



D6.1

Impact Master Plan

AUSTRALO

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Impact Master Plan

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Abstract

Communication, Dissemination and Exploitation are vital elements of any successful **Horizon Europe** funded project. The present document provides a detailed overview of **DATAMITE**'s strategy, defining the goals, priorities and potential implementation mechanisms to achieve all planned outcomes. To this end, the **DATAMITE** Impact Master Plan sets out the objectives, tools, materials, and channels to be exploited in order to effectively spread **the project's** activities, achievements and tangible results to targeted audiences, also encompassing the strategy for the successful commercialization and market uptake of **DATAMITE** solution.

Keywords

Dissemination, Communication, Exploitation, Standardisation, Agile, Impact

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Dissemination level	
PU Public, fully open. e.g., website	✓
CL Classified information as referred to in Commission Decision 2001/844/EC	
SEN Confidential to DATAMITE project and Commission Services	

* Deliverable types:

- R: document, report (excluding periodic and final reports).**
- DEM: demonstrator, pilot, prototype, plan designs.**
- DEC: websites, patent filings, press and media actions, videos, etc.**
- OTHER: software, technical diagrams, etc.**

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Abbreviations

AI	Artificial Intelligence
CEDS	Common European Data Spaces
CEN	European Committee on Standardisation
CENELEC	European Committee on Electrotechnical Standardisation
DIH	Digital Innovation Hub
DoA	Description of Action
DoA	Description of Actions
DSSC	Data Spaces Support Centre
EOSC	European Open Science Cloud
ETSI	European Telecommunication Standards Institute
FAIR	Findable, Accessible, Interoperable, Reusable
IDS	International Data Spaces
IEC	International Electrotechnical Commission
IP	Intellectual Property
IPR	Intellectual Property Rights
ISO	International Organization for Standardisation
ITU	International Telecommunication Union
RTD	Research and Technical (or Technological) Development
RTOS	Research and Technology organisations
TC	Technical Committee
TRL	Technology Readiness Level
WP	Work Package

Executive summary

DATAMITE operates in a decentralized manner while managing a diverse ecosystem of organizations, initiatives, and influential stakeholders. To enhance its performance and expand its impact, the initiative requires a responsive growth factor that fosters new synergies throughout the project's duration. **DATAMITE** is adopting an Agile Stakeholder Engagement Framework, a methodology designed to continuously develop and strengthen relationships with key stakeholder groups. This empowers the program's operations, aligning with the principles outlined in the Grant Agreement.

DATAMITE recognizes the importance of a cohesive communication plan that is versatile and agile. To effectively reach target groups and stakeholders, a targeted but wide communication approach will be implemented. This approach focuses on raising awareness by highlighting key aspects and benefits of the **DATAMITE** project to all audiences and end users. Clear and easily understandable visual materials will be designed and shared to make **DATAMITE** concepts instantly recognizable to a broader audience and spark their interest in the project and its outcomes. Customized content will also be created and shared with specific target groups to foster an active ecosystem of stakeholders. Additionally, relevant information from project deliverables, partner interviews, pilot case studies, and industry reports will be disseminated through **DATAMITE** communication channels to engage users and build a potential clientele base.

Dissemination is also crucial for **DATAMITE** to share results with various stakeholders, including peers in research, industry, commercial players, and policymakers. Additionally, **DATAMITE** aims to contribute to the progress of science and technology by making results available to the wider community. To achieve this, **DATAMITE** has developed a flexible dissemination plan that focuses on creating awareness, understanding, and actionable outcomes among the target audience. Implementing this plan will maximize the utilization and adoption of project outcomes and research insights, aligning with the desired impacts outlined in the work plan.

Another key element, is exploitation. The primary goal of the exploitation activities is to maximize the effective utilization of the project results through various means such as scientific, economic, political, or societal exploitation routes - both commercially and non-commercially-, and with the aim of transforming the Research and Innovation efforts into tangible value. All results generated in **DATAMITE**, will be strategically directed towards various 'Exploitation pathways', which



encompass the routes and ways for exploiting these results, in order to reach the intended target groups.

Last but not least, standardisation plays a crucial role for **DATAMITE**. Within the project timeline, the project aims to participate in several technical bodies for making technical contributions to existing and ongoing work while diffusing **DATAMITE**'s key messages to the standardisation community.

1 Introduction

Research innovation is a driving force for economic growth, the creation of new job opportunities and the enhancement of the standard of living. It is therefore important to ensure that the knowledge generated within research and innovation projects is properly diffused and that the means through which such knowledge can be delivered to the society are being effectively explored. This is realized through the commercial exploitation of products and services, which is the primary way of delivering research results to the citizens (end-users).

In addition, communicating research results can effectively accelerate research and technical development (RTD) towards increasing the technology readiness level (TRL), going beyond the current state of the art, and even creating new research horizon lines on future and emerging trends. Furthermore, dissemination activities, such as participation in workshops or publication of information on websites, enable participants “to get feedback on the economic potential and recommended market-oriented exploitation pathways”.¹

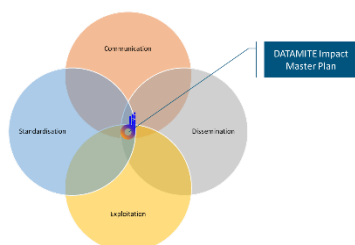


Figure 1. DATAMITE Impact Master Plan

The current document outlines the initial **DATAMITE Impact Master Plan** consisting of the overall project dissemination, communication and exploitation strategies including an extensive approach on standardisation (**Figure 1**).

The plan is the result of a coordinated effort among partners, considering stakeholders’ categories and needs, as well as partners’ communication channels and tools. In this sense, it is a supporting tool for each partner in maximizing the impact of their own dissemination actions while providing a means to ensure high visibility of activities and outcomes of the project as a whole. This plan proposes a selected list of communication & dissemination tools and activities to engage the target groups in the **DATAMITE** project.

To this end, a multi-step and multi-channel dissemination strategy is proposed in order to maximize the impact of the dissemination activities, adjusting the materials and tools to the specific needs, interests and potential for involvement of the target audience.

¹ D6.1: Dissemination and Exploitation Plan and Annual Dissemination Report 1 (31/08/2017), ICARUS Project, Retrieved from: <https://icarus-alloys.eu/>



The consortium considers this plan as a living document, updated yearly, reflecting an open, ongoing dialogue with potential users and related networks during the project, in order to be inclusive and to ensure the best possible results.

In terms of structure, **D6.1** consists of six interlinked sections. While sections 1 and 6 are the introductory and conclusive sections of the document, the other four sections present and discuss the key plans and frameworks that the project will follow throughout its lifetime. More specific, sections 2 to 5 discuss the following subjects:

- **Section 2** provides a clear overview of **DATAMITE's** Engagement Framework, the methodology of identifying and engaging with high-interest stakeholders (groups or individual).
- **Section 3** introduces the principles of **DATAMITE's** Communication & Dissemination Plan while showcasing the tools and channels. The section also presents International Cooperation objectives and phases.
- **Section 4** reveals key exploitation principles related to the project while introducing a clear plan for defining the right exploitation channel for all project's results.
- **Section 5** initiates the discussion around the standardisation plan of the project and its contributions to standardisation activities.

2 AGILE STAKEHOLDER MANAGEMENT

2.1 STAKEHOLDER ENGAGEMENT STRATEGY

Identifying and engaging with the most relevant stakeholders is an activity often referred to as ‘community building’ and it is a key aspect of every **Horizon Europe** project, such as **DATAMITE**. Indeed, the programme relies on communities, initiatives and projects that will either use the outcomes or relate and possibly liaise with its activities along its course.

Creating and nurturing an ecosystem of key players around an initiative is always a crucial factor in the outcomes and success of its value stream. The stakeholder’s impact on a project depends on its potential power -the ability to influence the value proposition- and the interest in exercising that power. Assessing the relative levels of each supports the decision on whom to spend time and effort to realize the greatest benefits.

When it comes to addressing fundamental challenges in Research and Innovation, multiple initiatives often work in a standalone manner to address the same issue from multiple directions, incurring inefficiencies and being incapable of delivering their full potential. By adopting an open framework of collaboration with peers and groups that can benefit and contribute to the impact of the project, **DATAMITE** will be able to reach a deeper understanding of the requirements and benefits from aligning efforts with similar task forces as it requires a responsive growth factor capable of prospecting and creating brand new synergies over the project’s lifetime, facilitating a greater advantage and extending its range of action.

2.1.1 Engagement Framework

To maximise the effectiveness of the dissemination, communication & exploitation plans that will be introduced in this document, the consortium requires a mechanism for managing, in a systematic manner, the ever-changing list of organisations, initiatives and players with a position to influence the value streams of the project. For this reason, **DATAMITE** will implement an **Agile Stakeholder Engagement framework (Figure 2)**, designed to continuously develop and strengthen relationships with a significant audience through the values of the **Agile Manifesto**²:

² <http://agilemanifesto.org/>

Table 1. Agile Manifesto Principles

The Agile Manifesto Principles		
Individuals and interactions	over	processes and tools
Results	over	comprehensive documentation
Collaboration	over	formality
Responding to change	over	following a plan

- **Individuals and interactions over processes and tools:** Ecosystem building is a team-based approach to deliver value as a joint effort. Tools are an important part of projects, but the team needs to work together effectively through productive interactions with the stakeholders.
- **Results over comprehensive documentation:** It is much more valuable to interact with the stakeholders, obtaining continuous feedback and managing increments of the ecosystem's snapshot rather than overspending resources in studying and reporting about their profiles and potential objectives.
- **Collaboration over formality:** This framework is designed to promote and facilitate collaboration in the programme. The team aims to engage and collaborate with stakeholders to inspect and adapt the vision, so the project will be as valuable as possible.
- **Responding to change over following a plan:** Rather than maintaining a fully defined and static vision of the stakeholders from the project, this methodology focuses on building up an ecosystem of interested parts throughout its lifetime.

The framework follows an iterative implementation structure based on **Sprints**, time-boxes of **6 months** where the main goal is to incrementally increase and reinforce the engagement of the stakeholders with the initiative. A new Sprint starts immediately after the conclusion of the previous Sprint at the end of 6-month period of the project (Sprint Qx). Its workflow includes the following phases:

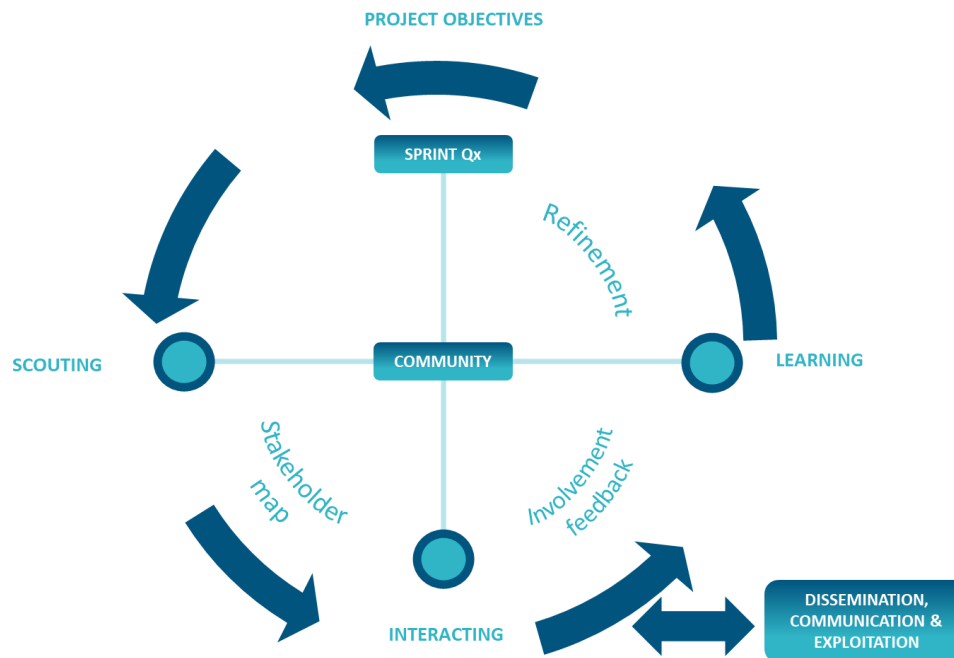


Figure 2. Stakeholder Engagement Framework

- Phase 1 – Scouting:** Building upon the objectives of **DATAMITE** and the findings from previous Sprints, this phase will explore, map, and assess Target Groups -and specific candidates- with different degrees of relevance for the scope and impact of the work plan. **DATAMITE** will build upon the sound experience and active involvement of the consortium members in initiatives and players that must be considered as baseline for engagement, taking advantage of new leads generated by second-degree partnerships and new opportunities as an outcome of the Interaction phase, including emerging PPPs and **HORIZON EUROPE** projects. The key result will be a version of the ‘**Stakeholder Map**’, a graphical instrument to 1) list key actors -and specific candidates within them; 2) thoughtfully organise and correlate these audiences; 3) define a common terminology to be used in all the project’s reference.
- Phase 2 – Interaction:** The next stage will involve the interaction with the identified target groups, supporting the activities outlined in the Dissemination, Communication and Exploitation strategies. This is the phase where **DATAMITE** will collaborate with initiatives having a specific mandate on industrial digitisation. Whenever relevant, the project will formally join specific Task Forces and Working Groups, contribute to scientific publications, and participate in events. Feedback extrapolated from previous Sprints will be used to enhance the efficiency and impact of these measures.

- **Phase 3 – Learning:** From the actions performed during the interaction, the consortium will learn lessons and collect findings that will feed the next Sprint. This will also include insights obtained from consultation (e.g., in the form of quick questionnaires or interviews), gathering valuable external remarks about the project and its operation.

2.1.2 Target Audience & Stakeholders

Promoting **DATAMITE** and encouraging stakeholders to engage with the project requires understanding who the ‘target audience’ is (**Figure 3**). Understanding these profiles and their influence in the value chain is essential to craft the Communication, Dissemination & Exploitation plans.

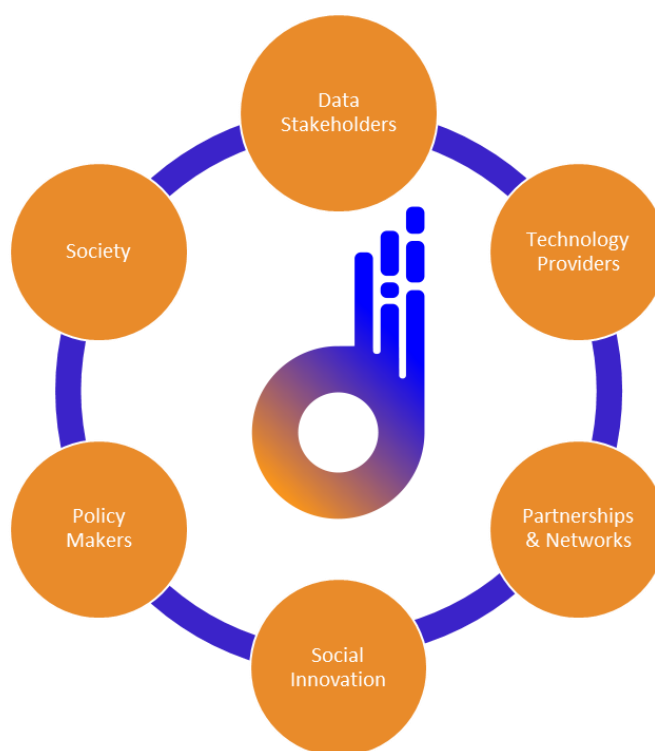


Figure 3. DATAMITE's Target Audience

- **Data Stakeholders:** This category encompasses the profiles involved in the data governance ecosystem and represents the main end-users of **DATAMITE** –i.e., the demand-pull perspective. Main figures are the Data Providers (the rightsholders demanding a safe, trustworthy, compliant, and accountable use of their data, with potential interest to receive compensation for it) and the Data Consumers (operating their data governance strategies including the processes, roles, policies, standards, and metrics that ensure the effective and



efficient use of information in enabling an organisation to achieve its goals). Other roles to consider are the Data Brokers/ Aggregators (a market expected to reach \$345 Billion in 2026) that collect personal information, packages it into bundles, and sells it to third parties), and Data Controllers and Stewards, who are specialists in overseeing data sets, ensuring that policies and compliance are proper, and implemented). **DATAMITE** will aim to engage with members from the application sectors directly involved in the validation process to (1) obtain hands-on requirements and feedback that supports the implementation of the project and its use case validation, understanding internal processes, system integration and risk management; (2) have access to quality data if needed; (3) raise wide-range awareness and trust on the benefits that interoperable data sharing and trading represents in complex real-world environments.

- **Technology Providers:** Professional roles working on research outputs, innovation findings, business activities and interoperability efforts around data-intensive frameworks and solutions –i.e., the technology-push perspective. These profiles undertake to investigate, advance and demonstrate approaches allowing for data assets to be discoverable, fairly priced and traded. The project will seek to engage with members to exchange and enforce the Technology Transfer of the outcomes, bridging the Open Innovation divide with application sectors, and seeking users for the **DATAMITE** framework. Segments include research-oriented institutions (technical universities, RTOs, spin-offs) and business-driven organisations (from highly risk-taking start-ups to innovation units in large-scale industry) that contribute to the technical and scientific ambition.
- **Partnerships & Networks:** One of the main intentions of **DATAMITE** is to harness the multiplier capacity of initiatives advocating for the data economy. The project leverages the consortium’s leadership and participation in active ecosystems (more details in Expected Outcome 2) to create synergies, bridging the collaboration across the data value chain. Segments include (1) the international communities of reference built-in by consortium partners; (2) the [AI, Data and Robotics European Partnership](#) (ADR PPP) – the European flagship driving innovation, acceptance and take-up of data technologies. This interaction includes collaboration with Horizon projects, in particular the cluster of projects from [CL4-2022-DATA-01-04](#) and [H2020-ICT-13-2018-2019](#); (3) the primary EU associations within the ADR PPP, especially the [Big Data Value Association](#) (BDVA); (4) the main EU associations advocating for federation of services within existing data infrastructures, particularly the [Gaia-X](#) Ecosystem and The [European Open Science Cloud](#) (EOSC); (5) the flagship initiatives for



the emerging European Common Data Spaces, e.g., the [Data Spaces Support Centre](#), and the brand-new [Data Spaces Business Alliance](#); and (6) ecosystems that concentrate large networks of public-private organisations, including data EU Digital Innovation Hubs, and the European Network of Artificial Intelligence Excellence Centres (the European AI lighthouse)..

- **Social Innovation (Social Innovators):** The implementation of data sharing and trading is not just a mere technical question. Human and ethical factors are compulsory to facilitate a transformation compliant with the needs of the workforce. Social science disciplines must be involved in order to understand how people interact with data governance and trading, making their design more natural for the user and relevant to the sector. Social innovators identify the challenges, strengthen the opportunities for user-friendliness, and empower a smooth transition to the Future of Work.
- **Policy Makers:** Public authorities, regulators, task forces and observatory organisations immersed in policy-oriented activities, funding programmes and laws. These entities are responsible for setting the rules and public incentives for designing and implementing the European data strategy, as well as strengthening Europe’s digital transformation, human capital, and competitiveness. The primary representative of this category is the European Commission, with special emphasis on the brand-new European Alliance for Industrial Data, Edge, and Cloud.
- **The Society:** The public should not be overlooked. It is crucial to bring to the public a common understanding and trust of the positive impact of Industry 5.0, which shifts the focus from technology-driven progress to a thoroughly human-centric and sustainable approach. Highly accessible content will be produced to engage with the society as a whole.

2.2 STAKEHOLDERS MAP

2.2.1 Stakeholders Map Breakdown

Figure below outlines the first version of the **DATAMITE Stakeholders Map (Figure 4)**, graphically representing all the target audiences at this stage. The diagram has been defined by taking into consideration the different target stakeholders’ groups identified to date, as the outcome of, the ongoing, Sprint Q1 of the Agile Stakeholder Framework. This map is a living document as is updated every 2 months.

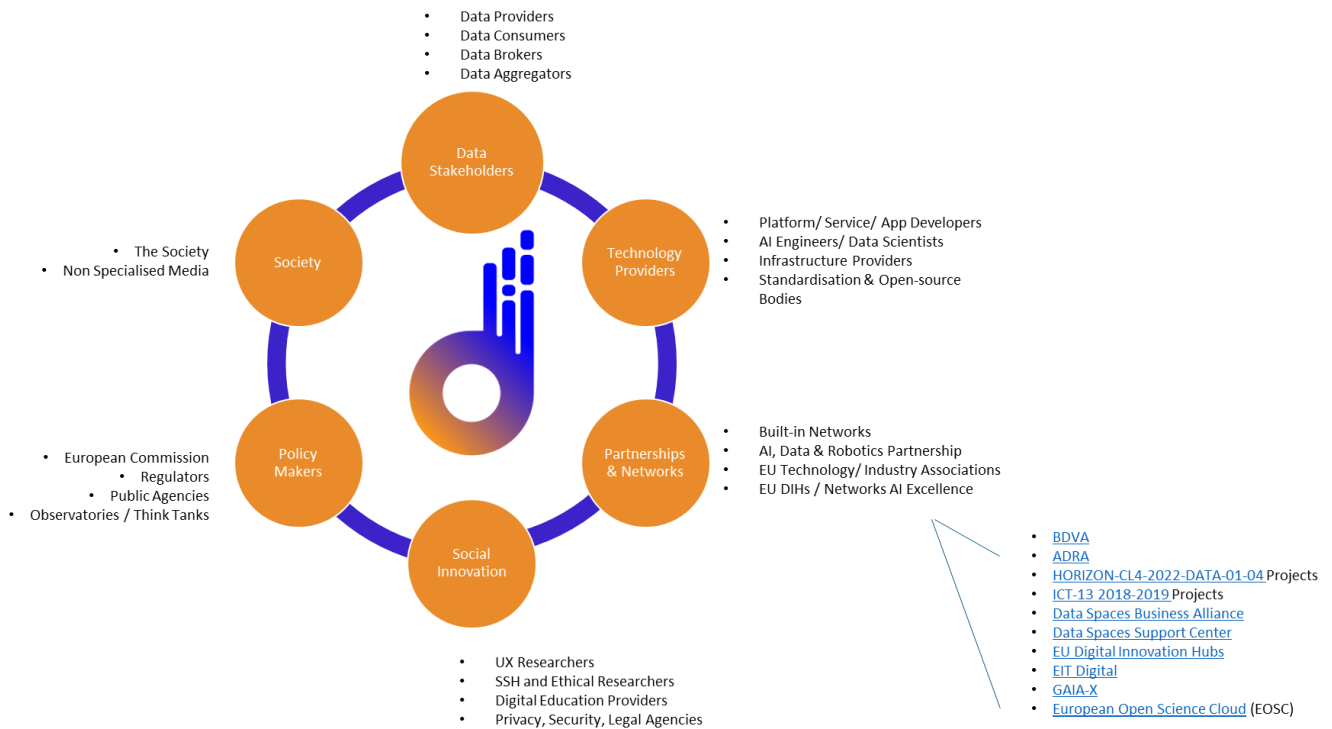


Figure 4. DATAMITE Stakeholders Map

2.2.2 Stakeholders Map Magic Quadrant

Figure 5 below contains the first version of the **DATAMITE Stakeholders Map Magic Quadrant**, that graphically summarises the main target audiences taking into consideration the different target stakeholders’ groups identified so far, as the outcome of, the ongoing, Sprint Q1 of the Agile Stakeholder Framework. The figure below provides a framework for managing stakeholders based on interest and influence as:

- ▶ Y-axis depicts the “Influence” potential of the project to this target group and vice versa.
- ▶ X-axis depicts the “Interest” that the target group may have towards our project and vice versa.

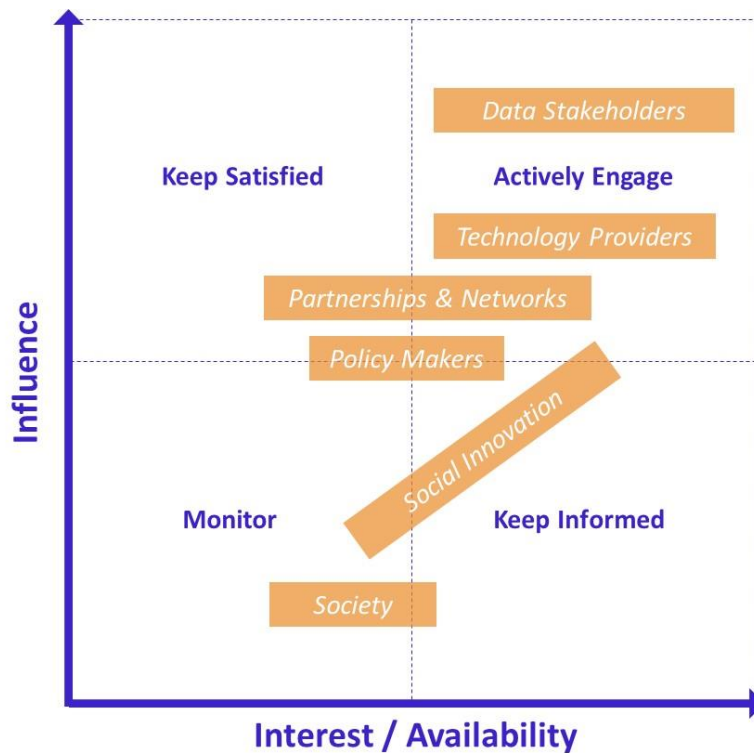


Figure 5. Magic Quadrant

2.2.3 Actively Engage Quadrant

This quadrant emphasises on stakeholders and target groups that have high influence towards the project while the project has great interest towards them. These are usually organisations or individuals who could potentially “stir”, “influence” or “kill” the activities of the project as their views, visions and feedback can be considered as key “beacons” for the project. These target groups need to be approached and activated early in the project while maintaining an active and frequent communication channel.

2.2.4 Keep Satisfied Quadrant

This quadrant includes organisations and/or individuals who have significant decision-making influence and authority while having limited availability or interest to be actively engaged to the project activities. It is usually very difficult to have consistent touch points with this target group, however the project should take into consideration their limited but valuable feedback, while synchronise its activities with their directives.



2.2.5 Keep Informed Quadrant

The “Keep Informed” quadrant, depicts organisations and individuals (or EU projects in our case) who are directly correlated or associated with our project. This target group may not be significantly impacted by **DATAMITE** or have low influence to project activities, however synergies, especially towards joint communication and dissemination, must be explored.

2.2.6 Monitor Quadrant

The current quadrant includes organisations, individuals or associations who may have low influence on the project activities and simultaneously show limited availability to get engaged into project activities. These target groups are not expected to be heavily involved in the project activities. However, the project needs to frequently communicate with them while staying alerted if they move to other quadrants.

3 Communication & Dissemination Strategy

Communication and dissemination sit at the heart of any **Horizon Europe** project and **DATAMITE** is no exception. A well planned, vivid, and agile communication and dissemination plan has the potential to achieve maximum impact for the benefit of the project. It should taking into account the possibility of external factors and challenges (such as the recent Covid-19 crisis) that might affect the execution and effectiveness of this plan. Although communication and dissemination are two interlinked activities, in this plan we choose to treat them as different yet closely depended to each other. It is obvious that similarities and convergences exist and will be examined throughout the whole lifespan of the project.

3.1 Communication Strategy

Communication in Research and Innovation projects is “*a strategically planned process that starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results. It requires strategic and targeted measures to communicate to a multitude of audiences, including the media and the public and possibly engaging in a two-way exchange*”³.

In the case of the **DATAMITE** project, Communication activities involve specific measures for promoting the project itself and the results attained. The communication plan has the mission to reach out to a broader audience, beyond the project’s core community (**Figure 6**).

³https://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management/communication_en.htm



Figure 6. EC's Communication Principles⁴



Figure 7. The Marketing Mix

The plan herein has the mission to reach out to the broadest audience possible. Communication campaigns will be implemented throughout the project lifetime to efficiently build traction among the target audience, emphasising on **DATAMITE’s technological innovations and pilots’ activities**. Such campaigns will build upon the **Promotion Mix** — the fourth element of the **Marketing Mix**⁵ (Figure 7)— that focuses on creating awareness and persuading the audience to initiate the engagement. In the case of **DATAMITE**, this Promotion Mix is the integration of **Personal Selling, Digital Marketing, Promotional Material and Branding**.

⁴ <https://ec.europa.eu/easme/en/section/communication-toolkit#3%20-%20social%20media>

⁵ <https://neilpatel.com/blog/4-ps-of-marketing/>

3.1.1 Objectives

The main objectives of the communication strategy are as follows:

- Set up internal communication mechanisms among the partners of the consortium;
- Support the external promotion of **DATAMITE** and its outcomes, managing the branding;
- Deliver top level messages about the project to all identified and relevant stakeholders;
- Raise awareness to non-specialised audiences of the added value of **DATAMITE** and its application in pilot activities;
- Increase awareness and interest about the project.

3.1.1.1 Messages per Stakeholder Group

Table 2. Messages per Stakeholder Group

Stakeholder Group	Main Directions of Messages
Data Stakeholders	<ul style="list-style-type: none"> - How the outcomes of the project will help them in their everyday operations? - What is the innovation of the project? - How can they monetize their data? - How they can get more value of their data?
Technology Providers	<ul style="list-style-type: none"> - What is the innovation of the project? - How this can be used and further exploited? - Open access of project results.
Partnerships & Networks	<ul style="list-style-type: none"> - What is the innovation of the project? - How can the project contribute to standards? - How can we collaborate in wider EU level ensuring a fair data monetisation approach for everyone? - How can we contribute to standards?
Social Innovation	<ul style="list-style-type: none"> - What is the innovation of the project? - How can we establish a fruitful and beneficial collaboration? - How data sharing and data monetisation affect the everyday life a normal citizen?
The Society	<ul style="list-style-type: none"> - How people are affected by data sharing and data exploitation? - How industry 5.0 principles affect our lives?
Policy Makers	<ul style="list-style-type: none"> - What is the innovation of the project? - How this can be used and further exploited? - Open access of project results. - What can we learn through DATAMITE's pilots?

3.1.2 Measures

A series of measures and communication tools will be used to enable to the project to reach the right audiences in a communication friendly and synchronous way.

Table 3. Communication - Personal Selling

Personal Selling			
Measure	Description	Benefit of the Measure	Stakeholders
Email Campaigns	Implementing targeted email campaigns to stakeholders to raise awareness about the projects and its activities.	Broadcasting messages to a target pool of contact points via email is a highly effective measure of engagement, especially when promoting activities and outcomes among different ecosystems.	<ul style="list-style-type: none"> ▪ Data Stakeholders ▪ Technology Providers ▪ Partnerships & Networks ▪ Social Innovation ▪ Policy Makers ▪ Society
One-to-one Phone Calls & Meetings	Follow up activity with targeted stakeholders to engage them into future activities and maintain a constant communication flow.	Although this is not a scalable mechanism, one-to-one phone calls and meetings are successful when targeting very specific key actors, often as a follow-up of an email campaign or an event. For the scope of the project, this is especially relevant when engaging members of the Construction Industry and Digital Transformation Advocates with access to their networks.	<ul style="list-style-type: none"> ▪ Data Stakeholders ▪ Technology Providers ▪ Social Innovation ▪ Policy Makers

Table 4. Digital Channels

Digital Channels			
Measure	Description	Benefit of the Measure	Stakeholders
Project Website	Establish online presence – a website where general public and interested individuals can read about the project progress and findings, including news, articles and public deliverables.	The project website is a key instrument for enhancing visibility of the project, introducing visitors to DATAMITE 's rationale and educates them about the project concept. All project findings are published on the website to allow anyone interested in the subject to follow the progress of the project, while optimising website optimizes DATAMITE on the search engines.	<ul style="list-style-type: none"> ▪ All Stakeholders
Social Media	DATAMITE will create and maintain actively its presence on several social media channels, with particular focus on Twitter	Social media are fast, low-cost channels of reaching interest groups and communities that are	<ul style="list-style-type: none"> ▪ All Stakeholders

	and LinkedIn as they have proven to be the most effective tools when engaging with technology communities.	normally not present at any events or conferences (physical or digital).	
Newsletters	Complementary to email engagement, online newsletters will provide a snapshot of the main activities and achievements. The project will aim to contribute together newsletters by the European Commission or associated initiatives. Professional marketing platforms (ill be used to automate the distribution among all contact points	Project newsletter shows the progress of the project to all stakeholders and keeps their interest high	<ul style="list-style-type: none"> ▪ Data Stakeholders ▪ Technology Providers ▪ Partnerships & Networks ▪ Social Innovation
Press Releases	DATAMITE will develop and distribute press releases to mainstream and specialist media as well as relevant civil society newsletters, magazines and journals. Press releases will be also distributed individually by partners to communicate the project to their network of customers, members and collaborators.	Within the Communication tactic, press releases can also target specific stakeholders depending on the journal/paper/website where the press release is published or distributed.	<ul style="list-style-type: none"> ▪ All Stakeholders
Developer Communities	The project will connect with and run activities in specific communities for developers, targeting those fostering openness and diversity. One of the commitments from the project is to actively advocate for female participation. Particular emphasis will be given to The Eclipse Foundation .	Communicate the project's outcomes and results to communities around Europe, will give the possibility to the consortium to collect valuable feedback (from pilot testing of open source tools) and strengthen the sustainability potential of project outcomes.	<ul style="list-style-type: none"> ▪ Technology Providers ▪ Partnerships & Networks
Marketplaces	DATAMITE will capitalise on available relevant platforms, such as the EOSC Marketplace, the Eclipse marketplace, and the services of the AI-on-demand (AIOD) platform.	The project will offer the project's components and encourage third-parties to use them, collecting valuable feedback.	<ul style="list-style-type: none"> ▪ Technology Providers ▪ Partnerships & Networks

Table 5. Promotional Material and Branding

Promotional Material			
Measure	Description	Benefit of the Measure	Stakeholders

Printed Material	The most common items include brochures, catalogues, posters and any other laid out paper-based resource. Most of the PR material will be available as e-documents and printing will occur as required (e.g., for events, workshops, etc.). DATAMITE will also explore other innovative alternatives to the traditional informative material. Labelled gadgets and merchandise have turned out quite effective means of promoting initiatives among a less specialised audience, while encouraging a more sustainable approach when considering long-lasting items.	Project collateral distributed at various events, conferences, workshops, etc. gain the project visibility with the general public and the national and European media	<ul style="list-style-type: none"> ▪ All Stakeholders
Multimedia Material	The project will produce multimedia material to have a self-explanatory and appealing presentation of the project, leveraging other available distribution channels of promotion (e.g., YouTube, Vimeo). The team will organise a set of video interviews throughout the project to collect inputs, taking advantage of plenary meetings and events of relevance. The final results will be edited to mix such interviews with animations.		<ul style="list-style-type: none"> ▪ All Stakeholders
Slide Decks	Slide decks replace in some cases the website as ‘Point of Market Entry’ of the project, mainly in events, email campaigns and one-to-one meetings. The project will produce several versions to fine-tune content for the target audience and update achievements.	Visual content has been always proved to be a very effective mean for communication	<ul style="list-style-type: none"> ▪ All Stakeholders
Infographics & Banners	Infographics and banners are eye-catching elements to quickly draw attention about the project, its objectives, announcements, partners, or the beneficiaries from the funding instruments. The project designs and produce several elements integrating them on the website, social media and newsletters.		<ul style="list-style-type: none"> ▪ All Stakeholders

3.1.3 Coordination with the Data Spaces Support Centre and related Data Spaces

Effective coordination with the **Data Spaces Support Centre (DSSC)** is essential for the successful deployment and maintenance of data spaces. This section will discuss key milestones

of coordination with the DSSC, and related data spaces and the tasks involved in ensuring effective management and knowledge transfer.

This coordination involves a variety of tasks, including knowledge transfer, announcement of relevant events, and support for the deployment of the **Common European Data Spaces (CEDs)**. The knowledge transfer from the DSSC and Digital Europe to **DATAMITE** is an essential milestone to ensure that best practices and expertise are shared. Additionally, the announcement of relevant events such as webinars or onsite meetings on a European level ensures that stakeholders are informed and engaged in the latest developments in data spaces. Supporting the deployment of CEDs requires coordination with stakeholders and the DSSC, and the appointment of projects spokespersons for relevant stakeholders on the European level regarding data space requirements. Regular joint meetings with the DSSC further facilitate communication and collaboration among stakeholders.

Another essential milestone for effective coordination with the DSSC and related data spaces is the development of a **knowledge management system**. The goal of this system is to help organizations stay informed and up to date on the latest developments in data spaces, so that they can make informed decisions and take advantage of new opportunities for growth and innovation. This includes continuously screening and monitoring updates in the data spaces community such as European Commission announcements and news alerts on websites. The knowledge management system should also capture and disseminate relevant information to stakeholders, organize and deliver relevant training sessions and workshops, and identify and share best practices and success stories from other organizations. By developing an effective knowledge management system and working closely with the DSSC and related data spaces, stakeholders can ensure that data spaces are effectively managed and maintained to promote growth and innovation across various industries and sectors.

3.2 Dissemination Strategy

Dissemination in Innovation Projects is a key and necessary element for achieving the desired impact of the project. According to the European Commission, *“Dissemination means sharing research results with potential users - peers in the research field, industry, other commercial players and policymakers). By sharing your research results with the rest of the scientific*

*community, you are contributing to the progress of science in general.*⁶ To this end, **DATAMITE** has developed a flexible and adjustable Dissemination Plan that will build effective awareness of the project results, creating understanding, and aiming for action among the key target audience identified. The execution of this strategy will facilitate the best use and uptake of the outcomes and research insights generated throughout the project lifetime, reinforcing each of the impacts aimed in the work plan.

3.2.1 “Three Phases” Approach

Dissemination activities will be carried out in **three main phases (Figure 8)**. Each of these has specific objectives and will therefore perform specific actions using appropriate channels. These phases were presented and discussed at the beginning of the project and will be refined accordingly to match the priorities of **DATAMITE**.

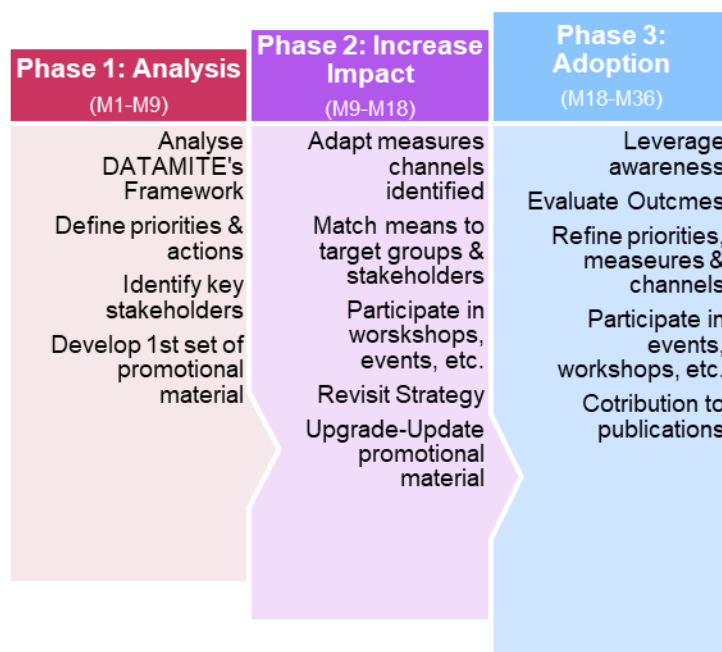


Figure 8. Dissemination Plan Phases

- **Phase I: Analysis (M01-M09).** In this preliminary phase, the Consortium will analyse the project's framework, with a special attention to internal and external barriers and obstacles that could slow down the dissemination activities, as well as defining the priorities and

⁶ https://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management/dissemination-of-results_en.htm

actions for the first year of the project. The Communication & Dissemination Leader will coordinate the engagement activities, to align the dissemination activities with the needs of the stakeholders identified, creating general awareness about the project's objectives and expected results. During this phase, the branding and a first set of promotional materials, produced in the frame of the **DATAMITE** communication plan will be prepared and delivered.

- **Phase II: Increase impact (M09-M18).** The main objective of Phase II is to increase impact and awareness generated during Phase I and to expose mainly the **DATAMITE** achievements. The Communication & Dissemination Leader will adapt the channels and measures identified in the proposal phase (and refined during Phase I) to the specific needs of Phase II, and it will work to properly find the right means to engage and collaborate with the target groups. This will help to increase the potential impact of the project's results. Participation in workshops, organisations of ad hoc events, as well as organisation of tutorials/webinars (if needed) will boost the dissemination process. Specific PR material will be also produced.
- **Phase III: Adoption (M18-M36).** This phase will leverage the general awareness raised in Phase I and Phase II, attracting more potential users and customers of **DATAMITE** project's results. The Communication & Dissemination Leader together with the Exploitation Leader will evaluate the outcomes of Phase I and II and, if needed, refine the priorities, channels and measures previously settled, also in concertation with the agile stakeholder management activities. Secondly, the definition of the main activities that could increase the impact also beyond the project's lifetime, such as continuing use of events, participation in workshops and conferences, contributions to publications in targeted specific media online and printed trade and research journals.

3.2.2 Objectives

The key objectives of the dissemination strategy are as follows:

- To set up the information dissemination mechanisms and priorities of **DATAMITE**;
- To establish, maintain and grow a community around **DATAMITE** in coordination with the stakeholder management framework;
- To create visibility and promote the work and results for target stakeholders by creating promotional materials and information campaigns;

- To disseminate the project and outcomes to the widest possible community through various channels and instruments. External participation and knowledge sharing will be encouraged through networking activities and events aimed at increasing the impact potential and enriching the contribution to the project;
- To conduct liaison with other EU, national and international initiatives to maximise the impact.

3.2.3 Measures

To execute the dissemination plan, the consortium identified a number of measures that need to be implemented throughout the project, to reach the above-mentioned objectives, in the most efficient and effective way.

Table 6. *Dissemination Material*

Dissemination Material			
Measure	Description	Benefit of the Measure	Stakeholders
Project Documentation	Reference material describing and reporting on technical outputs, APIs, architectures, models, guidelines, recommendations, promotional activities and any kind of insights produced by the consortium will be made available in the form of project documentation. Without excluding other formats, such documentation is captured by the project deliverables , making those categorized as 'Public' available openly through a repository and the website.	Publicly available information that can be disseminated to similar to DATAMITE initiatives and to the community as a whole.	<ul style="list-style-type: none"> ▪ Data Stakeholders ▪ Technology Providers ▪ Partnerships & Networks ▪ Social Innovation ▪ Policy Makers
Peer-reviewed Publications	A primary objective is to ensure the project's technical achievements and experimental findings are diffused among and exploited by the larger data innovation community. The project aims to publish and contribute to peer-reviewed publications in top refereed scientific journals and conferences, capitalising on the experience of the consortium.	Disseminate the outcomes of the project to a wide scientific community. Showcasing outcomes makes available to the scientific community for further exploitation.	<ul style="list-style-type: none"> ▪ Technology Providers ▪ Partnerships & Networks ▪ Social Innovation
Awareness Publications	The project has the ambition to widespread awareness of the results, and encourage take-up and validation of the open source	Awareness raising articles can disseminate the project's views and outcomes to a wider	<ul style="list-style-type: none"> ▪ All Stakeholders



	framework, data tools and training material among a broad audience. Awareness publications include blogposts, short articles, etc.	scientific and technical audience, leveraging project's impact.	
Insight Paper	Complementing non-scientific publications, the project aims to publish one Insight Paper expressly oriented to policymakers on the deployment of the Common European Data Spaces . The publication outlines best practices observed throughout the implementation and validation, suggesting lessons learnt and measures to overcome obstacles.	This document is designed to be easy-to-digest, short and straight to policy recommendations. The project also pursues to influence Strategic Research and Innovation Agenda (SRIA) through the active role of some partners.	<ul style="list-style-type: none"> ▪ Partnerships & Networks ▪ Policy Makers
Coding Guidelines	The project aims to facilitate general guidelines to ease external development efforts, including 'code of conduct', 'development environment', 'security guidelines', 'coding style', 'debugging' and 'performance considerations'.	Specialises to the developers' communities guidelines will facilitate a wider penetration of project technological outcomes to the community	<ul style="list-style-type: none"> ▪ Technology Providers ▪ Partnerships & Networks

Table 7. Digital Channels

Digital Channels			
Measure	Description	Benefit of the Measure	Stakeholders
Source Code Repository	Advocating for interoperability and openness, the project will make software repositories accessible through well-known source code management platforms, such as GitHub or GitLab.	This measure facilitates the respect of the open-source best practices such as the Transparency, the Openness and the Vendor-Neutral open collaboration.	<ul style="list-style-type: none"> ▪ Technology Providers ▪ Partnerships & Networks
Open Access to Research	Following the principle 'as open as possible', DATAMITE will provide open access to peer-reviewed publications and scientific research data, following the Data Management Plan. DATAMITE is using Zenodo ⁷ OpenAIRE ⁸ repository, where it is possible to deposit both	"Open Access" Scientific & Technical material allows a wider dissemination of the project's outcome to a wider scientific and	<ul style="list-style-type: none"> ▪ Data Stakeholders ▪ Technology Providers ▪ Partnerships & Networks

⁷ <https://zenodo.org/>

⁸ <https://www.openaire.eu/>

	publications and data, while providing tools to link them. The Zenodo infrastructure will also be used as a document repository for all public deliverables. Whenever possible, the datasets are made openly available via the data.europa.eu, the official portal for EU data.	technological community.	<ul style="list-style-type: none"> ▪ Social Innovation ▪ Policy Makers
HelpDesk	The project will setup a corporate contact point for all stakeholders (e.g., info@datamite.eu), with a 72-hour reply commitment, that manages general inquiries, collaboration requests, bug-tracking and feature requests. This channel will be completed with a FAQ section on the website for common problem-solving. The project dedicates specific support channels, informing about relevant milestones and news, as well as supplying technical assistance.	An efficient and effective helpdesk ensures a smooth communication pipeline with the community strengthening the bonds and trust of the project with its ecosystem.	<ul style="list-style-type: none"> ▪ Data Stakeholders ▪ Technology Providers ▪ Partnerships & Networks

Table 8. Events

Event			
Measure	Description	Benefit of the Measure	Stakeholders
Webinars / Workshops	The project will organise, co-organise or participate in several workshops and webinars related to the project. These events will facilitate hands-on training and exchange of ideas related to the modules, providing opportunities for round table discussions, mentoring and development. Some events are restricted to the consortium and 'invitation-only' players, while others are public, targeting training resources. Webinar sessions will be promoted in referent sites recorded, edited, and ultimately uploaded as educational multimedia resources and knowledge pills for each training itinerary.	Participating and organising/co-organising, workshops and webinars is a strategic mechanism to interact actively with multiple stakeholders at a time.	<ul style="list-style-type: none"> ▪ All Stakeholders
Conferences / Fairs	Participating in conferences and trade fairs is a strategic mechanism to interact actively with multiple stakeholders simultaneously, covering the European and international range.	Showcasing the project's tangible outcomes through exhibitions and demo events, allows the dissemination of concrete outcomes to a wider audience.	<ul style="list-style-type: none"> ▪ All Stakeholders

Working Groups	A strength of the project is the active participation of the consortium in working groups. Such task forces bring together existing community efforts to drive common discussions and strategies. Special attention to build technical and promotional synergies with the project cluster under HORIZON-CL4-2022-DATA-01-04, while bridging the gap with the cluster H2020-ICT-13-2018-2019.	Participation in working groups, enhance the networking capability of the project while allowing the penetrations of project's outcomes to a wider community.	<ul style="list-style-type: none"> ▪ Data Stakeholders ▪ Technology Providers ▪ Partnerships & Networks ▪ Social Innovation ▪ Policy Makers
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3.2.3.1 Events List

The list below is an indicative list of events that have been identified as main targets. This list is continuously updated by all project partners while actions per event and per partner being identified and assigned, depending on the maturity of the project. It is also crucial to mention that many events (if not all of them) are transforming to virtual (from physical) because of the recent Covid-19 emergency. **DATAMITE** aims to get involved regardless of the form of the event.

Table 9. Events List

Event	Date	Location	Short Description
<u>National Field Days</u>	03-05.06.2023	Sielinko, Poland	National Field Days in 2023 include Innovation Zone that present new initiatives, products and projects for agriculture. One of innovation is Datamite project. The data spaces and governance are the point of workshops located in The Innovation Zone.
<u>Data Week 2023</u>	13-15.06.2023	Luleå, Sweden	Data Week 2023 is the spring gathering of the European Big Data and Data Driven AI research and innovation communities. In Data Week, the participants share knowledge and results, discuss topics of common interest, find synergies, build new collaborations, and identify new challenges and recommendations. Data Week also links the communities and their results to the European policies and market needs and brings European initiatives and activities closer to local communities.
<u>EGI2023</u>	19-23.06.2023	Poznań, Poland	At the annual EGI conference, international scientific communities, computing and service providers, European projects, security experts, community managers, and policy makers gather to take research and innovation in data-intensive processing and analytics forward.
<u>EclipseCon 2023</u>	16-19.06.2023	Ludwigsburg, Germany	EclipseCon is the leading conference for developers, architects, and open-source business leaders to learn about Eclipse technologies, share best practices, and more.

			EclipseCon connects the Eclipse ecosystem and the industry's leading minds to explore common challenges and innovate together on open-source runtimes, tools, and frameworks for cloud and edge applications, IoT, artificial intelligence, connected vehicles and transportation, digital ledger technologies, and much more.
<u>Open Source Experience 2023</u>	6-7.12.2023	Paris, France	Supported by Systematic Paris Region, the Open Source Experience is the meeting place for the entire open source software industry, bringing together more than 4,500 professionals over two days! A place for technological exchanges, meetings and business opportunities dedicated to open source and to all the players in the open-source sector. Open-Source Experience focuses on open source technologies, solutions and challenges in France and Europe, and highlights the driving role of open source innovations in the digital transformation of companies in technologies such as AI, IoT, Cloud and Blockchain.
<u>EOSC Symposium 2023</u>	20-22.09.2023	Madrid, Spain	EOSC Symposium is a fully hybrid event, facilitating broader exchanges between stakeholders from ministries, policy makers, research organisations, service providers, research infrastructures and research communities driving the development of – and engagement with – the European Open Science Cloud. In the context of the EOSC Future project, the EOSC Symposium will also be a critical platform to showcase project achievements and key exploitable results.
<u>Open Science Fair 2023</u>	25-27.09.2023	Madrid, Spain	Open science (also referred to as Open Scholarship or Open Research) is at a crossroads. Implementation and adoption are progressing, with researchers, research institutions, funding agencies, service providers and infrastructures all engaging at various levels. However, different models are emerging which produce a seemingly fragmented ecosystem and achieve small steps on top of traditional scholarly communication system. In order to enable international and interdisciplinary research, we need to ensure interoperability across communities and services while still maintaining our ability to support diversity of workflows and knowledge systems
European Big Data Value Forum (EBDVF)	25-27.10.2023	Valencia, Spain	The European Big Data Value Forum (EBDVF) brings together industry professionals, business developers, researchers and policy-makers from all over Europe and other regions of the world to advance policy actions, and industrial and research activities in the areas of Data and AI.

3.2.3.2 Conference and Journals List

The following list introduces some of the conferences and journals that the project will emphasise on. However, this list is dynamic and it will be updated on a frequent basis according to the scientific and technical maturity of the project.

Table 10. Conferences & Journals List

Title	Type
IEEE transactions on parallel and distributed computing (TPDS)	Journal
IEEE Transactions on Big Data	Journal
MDPI Future Internet journal	Journal
International Symposium on Grids and Clouds (ISGC)	Conference
IEEE Open Access Journal of Power and Energy	Journal
CODATA Data Science Journal	Journal
Big Data Research	Journal
IFIP International Conference on Artificial Intelligence Applications & Innovations	Conference
International Journal of Data Science and Analytics	Journal
International Conference on Data Science and Competitive Intelligence	Conference
Big Data Analytics Europe	Conference
DataConnect Conference by women in analytics	Conference
International Conference on Data Science (ICDS)	Conference
International Conference on Big data and Data Sciences (ICBDDS)	Conference
International Conference on Data Science and Business Informatics (ICDSBI)	Conference

3.3 Communication & Dissemination Monitoring

3.3.1 Monitoring Strategy

Monitoring and adjusting the Communication & Dissemination plan, on a frequent basis, is a fundamental element of the project's success. Continuous monitoring allows the consortium to correct any possible deviations and improve its effectiveness by applying correction and mitigation measures when needed.

It will also address possible implementation problems and identify whether further action is required to ensure that objectives are met. Emphasis is given on the pre-assessment of

information needs, on the monitoring frequency (in a monthly basis) and the method of collecting evidence.

The execution and effectiveness of the Communication & Dissemination plan is dependent on close monitoring, and a flexible and prompt response mechanism (**Figure 9**). Every designed and implemented activity will be monitored and evaluated according to its impact and closely related to the KPIs (see **7.1 Communication & Dissemination KPIs**).

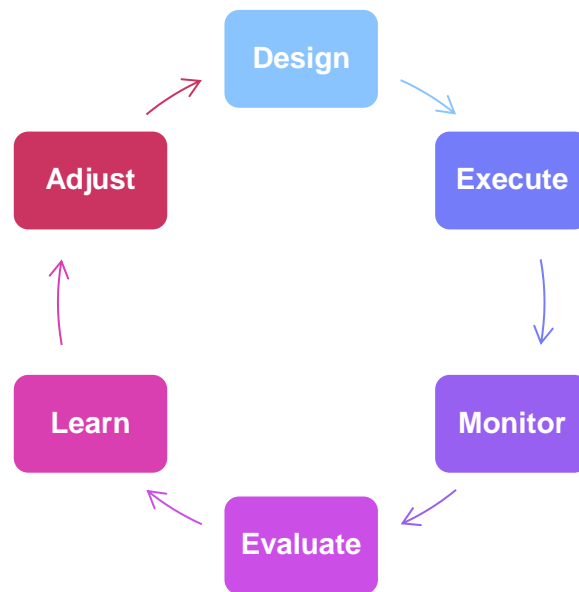


Figure 9. *Communication & Dissemination Loop*

- **Design:** Design is activity based on the Communication & Dissemination Plan and the desired impact;
- **Execute:** Execute according to plan;
- **Monitor:** Closely monitor the activity and collect input and results. Monitoring will be based on a template that is available only to partners through the internal website;
- **Evaluate:** Evaluate the outcomes of the activity in a collaborative way according to the desired targets set in the design phase;
- **Learn:** Learn through this evaluation and try to extract the most valuable outcomes out of it;
- **Adjust:** Absorb findings and lessons learnt adjust the plan accordingly, if needed.

All outcomes and results of the Communication & Dissemination Plan will be reported in **D6.2 Dissemination, Communication and Engagement Report** at Month 18 and **D6.3 Dissemination, Communication and Engagement Report** at Month 36.

3.3.2 Possible Risks

There are several risks and potential issues related to the communication and dissemination side of the project. These risks will be monitored and mitigated by the Communication & Dissemination leader who will also control these risks on a regular basis and will report any changes to the Project Coordinator. Examples of communication risks include but are not limited to:

Table 11. Dissemination & Communication Risks

Communication & Dissemination Risks		
Risk	Priority	Measure to minimise Risk
Communication & Dissemination activities fail to target the correct audiences. The project may fail to draw interest from relevant stakeholders.	High	DATAMITE partners have defined a clear set of objectives and measures for each target group. However, this agile strategy allows us to revisit and mitigate our activities if needed. Close monitoring and frequent evaluations will make sure that our strategy will remain on track throughout the project.
Lack of public awareness of Project activities	Low	The network is diverse and includes leading scientists, industrial partners, end users, standardisation partners, etc. most of them affiliated to international Committees that guarantee relevant connections and channels. If needed, extra budget coming from indirect costs or own resources will be directly allocated to perform any needed foreseen or unforeseen mitigation measures to meet project goals.
Lack of partner's engagement	High	DATAMITE partners have developed a concrete communication and dissemination strategy, supported by internal dissemination and communication manuals and guidelines, monitoring procedures and internal reviews enabling them to assess, both from a quantitative and a qualitative perspective, project's performance and engagement of partners. Also, the "6 months sprint" approach (described in Section 2) allows both proactive and reactive actions to be taken, whenever partners or the consortium as a whole underperforms.

4 Exploitation & Sustainability Strategy

Research and innovation have been placed at the centre of the European strategy to promote smart, sustainable, and inclusive growth. While one can debate what constitutes a healthy relation of industry and basic research, there is no doubt that a knowledge-based society prospers with the innovativeness of its engineers and the skills of its scientists. It is emphasized *that “research is an investment in our future and so put it at the heart of the EU’s blueprint for smart, sustainable and inclusive growth and jobs”*⁹. For this reason, exploitation is a key ingredient for any Horizon Europe project as it clearly refers to *“the utilisation of results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardisation activities”*¹⁰.

In the following sections, we have specified our preliminary exploitation strategy and the required steps aimed at identifying sound business models, replicable to various markets. The main objective of the exploitation activities is to position the **DATAMITE** project among the identified key stakeholders and maximise its impact during its life through the execution of different activities involving the offline and online world.

4.1 Exploitation principles

DATAMITE recognises **three main** exploitation models (**Figure 10**) for the project results:

- **Commercial exploitation model**, which implies the paid provision of the project results to the end users, complying with a licensing scheme that will be defined at a later stage.
- **Research exploitation model**, which implies the use of the research know-how acquired in future research activities.
- **Technological exploitation model**, which implies the use of the technological know-how gained for the development of innovative products and the provision of advanced services built on top of them.

⁹ Horizon 2020 - The Framework Programme for Research and Innovation. COM(2011) 808 final, p.2. Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0808&from=EN>

¹⁰ http://ec.europa.eu/research/participants/portal/desktop/en/support/reference_terms.html

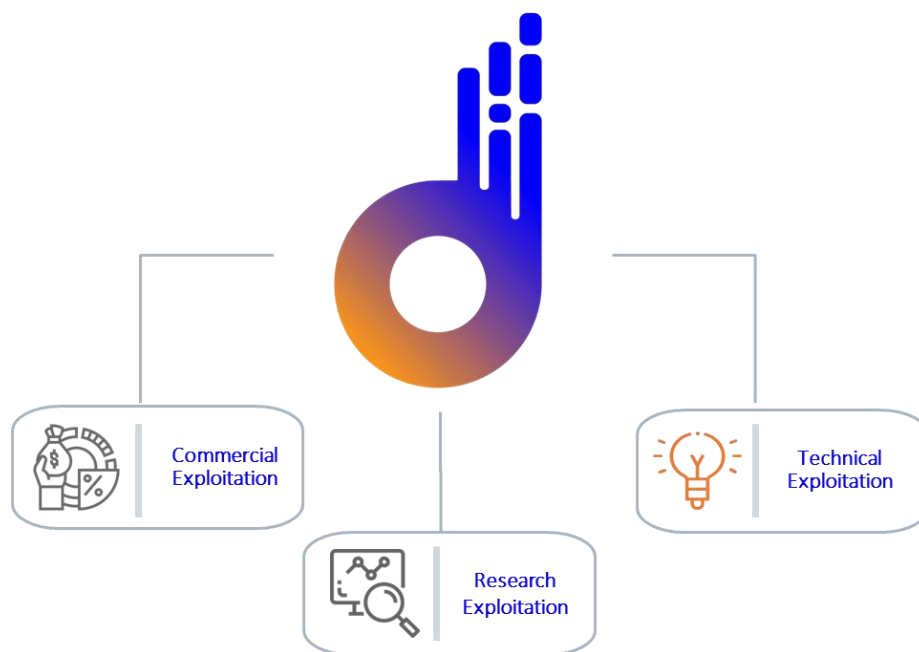


Figure 10. Exploitation Models

All three routes will be explored independently as the project evolves while the most appropriate exploitation model will be selected. At this point, it is important to highlight that **DATAMITE** will produce several exploitable results. All exploitable results will be treated on equal terms therefore the most appropriate model for each one will be proposed. However, it also needs to be addressed that the exploitation models of the project's results will be dependent upon three main parameters:

- the nature and interests of the project partners and stakeholders in general,
- the distribution model (commercial or non-commercial) of the project results, and
- the distribution of the IPRs amongst the project partners.

Based on these limitations:

- **DATAMITE** industrial partners are mainly interested in commercially exploiting the project results,
- the consortium (as well as external) **academic and research organisations** are mainly interested in adopting the research exploitation model for project results that will be provided as open-source components, integrating them in their research and/or teaching activities and/or setting up future research projects further promoting the project results, and
- **external industrial partners** are mainly interested in adopting the technological exploitation model for the project results.

4.1.1 DATAMITE added value

DATAMITE delivers a modular, open-source and multi-domain Framework, to improve DATA Monetizing, Interoperability, Trading and Exchange, in the form of software modules, training and business materials for European companies, empowering them to become new relevant players in the data economy.

DATAMITE unleashes the monetisation potential at two levels: internal and external. At an internal level, users have tools to improve the quality management of their data, the adherence to FAIR (Findable, Accessible, Interoperable, Reusable) principles, and are able to upskill on technical and business aspects. Therefore, data becomes trustable, reducing the data-decision gap, and more reliable also in other paradigms like AI. At an external level, keeping users in control of their data provides new sources of revenue and interaction with other stakeholders, e.g., in ecosystems like the International Data Spaces (IDS), data markets or the European Open Science Cloud (EOSC). In addition, the architecture envisioned for **DATAMITE** enables DIHs sandboxing, becoming a potential instructor on their onboarding of SMEs and low-tech SMEs into the data economy. Together, **DATAMITE**'s solutions function as a catalyst to boost data monetisation in the European productive fabric.

4.1.2 Knowledge management and protection strategy

The basic principles concerning intellectual property rights (IPR), background and results, access rights, and rights of use are described in the DoA.

DATAMITE will consider three main elements of an effective system to protect and exploit Intellectual Property (IP):

- **Firstly**, a system that enables the protection of IP (e.g., patents, copyrights, brand, industrial design) that includes clarity about the ownership and use of IP rights (IPR), the rights and freedom of parties to transfer (assign) IP, and the freedom to publish.
- **Secondly**, a technology transfer framework, preferably with the support of specialised knowledge transfer offices with professional staff, such as the European IPR Helpdesk.
- **Thirdly**, a fair law enforcement system in each partner's country caters to dispute settlement and can award penalties and sanctions where appropriate.

Specific IPR issues are identified and addressed in the **Consortium Agreement**. The basic principle is that:



- Foreground knowledge, i.e., created within (or resulting from) the project, belongs to the project partner who generated it.
- If knowledge is developed jointly and separate parts cannot be distinguished, it will be jointly owned unless the concerned contractor agrees on a different solution.
- Background: As per the Grant Agreement (Article 16.1) background is defined as “data, know-how or information (...) that is (...) needed to implement the Action or exploit the results”. Because of this need, Access Rights must be granted in principle, but Parties must identify and agree amongst themselves on the Background for the Project. These specifications are in Attachment 1 of the Consortium Agreement, including:
 - Description of Background
 - Specific restrictions and/or conditions for implementation (Article 16.4 Grant Agreement and its Annex 5, Section “Access rights to results and background”, sub-section “Access rights to background and results for implementing the Action”)
 - Specific restrictions and/or conditions for Exploitation (Article 16.4 Grant Agreement and its Annex 5, Section “Access rights to results and background”, sub-section “Access rights for exploiting the results”)

4.1.2.1 Joint Ownership of Results

Joint ownership is governed by Grant Agreement Article 16.4 and its Annex 5, Section Ownership of results, with the following additions:

Two or more beneficiaries own results jointly if:

- they have jointly generated them, and it is not possible to: establish the respective contribution of each beneficiary or separate them for the purpose of applying for, obtaining or maintaining their protection.

The joint owners must agree — in writing — on the allocation and terms of the exercise of their joint ownership (“joint ownership agreement”), to ensure compliance with their obligations under the Grant Agreement.

4.1.2.2 Transfer of Results

Each Party may transfer ownership of its own Results, provided this does not affect compliance with their obligations under the Grant Agreement, as stated in Article 16.4 and its Annex 5, Section Transfer and licensing of results, sub-section “Transfer of ownership” of the Grant Agreement.



The beneficiaries must ensure that their obligations under the Agreement regarding their results are passed on to the new owner and that this new owner has the obligation to pass them on in any subsequent transfer.

Moreover, they must inform the other beneficiaries with access rights of the transfer at least 45 days in advance, unless agreed otherwise in writing, for specifically identified third parties, including affiliated entities or unless impossible under the applicable law. This notification must include sufficient information on the new owner to enable the concerned beneficiaries to assess the effects on their access rights. The beneficiaries may object within 30 days of receiving notification (or less if agreed in writing) if they can show that the transfer would adversely affect their access rights. In this case, the transfer may not take place until an agreement has been reached between the beneficiaries concerned.

In case a Party intends to transfer its share of a joint Result, the other joint owner(s) shall have a pre-emptive right to acquire said joint Results.

Each Party may identify specific third parties it intends to transfer the ownership of its Results in Attachment (3) of this Consortium Agreement. The other Parties hereby waive their right to prior notice and their right to object to such a transfer to listed third parties according to the Grant Agreement Article 16.4 and its Annex 5, Section Transfer of licensing of results, sub-section “Transfer of ownership”, 3rd paragraph.

The transferring Party shall, however, at the time of the transfer, inform the other Parties of such transfer and shall ensure that the rights of the other Parties under the Consortium Agreement and the Grant Agreement will not be affected by such transfer. Any addition to Attachment (3) after the signature of this Consortium Agreement requires a decision of the Steering Committee.

The Parties recognise that in the framework of a merger or an acquisition of an important part of its assets, it may be impossible under applicable EU and national laws on mergers and acquisitions for a Party to give at least 45 calendar days prior notice for the transfer as foreseen in the Grant Agreement. The obligations above apply only for as long as other Parties still have - or still may request - Access Rights to the Results.

4.2 Exploitation and Sustainability Plan

In **DATAMITE**, exploitation will be tackled in a multidimensional way, aiming to take advantage of all the high-end, innovative outcomes of the project. Different exploitation routes will be examined throughout the project to identify the most promising exploitation path for each tangible or intangible asset. The figure below provides a graphical overview of the **exploitation path (Figure 11)** that each **exploitable asset** will follow throughout the lifetime of the project.

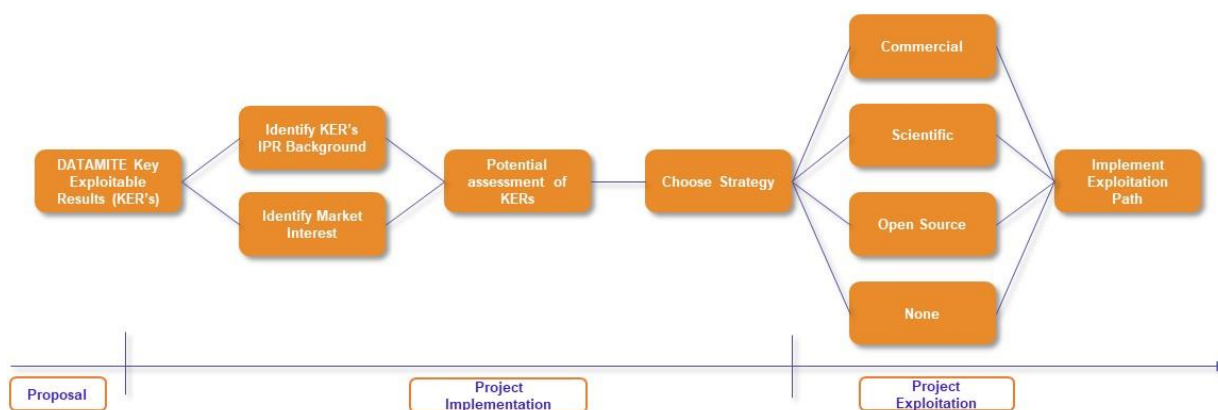


Figure 11. Exploitation Path

4.2.1 Key Exploitable Results & Strategy

Key Exploitable Results (KERs) are the project's exploitable results, including the knowledge generated and published, the framework of technical features and services released, as well as the strategic relationships created among critical stakeholders.

The consortium has identified the **Five Key Exploitable Results** that will be of prime interest. Although additional results may be revealed throughout the project's lifetime, independently assessed and tested.

Table 12. KER #1

KER #1: DATAMITE ARCHITECTURE REFERENCE IMPLEMENTATION (WP1)	
Short Description	Reference implementation of the DATAMITE Architecture developed in T1.5.
Background IP	Knowledge of IDS RAM Experience on the design & implementation of data platforms (e.g., ICT-13 projects DataPorts, DataVaults, Musketeer, Trust), and the integration and compatibility of open-source components.
Exploitation Strategy	An open-source release provides valuable know-how to the European ecosystem, helping interested organisations and individuals to get a full understanding of the architecture and its APIs. With this approach, DATAMITE aims to be a de facto reference for future developments, invaluable increasing the outreach of the project.

Table 13. KER #2

KER #2: DATAMITE OPEN-SOURCE CORE SUITE (WP2, WP3)	
Short Description	Suite of all core open-source DATAMITE modules (DSM, DQM, DGM, DSEM, DSTM) to improve data monetisation by providing data governance, quality, security, exchange and sharing functionalities.
Background IP	Knowledge of theIDS Rulebook; IDS reference testbed, Data spaces connector & Information
Exploitation Strategy	Provide value to the European Data Ecosystem, empower European companies to better manage data for improved monetisation opportunities, avoiding costly licenses, and build up among the different communities represented in the consortium. The strategy of this KER is to involve as many actors as possible around DATAMITE , guaranteeing technical & commercial success of the other KERs. As an open-source suite, it is unrestrictedly available online and specific ecosystem building actions are undertaken to maximize the impact of this KER.

Table 14. KER #3

KER #3: DATAMITE MONETIZING STRATEGIES (WP4)	
Short Description	Know-how & open-source training materials generated in the project, tailored to support the development of business skills of DATAMITE adopters.
Background IP	Technical knowledge on the existing open-source components to be used as building blocks (IDS connectors, Apache Atlas & Ranger, Trino). IDSA & SITRA rulebooks offer tools and agreement templates to facilitate data ecosystems building (1001Lakes and IDSA).
Exploitation Strategy	The publication of these open-source materials serves two main intents: 1) Attract a business user base into DATAMITE , and 2) Upskill employees, allowing staff to understand business strategies and gain a holistic knowledge on data monetizing, improving their decision making. A well-documented platform is attractive.

Table 15. KER #4

KER #4: DATAMITE ADVANCED COMPONENTS (WP2, WP3)	
Short Description	Additional modules that provide advanced features and specific enhanced capabilities to the core framework developed within the project.
Background IP	Previous experience in the development of anonymisation algorithms, big data analytics tools, detection of biases in data assets, or integrity verification and privacy enforcement mechanisms.
Exploitation Strategy	Improve the capabilities of DATAMITE experienced users with advanced components developed in parallel to the open-source ones, which can be individually acquired and target to specific user needs & industry domains. A commercial plan for licensing these components will be generated at an early stage of the project.

Table 16. KER #5

KER #5: DATAMITE BUSINESS & TECH SAVVY (WP4, WP5)	
Short Description	Technical and Business IP generated in the project and acquired by Expert Organisations that are able to provide Consulting, Support and Training services to end-users interested in deploying and/or being compliant with DATAMITE reference implementation.
Background IP	The project leverages certification models from ongoing initiatives such as the BDVA i-Spaces (led by ITI) or EDIHs, considered a well-prepared structure to help in the adoption of project results.
Exploitation Strategy	Consortium members are in the position to capitalise on a pool of Tech Experts with the business & technical savvy to provide consulting services to 3rd-parties interested in implement/deploy/adapting DATAMITE . These customers may request personalised assessments to satisfy corporate needs or specific trainings. Consortium partners are labelled as DATAMITE Tech Experts, becoming certified Tech Trainers for future Experts.

4.2.2 Business case

A preliminary Business Case was elaborated at the proposal stage to present the business logic inherent to **DATAMITE**, assessing the market, its driving factors, the unique proposition of the project, the benefits to be created and a preliminary business model to generate revenues and serve customers.

Table 17. DATAMITE Business Case

BUSINESS CASE
<p>Market Overview: According to the baseline scenario developed by IDC and Lisbon Council, the Data Market is forecast to reach €82.5 billion in the EU27, in 2025. The Data Economy is going to grow faster than the Data Market¹¹, thanks to a positive multiplier impact of data innovation on the economy, reaching a value of €550 billion in the EU27, in 2025. The European data market scenario 2025 for EU27 is 173.000 Data companies; the data suppliers' revenues is estimated at €99Bn. The 2025 scenario are shaped by a combination of economic and social drivers focused on the diffusion of data-driven innovation, driven by demand-supply dynamics and the social and economic data governance model enabling a fair and competitive economy, as indicated by the European Data Strategy. IDC estimates that the growing Industry Digital Ecosystem market in Europe, on average, 30% of Global 2000 company revenue (by 2026) is going to derive from industry ecosystem shared data, applications, and operations initiatives with business networks¹².</p>
<p>Needs: The achievement of the objectives of European data economy depends on overcoming the arising challenges.</p>

¹¹ The European Data Market Monitoring Tool. Final Study Report'. European Commission, Jun 2020

¹² Source: IDC FutureScape: Worldwide Future of Industry Ecosystems 2022 Predictions

- **Data volume:** As reported by Statista¹³, the total amount of data created, captured, copied, and consumed globally is forecast to increase rapidly, reaching 64.2 zettabytes in 2020. By 2025, global data creation is projected to grow to 180+ zettabytes. With such volume, instant reactivity to events can only be achieved by shifting processing capacity and intelligence closer to the data sources.
- **Data management rules:** The Digital Services Act and Digital Markets Act aim to create a safer digital space where the fundamental rights of users are protected and to establish a level playing field for businesses. On the other hand, European regulation on the free flow of non-personal data, together with the General Data Protection Regulation, raises legal certainty for cloud users by ensuring the free movement of all data in the EU.
- **Fragmentation of EU market:** Europe has difficulties to match demand and provide a reliable alternative to global hyperscale providers. It currently features a fragmented offering of solutions that are independently innovative, but that struggle to meet users' needs in terms of end-to-end coverage and ability to scale for the massive transformations.
- **Supply-Demand Dimension:** The number of data suppliers continue to grow at a faster pace than the numbers of data users in the longer term (out to 2025). Data suppliers are estimated at almost 149,000 in the EU27 for 2019, while data users, instead, are amounting to nearly 535,000 in the EU27. Revenues generated by data suppliers have registered a constant increase through the last years to reach nearly €64 billion in 2019. Forecasting data companies' revenues shows an expected annual growth rate out to 2025 of 7.0%¹⁴.
- **Skills shortages and lack of expertise:** The number of data professionals is increasing to 9.3 million in the EU27 by 2025. It is estimated a potential data skills gap of approximately 759,000 unfilled positions in the EU27 by 2025, corresponding to 8.2% of total demand. Increased reliance on data technologies requires new skills and roles. Smaller organisations generally lag large firms to adopt data-intensive technologies and many struggle to recruit and retain the operatives and technicians they need.

Benefits: The open-source framework designed by **DATAMITE** results in several benefits.

- **End-to-end performance:** AI-driven infrastructure and workload optimisation reduces the amount of data sent to the cloud, enabling real-time operations, optimising the operation of systems and services, and improving security.
- **Market openness and competitiveness:** **DATAMITE** offers a completely interoperable, open, multi-vendor platform that can be used by service providers and system integrators – explicitly SMEs – to offer their assets more broadly and towards a wide customer portfolio, while accelerating innovation for industry-specific needs; in the end, effectively empower European companies to exploit data monetizing. DIHs can enrich their product and service portfolio towards their customers, offering better value propositions and increasing market competitiveness.
- **Trustworthiness:** Trusted orchestration mechanisms are needed in the transition towards more software-driven components and systems, facilitating collaboration across data stakeholders and system integrators. This encourages businesses to share data more open and frequently, lessening concerns on theft of trade secrets and customer poaching.
- **Interoperability:** Based on Europe-wide defined or adequate international standards, the development of joint services and offers is necessary to guarantee a high degree of interoperability, portability and reversibility of infrastructure and data. Interoperability inside one vertical or cross-vertical is a must.
- **Policy-making:** Policymakers can identify and test how to implement the data governance act and data act and identify policy and regulations gaps. Standardisation bodies contribute to data spaces emerging standards. EU Data spaces initiatives benefit from findings on testing their technologies

¹³ Volume of data/information created, captured, copied, and consumed worldwide from 2010 to 2025'. Statista, Jun 2021

¹⁴ The European Data Market Monitoring Tool. Key facts & figures, first policy conclusions, data landscape and quantified stories. European Commission, Jun 2020

and support the convergence efforts. Citizens benefit indirectly by better data-driven services, more sustainable and environmental solutions and data-driven culture.

Business Model: DATAMITE unlocks new business opportunities among the data stakeholders. Industries can capitalize on their interoperable datasets and newly digital twin processes, while technology providers – especially small players –strengthen their market position as infrastructure and service suppliers. In this scenario, the project envisions three major revenue streams: (1) subscription fee to the integration of the cognitive layer, that include operating licence and maintenance; (2) commercial business agreements with third-party device suppliers and module developers/integrators to certify/integrate their assets with **DATAMITE** framework, including access to datasets through APIs; (3) training/certification material, facilitating digital upskilling.

4.2.3 Exploitation Phases & Next Steps

The actual exploitation plan(s) for any exploitable asset of the project, will be elaborated and updated according to project needs and evolutions taking place throughout the project duration.

This will be done during eight different phases (**Figure 12**):

- **Phase 1:** Market insights and business requirements.
- **Phase 2:** Define project’s value proposition.
- **Phase 3:** Business requirements validation.
- **Phase 4:** Business Model.
- **Phase 5:** Identify and explore open issues.
- **Phase 6:** Seek partners’ buy in.
- **Phase 7:** Consolidation.
- **Phase 8:** Go-to-market, long-term sustainability, and potential commercialisation.

What is important to mention at this point is that the above-mentioned phases are subject to review and refinement during the following months and according to the needs and requirements of the project.

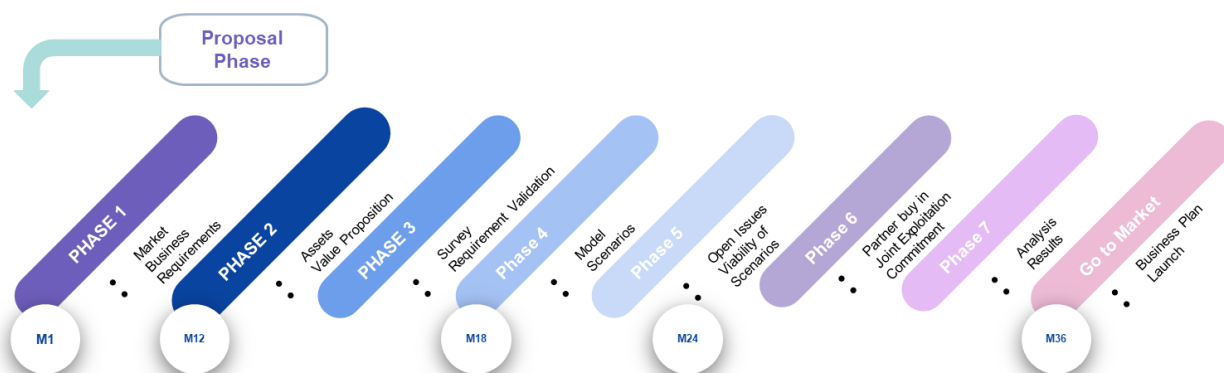


Figure 12. Exploitation Plan Phases



Phase 1: Market insights and business requirements (M12): For the potential commercialisation of a new innovative product, it is essential to have in-depth knowledge of the market and the clients that you want to serve. During **DATAMITE**, different models will be used to get in-depth knowledge of the market:

- **Market insight model:** instructs the team to begin with listing market trends that are specific to their proposition. These market trends help zero down on the target groups the team would want to focus on for their offering. Based on the market trends, the next step is to identify the needs of each of the target groups.
- **Client insight model:** Helps in better understanding the needs of the target groups. The target group is the buyer of the service; however, there are other stakeholders for this buyer, and it is as crucial for the offering to cater not only for the needs of the buyer but also its most important stakeholders.
- **Competition insight model:** Two of the needs identified in the market insight model are plotted on the model. It helps the team determine to what extent the proposition caters to these two needs and hence plot the **DATAMITE** platform as a solution provider accordingly. When plotted against competitors with offerings in the same space, the model helps identify the whitespaces and translate to differentiation.

The market is explored using standard tools, such as **SWOT**¹⁵ and **PESTEL**¹⁶ and so on, to identify and to quantify the market for future forecasting.

Phase 2: Explore the project activities and derive a value proposition (M12): By applying common techniques from the management literature, the activities carried out by the project will be analysed for the value they create, to whom and by whom. These activities are then organised into a strong statement(s) that represents the flow of value in the project.

Phase 3: Business requirements validation (M12-M18): In the third phase, a survey to test market readiness of the first results of the project with possible future clients will take place. In the survey, all results will be presented to future clients, and they will be asked if in the future they would be interested in such a product, if the product covers their business requirements, if they

¹⁵ https://en.wikipedia.org/wiki/SWOT_analysis

¹⁶ <https://corporatefinanceinstitute.com/resources/management/pestel-analysis/>



would like to pay for it and how much, what they see as the strong and weak points of the product, etc. The **DATAMITE** team will instantiate a build-measure-learn feedback loop. **DATAMITE** achievements will be continuously validated by potential customers (target group). The survey will consist of questionnaires, focus groups and open discussions.

Phase 4: Business model (M12-M18): Besides market insight, it is also very important to have a good business model to bring the new product(s) successfully to the market. A business model describes the rationale of how an organisation creates, delivers, and captures value. For the development of the business model, we shall rely on the ‘Business Model Canvas’, from Osterwalder, Pigneur & al¹⁷. This is probably the most popular tool used to design the operations of a new or refocused business. In accordance with the building blocks of the business model canvas, the team will be challenged during this phase of the Fast Track to answer the questions regarding the market, the organisation, and the pricing and business case. Additionally, a chain of sequential and parallel activities of the project will be created. Thanks to the analysis of these activities and having in mind the **DATAMITE** business model, the **DATAMITE** consortium will create multiple business scenarios that partners will be willing to follow. The identification of revenue streams and cost centres per scenario is the final step of this phase.

Phase 5: Identify and explore open issues (M24-M28): In the first iteration, the open issues to be identified cover the description, pros, cons, caveats and assumed viability of the scenarios. This translates to the key activities, value, clients, and key partner’s aspects of the Osterwalder canvas. **This first iteration concludes in M18.** In the second iteration, key resources, relationships, and channels are also examined. This completes the business model canvas. **This iteration will last from M24 to M28.**

Phase 6: Seek partner buy-in (M28-M30): In the first iteration of this phase, partners are requested to provide their initial impression of the models and then to explore internally how their individual motivations, activities and existing partnerships can support each model. This complements the viability analysis of step 3 (where the scenario is considered in isolation) by also considering the viability of the partners to deliver the scenario. This step is also part of the

¹⁷ Osterwalder, Alexander; Pigneur, Yves; Clark, Tim (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Strategyzer series. Hoboken, NJ: John Wiley & Sons. ISBN 9780470876411. OCLC 648031756



individual exploitation analysis. **This iterative step lasts from M18 to M20.** In the second iteration, partners must state which resources and investments they can commit to the project and which roles they will accept in the post-project sustainability scenario. This step is synonymous with the joint exploitation plan/joint exploitation commitment of the partners. This step runs **from M28 to M30.**

Phase 7: Consolidation (M20-M24, M30-M32): In both iterations, this step includes consolidating all the work and data collected during the period, including individual exploitation plans, joint exploitation leads, business modelling, market data, stakeholders' feedback, and technical results. **This step runs from M20 to M24 and from M30 to M32.** The output of the first iteration will be delivered in the intermediate exploitation report, while the output of the second will be in the final report.

Phase 8: Go to market (M32-M36): The final phase of the Fast Track is the development of a 'Go to Market' plan. This step takes the output of the iterations, covering both the theoretical models proposed, the partner's intentions and commitments and the data through the use cases and stakeholder discussions to derive a **full business plan** for the implementation of the solution. The selected business scenario is taken as the baseline for exploitation. The completed business model canvas will complement this value proposition with other aspects of the business model and is then specified using financial projections. IPR agreements and interim results to generate the business plan are also finalised in this plan. This plan is ratified by project partners and any changes to the project and partner roles are implemented to prepare for a transition phase towards the new model. **This step runs from M32 to M36.** This will be described in the final exploitation report.

The intensity of exploitation activities will vary in the project based on the delivery of the project results. In this context, the first preliminary plan and ideas are presented in the present Impact Master Plan.

Then, with the collaboration of the consortium, we will intensify our activities with amore analytical definition of all possible commercial and non-commercial exploitation models and definition and evaluation of the sustainability and viability of possible business models and alternative solutions.

The peak of exploitation activities will be prior to the delivery of the project's results when the project dissemination activities will also be intense with the purpose of reaching and attracting potential stakeholders and customers.

5 Standardisation Strategy

Standardisation is a strategic tool. It aims for several goals to conduct standardisation activities within **DATAMITE**: Enhancing the quality and interoperability of the developed **DATAMITE** results, using a European and international network for their sustainable and long-term dissemination and improving user acceptance by complying with the latest standards. As task leader and responsible partner for the standardisation activities in **DATAMITE**, DIN acts as a link between the standardisation community and the project consortium.

The following standardisation key objectives within **DATAMITE** are set for the most efficient utilisation of the pursued standardisation activities:

- Investigate published and under development standards, as well as relevant technical committees at EU and international level;
- Identify standardisation needs and opportunities of the project;
- Define a strategy to contribute to ongoing activities or to initiate new ones;
- Create synergies with standardisation committees, bodies and working groups.

At the beginning of the project, it is important to familiarize the consortium, and especially the project partners who have not previously been involved in standardisation, with the fundamentals of standardisation, which is described in the following sub-clause.

5.1 Fundamentals of Standardisation

Standardisation is a widely accepted tool to lower trade barriers due to an agreement on field specific terminologies, methodologies, construction methods and a wide range of other criteria. There are several ways for standardisation on an international, European and national level. In this section, a brief overview of these opportunities is given.

A standard is a consensus-based document that is approved by a recognized standardisation body. It provides rules, guidelines or characteristics for activities or their results, reflecting the state-of-the-art. It should be based in the consolidated results of science, technology and experience, aiming at the promotion of the optimum community benefits.

There are three official standardisation organizations on the international level: the International Organization for Standardisation (ISO), the International Electrotechnical Commission (IEC), and the International Telecommunication Union (ITU). They work on international standardisation

issues, which can be addressed to them directly or via the European or national standardisation bodies. At the European level, the European Committee on Standardisation (CEN), the European Committee on Electrotechnical Standardisation (CENELEC) and the European Telecommunication Standards Institute (ETSI) oversee the standardisation work. On the national level there are a lot of standardisation organizations. Some countries have more than one organization, some of them are financed by the government, and some are independent of them. They are all working together under the roof of the European and the international standardisation bodies.

Considering the international standardisation landscape, the Vienna and Dresden Agreements need to be explained. Those agreements between CEN and ISO (Vienna), CENELEC and IEC (Dresden) have the objective to carry out work at one level of standardisation (where possible) and use parallel voting procedures to achieve simultaneous adoption as ISO/IEC and EN standards.

The focus of this report lies on the international and European standardisation work, due to **DATAMITE** being a European funded project and the standardisation work takes place on the international and European level. The national level is only marginally considered.

5.1.1 Types of standards

In general, a standard is a technical document that defines requirements for products, services or processes. There are, however, differences regarding their creation, which are described below. For this purpose, different types of standardisation documents are shown in **Figure 13** depending on their development time and their degree of consensus.

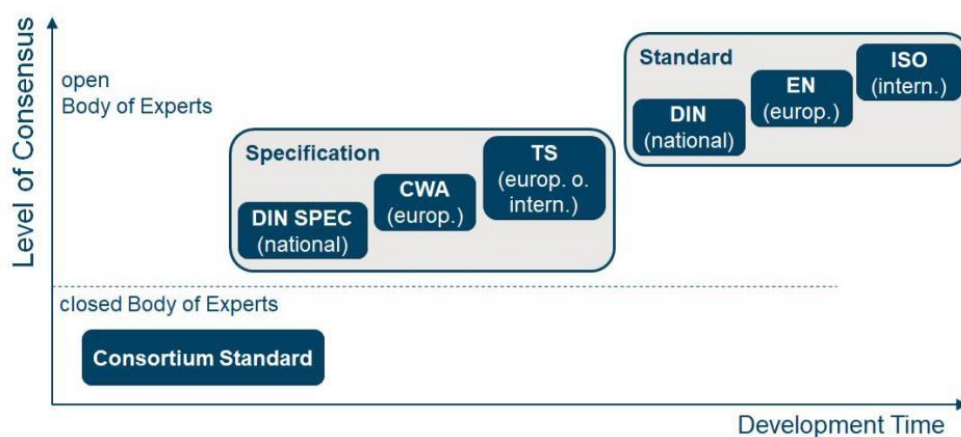


Figure 13. Types of standards and specifications; using DIN as example

5.1.1.1 Consortium standard

Consortium standards as shown in **Figure 13** are usually developed in a closed circle of experts. One of the characteristics of these standards is that not all interested parties are involved in the drafting process. The closed body of experts can, for example, be an industry-specific consortium formed by one or various companies. Although these documents have some characteristics of a standard, such as defined procedures or documentation rules, consortium standards are often not freely accessible and are developed in private.

5.1.1.2 Standard

The work of standardisation organizations such as ISO/IEC, CEN-CENELEC or DIN/AFNOR/UNE/BSI/... focuses entirely on the transparent production of standardisation documents involving an open body of experts. According to DIN EN 45020 a standard is defined as follows:

"A document, established by consensus and approved by a recognized body that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context".

Consensus in this case means the general agreement of all interested parties, characterized by the absence of sustained opposition to key content. The core objective of consensus is to consider the views of all interested parties concerned and to eliminate any counterarguments.

It is important to clarify that there are various types of existing standards, focusing on different topics of interest; e.g. related to terminology or to testing. In EN 45020 "Standardisation and related activities - General vocabulary" some common types of standards are defined as shown in **Table 18**.

Table 18. Types of standards as defined in EN 45020

Basic standard	Wide-ranging coverage or contains general provisions for one particular field.
Terminology standard	Concerned with terms, accompanied by their definitions etc.
Testing standard	Concerned with test methods, sometimes supplemented with other provisions related to testing.
Product standard	Specifies requirements to be fulfilled by product or group of products, to establish its fitness of purpose.
Process standard	Specifies requirements to be fulfilled by a process, to establish its fitness of purpose.
Service standard	Specifies requirements to be fulfilled by a service, to establish its fitness of purpose.

Interface standard	Specifies requirements concerned with the compatibility of products and systems at their point of connection.
Standard on data to be provided	Contains a list of characteristics for which values or other data are to be stated for specifying the product, process or service.

5.1.1.3 Specification

A specification is a document agreed by the participants of a temporary workshop, which is designed to meet an immediate need and form the basis for future standardisation activity. The workshop is open to the direct participation of anyone with an interest in the development of the agreement. There is no geographical limit on participation. In other words, stakeholder involvement is limited to those who are directly interested in the topic.

The direct participation of interested parties and the rapid development opportunities offered by a specification are particularly attractive for research projects which have to deliver results within the duration of their project lifetime. The development of a specification is fast and flexible, on average between 10-12 months. Although a specification is developed outside the normal technical body structure, it is important to ensure the coherence of all the standardisation regulations to protect the credibility of international, European and national standardisation. A specification does not have the status of a standard. It involves no obligation at national level. A specification shall not conflict with standards.

5.1.2 Levels of Standardisation

Figure 14 gives an overview of the standardisation bodies on national, European and international level.

	Germany	Europe	Worldwide
General			
Electrotechnology			
Telecommunications			

Figure 14. Standardisation Bodies on National, European and International Level

The different levels of standardisation is described in the following sub-clauses in detail.

5.1.2.1 International Standardisation Work

The International Organization for Standardisation (ISO) and the International Electrotechnical Commission (IEC) are the responsible standardisation organizations on the global level. The International Telecommunications Union (ITU) is the United Nations specialized agency in terms of information and telecommunication technologies.

Many of the ISO members also belong to regional standardisation organizations. ISO has recognized regional standardisation organizations representing Africa, the Arab countries, the area covered by the Commonwealth of Independent States, Europe, Latin America, the Pacific area, and the South-East Asia nations. The national bodies commit themselves to adopt ISO standards unchanged as national standards and to develop deviating standards only when there are no suitable ISO standards that can be adopted nationally. In the case of IEC, similar agreements apply.

5.1.2.2 European Standardisation Work

At the European level, following the EC information directive, standards work is carried out by the European Committee for Standardisation (CEN), the European Committee for Electrotechnical Standardisation (CENELEC) and the European Telecommunication Standards Institute (ETSI).

The European standardisation organizations are associations of national standardisation bodies according to Belgian (CEN, CENELEC) or French (ETSI) law. Members of CEN and CENELEC are first and foremost the national standards organizations of EU and EFTA member states, and the national standards organizations of other countries intending to become members of the EU or EFTA; members of ETSI are direct members such as companies, institutes and services throughout Europe.

With their August 1982 cooperation agreement, CEN and CENELEC declared themselves to be joint European standardisation organizations. Their responsibility is the harmonization of existing national standards. CEN/CENELEC has working groups including the General Assembly, Administrative and Technical Boards and Technical Committees (TC) that are open to all members, and include national delegations presenting agreed positions. European organizations which represent a particular sector may have observer status. In addition to the full members, there are also affiliated standards bodies and associate organizations.

5.1.2.3 National standardisation work; using DIN as example

National standardisation bodies publish national standards and are members of the European and international standardisation bodies.

One example is DIN, the national standardisation body of Germany. Anyone and any organization within Germany can participate in DIN. All incoming requests are reviewed and it is then decided by the corresponding committee whether there is a demand in the affiliated industry, whether European or international standardisation activities already exist and on which level the proposed work shall take place. Subjects that are ongoing on the European level initiate a standstill clause on the national level.

If the document is only on the national level, TCs are responsible for the technical input. TCs are open for participation of any expert. They include members of each group of interest such as research, industry and associations.

5.1.3 Development of standards

The following sub-clauses describe the development of standards on the international and European level.

5.1.3.1 Development of an ISO standard

Standards are developed by ISO (or IEC, for electro technical standards) according to the national delegation principle, with each country sending a delegation of experts to represent the national standpoint. This standpoint is developed in national committees that "mirror" the international committees. These mirror committees decide whether or not an international standard should be adopted as a national standard; this is voluntary, in contrast to European standards, which must be adopted nationally.

International standardisation work begins with a "new work item proposal". Such proposals can be submitted by:

- A member of the International Organization for Standardisation (ISO), or – in electro technical standardisation – by a member of the International Electrotechnical Commission (IEC).
- A working body of ISO or IEC.
- An international organization that has liaison status.
- The Technical Management Board of ISO or IEC.
- The ISO or IEC Secretary General.



A simple majority of national standardisation organizations with an interest in the subject matter is required for the proposal to be approved. In addition, a sufficient number of these must also agree to participate in the work. Only then will the proposal be accepted and work on the standard can begin. Within two months a "committee draft" is circulated for voting among the members of the responsible technical committee. A draft is drawn up taking any comments received into consideration.

The draft standard is then made available to all ISO (or IEC) members, who have three months to submit their national standpoint and comments. Within a two-month period, anyone may comment on this draft. The national mirror committee discusses all comments received and submits the consolidated national viewpoint to ISO.

If the criteria for approval are fulfilled during the voting procedure, the draft is then published as an International Standard. If they are not fulfilled, or if the responsible working group decides so, a final draft is published. The ISO or IEC members then have two months to decide whether to accept this as an International Standard. No comments are submitted during this voting period. Acceptance of the final draft requires a two-thirds majority of all active members participating, and not more than a quarter of all votes may be negative. Ratification of an international standard takes place following positive voting. There is no obligation for national standardisation bodies as part of ISO or IEC to adopt international standards as national standards.

5.1.3.2 Development of a European Standard (EN)

European standards are developed by CEN, CENELEC (for electrotechnical standards) or ETSI (for standards in telecommunications). Work at CEN and CENELEC is based, as on international level, on the national delegation principle: each country sends a delegation of experts to represent the national standpoint in the European committees. This standpoint is developed in national committees that "mirror" the European committees. By taking the secretariat of a European committee, national members can play a leading role in the committee's work. It is often decisive for national interests to be effectively represented at an early stage of the development of a European Standard.

European standardisation work begins with a proposal for a standard, which might come from a member of the European standards organizations (CEN/CENELEC/ETSI), the European Commission, or another European or international organization as shown in **Figure 15**.

At least a simple majority and 71 % of the weighted majority among all national standardisation bodies voting are needed for the proposal to be accepted. In addition, a sufficient number of



national standardisation bodies must agree to participate, after having checked with their stakeholders that there is sufficient need - and sufficient financing - for carrying out the necessary work in the national mirror committees. Only then will the proposal be accepted and work on the standard can begin.

If there is an existing international standard on the subject, it will be adopted unchanged as a European Standard. If this is not the case, the responsible working body will draw up a manuscript for the draft standard (prEN). The draft standard is distributed to the national standards organizations for commenting in what is called the "public enquiry" stage. National comments are to be submitted within three months. The national mirror committee discusses all comments received and submits the consolidated national standpoint. Based on the comments received, the responsible working group can either decide to publish the standard or to draw up and issue a final draft. In a formal vote over a two-month period, the members then decide whether to accept this final draft as a European Standard. There is no public enquiry for the final draft. Approval of the final draft requires at least 71% of the weighted votes of CEN members. Ratification of a European Standard takes place following positive voting.

After ratification the European Standard must be adopted unchanged as a national standard and any conflicting national standards must be withdrawn. In addition, a standard that has been developed at international level can be simultaneously adopted as a European Standard by means of parallel voting procedures in accordance with the Vienna Agreement. Such standards are also to be automatically adopted by the national standards organizations.

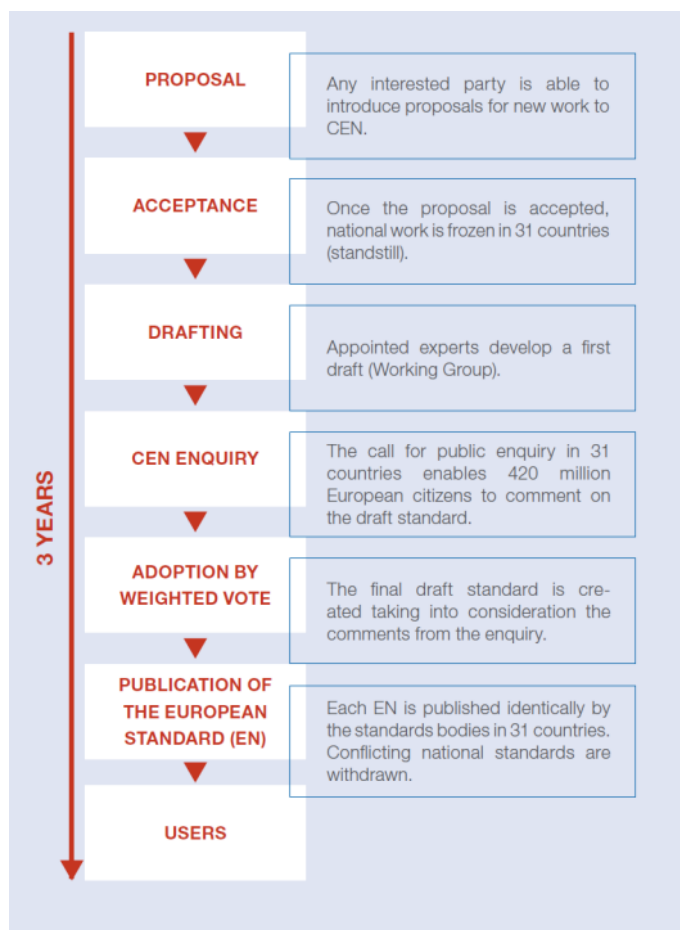


Figure 15. Development of an EN

5.1.3.3 Development of CEN Workshop Agreement (CWA)

“A CEN Workshop Agreement (CWA) is a document published by CEN, which is an agreement developed and approved in a CEN Workshop. The workshop is open to the direct participation of anyone with an interest in the development of this agreement. The out coming document has not the formal status of a European Standard (EN) as it involves no obligation at national level.”

There is a multiple step process described by CEN to develop and publish CWA as shown in **Figure 16**. It starts with the request of an interested party to a CEN member. Therefore, the proposer needs to prepare a draft project plan, which describes what the objective of the CEN Workshop is. Afterwards, the CEN-CENELEC Management Centre announces the proposal for a new CEN Workshop on the CEN Website for at least 30 days. This is for information and transparency reasons. Comments on the draft project plan can be made and shall be considered in the further development of the document. The next step is the kick-off meeting, where the

proposed project plan is approved and the chairperson for the CEN Workshop is elected. Furthermore, the formal launch of the Workshop happens at the kick-off meeting and the formal registration of the participants, who want to work on the CWA takes place. The workshop participants develop a draft CWA according to the specifications laid down in the project plan. The draft CWA is made available for comments to the registered workshop participants.

The CWA can be understood as a test-document. The European companies can work with it and if it is found to be useful it will likely be used as basis for a new European Standard. Since a CWA is created in a rather short time, it is an ideal tool for innovations and research projects.

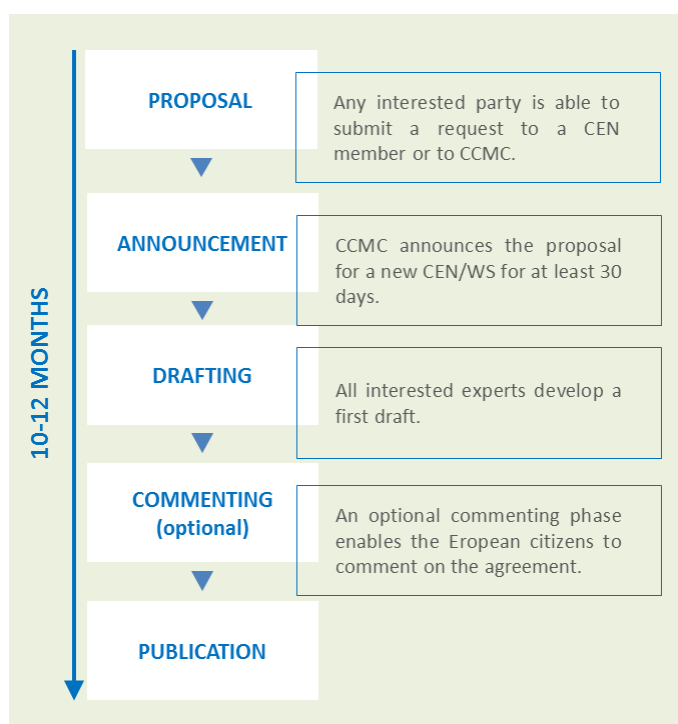


Figure 16. Development of a CWA

5.1.4 Participation in the standardisation process

The way for participating usually starts on the national level due to the delegation principle. Everyone can easily propose new standardisation topics at the national standardisation body. Also, during the commenting phase everyone can comment on the draft. Another way is to participate in person in the national TCs.

A TC is a technical decision-making body with a title, a scope and a work program. It manages the preparation of standardisation documents in accordance with the agreed business plan. Experts, who are members of national TCs, have the chance to participate in European and

international standardisation. They are sent to European or international TCs to represent the national interests within a standardisation project as national delegates.

European associations and research projects have the option to participate directly on the European or on the international level through liaisons with TCs or WGs. As a liaison organization, they are observers on a consultative basis and are informed about standardisation activities.

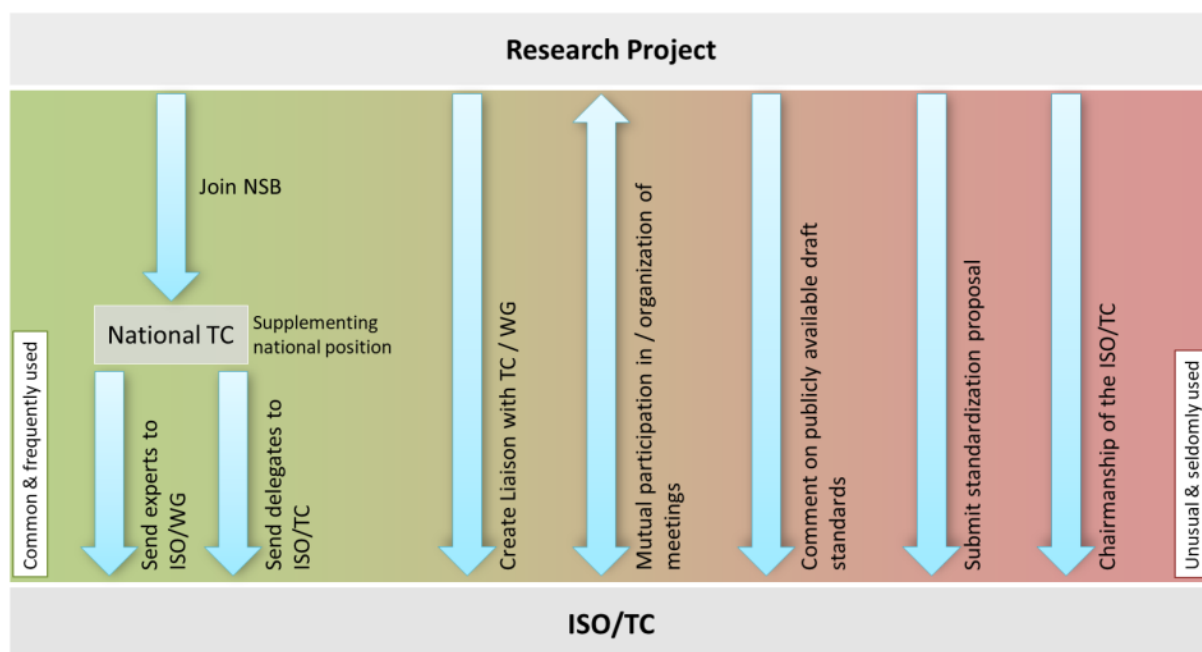


Figure 17. Possibilities of participation in standardisation

Figure 17 summarizes all ways for a research project to participate in standardisation. In the case of **DATAMITE** the following options are the most applicable:

- Project partners of **DATAMITE** can join their national standardisation body (NSB) as experts. Subsequently they ask the NSB for a nomination to the working group (WG), where a project of interest is being developed. The experts can then participate at the development of a given standard. Furthermore, experts have the opportunity to vote/to give input on ISO-ballots for a given project and also the possibility to propose a new project via the national mirror committee.
- **DATAMITE** can seek to establish a liaison with the relevant technical committee. Most likely this will happen on WG level. This offers the opportunity to be informed about ongoing activities but the active participation is rather limited.



- **DATAMITE** can seek direct contact with representatives of the technical committee by e. g. invite them to consortium or project meeting, by participating meetings of the technical committee or by organizing direct meeting/calls with experts of the technical committee.
- **DATAMITE** can submit standardisation proposals to the technical committee. These proposals are only successful, if five other countries take part in the development of the envisaged standard. Out of this reason it is important to have supporters within the technical committee and on national level.

5.2 Standardisation research

The aim of the standardisation activities in the framework of the **DATAMITE** project is to make the determined research results available to the public in the form of one or more standards, such as a CEN Workshop Agreement (CWA) or to contribute to ongoing standardisation projects. That encourages exchanges with relevant market participants and harmonizes the innovations with the state of the art. To avoid the development of redundant documents, a detailed standards research will be performed with the aim of identifying all standards that are related to the content of **DATAMITE**. This ensures that the project partners are aware of the published standards and ongoing standardisation activities concerning the content of **DATAMITE**. This assures that a potential DATAMITE CWA does not conflict with current standards at national, European and international level.

The standards research will focus on formal standards established by recognized standard developing organizations as ISO on international, CEN on European or for instance DIN on German national level. While searching for the standards, relevant standardisation committees at European and international level will be identified. There, the **DATAMITE project** findings can be presented and the uptake of the finding to ongoing standardisation activities can be promoted. It is also possible to comment on standards within their mandatory commenting phase. The standardisation research along with the **DATAMITE** project results will be the basis for the standardisation approach in the project. It is possible to contribute to ongoing standardisation projects, but also to develop a CWA within **DATAMITE**.

The search and initial analysis of relevant standards and current standardisation activities will be performed in the first year of the **DATAMITE** project fulfilling Task 6.3.1 “Standardisation research (M1-M12)”. It is important to note, that this research depends on input by the project partners after achieving specific results in the **DATAMITE** as doing the research too early will make it more



difficult identifying standardisation potential for **DATAMITE**. To achieve a fulfilling result, all relevant partners will be asked to provide keywords, which will be used for the research.

5.3 Interaction with relevant standardisation committees

Based on the outcome of the standardisation research, the standardisation committees will be contacted and informed about the **DATAMITE** project. The aim is to set up meetings of interested **DATAMITE** partners and representatives of the standardisation committees to exchange ideas on possibilities of cooperation between the standardisation committee and the **DATAMITE** consortium on standardisation activities.

This standardisation research and interactions with relevant committees will form the basis for further activities and the development of a standardisation strategy tailored to the different thematic focuses and developments of the **DATAMITE** project. As it is an efficient tool to identify topics and monitor the progress of these topics within the project, a standardisation potential workshop will be conducted. The proceedings and the outcome of this workshop are depicted in detail in the following section” Identification of standardisation gaps”.

5.4 Identification of standardisation gaps

A standardisation workshop will be conducted to decide on how to proceed with the outcomes of the standardisation research and interactions with relevant committees. The aim of this workshop is to collect ideas and needs for standards that the partners have identified in the process of developing the deliverables in the **DATAMITE** project. The results of the workshop will determine, whether there are gaps, that need to be filled by developing a CWA (see 5.1.3.3 for process) or contributing to ongoing standardisation projects in technical bodies. Afterwards, the standardisation activities will be initiated.

6 Conclusions

Communication, dissemination, and exploitation in **Horizon Europe** projects are structured to ensure that projects have an impact beyond the mere research outcome. To this end, **DATAMITE** has developed the **Impact Master Plan** which outlines the most important and critical elements related to its communication, dissemination, and exploitation strategy, that have to be taken into account throughout the entire project lifetime. The current document is expected to act as a point of reference for current and foreseen communication, dissemination and exploitation activities while all mentioned activities will be continuously monitored and updated throughout the project lifetime.

Regarding communication and dissemination, **DATAMITE** will publicise the outcomes of the project, in its different phases, to the right audiences in the right time to demonstrate the ways in which research and innovation are contributing to a European 'Innovation Union'. Communication activities will show our multidisciplinary European consortium achievements in scientific excellence and contribution to competitiveness. In addition, the plan has been made keeping in mind the multidisciplinary nature of **DATAMITE** members, which allows them to reach very different and well targeted segments of the identified stakeholders. Some channels have been chosen to accomplish a wider visibility and boost the project throughout some of the most common means of communication nowadays, such as social networks, events, papers, conferences or email marketing.

At the same time, public relations campaigns have been planned to keep all related stakeholders updated on **DATAMITE**'s progress and results. All of these actions must be done under the designed corporate image and by spreading the right messages, so that every communication released to the audience is coherent with the scope of the whole project. To make sure all of these procedures are carried out properly, a system of metrics has been designed to measure the obtained results and compare them with the previously set objectives.

Regarding exploitation, **DATAMITE**'s consortium will continuously monitor and evaluate project's outcomes, examine possible exploitation routes and identify the most prominent exploitation pathway for each of individual asset. Various possible routes, such as individual and/or joint exploitation, scientific vs commercial exploitation etc. will be examined in order to define the optimum way to go forward and generate impact, beyond the closed borders of the project.

7 Appendix

7.1 Communication & Dissemination KPIs

Table 19. Communication & Dissemination KPIs

Type of KPI		Target KPI	
Communication	Website traffic	300 unique visitors/month	Measure every 4 months
	Social Media	<ul style="list-style-type: none"> • 3000+ followers • 200k impression 	Twitter, LinkedIn and YouTube followers
	Non-Scientific Articles	50+	Publications in articles, blog posts, position papers, factsheets and other non-scientific publications
	Open Access Downloads	1000+	Downloads of public deliverables and documentation through ZENODO
	Webinars Workshops	<ul style="list-style-type: none"> • 25+ • 1000+ participants 	These events facilitate hands-on training and exchange of ideas related to the modules, providing opportunities for round table discussions, mentoring and development
	Conferences & Events	30	Showcases results achieved by the project through presentations, talks, exhibition spaces and personal engagement
	Newsletters	15	9 internal and 6 external
	Videos	3+	Showcasing on results, partners or interview
Dissemination	Peer Reviewed Publications	20 300+ citations	<ul style="list-style-type: none"> • 10 journals • 10 conferences
	Insight Paper	1	Insight Paper expressly oriented to policymakers on the deployment of the Common European Data Spaces
Ecosystem Building	Networks of Contact points	<ul style="list-style-type: none"> • 10000+ 	Overall contacts with whom the project will contact to



	Synergies	<ul style="list-style-type: none">• 10+ Horizon projects• 4+ EU data infrastructure• Networks• 3 Networks of AI Excellence Centres• 20+ EU DIHs	Create synergies on joint events, workshops, joint publications, etc.
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