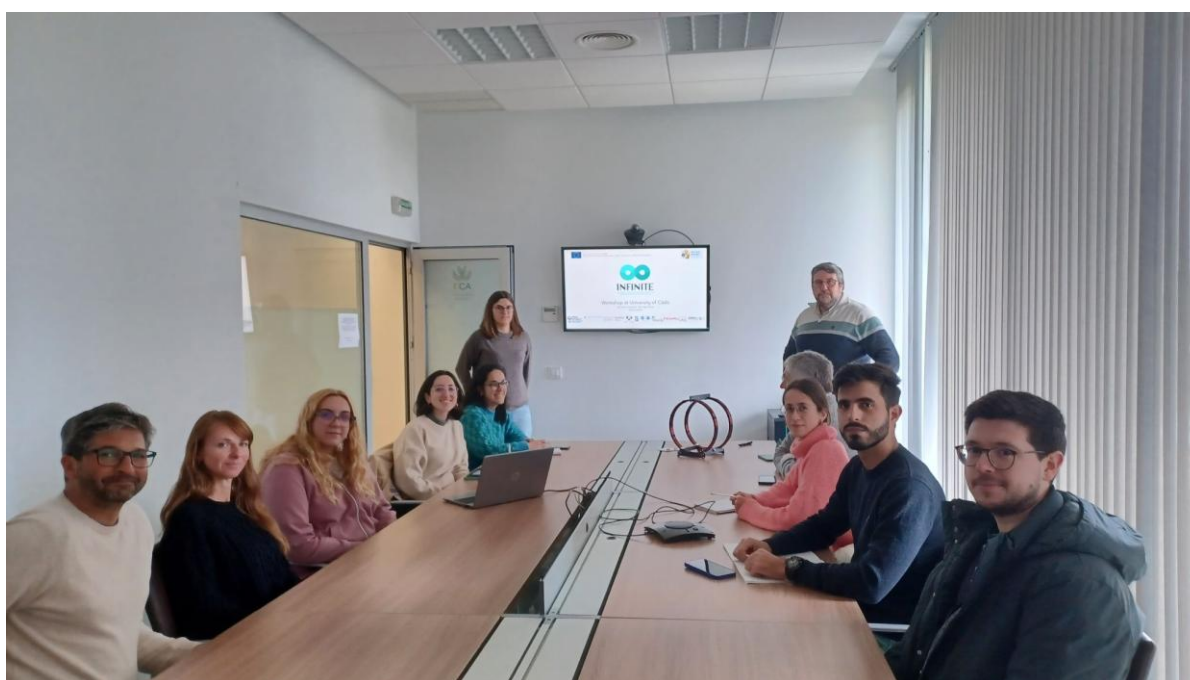


Figure 19: workshop organized by TITANIA related to the [INFINITE - EU Project](#) with the students of the Master's program in Nanosciences and Materials Technology at the University of Cádiz (UCA).".



Figure 20: T [Peio Olaskoaga](#), who presented the latest [INFINITE](#) project developments at [JEC25](#), within the JEC Composites Research & Innovation Projects area.

Publications

Throughout the duration of the project, a total of **51 scientific publications** (two of them awarded as best papers) have been produced by INFINITE partners, demonstrating strong dissemination and knowledge transfer across the research and industrial communities. This output includes **44 peer-reviewed journal articles** and **7 conference proceedings or workshop contributions**, reflecting the consortium's commitment to scientific excellence and outreach.

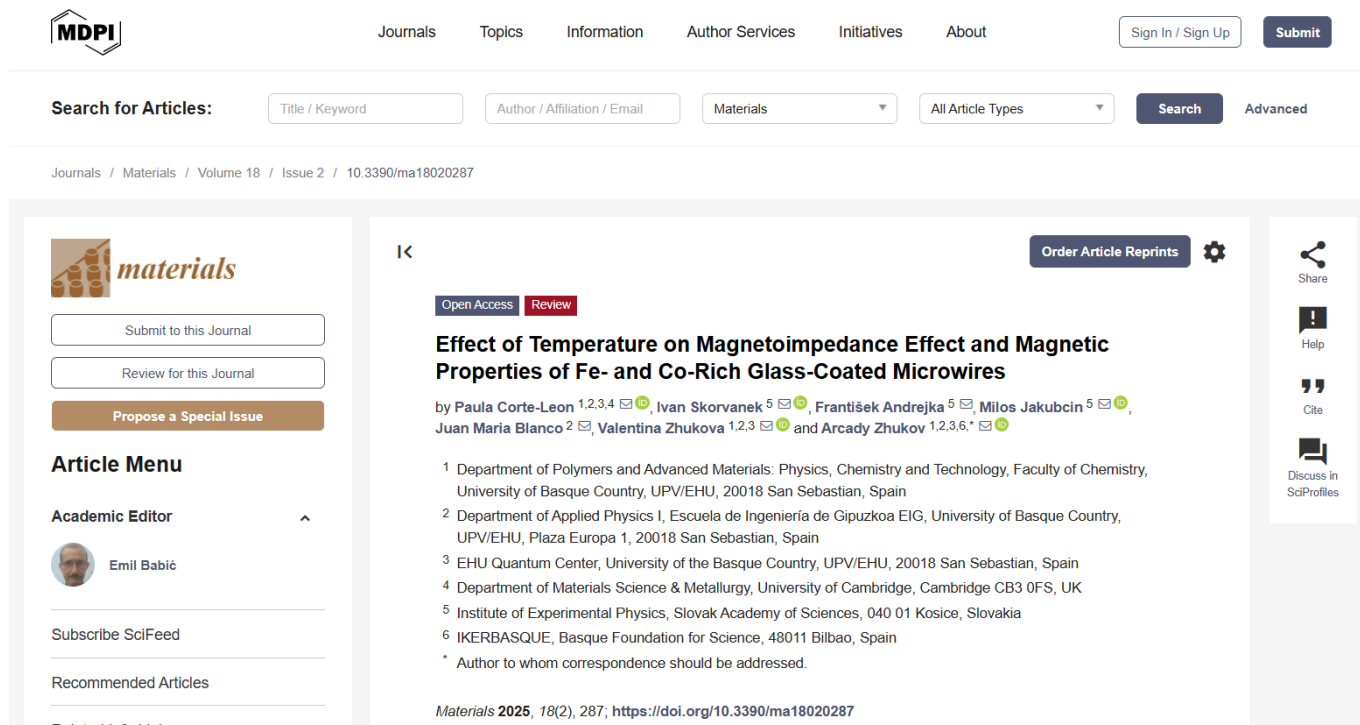
The published work covers a wide range of advanced topics, including magnetic microwire properties, magnetoimpedance effects, structural health monitoring in composite materials, and integration of ferromagnetic elements in sensing technologies. These contributions have appeared in reputable journals such as *IEEE Sensors Letters*, *AIP Advances*, *Sensors*, *Journal of Alloys and Compounds*, *Ceramics International*, and *Materials*, as well as in leading international conferences like *MATCOMP* and the *European Congress on Computational Methods in Applied Sciences and Engineering*.

This strong publication record not only reinforces the scientific value of the project but also strengthens its visibility and impact within the European research ecosystem and beyond. For the full list of publications, please refer to the annexes section of this report.

Table 7 - [Scientific publications during whole reporting period](#)

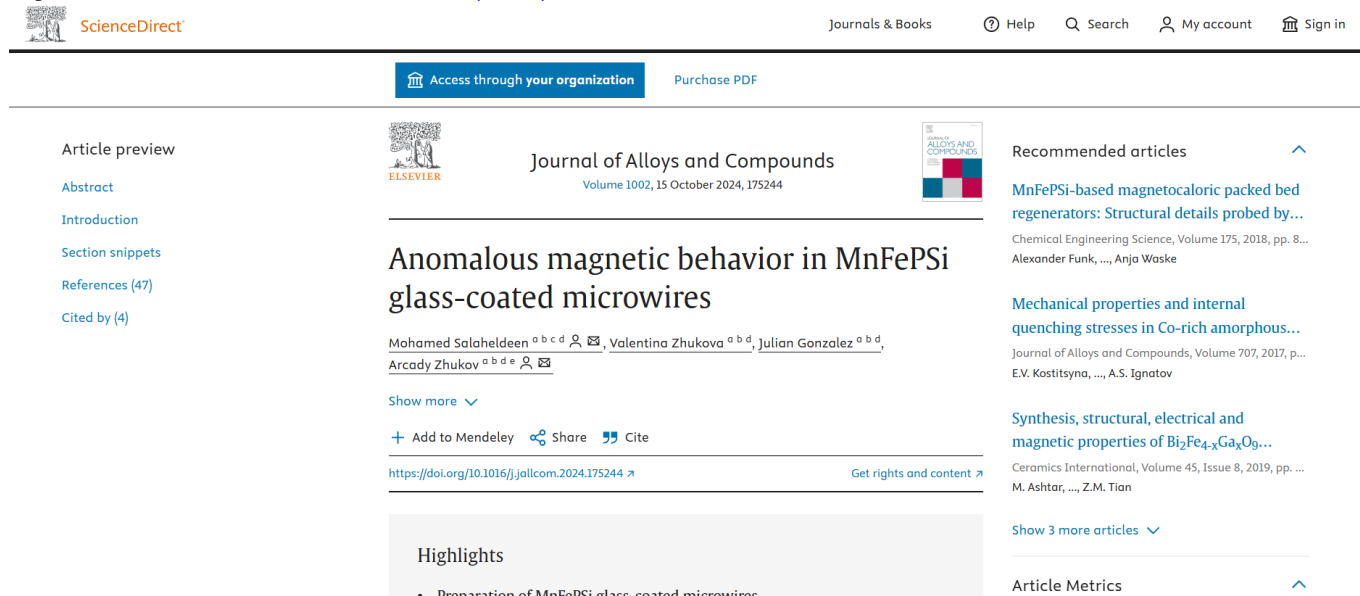
													
Type of Publication	Title	Authors	Title of the Journal or equivalent	Number	Peer-reviewed (Y/N)	Was the publication available in open access through the repository at the time of publication (Y/N)	Type of PID (repository)	PID (Publisher version of record)	PID of deposited publication	ISSN or eISSN	Publisher	Status	Publication date
Article in journal	Comparison of the Magnetic and Structural Properties of MnFePSi Microwires and MnFePStBz Alloy	M. Salakhitdinov, V. Zhukova, J. Romero, D. Salazar, M. Isakov, A. Zhukov	Materials 17 (2024) 1874	7	Y	Y	DOI	https://doi.org/10.3390/ma17101874			MDPI	Done	
Article in journal	Domain wall dynamics in stress annealed microwires	K. Chichay, S. Shevtsov, V. Rodionova, V. Zhukova, A. Zhukov	Maner. Res. Bull 178 (2024) 112305	178	Y	Y	DOI	https://doi.org/10.1016/j.materresbull.2024.112305			Elsevier	Done	
Article in journal	Optimization of giant magnetoimpedance effect in Co-rich glass-coated microwires by annealing	P. Cortes-León, A. González, V. Zhukova, M. Isakov, J.M. Blanco, A. Zhukova	J. Alloys Compound, 999 (2024) 175023	999	Y	Y	DOI	https://doi.org/10.1016/j.jallcom.2024.175023			Elsevier	Done	
Article in journal	Dependence of Magnetic Properties of Air-Prepared Nanocrystalline Ni ₂ MnGa-Glass-Coated Microwires on the Geometrical Aspect Ratio	M. Salakhitdinov, V. Zhukova, R. Lopez Arnan and A. Zhukov	Sensors, 24(11)(2024) 3632	24	Y	Y	DOI	https://doi.org/10.3390/s24113632			MDPI	Done	
Article in journal	Bending annealing-induced transformation of magnetic structure in Co-rich amorphous microwires	A. Chichay, P. Cortes-León, V. Zhukova, Arcady Zhukov	Physica B 689 (2024) 416178	689	Y	Y	DOI	https://doi.org/10.1016/j.physb.2024.416178			Elsevier	Done	
Article in journal	Effect of Magnetostatic Interaction on the Single Domain Wall Propagation in Magnetic Microwires	P. Cortes-León, A. González, J. M. Blanco, V. Zhukova, A. Zhukov	IEEE Trans. Magn. 60 (9)(2024) Art. no. 3000795	60	Y	Y	DOI	https://doi.org/10.1109/TMAG.2024.3413034			IEEE	Done	
Article in journal	Anomalous magnetic behavior in MnFePStBz glass-coated microwires	M. Salakhitdinov, V. Zhukova, J. M. Blanco, A. Zhukov	J. Alloys Compound, 1002 (2024) 175244	1002	Y	Y	DOI	https://doi.org/10.1016/j.jallcom.2024.175244			Elsevier	Done	
Article in journal	Unveiling the impact of annealing and magnetic field on MnFePStBz microwires	M. Salakhitdinov, V. Zhukova, A. Zhukov, J. M. Blanco, J. González and A. Zhukov	J. Appl. Phys. 136 (2024) 133902	136	Y	Y	DOI	https://doi.org/10.1063/1.6135123			AP Publishing	Done	
Article in journal	Spatial Annealing of Magnetic Microwires	M. Salakhitdinov, V. Zhukova, J. M. Blanco, J. González, A. Zhukov	Sensors 24 (2024) 8239	24	Y	Y	DOI	https://doi.org/10.3390/s24118239			MDPI	Done	
Publication in conference	On the Training of Algorithms Using Finite-Element Computation Data for Damage Identification in Sensorized Composite Structures	R. Chibrikov, C. Mullen, K. Kouzamas	9th European Congress on Computational Methods in Applied Sciences and 15th International Workshop on Structural Health Monitoring		Y	Y	DOI	https://doi.org/10.23917/econm.2024.081	https://doi.org/10.23917/econm.2024.081		SciFedia	Done	2024/06
Publication in conference	Physics-Informed Machine Learning for Structural Health Monitoring of Aerospace Composite Structures	R. Chibrikov, C. Mullen, K. Kouzamas			Y	Y	DOI					Ongoing	
Article in journal	Tuning of magnetic properties and Giant Magnetoimpedance effect in multilayered microwires	R. Lopez-Arnan, J.P. Arellano, J.A. González, A. García-Gómez, V. Zhukova, A. Chichay, M. Salakhitdinov, A. Zhukov	J. Sci. Adv. Mater. Devices 9(4) (2024) 100621	9(4)	Y	Y	DOI	doi 10.1016/j.jamds.2024.100621			Elsevier	Done	22/11/2024
Article in journal	The impact of high-temperature annealing on magnetic properties, structure and magnetostatic transformation of Ni ₂ MnGa-based glass-coated microwires	M. Salakhitdinov, V. Zhukova, J. M. Blanco, J. González, A. Zhukov	(2025) 4378-4387 https://doi.org/10.1016/j.ceramint.2024.11.414	51(4)	Y	Y	DOI	doi 10.1016/j.ceramint.2024.11.414			Elsevier	Done	26/11/2024
Article in journal	Effect of annealing conditions on Giant Magnetoimpedance of Co-rich glass-coated microwires	A. García-Gómez, V. Zhukova, J. M. Blanco, A. Zhukov	J. Alloys Compound, 1010 (2025) 177626	1010	Y	Y	DOI	https://doi.org/10.1016/j.jallcom.2024.177626			Elsevier	Done	18/12/2024
Article in journal	Effect of Temperature on Magnetoimpedance Effect and Piezoelectric Properties of Fe- and Co-Rich Glass-Coated Microwires	P. Cortes-León, I. Skovranek, F. Andrija, M. Jakubovic, J. M. Blanco, V. Zhukova, A. Zhukov	Materials, 18 (2025) 287	18	Y	Y	DOI	https://doi.org/10.3390/ma18020287			MDPI	Done	2025/01

Some examples of the scientific publications.



The screenshot shows the MDPI Materials journal article page for the article "Effect of Temperature on Magnetoimpedance Effect and Magnetic Properties of Fe- and Co-Rich Glass-Coated Microwires". The article is published in Materials, Volume 18, Issue 2, 2025. The authors are Paula Corte-Leon, Ivan Skorvanek, František Andrejka, Milos Jakubcin, Juan Maria Blanco, Valentina Zhukova, and Arcady Zhukov. The article is available as an Open Access article. The page includes a sidebar with the journal logo, submission options, and an article menu. The main content area displays the article title, authors, and a list of affiliations. The right sidebar contains sharing options and a link to the article's DOI.

Figure 21: Publication on [Materials, 18 \(2025\) 287](https://doi.org/10.3390/ma18020287)



The screenshot shows the Elsevier Journal of Alloys and Compounds article page for the article "Anomalous magnetic behavior in MnFePSi glass-coated microwires". The article is published in Volume 1002, 15 October 2024, 175244. The authors are Mohamed Salaheldeen, Valentina Zhukova, Julian Gonzalez, and Arcady Zhukov. The article is available as an Open Access article. The page includes a sidebar with the journal logo, submission options, and an article menu. The main content area displays the article title, authors, and a list of affiliations. The right sidebar contains sharing options and a link to the article's DOI.

Figure 22: [Journal of Alloys and Compounds. Volume 1002- 15 October 2024, 175244](https://doi.org/10.1016/j.jallcom.2024.175244)

4. ENHANCEMENT OF INFINITE RESULTS EXPLOITATION

Although owners of the exploitable results presented above will use their own commercial channels to promote their new products/services. INFINITE project has made use of the following platform to promote these results.

4.1 HORIZON RESULTS PLATFORM

Horizon Results Platform (HRP) is a tool made available by the EC for:

- Beneficiaries in disseminating their Key Exploitable Results.
- Stakeholders to engage with beneficiaries, directly or through National Contact Points (NCP).
- The EC to learn from project results.

INFINITE project has made available detailed information for the most important results at the HRP (Figure xxxx). The prioritized results (KERs) in the exploitation analysis (section 2.2.1) have been the results that have been published in this Horizon Results platform

5. CONCLUSION

This document outlines the communication, dissemination, and exploitation plan devised for the INFINITE project, along with the key performance indicators (KPIs) utilized for its monitoring and the primary outcomes achieved within the whole reporting period (M1-M36). While intended as a guiding framework for project partners and the coordination team, it remains flexible for adaptation based on partner needs and emerging dissemination and exploitation opportunities.

This deliverable is accompanied by a subsequent release scheduled for the project's conclusion (D7.3, M36). In this follow-up, the communication, dissemination, and exploitation activities for the second reporting period will be delineated, elucidating the tools and mechanisms employed and presenting the outcomes derived from their implementation. It is crucial to note that the dissemination and exploitation plan is a dynamic document subject to continuous updates.

As detailed in this report, INFINITE project partners have been actively engaged in disseminating project results and technologies, showcasing a diverse array of innovations developed throughout the project.

By the end of the project (M36), INFINITE has clearly surpassed most of the communication and dissemination targets initially set in the proposal. With **47 website updates** (vs. >15 expected) and over **5,000 visits** (vs. 500 target), the project website has served as an effective platform for information sharing. LinkedIn has been the most active social media channel, reaching **24,620 impressions** (vs. >42) and **223 followers**, exceeding the expected 200. While Twitter remained inactive by strategic choice and gathered only **18 followers**, the focus on alternative platforms proved more impactful. YouTube content achieved **582 views**, and although below the target of 1,000, it complemented the project's visibility efforts through **18 published videos** (vs. >3 planned).

In terms of press and media, the project recorded **196 press appearances** and published **2 newsletters**, slightly under the target (>4), but with a significantly broader media reach than anticipated.

On the dissemination side, the results are equally positive. The project delivered **51 scientific publications**—more than doubling the target of 25—and had an active presence in **European, industrial, and scientific conferences**, although specific counts for each category vary. INFINITE also participated in **7 relevant trade fairs BIEMH, JEC World, and MATCOMP** (vs. 2 planned), demonstrating a strong industrial outreach.

Although no workshops were organized at demonstrator sites or independently, the high publication rate and broad participation in high-level events ensured excellent visibility and engagement with target audiences. Overall, the INFINITE project's communication and dissemination strategy has been robust, exceeding expectations in key performance areas and significantly contributing to the project's visibility, impact, and long-term exploitation potential.

In summary, project results have been effectively disseminated to diverse target audiences throughout the project. Furthermore, an effective exploitation plan is underway to ensure the successful utilization of INFINITE's exploitable results, with a specific emphasis on developing a business design for key exploitable outcomes of the INFINITE project.