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PLAN FOR DISSEMINATION AND EXPLOITATION, INCLUDING STANDARDIZATION AND COMMUNICATION ACTIVITIES

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Abstract	The present deliverable provides a plan for dissemination, exploitation, standardization, and communication activities as part of Work Package 7, outlining the objectives and methodologies to be used for preparing actions as well as to share AD4GD outcomes in conjunction with the rest of the WP7 tasks. The present plan will be updated regularly during the project lifetime to select appropriate tools and communication channels to be used by the consortium for both internal and external communication. The main elements of the plan will be the tasks, responsible partners, materials, audience and timing.
Keywords	Dissemination, communication, standardization, exploitation, strategy
Disclaimer	Views and opinions expressed in this deliverable are those of the author(s) only and do not necessarily reflect those of the European Union the United Kingdom or Switzerland. Neither the European Union nor United Kingdom nor

	Switzerland can be held responsible for them

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ABBREVIATIONS

Abbreviation	Definition
AD4GD	All Data 4 Green Deal
API	Application Programming Interface
BDVA	Big Data Value Association
C	Communication
CA	Consortium Agreement
CitSci	Citizen Science
D	Dissemination
DoA	Description of Action
EC	European Commission
EO	Earth Observation
ETSI	European Telecommunications Standard Institute
ETSI IGS IPE	ETSI Industry specification group on IPv6 enhanced innovation
EU	European Union
FAIR	Findability, Accessibility, Interoperability, and Reusability
GA	Grant Agreement
GDDS	European Green Deal Data Space
IANA	Internet Assigned Numbers Authority
IDSA	International Data Spaces Association
IoT	Internet of Things
IPCC	Intergovernmental Panel on Climate Change
IPR	Intellectual Property Rights
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
ITU	International Telecommunications Union
IUCN	International Union for Conservation of Nature
KER	Key Exploitable Result
KPI	Key Performance Indicator
M	Month
ML	Machine Learning
OGC	Open Geospatial Consortium
SDO	Standard Development Organization
SEG	Target group segment
SG	Study Group

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SO	Strategic Objective
W3C	World Wide Web Consortium
WMO	World Meteorological Organization
WP	Work Package

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EXECUTIVE SUMMARY

The present deliverable provides an overview of the plan for dissemination, exploitation, standardization, and communication activities for the AD4GD project, which aims to co-create and shape the European Green Deal Data Space as an open hub for FAIR data and standards-based services that support the key priorities of pollution, biodiversity, and climate change.

The Plan for dissemination and exploitation, including standardization and communication activities outlines the objectives and methodologies for preparing actions and sharing outcomes, which will be done alongside research and technological developments, with close collaboration between all consortium members. The plan defines four strategic objectives to achieve through communication actions:

1. positioning the Green Deal Data Space as the best solution to overcome current barriers to access to Earth observation data and services,
2. placing AD4GD as an international reference in FAIR data and standards-based services management,
3. raising awareness of the need for quality, reliable, open, and interoperable data; and
4. building a collaborative community that engages all parties in effective and mutually supportive networking.

The successful implementation of the plan will guarantee the international impact of the project through the design of the AD4GD visual identity, creation of regular update of communication channels and materials, publication of AD4GD results in high-impact factor journals, development of a standardization strategy, including the integration of standards into the project and liaison with Standard Development Organizations, as well as an exploitation and sustainability strategy.

1 INTRODUCTION

The present deliverable provides a plan for dissemination, exploitation, standardization, and communication activities as part of Work Package 7 on Standardization, Outreach and Exploitation, led by Mandat International (MI), in the context of T7.1 Strategy for communication and dissemination. The present strategy outlines the objectives and methodologies to be used for preparing actions as well as to share AD4GD outcomes in conjunction with the rest of the tasks in WP7, including:

- T7.2 Communication and dissemination activities
- T7.3 Standardization and international cooperation
- T7.4 Exploitation and sustainability plan
- T7.5 AllData4GreenDeal engagement in global initiatives
- T7.6 Collaboration with sister projects

This first iteration of the deliverable is due in M06 (February 2022) and is intended to be a living document continuously updated during the project lifestyle to select the appropriate tools and communication channels for internal and external activities. It is intended for the AD4GD consortium members to be used as a reference document. In M36 (August 2025), the second version of the present deliverable will report on all dissemination, exploitation, standardization, and communication achievements.

1.1 AD4GD DISSEMINATION, EXPLOITATION, STANDARDIZATION AND COMMUNICATION ROADMAP

Dissemination, exploitation, standardization, and communication activities are an integral part of the AD4GD project and will be done alongside both research and technological developments. Here, close collaboration between all consortium members will be integral for the success of the activities to be carried out. During the early stages of the project, the focus will be put on research, technical developments, and the construction of strategies for dissemination, exploitation, standardization, and communication. This will be done by defining priorities and the strategic vision, identifying relevant partners, and coordinating the provision of such activities. Figure 1 provides a high-level overview of the project's roadmap:

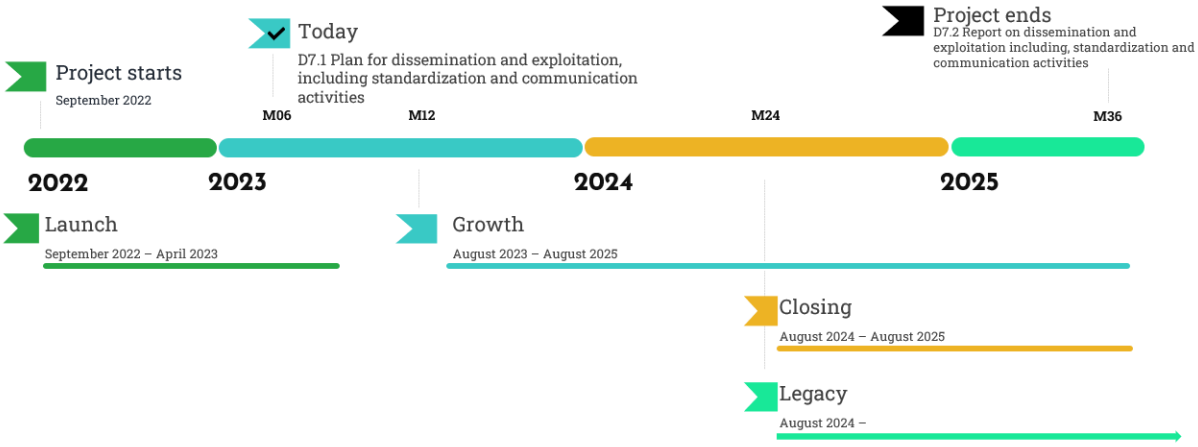

Figure 1 AD4GD Dissemination, exploitation, standardization, and communication roadmap

Based on this, the AD4GD strategic roadmap includes 4 stages along the verticals of Dissemination (D) and Communication (C). This instrument enables an effective approach towards defining, planning, organizing, and exploiting project outcomes and results. The 4 stages include:

1. Launch (D) (M01-M08): this phase will create the AD4GD project identity, define the target audience, set up the website and other communication channels, and initiate introductory campaigns.

2. Growth (C&D) (M12-M36): the focus of this phase is the active implementation of communication campaigns, expansion of the reach of AD4GD, as well as the involvement and engagement of stakeholders and feedback gathering.
3. Closing (D) (M24-M36): this phase will deliver the project impact and set the ground for continuous exploitation.
4. Legacy (C&D) (M24-): this post-project phase will ensure the continuation of interactions with partners and the audience, maintain the website, and improve the framework. The exploitation strategy will be supported by attracting new stakeholders for AD4GD outcomes uptake, including financial backers for post-project market deployment.

1.2 DELIVERABLE STRUCTURE

The deliverable is structured into 6 sections, as follows:

1. *Introduction*: provision of the context for the deliverable, as well as the establishment of a specific dissemination, exploitation, standardization and communication roadmap into four main phases.
2. *Objectives*: this section explains the focus of the present deliverable, including both global and local objectives.
3. *Strategy for communication*: provision of communication strategy with an emphasis on the stakeholder outreach strategy, visual identity and digital presence, as well as promotional material for conferences and events, in line with the established KPIs.
4. *Strategy for dissemination*: provision of dissemination strategy with an emphasis on standardization and international outreach, including both the use of standards within the project and established liaisons with SDOs, conferences and events, and publications, in line with the established KPIs.
5. *Strategy for exploitation*: analysis of sustainability paths of the project outcomes.
6. *Conclusion*: this section concludes the deliverable.

2 OBJECTIVES

2.1 AD4GD AT A GLANCE

The mission of AD4GD is to co-create and shape the European Green Deal Data Space (GDDS) as an open hub for FAIR data and standards-based services that support the key priorities of pollution, biodiversity and climate change. The focus will be on interoperability concepts that bridge the semantic and technology gaps which currently prevent stakeholders and application domains from multi-disciplinary and multi-scale access to data, and impede the exploitation of processing services, and processing platforms at different levels including Cloud, HPC and edge computing.

This project will enable the combination and integration of data from remote sensing, established Virtual Research Environments and Research Infrastructures, Internet of Things (IoT), socio-economic data, INSPIRE and Citizen Science (CitSci) in an interoperable, scalable, and reliable manner. This will facilitate integration by including semantic mappings to different standards and dominant models bridging domain- and data source-specific semantic concepts such as the Essential Variables framework, as well as applying machine learning and geospatial user feedback to ensure quality, reliability and trustworthiness of data and transforming spatial scales.

The AD4GD project aims to:

- Co-design a Green Deal common Data Space of interoperable building blocks for heterogeneous data integration, artificial intelligence, Web APIs etc., allowing multiple existing data models and API standards to be fully integrated by semantic mapping.
- Ensure the FAIR integration of CitSci with other in-situ Earth observation data and INSPIRE data in the European Green Deal Data Space.
- Enable heterogeneous IoT communication protocols and data format integration into a common semantic model for the climate-related, geospatial, and environmental European GDDS.
- Overcome data fragmentation by combining Earth Observation data from satellites with other sources of data into a common climate-related, geospatial, and environmental data space to support the European GDDS.
- Enhance certainty, quality, and exploitability of heterogeneous data by leveraging data analytics, machine learning, and Artificial Intelligence.
- Demonstrate through multi-scale, multi-criteria, and multi-actor pilots the applicability and added value of data fusion for improved accessibility and decision-making in the European Green Deal Data Space domains climate change, zero pollution and biodiversity.
- Research and demonstrate the potential of the AD4GD data space concept from the core to the edge to increase the scalability, performance, and convergence of the use of high-performance computing, cloud, data, and artificial intelligence resources for Earth system modeling.
- Upscale and sustain the AD4GD concept and a collaborative community to support a highly scalable, comprehensive, and FAIR Green Deal European Data Space for citizens, researchers, policy, and decision-makers.

The AD4GD consortium gathers 12 expert partners from Europe, as depicted in Figure 2.

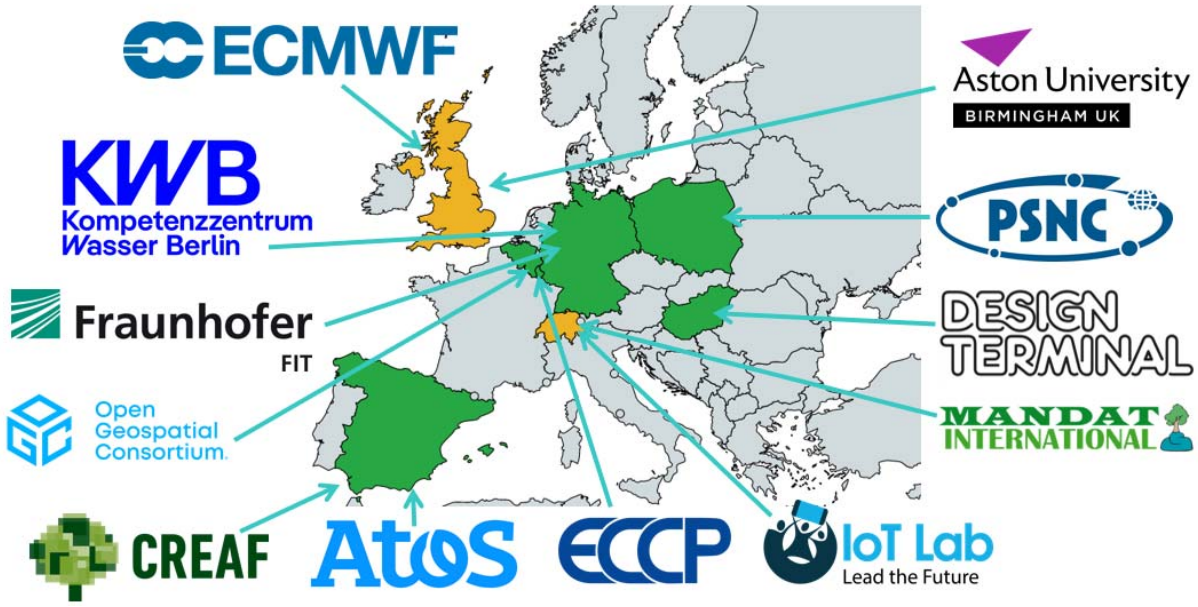

Figure 2 AD4GD Consortium members

2.2 GLOBAL DISSEMINATION, EXPLOITATION, STANDARDIZATION AND COMMUNICATION OBJECTIVES

The key objective of the D7.1 Plan for dissemination and exploitation, including standardization and communication activities is to **ensure that AD4GD activities, developments, achievements, and outcomes are shared among the selected target groups and stakeholders, at the set times, as well as through the use of specific means and tools.** Consequently, 4 strategic objectives (SO) can be defined which the communication actions of the AD4GD project aim to achieve:

SO1. Position the **Green Deal Data Space as the best solution** to overcome the current barriers to access to Earth observation data and services.

SO2. Place **AD4GD as an international reference** in FAIR data and standards-based services management.

SO2.1. Consolidate the AD4GD as a quality brand.

SO2.2. Facilitate access to transparent, up-to-date, and high-quality knowledge for stakeholders.

SO3. Raise awareness of the need for quality, reliable, open, and interoperable data.

SO3.1. Explain why these features are necessary for data.

SO3.2. Demonstrate how the GDDS benefits from these features.

SO4. Build a **collaborative community** that engages all parties in effective and mutually supportive networking.

SO4.1. Promote and make visible the different data sources through the AD4GD project.

SO4.2. Connect different data communities.

SO4.3. Turn the different data communities into AD4GD's best practices ambassadors.

The successful implementation of the plan will guarantee the international impact of the project through the:

- Design of the AD4GD visual identity, including logos, templates, and other promotional material.

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- Creation and regular update of communication channels and materials.
- Publishing of AD4GD results in high impact factor journals, magazines, and conferences.
- Development of a standardization strategy for implementing standards into the project and preparing contributions to be submitted to Standard Development Organizations (SDOs).
- Development of an exploitation and sustainability strategy.

As part of the Launch phase (M01-M08), the following internal objectives are set for AD4GD:

- Generate a comprehensive plan for dissemination, exploitation, standardization, and communication, establishing responsibilities of the consortium members and guiding the work during all phases of the project.
- Provide a general framework for all consortium members, including a Communication and Dissemination Policy.
- Establish solutions to plan, design, record, and monitor developments related to the activities carried out in the context of WP7.
- Set up all communication and dissemination channels, including the preparation of promotional materials.

Establish channels and means to reach visibility with the specified target groups and stakeholders.

3 STRATEGY FOR COMMUNICATION

The main objective of the communication strategy is to provide continuous updates on the progress of the project to the stakeholders and target groups. In the context of AD4GD, several communications aspects were established, including the distinct visual identity, e-newsletter, and other mass media communication channels, as well as the social media handles.

As showcased in Table 1, the following Key Performance Indicators (KPIs) were set to measure the project's success and give a general direction towards communication activities:

Indicator	Impact	Source
Visits to AD4GD website	≥ 5000	Visitor counter
Explanatory videos	≥ 5	Videos generated and uploaded
Organized workshops, including demonstration workshops	≥ 10	Internal and external workshops
Demonstration workshops, forums / total participants	4 / ≥ 250	External demonstration workshops/forums / participants in total to all workshops/forums
Articles in online blogs and newspapers	≥ 200	Number of articles/blogs generated by partners and published on the AD4GD website and externally
Distributed printed/digital material	≥ 2500	Number of handed out printed material/number of downloads-sent material
E-newsletter recipients	≥ 500	Mailing and subscriber list record
Followers/subscribers on social media	≥ 500	Twitter, LinkedIn, YouTube subscriber/follower number
Organized open events	≥ 5	Partners' reports on communication activities

Table 1 Communication activities KPIs

To achieve the set KPIs, the communication strategy was set up along four focus areas, including:

1. WHO to communicate to (stakeholders and target groups).
2. HOW to share information (means and tools).
3. WHAT information to share.
4. WHEN and by WHOM the communication actions are carried out.

As Work Package 7 leader, MI is responsible for coordinating all communication activities. It has been agreed that all AD4GD consortium members are jointly responsible for the timely execution of planned activities, as agreed with the project coordinator and the WP lead. The following matrix provides a high-level overview of the envisioned structure of communication activities and the distribution of responsibilities. Target groups are defined as part of Stakeholder outreach strategy (Section 3.1.1).

WHO **Target group**	**HOW** **Tools**	**WHAT** **Information**	**WHEN** **Period**	**WHOM** **Lead partner**
All target groups	Website	Goals, means and results of the project, blogs, videos	M1-M36 Continuously updated	MI + ALL

SEG1, SEG2, SEG3	Explanatory videos	Project introduction Pilots Final achievements	1 (M1-M12) 3 (M13-M24) 1 (M25-M36)	CREAF, AU, KWB, ECMWF, FIT, ITL
SEG3, SEG4, SEG5, SEG6	Workshop	Goals, means and results of the project	2 per year	ALL Sister Projects
SEG4, SEG5, SEG6	Demonstration workshops and forums		2 (M13-M24) 2 (M25-M36)	ALL Sister Projects
SEG1, SEG4, SEG6	Articles	Achieved results and developed methodologies	M01-M36	All Sister Projects
All target groups	Printed/digital material	Infographic Rollup Flyer Brochure	M06-M36	ALL Sister Projects
All target groups	E-newsletters	General updates, upcoming events, achieved results	2 per year (M01-M36)	CREAF
SEG1, SEG3, SEG4, SEG5, SEG6	Twitter posts	General updates, upcoming events, achieved results	3 per week (M01-M36)	CREAF + All Sister Projects
SEG3, SEG4, SEG5, SEG6	LinkedIn posts	General updates, upcoming events, achieved results	1 per week (M01-M36)	MI + All Sister Projects
All target groups	Open events	Pilots introduction and achievements	5 (M13-M36)	CREAF, AU, KWB, ECMWF, FIT, ITL

Table 2 Communication strategy matrix

The information described above is subject to evolution and change depending on the project developments. Some communication activities (i.e., elements described in the HOW and WHAT columns of Table 2) might be joined together to better address the KPIs presented in Table 1. The deliverables tied to the reporting of communication activities of AD4GD will maintain the accurate monitoring and evaluation. All partners involved will jointly prepare contributions to the upcoming deliverables and report on their activities as applicable.

Communication activities will be monitored by MI; any deviations will be reported to the project coordinator. Every consortium member is responsible for generating impact through communication activities through AD4GD-specific and other communication channels.

3.1 STAKEHOLDER OUTREACH STRATEGY

To share the AD4GD vision and key messages with a wide pool of stakeholders, a specific strategy was set to achieve the best possible outcomes. This sub-section focuses on both the segmented target groups

identified, including the information to be shared with them by specific means, as well as the collaboration strategy with sister projects, other international projects, and specific groups set up by the European Commission (EC).

3.1.1 TARGET GROUPS

The list of key stakeholders has been segmented into specific target groups as part of the Description of Action (DoA). As part of the stakeholder outreach strategy, each segment was assigned with relevant information and the methodology to share such information, creating a beneficial engagement.

Who	What	How
Civil society and citizens (SEG1)	Less technical language so that a non-specialist audience can easily understand the goals and means of the project	Website, social media, mass media, e-newsletter, demonstrations
Policy makers, local and regional authorities (SEG2)	Project goals as well as successful or exemplary activities and results	Website, e-newsletter, networking, round table with policy maker, policy briefs, demonstrations
Decision makers, including industrial stakeholders, data providers and developers, and the innovation community (SEG3)	Focus on the technology enablers, measured impacts, potential economic exploitation and societal benefits	Website, e-newsletter, networking, scientific publications, round table with decision makers, policy briefs, demonstrations
Research communities (SEG4)	Detailed scientific and technical results	Website, e-newsletter, social media, networking, scientific publications, briefings, demonstrations, collaboration with projects and networks, invitation to seminars and talks, conferences and events attendance, participation and organization of workshops and PhD schools
European projects (SEG5)	Detailed scientific and technical results	Website, e-newsletter, social media, networking, publications, demonstrations, participation in other projects events, Project Boards
Developers at industry/commercial organizations (SEG6)	Implementation guidelines and best practices in the form of coding sprints	Website, e-newsletter, social media, networking, publications, demonstrations

Table 3 Target group segments and means of information sharing

3.1.2 SISTER PROJECTS AND DATA SPACE PROJECTS

As part of the stakeholder engagement strategy, AD4GD will establish liaisons with the Sister Projects that were funded under the same topic (HORIZON-CL6-2021-GOVERNANCE-01-17). They are dealing with relevant and pertinent subjects to exchange best practices, implement synergies, and deliver added value communication, dissemination, and exploitation activities towards stakeholders.

Project title	Description	Partners	Main contact

HORIZON-CL6-2021-GOVERNANCE-01-17			
F.A.I.R. information cube (FAIRiCUBE)[1]	The core objective of FAIRiCUBE is to enable players from beyond classic Earth Observation (EO) domains to provide, access, process, and share gridded data and algorithms in a FAIR and TRUSTable manner. To reach this objective, we propose creating the FAIRiCUBE HUB, a crosscutting platform and framework for data ingestion, provision, analysis, processing, and dissemination, to unleash the potential of environmental, biodiversity and climate data through dedicated European data spaces. Within this project, TRL 7 will be attained, together with the necessary governance aspects to assure continued maintenance of the FAIRiCUBE HUB beyond the project lifespan. This project's goal is to leverage the power of Machine Learning (ML) operating on multi-thematic datacubes for a broader range of governance and research institutions from diverse fields, who at present cannot easily access and utilize these potent resources. Selected use cases will illustrate how data-driven projects can benefit from cube formats, infrastructure, and computational benefits. They will guide us in creating a user-friendly FAIRiCUBE HUB, which is tightly integrated to the common European data spaces, providing relevant stakeholders an overview of both data and processing modules readily available to be applied to these data sources. Tools enabling users not intimately familiar with the worlds of EO and ML to scope the requirements and costs of their desired analyses will be	NILU Siftelsen Norsk Institutt For Luft Forskning Space4environment SARL Naturhistorisches Museum EOX IT Services gmbh Jacobs University Bremen ggmbh Stichting Wageningen Research Epsilon Italia srl 4sfera Innova Sociedad Limitada	CREAF MI

[1] F.A.I.R. information cube

	implemented, easing uptake of these resources by a broader community. The FAIR sharing of results with the community will be fostered by providing easy to use tools and workflows directly in the FAIRiCUBE HUB.		
Urban Data Spaces for Green dEal (USAGE)[2]	USAGE (Urban Data Space for Green Deal) aims to provide solutions and mechanisms for making city-level environmental and climate data available to everyone based on FAIR principles. USAGE will support the implementation of the European strategy for data and various European Green Deal priority actions at the level where climate change is mostly felt: cities and towns. USAGE will provide innovative governance mechanisms, consolidated arrangements, AI-based tools and data analytics to share, access and use city-level data from Earth Observation (EO), Internet of Things (IoT), authoritative and crowd sources, leveraging on standards for data and service interoperability. USAGE wants to become a decentralized infrastructure for trustworthy data collection, processing and exchange based on commonly agreed principles, facilitating the combination of heterogeneous data for policy analysis. USAGE will validate its solutions in four diverse pilot areas located in four different countries, focusing also on the reusability of the solutions in other urban areas. The consortium consists of 11 interdisciplinary partners from 5 European countries and, within the 3 years of activities, will also realize a long-term sustainability and growth strategy plan of project solutions.	Universidad Politécnica De Madrid Vermessung Avt-Zt-Gmbh Comune Di Ferrara Deda Next Srl Epsilon Italia Srl Fondazione Bruno Kessler Geocat Bv Open Geospatial Consortium Europe Ayuntamiento De Zaragoza The Lisbon Council For Economic Competitiveness Asbl Katholieke Universiteit Leuven	CREAF MI OGC ITL

[2] Urban Data Spaces for Green dEal

Biodiversity Building Blocks for policy (B^3)	The world is changing rapidly; climate change, land use change, pollution and natural resource exploitation are creating a global crisis for biodiversity whose magnitude and dynamics are hard to quantify. Decision makers at all levels need up-to-date information from which to evaluate policy options. For this reason, rapid, reliable, repeatable monitoring of biodiversity data is needed at all scales from local to global. Only by leveraging large volumes of data, advanced modelling techniques and powerful computing tools can we hope to synthesize these data within timescales that are relevant to policy. Data on biodiversity come from a diverse range of sources, citizen scientists, museums, herbaria and researchers are all major contributors, but increasingly new technologies are being deployed, such as automatic sensors, camera traps, eDNA and satellite tracking. Integrating these data is a major challenge, but is necessary if we are to create dependable information on biodiversity change. B3 will use the concept of data cubes to simplify and standardize access to biodiversity data using the Essential Biodiversity Variables framework. These cubes will be used, in conjunction with other environmental data and scenarios, as the basis for models and indicators of past, current and future biodiversity. The overarching goal of the project is to provide easy access to tools in a cloud computing environment, in real-time and on-demand, with state of the art prediction models of biodiversity, that will output models and indicators of biodiversity status and change. The	Agentschap Plantentuin Meise Global Biodiversity Information Facility Eigen Vermogen Van Het Instituut Voor Natuur- En Bosonderzoek Alma Mater Studiorum - Universita Di Bologna Justus-Liebig-Universitaet Giessen Universitatea Ovidius Din Constanta South African National Biodiversity Institute Stellenbosch University Pensoft Publishers Martin-Luther-Universitat Halle-Wittenberg Institut National De Recherche En Informatique Et Automatique Universidade De Aveiro La Trobe University	CREAF MI AU

	project envisages a future where primary biodiversity data are seamlessly integrated into monitoring and forecasting such that policy and management can proactively respond to problems while at the same time reduce the costs of monitoring and management, and the negative impacts of biodiversity change.		

Table 4 Sister projects

In addition, other projects that contribute to the Green Deal Data Space have been identified, as showcased in Table 4. AD4GD will continue to monitor developments and contact other projects, as relevant.

Project title	Description	Partners	Main contact
HORIZON-CL6-2021-GOVERNANCE-01-16			
AI-augmented ecosystem for Earth Observation data accessibility with Extended reality User Interfaces for Service and data exploitation (EO4EU)[3]	A vast amount of Earth Observation data is produced daily and made available through online services and repositories. Contemporary and historical data can be retrieved and used to power existing applications, to foster innovation and finally improve the EU citizens' lives. However, an undersized audience follows this activity, leaving huge volumes of valuable information unexploited. EO4EU aims to provide innovative tools, methodologies and approaches that would assist a wide spectrum of users, from domain experts and professionals to simple citizens to benefit from EO data. EO4EU strives to deliver dynamic data mapping and labelling based on AI adding FAIRness to the system and data. EO4EU introduces an ecosystem for holistic management of EO data, bridging the gap among domain experts and end users, bringing in the foreground technological advances to address the market straightness towards a wider usage of EO data. EO4EU envisages to	Ethniko Kai Kapodistriako Panepistimio Athinon European Centre For Medium-Range Weather Forecasts D.Tsakalidis-G.Domalis Oe Cineca Consorzio Interuniversitario Vilniaus Universitetas Latvijas Universitate Ilmatieteen Laitos Fondazione Centro Euro-Mediterraneosui Cambiamenti Climatici Sistema Gmbh Danaos Shipping Company Limited Kentro Meleton Asfaleias - Center Forsecurity Studies Centre D'etudes De Securite Ebos Technologies Limited Trust-It Srl Engineering - Ingegneria Informatica Spa	ECMWF

[3] AI-augmented ecosystem for Earth Observation data accessibility with Extended reality User Interfaces for Service and data exploitation

	boost the Earth Observation data market, providing a digestible data information modeling for a wide range of EO data, through dynamic data annotation and a state-of-the-art serverless processing by leveraging important European Cloud & HPC infrastructures.	Intelligence For Environment And Security Srl Ies Solutions Srl Meteorological And Environmental Earth Observation Srl Fraunhofer Gesellschaft Zur Forderung Der Angewandten Forschung Ev	
Open-Earth-Monitor Cyberinfrastructure (OEMC)[4]	The Open-Earth-Monitor Cyberinfrastructure will increase European capability to generate timely, accurate, disaggregated, people-centred, accessible (GSM-compatible) and user-friendly environmental information based on Earth Observation data. We will achieve this by building a cyberinfrastructure anchored in FAIR data principles, leveraging and improving our existing platforms OpenEO.org, Geopedia.world, GlobalEarthMonitor.eu, EarthSystemDataLab.net, OpenLandMap.org, OpenDataScience.eu, LifeWatch.eu, XCUBE and EuroDataCube.com. We do this in 3 phases: a) implementation of the computing engine and in-situ O&M data services; b) direct application of the Open-Earth-Monitor to support EU Green Deal and other strategic actions; c) dissemination and engagement of stakeholders & target users through series of open workshops, then revise the tools and adjust them to better fit their objectives and limitations. We specifically target contributing to: operational planning for planting 3 billion trees over the EU by 2030; achieving climate-neutrality by 2035 in the land sector; building back a net-zero GHG emission	Stichting Opengeohub Internationales Institut Fuer Angewandte Systemanalyse Helmholtz Zentrum Potsdam Deutschesgeoforschungszentrum Gfz Gilab Doo Beograd Fondazione Edmund Mach Brockmann Consult Gmbh Nature 4.0 Societa Benefit Societa A Responsabilita Limitata Consiglio Nazionale Delle Ricerche Wageningen University Sinergise Laboratorij Za Geografskeinformacijske Sisteme Doo Multione Jdoo Za Racunalne Djelatnosti I Usluge Westfaelische Wilhelms-Universitaet Muenster Udruzenje Eko-Inovacija Na Balkanu Terrasigna Srl Max-Planck-Gesellschaft Zur Forderung Der Wissenschaften Ev Accademia Europea Di Bolzano Centro De Investigacion	CREAF

[4] Open-Earth-Monitor Cyberinfrastructure

	economy by 2050; achieving UN's SDGs'; monitoring essential biodiversity indicators; compiling natural capital accounts for private / public sectors; enabling businesses to leverage competitive advantage through the EU Green Deal; increasing the quality of life for European Citizens. We will innovate: 1) implementation of original cloud-based solutions to seamlessly integrate in-situ (point, site) & EO data so that we can produce environmental information at analysis- and decision-ready levels; 2) implementation of fully-scalable Automated Mapping / AutoML frameworks; 3) user-experience-designed data provision and Apps possibly reaching millions of users across EU and globally; 4) financial assessment tools allowing users to directly quantify ecosystem services (SEEA methodology), to identify optimal environmental and climate solutions, & to build business solutions.	Ecologica Y Aplicaciones Forestales Fondazione Centro Euro-Mediterraneosui Cambiamenti Climatici E-Science European Infrastructure For Biodiversity And Ecosystem Research Simbiotica Sl	
DIGITAL-2021-CLOUD-AI-01			
The Green Deal Data Space Foundation and its Community of Practice (GREAT)[5]	GREAT is tasked to establish the Green Deal Data Space (GDDS) foundation & Community of Practice that are the prerequisite for its future implementation, evolving existing data ecosystems into an integrated system with the involvement of an expanding cross-sectoral pan-European network. The framework that GREAT will implement includes 5 pillars: 1. The Minimum Viable GDDS defining an expandable core set of high value datasets for the first implementation phase of the data ecosystem federation. 2.The reference blueprint of the technical architecture setting the data &	IDC Italia SRL Stichting EGI Cesnet Zajmove Sdruzeni Pravnickych Osob Consiglio Nazionale delle Ricerche European Association of Remote Sensing Companies European Centre for Medium-range Weather Forecasts Earth Observation Data Centre for Water Resources Monitoring SURF BV	

[5] The Green Deal Data Space Foundation and its Community of Practice

	service technical interoperability framework & defining the common services enabling federated discovery, access, processing & reuse of data. 3. An open & inclusive multi-stakeholder governance scheme defining federation business processes, roles, policies & the trust framework. 4.The roadmap defining the future implementation & capacity building steps during 2024-2027. 5. An open pan-European Community of Practice of data providers, users & intermediaries from industry, public administration, & research communities participating in all phases from co-design to implementation. The design of the GDDS framework incorporates these 5 elements & is driven by the requirements of use cases that address the following 3 Green Deal actions: 2030 Biodiversity strategy, Zero-pollution Action Plan & Climate Change Adaptation Strategy. GREAT builds on the strengths of a consortium of 11 partners & 3 affiliated entities with direct links to +1000 stakeholders & +100 initiatives operating at national & international level. The network of stakeholders directly connected with the consortium spans across multiple sectors (e.g., Land, Ocean & Maritime, Atmosphere & Climate, Disasters Geohazards Emergency, Security & Safety & Built Environments) The Consortium brings expertise in data governance, distributed data infrastructure design, large-scale system integration, data value chains, stakeholder engagement.	Wageningen University European Plate Observing System SEASCAPE BELGIUM	

Table 5 Other relevant initiatives

In the EuroGEO workshop on November 8th, 2022 in Athens, it was agreed that an Action Group on the Green Deal Data Space is going to be created. A tentative website enumerates the projects and will be developed as soon as activities start running (https://actiongroup.greendealdata.space/). An email

distribution list also exists (gdds-action-group-l@llistes.uab.cat). The action group acts as an ideal mechanism of networking and clustering with the identified projects. The first foreseen activity is to draft a work plan for this group. Based on preliminary discussions the work plan will consist of:

- Preparing a document with 10 recommendations for the Green Deal Data Space by the end of 2023.
- Coordinating communication and dissemination activities.
- Elaborating a newsletter for the group based on the inputs from the 4 sister projects every 4 months.
- Organizing webinars, round tables and workshops among the projects with other relevant national and international actors and, in particular, members of the technology platforms, scientific organizations and operational groups set up by the EC in which the project partners are already involved. A minimum of 1 webinar per year will be organized.
- Cross-fertilizing use cases between projects, e.g., FAIRiCUBE offered to host external use cases from the sister projects. This will be done after M16.
- Including representatives of the sister projects in the advisory board.
- Coordinating with other action groups and EuroGEO as a whole. In particular, organizing a side event in the EuroGEO workshop every year.

Reports will be provided periodically internally after each networking meeting, extracting the conclusions from the action group activities. A shorter version will be made public on the Project Website.

These activities will be carried out by all consortium members in the context of *T7.6 Collaboration with sister projects*, under the leadership of CREAF and OGC.

3.2 VISUAL AND BRAND IDENTITY

The establishment of an easily distinguishable visual identity of AD4GD is key for brand recognition (SO2.1.) and it includes all elements that make the visual identification unique. All materials and associated user guidance presented below must be followed by all consortium members for keeping a consistent AD4GD brand image. A specific Communication and Dissemination Policy will be provided internally by CREAF to be followed by the partners.

The AD4GD visual and brand identity include the project logo and associated color scheme, specified typography, as well as the templates for Word and PowerPoint, and the Grant agreement number and EU emblem.

3.2.1 AD4GD LOGO

The AD4GD brand identity is based on a dynamic logo including a main version and several other color and size variations to serve as adaptations for different offline and online communication and dissemination materials. For the creation of the logo, several consortium members have participated in a benchmarking session to gather inspiration. The creation of the AD4GD logo followed four guiding characteristics, including simplicity, adaptability, flexibility, and durability.

Two dynamics were developed for simplifying the essential concepts that define AD4GD, as shown in the following figure. One would focus on '*action verbs*' which would center the contribution and impact, while the other focuses on the '*tone of voice*', the manner in which the project is communicated to the public.

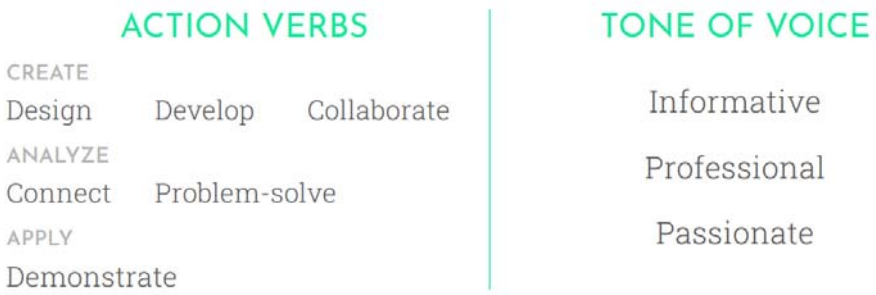

Figure 3 Main concepts behind the AD4GD logo

The AG4GD logo uses transparency and overlay to convey the never-ending construction of this huge data space, constantly enriched by new information. Information, as the pieces forming D that represent "DATA", are integrated and standardized to create something richer and understandable, whereas the empty spaces represent the data gaps being filled in. Every piece of the letters dovetails with the next, like pieces of a puzzle, an example of problem solving. The three colors also represent the three key priorities (more details in Section 3.2.2). This logo sees the project as something with incredible potential and capacity of growth, a multidisciplinary effort in problem solving.

In total, one big and one medium resolution imagotype (300px), as well as one small resolution (80px) and one favicon (35px) isotype logos were developed by CREAF. For further adaptability, each logo was developed in three color schemes, one in original colors, one in greyscale, and one in one color. Additionally, a transparent version has been made available to be used on colored or pictured backgrounds.

Figure 4 AD4GD logo: Big resolution imagotype (300px) in three colors (original, greyscale, one color)

Figure 5 AD4GD logo: Medium resolution imagotype (300px) in three colors (original, greyscale, one color)

Figure 6 AD4GD logo: Small resolution isotype (80px) in three colors (original, greyscale, one color)

Figure 7 AD4GD logo: Favicon (35px) in three colors (original, greyscale, one color)

Figure 8 AD4GD logo: Transparent on color and picture background concept

3.2.2 AD4GD COLOR SCHEME

As presented in Figure 9, the main color of AD4GD is vivid green, connecting to it existing within a digital environment as well as being part of the Green Deal. The three secondary colors represent biodiversity (green), climate change (yellow), and pollution (blue). The colors are muted and closer to colors we find in nature as the data comes from and affects the real environment.

Figure 9 AD4GD Color scheme with primary and secondary colors

3.2.3 AD4GD TYPOGRAPHY

The typography used for the logo is a modified Josefin Sans. For the titles we will use the original Josefin Sans, clean and readable and available in Google Fonts, which makes it optimal for both printed and digital media. Using this font in the logo as well as in associated text consolidates graphical identity.

Josefin Sans

Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Figure 10 Josefin Sans font

The body uses Roboto Slab, contrasting the sans serif font of the titles with a serif font for the text. This typography has multiple weights and is also available on Google Fonts. It is slightly more formal than Josefin Sans, which creates a good balance when combined.

Roboto Slab

Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
Aa Bb Çç Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Figure 11 Roboto Slab font

3.2.4 TEMPLATES

Internal or external communication activities carried out by any partner involving the production of materials such as text documents or slide presentations should use common templates in order to create a unified identity. These have been designed by CREAF and are available to all partners on the shared Google Drive folder. The document template was created in Google Documents, as showcased on the following figure:

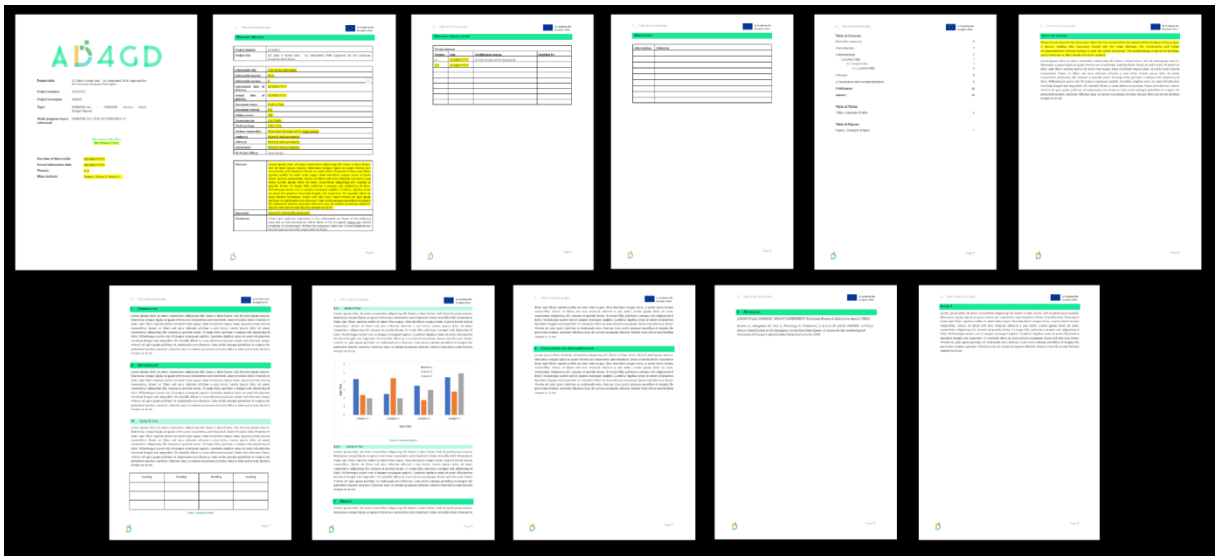

Figure 12 AD4GD Document template

The presentation template was created in Microsoft PowerPoint, as showcased on the following figure:

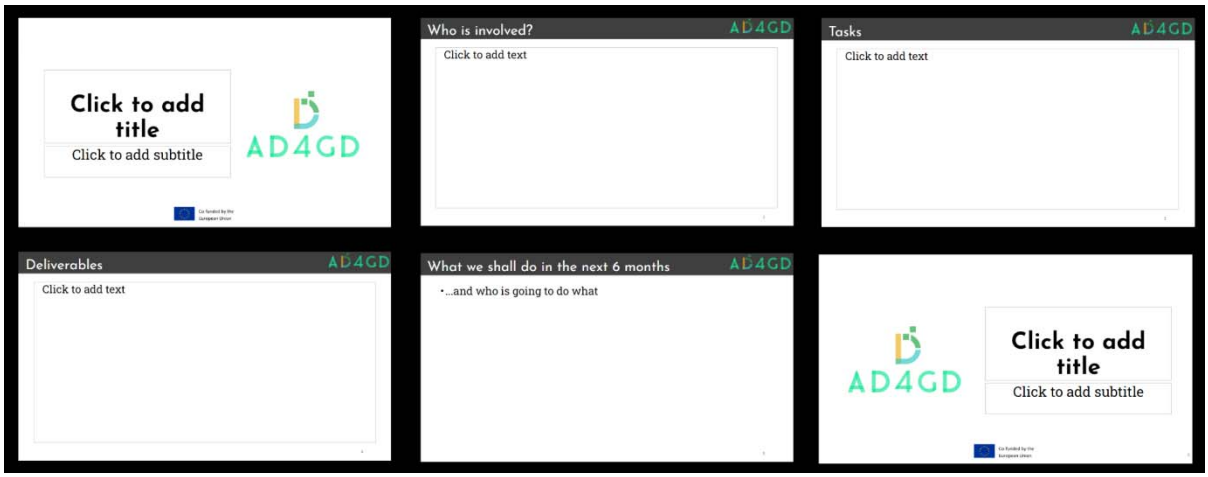

Figure 13 AD4GD Presentation template

3.2.5 FUNDING ACKNOWLEDGMENT AND EU EMBLEM

AD4GD partners are no longer requested to use the Grant Agreement number (101061001) in all of their external communication and dissemination activities (see Grant Agreement article 17). Instead AD4GD partners should use the EU emblem (EU flag; blue with stars; not the one identifying the EC) and the accompanying text of "Co-funded by the European Union, Switzerland and the United Kingdom" as stated in the Consortium Agreement article 11.7 and in accordance with the Grant Agreement.

3.3 COMMUNICATION CHANNELS AND TOOLS

The AD4GD communication tools encompass the website and social media pages, mass media presence and e-newsletters.

3.3.1 WEBSITE

The AD4GD website serves as the main digital point of information sharing about the project, providing visitors (i.e., general public, scientific community, relevant projects, and other external stakeholders) an overview of the project and up-to-date information on results, activities, and outcomes. The website will be kept alive beyond the project's lifecycle, as part of the Legacy phase.

User-friendliness was one of the key goals during the development of the AD4GD website, and it includes the following sections:

- Home
- Project
- Pilots
    - Water pollution
    - Biodiversity
    - Climate change
- Partners
- Work Packages
    - Summary
    - WP1
    - WP2
    - WP3
    - WP4
    - WP5
    - WP6
    - WP7
    - WP8
    - WP9
- Sister Projects
- Communication
    - Blogs
    - Newsletters
    - Deliverables
    - Events & conferences
- Login
- Register

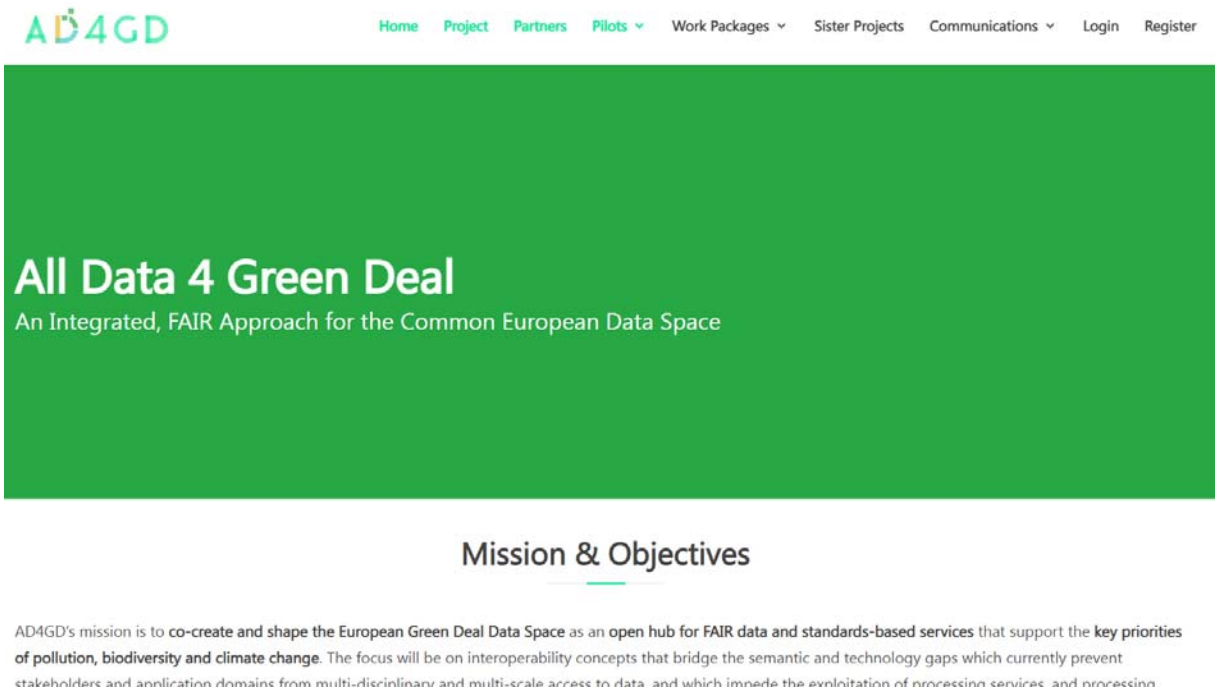

Figure 14 AD4GD website: Home page

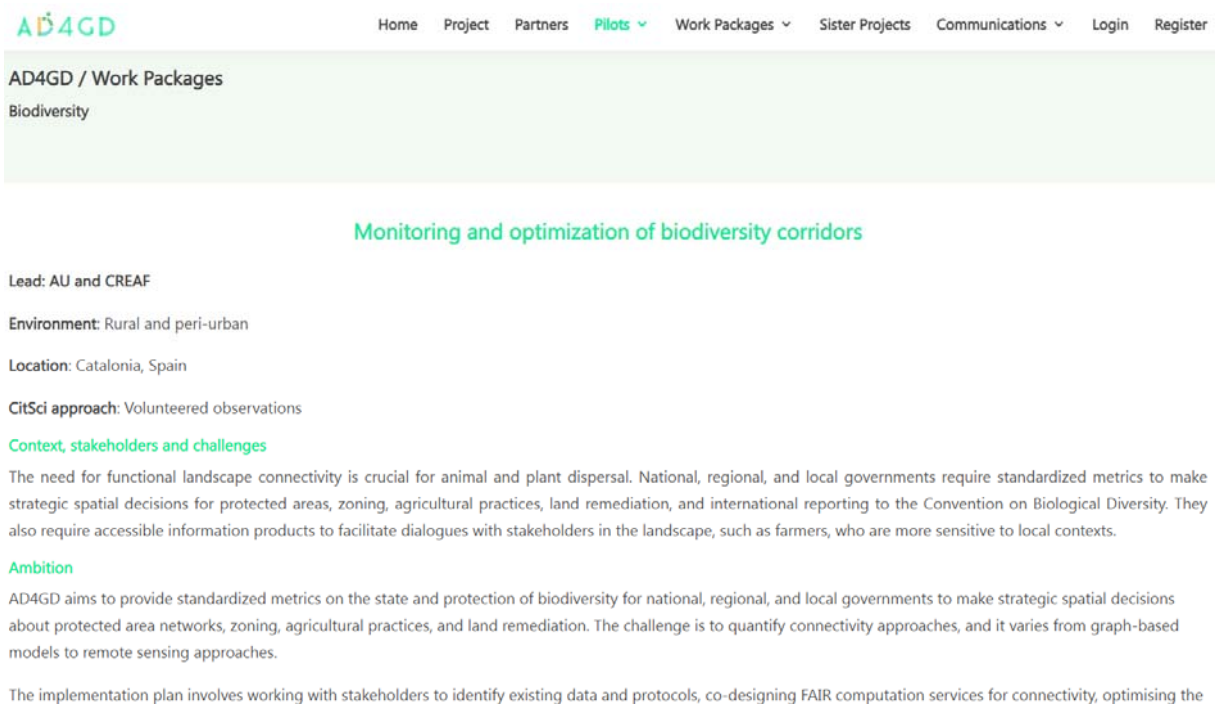

Figure 15 AD4GD website: Biodiversity pilot page

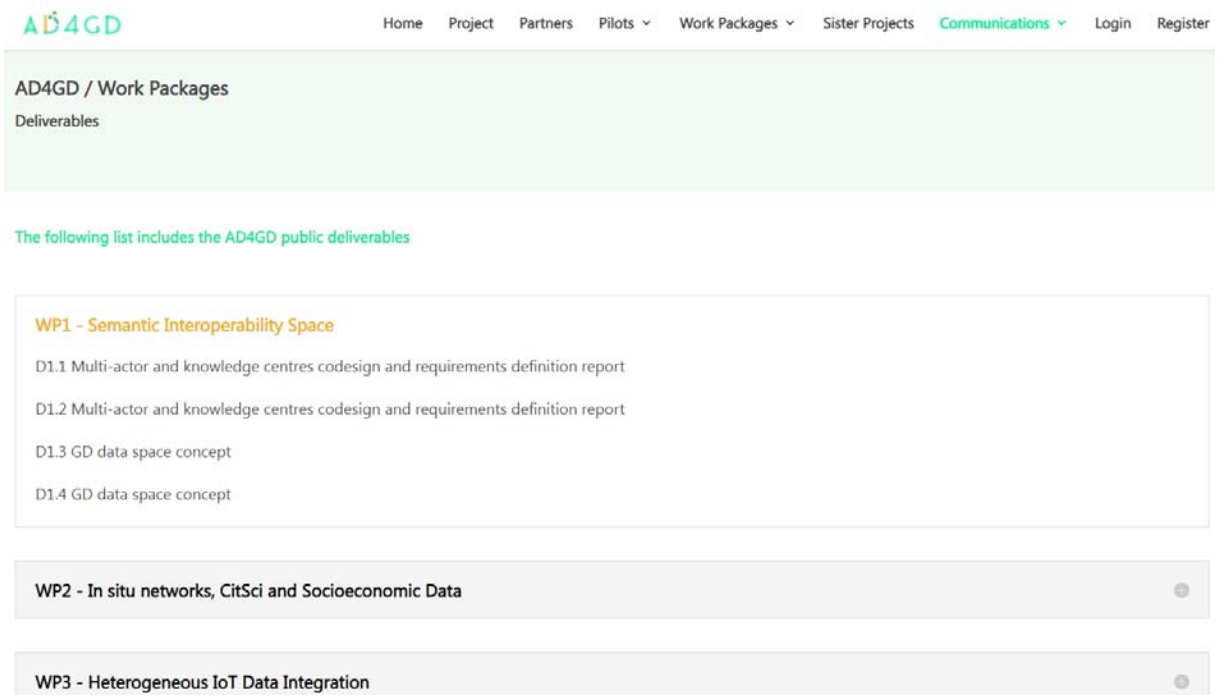

Figure 16 AD4GD website: List of deliverables

Once a partner logs in to the site, they gain access to a specific Partner Dashboard where they can choose to review their blog entries and compose blog posts that are published on the website.

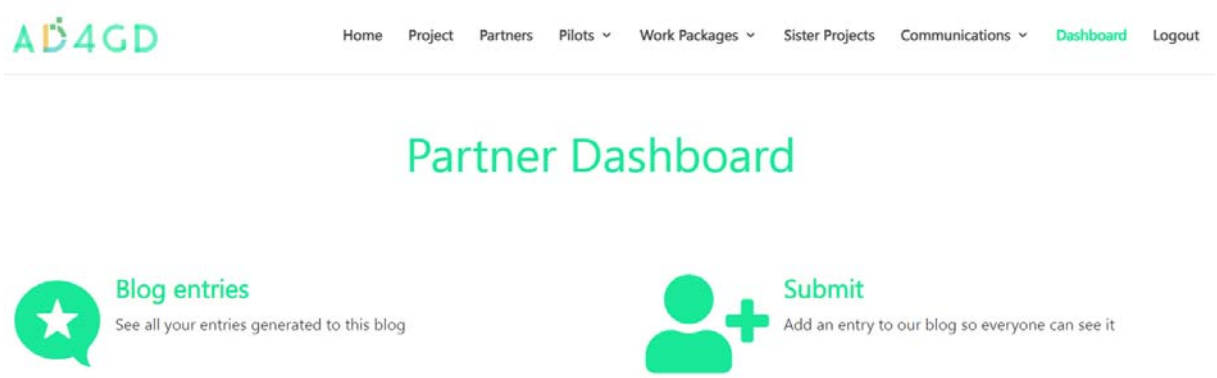

Figure 17 AD4GD website: Partner dashboard

3.3.2 MASS MEDIA

Each consortium member is dedicated to communicating and disseminating project news, developments, and outcomes in public press, TV and radio programs, blogs, interviews, and others. Consortium members will closely work with WP7 lead to create articles, press releases and translate them to other languages, where applicable, hence creating a multi-level impact from global to local. These activities will be built around the seven milestones of AD4GD to further maximize impact.

3.3.3 E-NEWSLETTERS

An e-newsletter will be distributed periodically (2 per year) to the target groups and specific stakeholders identified. These e-newsletters will keep the stakeholders informed about the latest news, developments, events, and achievements of AD4GD. Additionally, each e-newsletter will be published on the project website to maximize impact.

CREAF will create a newsletter template according to the AD4GD visual identity and generate a database that all the consortium members must feed. To do it:

1. CREAF will request the partners to share the link to subscribe to the newsletter with all the prospective subscribers, taking advantage of the variety and volume of their connections.
2. A 'subscribe button' should be added to the website.
3. For each organized event, partners must ask the participants if they want to join the newsletter in the registration form. Each consortium member shall request permission before using any contact information provided in the database, complying with the GDPR.

3.3.4 WORKSHOPS

Workshops are brief but intensive programs for a group of people providing specific skills or type of information in a particular context. Workshops will be organized both internally and externally. The goal of internal workshops will be to provide a set of practical skills or techniques to the consortium to further enhance cooperation and advancements within the project and between consortium members, while external workshops may be aimed towards decision-makers, the wider research community, other European projects, and developers. The workshops may not only include technical developments in the context of AD4GD, but lessons learned and best practices as well.

Workshops may take place both on site, and in the form of webinars.

Additionally, specialized demonstration workshops/forums will be set up, as elaborated in the next sections.

3.3.4.1 DEMONSTRATION WORKSHOPS/FORUMS

4 specific demonstration workshops/forums will be organized during the Growth and Closing phases of the project targeting the research community, other European projects, and developers.

At least one of these demonstration workshops may be organized in collaboration with the identified Sister Projects to jointly showcase project developments.

3.3.4.2 TRAINING TOOLKIT

Training activities are specifically aimed towards public authorities, decision-makers, and scientists, and include a training toolkit to be produced with general applicability in mind. The toolkit may be primarily utilized in the context of external workshops. It will be developed during the Growth phase of the project by the technical project partners, considering the developments in WP3, 4, 5, and 6.

3.3.5 SOCIAL MEDIA

The use of various social media channels (i.e., Twitter, LinkedIn, YouTube) provides a platform for interactive communication and real time interaction with followers from numerous target groups and beyond. Social media is an excellent tool for raising awareness of AD4GD and related activities, reaching hundreds that otherwise might not have learned about the project.

Social media activities will be carried out with the support of all consortium members, tagging them when applicable, as well as encouraging distribution through their own social media channels. CREAF and MI set up an '*AD4GD Content calendar*' in excel with the tabs 'Twitter', 'LinkedIn', 'Newsletters', 'Videos', and 'KPIs'. Additionally, MI has generated a document titled 'AD4GD Publishing calendar and posts' to gather the specific posts (including text, emojis, pictures, links, etc.) to be released on social media. Both documents have been made available to all project partners on the shared drive.

The AD4GD consortium will continuously monitor the evolvement of social media platforms in line with European Commission's Code of Practice on Disinformation[6] and check, readjust, and re-evaluate their viability as tools for maximizing the impact of the project.

3.3.5.1 TWITTER

A Twitter account has been generated by CREAF (https://twitter.com/ad4gd_project) under the handle @ad4gd_project. CREAF will manage the AD4GD presence on Twitter and will create new posts at least 3 times a week.

Twitter content will be focused on explaining the project objectives, and outputs, sharing the materials and news generated throughout the projects and promoting its events. Also, it will be a channel to interact with the Sister Projects by sharing its content (retweets, mentions, etc.). Twitter is also an opportunity to re-direct stakeholders to the website.

Post will be created following three main rules, including:

- Mentioning partners/people/projects using @ wherever possible: a list of profiles of interest will be created by CREAF and be accessible to all the partners involved in WP7.
- Use of hashtags: the most relevant hashtags with the most interactions will be actively searched for in order to promote the posts. Some examples, include #AD4GD #HorizonEU #GreenDeal.
- Strategic use of pictures, emojis and short-cutted links to make the post more appealing.

In addition, to strengthen AD4GD's visual brand identity, a Twitter kit will be created with template banners. For example, to be used when sharing events, news or interviews.

[6] https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

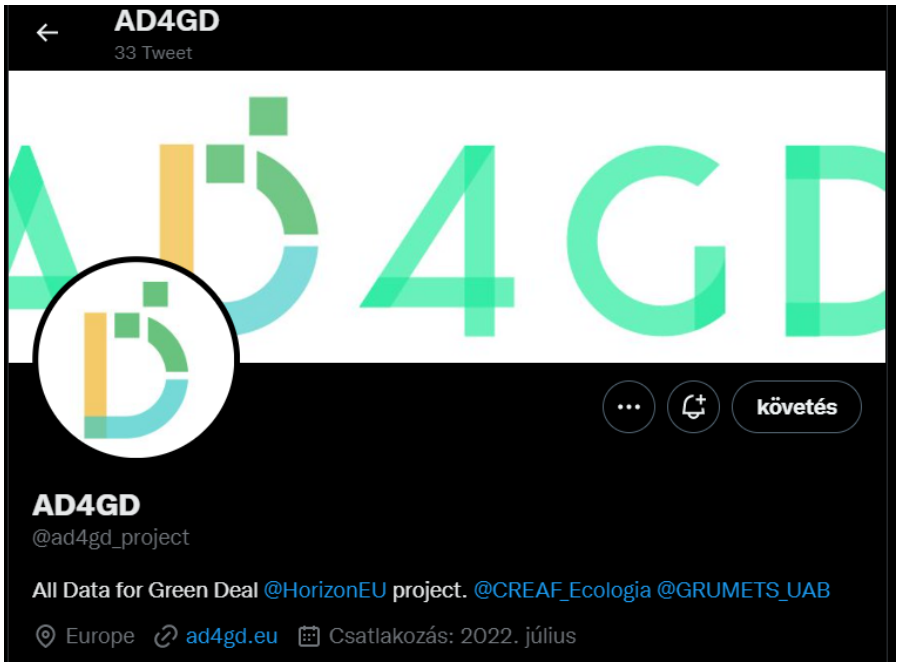

Figure 18 AD4GD Twitter

3.3.5.2 LINKEDIN

LinkedIn is a professional networking tool through which AD4GD achievements will be communicated and disseminated by sharing posts and news, including through other websites and social media accounts. LinkedIn is a means for reaching professional communities who are interested in the project developments, including in the fields of sustainability, research, ICT, and security.

MI has created the AD4GD LinkedIn page (https://www.linkedin.com/company/ad4gd/), inviting one person per consortium member to act as Content admin. All consortium members are encouraged to share and re-share posts, and to invite their connections to follow AD4GD. MI will continue to post once a week, keeping the following rules in mind:

- Mentioning partners/people/projects using @ wherever possible: a list of profiles of interest will be created by MI and be accessible to all the partners involved in WP7.
- Use of hashtags: the most relevant hashtags with the most interactions will be actively searched for in order to promote the posts. Some examples include #AD4GD #HorizonEU #GreenDeal.
- Strategic use of pictures, emojis and short-cutted links to make the post more appealing.

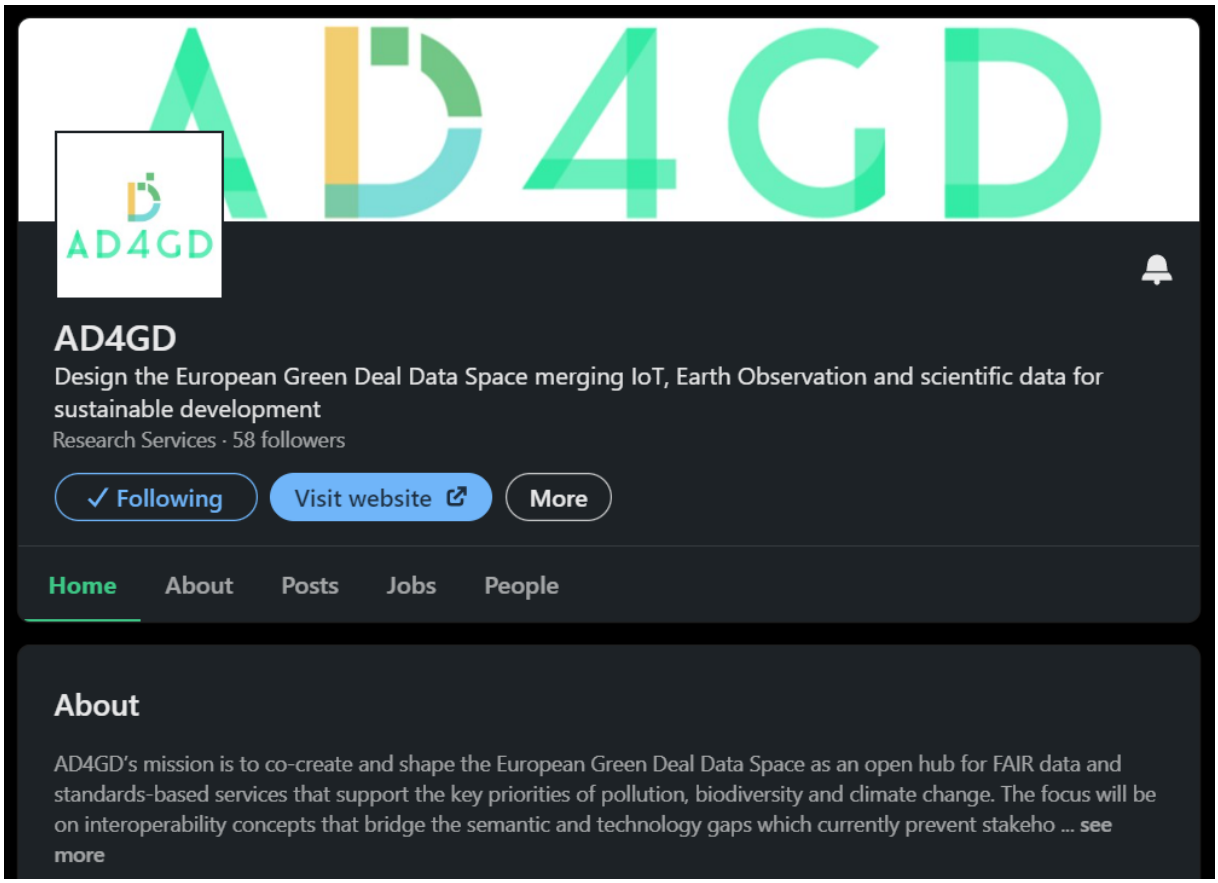

Figure 19 AD4GD LinkedIn

3.3.5.3 YOUTUBE

The AD4GD YouTube account was set up by CREAF to be used as a repository of videos produced by the project consortium, including introductory and explanatory videos tailored to the actual project stage. Videos will be produced using clear imagery and icon set to give a modern feel and enhance the comprehensiveness and reach of produced material.

At the current stage, 17 videos are planned to be shared:

1. M1-M12: introductory/explanatory video of AD4GD
2. M13-M24: information about the first pilot, the comprehensive monitoring of water pollution
3. M13-M24: information about the second pilot, the monitoring and optimization of biodiversity corridors
4. M13-M24: information about the third pilot, the enhancement of greenhouse gas emission monitoring through dynamic calibration of low cost sensors
5. M25-M36: AD4GD achievements and outcomes, lessons learned and the way forward
6. M18-M36: 12 partner interviews in their full length

Figure 20 AD4GD YouTube channel

3.3.6 PARTNER INTERVIEWS

From M7, MI will set up and conduct interviews with all AD4GD consortium members via Zoom. The recordings will be cut into maximum 1-minute-long segments to prepare them for periodic sharing through social media. The longer versions of the interview will also be made available through YouTube, as well as disseminated through the AD4GD website.

The interview segments will provide an insight to the creation of AD4GD, its expected impacts, who are the project partners, and how they are contributing to the vision of AD4GD.

3.4 CONFERENCES AND EVENTS

As part of the dissemination strategy, AD4GD has gathered the list of relevant conferences and events (see Section 4.2). To effectively communicate about the project, a set of promotional material was prepared for varying use-cases, to be distributed at the identified conferences, events, seminars, workshops, and training opportunities. These materials include a QR code, PowerPoint presentation, brochure, flyer, rollup, and a training toolkit, as detailed in the following sections. All versions are/will be made available on the shared drive so that consortium members can easily access these.

3.4.1 QR CODE

A QR code will be designed by CREAF, OGC, and MI including the AD4GD logo to serve as a bridge to the AD4GD website. The QR code will be made available on the shared drive to be easily sharable by all project partners. The QR code will be also included as part of the other promotional materials.

3.4.2 POWERPOINT PRESENTATION

The PowerPoint presentation introducing AD4GD will be designed by CREAF, OGC, and MI to provide useful information about the project after M13 when the pilots have officially started. The presentation will be made available on the shared drive to be easily editable/translatable by other project partners to introduce AD4GD at events and conferences.

3.4.3 BROCHURE

After the pilots have officially started (M13), a brochure will designed by CREAF, OGC, and MI to communicate detailed project information to a wide range of target groups. The brochure will editable and could be translated to other languages. It could be printed or shared as PDF depending on the use case.

3.4.4 FLYER

A preliminary flyer concept was designed by MI in A5 size to include useful information about AD4GD to reach a wide range of target groups. Flyers are designed to be easily editable and printable by all consortium members, allowing the inclusion of specific information or other languages.

Figure 21 AD4GD flyer concept

3.4.5 ROLLUP

A preliminary rollup concept was designed by MI to communicate project information on external events, including conferences, symposiums, workshops, or seminars.

Co-funded by the European Union, Switzerland and the United Kingdom

Figure 22 AD4GD rollup concept

4 STRATEGY FOR DISSEMINATION

The main objective of the AD4GD dissemination strategy is to transfer knowledge and results, enabling others to utilize and up-take results. In this context, based on the approval of the consortium members, research results will be shared with the relevant target groups, by utilizing the following channels:

- Liaison with and contributions to Standard Development Organizations;
- Attendance to, and presentations/demonstrations at conferences;
- Publications in high impact factor journals, magazines, and conferences.

As showcased in Table 6 and as found in the DoA, the following Key Performance Indicators were set to measure the project's success and give a general direction towards dissemination activities:

Indicator	Impact	Source
Publications in peer reviewed and open access journals	≥ 20	Number of publications
Publications in high impact factor journals	≥ 10	Number of publications in 2+ IF journals
Magazine articles	≥ 10	Number of magazine articles (both online and printed)
Involvement in conferences (articles)	≥ 20	Articles published by conferences
Meetings with local or regional authorities	≥ 10	Number of meetings with authorities
Open days at pilot locations	≥ 5	Number of open days
Research supported	≥ 8 MSc ≥ 5 PhD	Number of MSc and PhD research supported
Demonstration webinars + training / total participants	3+3 ≥ 100	Number of demonstration webinars + training / participants in total to all webinars + training
Final dissemination event	≥ 150	Number of participants
Standards reused in the AD4GD information model specification	≥ 10	Number of standards
Services and components implementing AD4GD open APIs	≥ 20	Number of contributions

Table 6 Dissemination activities KPIs

To achieve the set KPIs, the communication strategy was set up along four focus areas, including:

1. WHO to address (stakeholders and target groups).
2. HOW to disseminate (means and tools).
3. WHAT to disseminate.
4. WHEN and by WHOM the dissemination actions are carried out.

As Work Package 7 leader, MI is responsible for coordinating all dissemination activities. All AD4GD consortium members are responsible for the timely execution of activities, as agreed with the project

coordinator and the WP lead. The following matrix provides a high-level overview of the envisioned structure of dissemination activities and the distribution of responsibilities:

WHO **Target group**	**HOW** **Tools**	**WHAT** **Information**	**WHEN** **Period**	**WHOM** **Lead partner**
SEG4, SEG5, SEG6	High impact factor journals	AD4GD as a project Interim results Methodologies Technologies Open innovation aspects	M12-M36	ALL
SEG1	(Online) Magazines		M12-M36	
SEG4, SEG5, SEG6	Conference articles		M12-M36	
SEG1	Pilot open days		5 (M12-M36)	CREAF, AU, KWB, ECMWF, FIT, ITL
SEG4, SEG6	Research supported		M01-M36	ALL
SEG1, SEG2, SEG3, SEG6	Open access publication		M18-M36	ALL
SEG4, SEG5, SEG6	Demonstration webinar / training		6 (M12-M36)	ALL
All target groups	Final dissemination event		1 (M25-M36)	MI
NA	Standards reused		10 (M01-M24)	ALL
SEG4, SEG6	Standards contributions		20 (M12-M36)	OGC, MI + ALL
SEG1, SEG2	Outcome factsheets		1 (M25-M36)	ALL
SEG2	Green Deal - EC meeting		1 (M25-M36)	CREAF, OGC, MI
SEG2	Policy Brief		1 (M25-M36)	MI

Table 7 Dissemination strategy matrix

Furthermore, to ensure adequate dissemination among the AD4GD consortium members, references are made to their respective websites, publications, training, and others. Additionally, CREAF has also created a specific mailing list for internal dissemination: ad4gd-dissem-l@llistes.uab.cat

The information described above is subject to evolution and change depending on the project developments. Some dissemination activities (i.e., elements described in the HOW and WHAT columns of Table 7) might be joined together to better address the KPIs presented in Table 6. The deliverables tied to the reporting of dissemination activities of AD4GD will maintain the accurate monitoring and evaluation. All partners involved will jointly prepare contributions to the upcoming deliverables and report on their activities as applicable.

Dissemination activities will be monitored by MI; any deviations will be reported to the project coordinator. Every consortium member is responsible of maximizing impact through dissemination of AD4GD results through the defined channels.

4.1 STANDARDIZATION

Numerous Standard Development Organizations (SDOs) have been contributing to developing IoT communication and interoperability protocols in the context of Earth observation. Standards and standardization play an important role in the vision of AD4GD not only in co-creating and shaping the European Green Deal Data Space but further researching and bridging semantic and technology gaps.

Standardization related efforts will take a dual approach and focus on not only the specific standards to be implemented and reused in AD4GD but the identification of project specific aspects to be considered by SDOs. For this, a survey was generated by MI with the support of OGC and distributed in the AD4GD consortium to verify their involvement with Standard Development Organizations, validate which standards could be useful for developing the project assets, and assess the standardization potential of the project. The questions were based around the principle of the 3 W questions:

- **WHAT** are the topics with standardization potential what are the AD4GD standardizable assets
- **WHERE** these topics can be submitted and with which SDOs AD4GD should set a liaison up
- **WHO** can lead and/or support standardization efforts within the AD4GD consortium.

All AD4GD partners have submitted their answers in time. The questionnaire can be found in Annex II.

It must be noted as the AD4GD project is still in its early stages of development, hence it is impossible to list all possible outcomes and assets relevant for standardization. Depending on the technical developments of the project, new assets will likely appear at the later stages.

4.1.1 STANDARDS RELEVANCE

Standards (i.e., IoT communication protocols) are essential for enabling the integration of heterogeneous IoT data and communication protocols into the common data model and data space. The objective of this subsection is to identify and map existing standards to be considered for the development of AD4GD assets.

The following table contains an initial list of standards to be considered. Each standard will be considered in the context of WP1-6.

Standards Development Organization	Standard
Darwin Core Maintenance Interest Group	Darwin Core[7]
Citizen Science Association Data & Meta Data Working Group	PPSR_Core[8]
European Telecommunications Standard Institute	SAREF4AFRI[9]
FIWARE Foundation/ETSI	NGSI-LD[10]
FIWARE Foundation/ETSI	NGSI v2[11]
Internet Assigned Numbers Authority	Sensor Measurement List[12]
International Organization for Standardization	ISO 19115[13]
International Organization for Standardization	ISO 19139[14]

[7] https://dwc.tdwg.org/
[8] https://core.citizenscience.org/
[9] https://saref.etsi.org/saref4agri/v1.1.2/
[10] https://fiware-datamodels.readthedocs.io/en/stable/ngsi-ld_howto/index.html
[11] https://fiware-tutorials.readthedocs.io/en/stable/index.html
[12] https://www.iana.org/assignments/senml/senml.xhtml
[13] https://www.iso.org/standard/53798.html

International Organization for Standardization	ISO 19157[15]
National Center for Ecological Analysis and Synthesis	Ecological Metadata language[16]
National Snow and Ice Data Center	Network Common Data Format[17]
Open Geospatial Consortium	GeoSPARQL
Open Geospatial Consortium/International Telecommunications Union	OGC SensorThings API[18] Y.4473[19]
Open Geospatial Consortium	CityGML[20]
Open Geospatial Consortium	Earth Observation Dataset Metadata GeoJSON(-LD)[21]
Open Geospatial Consortium	Web Map Service[22]
Open Geospatial Consortium	Web Feature Service[23]
Open Geospatial Consortium	Catalogue Service Web[24]
Open Geospatial Consortium	Observation & Measurements standards[25]
Open Geospatial Consortium	GeoSPARQL[26]
Open Geospatial Consortium	API Tiles[27]
Open Geospatial Consortium	API Features[28]
QUDT.org	QUDT[29]
World Meteorological Organization	GRIB[30]
World Meteorological Organization	BUFR[31]
World Wide Web Consortium	Web Best Practices on Spatial Data[32]
World Wide Web Consortium	PROV-O[33]
World Wide Web Consortium	Semantic Sensor Network Ontology[34]

[14] https://www.iso.org/standard/67253.html
[15] https://www.iso.org/standard/32575.html
[16] https://eml.ecoinformatics.org/
[17] https://nsidc.org/data/user-resources/help-center/what-netcdf
[18] https://www.ogc.org/standards/sensorthings
[19] https://www.itu.int/rec/T-REC-Y.4473-202008-I/en
[20] https://www.ogc.org/standards/citygml
[21] https://www.ogc.org/standards/eo-geojson
[22] https://www.ogc.org/standards/wms
[23] https://www.ogc.org/standards/wfs
[24] https://www.ogc.org/standards/cat
[25] https://www.ogc.org/standards/om
[26] https://www.ogc.org/standards/geosparql
[27] https://ogcapi.ogc.org/tiles/
[28] https://ogcapi.ogc.org/features/
[29] https://www.qudt.org/pages/QUDToverviewPage.html
[30] https://community.wmo.int/en/activity-areas/wis/latest-version
[31] https://community.wmo.int/en/activity-areas/wis/latest-version
[32] https://www.w3.org/TR/sdw-bp/
[33] https://www.w3.org/TR/prov-o/
[34] https://www.w3.org/TR/vocab-ssn/

World Wide Web Consortium	RDF Data Cube[35]

Table 8 Standards to be considered for use in AD4GD

4.1.2 LIAISON WITH SDOS AND AD4GD CONTRIBUTION TO STANDARDIZATION

Before pursuing standardization activities, it is crucial for the project to develop its innovations aligned with other standards. By analyzing the standardization potential of AD4GD, the objective is to prepare liaisons with the identified SDOs, communicate the outputs of AD4GD, and make contributions to existing work items.

In the context of AD4GD, contributions are understood as outputs of research projects that are shared with SDOs. They are not limited to activities leading towards the development of fully recognized standards, but may include other forms of collaborations, such as demos, presentations, tutorials, and participation in Study Group/Committee meetings, etc.

Based on the survey results, the following table provides a synthesized standardization strategy for AD4GD:

WHAT	**WHO**			**WHERE**	
Asset to be standardized	**Related WP**	**Lead contributor**	**Lead SDO facilitator**	**SDO**	**Working Group/Task Force**
OGC APIs and OGC Definition Server	WP1, WP2, WP3, WP4, WP5, WP6	CREAF, OGC, PSNC, ITL, ECMWF, ATOS, FIT, AU	OGC, CREAF	OGC	NA
GeoDCAT					NA
OGC Records API					NA
SensorThings API					NA
Data spaces	WP1, WP2, WP4	PSNC, CREAF, OGC, ECMWF, FIT, ITL, ECCP	ECCP	ECCP	Europrivacy International Board of Experts
AD4GD information model	WP1, WP2, WP3, WP4, WP5	CREAF, OGC, PSNC, ITL, ECMWF, ATOS, FIT, MI, AU	OGC, CREAF, PSNC	OGC	NA
			CREAF, AU	ISO	ISO 19157 ISO TC211
			MI	ITU-T	SG20
			ITL	ETSI	ISG IPE
				ISO/IEC	SC 41/WG
			ECMWF	WMO	GRIB BUFR
Best practices to	WP2	CREAF, AU,	OGC, CREAF	OGC	NA

[35] https://www.w3.org/TR/vocab-data-cube/

manage in situ socioeconomic and CitSci data using FAIR principles		FIT, OGC, ECMWF	CREAF, AU	ISO	ISO 19157 ISO TC211
			MI	ITU-T	SG20, AI working group
			ITL	ETSI	ISG IPE
				ISO/IEC	SC 41/WG
Standardized vocabularies for citizen science	WP2, WP6	CREAF, AU, FIT, OGC, ECMWF, KWB, ITL, MI	OGC, CREAF	OGC	NA
			CREAF, AU	ISO	ISO 19157 ISO TC211
			ITL	ETSI	ISG IPE
				ISO/IEC	SC 41/WG
Standardization for local data implementation	WP1, WP2, WP6	CREAF, AU, FIT, OGC, ECMWF, KWB, ITL, MI	OGC, CREAF	OGC	NA
			CREAF, AU	ISO	ISO 19157 ISO TC211
			ITL	ETSI	ISG IPE
				ISO/IEC	SC 41/WG

Table 9 AD4GD Standardization strategy

A specific joint database was generated by MI where the goal of one Sheet titled '*AD4GD Standardization*' is to monitor the status of prospective contributions with the following fields to be filled by the authors:

- What
  - Name of contribution
  - Type of contribution
- Where (name of SDO)
- When (planned submission/actual submission date)
- Who (name of partners)
- Status

The following subsections will further detail the various aspects of the standardization strategy.

4.1.2.1 ASSETS FOR STANDARDIZATION (WHAT)

The following assets and topics were suggested by AD4GD partners to consider for standardization:

- AD4GD information model
- Standardized vocabularies for citizen science
- Standardization for local data implementation
- Standardized way to gather data sets meta data from different servers
- OGC APIs and OGC Definition Server to interoperability exchange data across applications
- GeoDCAT
- OGC Records API
- Best practices to manage in situ socioeconomic and CitSci data using FAIR principles
- SensorThings API

4.1.2.2 STANDARDS DEVELOPMENT ORGANIZATIONS (WHERE)

The following SDOs are proposed for setting up liaisons and directing AD4GD standardization efforts to:

- Big Data Value Association (BDVA)
- European Telecommunications Standard Institute (ETSI)
  - ETSI Industry specification group (IGS) on IPv6 enhanced innovation (IPE)
- FIWARE Foundation
- GEOS
- International Data Spaces Association (IDSA)
- International Organization for Standardization/International Electrotechnical Commission (ISO/IEC)
  - ISO/IEC JTC 1/SC 41 Internet of Things and digital twin
  - ISO/IEC JTC 1/SC 38 Cloud computing and distributed platforms
  - ISO/IEC JTC 1/SC 32 Data management and interchange
- Intergovernmental Panel on Climate Change (IPCC)
- International Telecommunications Union (ITU)
  - Study Group 20: Internet of Things and smart cities and communities
- International Union for Conservation of Nature (IUCN)
- Open Geospatial Consortium (OGC)
- World Meteorological Organization (WMO)
- World Wide Web Consortium (W3C)
  - Agriculture Working Group

4.1.2.3 AD4GD STANDARDIZATION PARTNERS (WHO)

Table 10 lists the existing standardization activities of the AD4GD consortium members:

Partner	SDO	Working Group	Topic	Status
AU	ISO/OGC	ISO 19157	Geographic information	Expert
CREAF, OGC	OGC	NA	OGC API Maps	Expert
CREAF, OGC	OGC	NA	OGC API Tiles	Expert
CREAF, OGC	OGC	NA	SensorThings API+	Expert
CREAF, OGC	OGC	NA	Cloud Optimized GeoTIFF	Expert
CREAF	ISO	ISO TC211	Data spaces	National experts
ECCP	ECCP	Europrivacy International Board of Experts	Europrivacy Certification Scheme	Scheme Owner
ECMWF	WMO	GRIB	Meteorological data storage	Observer
ECMWF	WMO	BUFR	Binary data format	Observer
ITL	ETSI	ISG IPE	IPv6, 6TiSCH	Rapporteur in charge of IoT and 6TiSCH
ITL	ISO/IEC	SC 41/WG	IoT interoperability	Liaison
MI	ITU-T	SG20	IoT	Rapporteur in Q5

PSNC, OGC	OGC	AIM	Agriculture	Member

Table 10 AD4GD partners' standardization activities

The following table identifies the organizational focal points who can lead contribution processes at specific SDOs:

Partner name	Focal point	SDO
CREAF	Joan Masó Alba Brobia	OGC ISO
ECCP	Stefan Schiffner	ECCP
ITL	Cédric Crettaz	ETSI ISO/IEC
MI	Renáta Radócz Sébastien Ziegler	ITU ISO/IEC
OGC	Francesca Norado	OGC, ISO
PSNC	Raul Palma	OGC, BDVA, GAIA-X, EOSC

Table 11 Standardization lead partners

Additionally, most AD4GD partners have expressed interest in supporting contributions jointly with other consortium members.

4.2 CONFERENCES AND EVENTS

Industry and regulatory conferences, symposiums, and other events are important venues for disseminating AD4GD achievements and technical/research results. Such conferences are usually visited by multiple target groups specified as part of the communication strategy (Section 3.1.1). At this stage of the project, AD4GD consortium members envision attendance in the following conferences:

Conference/event	Topic	Partner
Digital Around the World	Internet of Things, data protection, data models, API	MI, ITL, ECCP, ATOS
Privacy Symposium	Data protection	MI, ITL, ECCP
EuroGEO workshop	European GEO Community	CREAF, MI, AU
GEO symposium and data and knowledge workshop	GEO Community	CREAF, MI
GEO plenary and ministerial	GEO Community	CREAF, MI
ESA Living Planet symposium	Remote Sensing	ECMWF, AU
ECSA conference	Citizen Science (European forum)	CREAF, AU
C*Sci Association	Citizen Science (international forum)	AU
ENVRI week	In-situ network community	CREAF, AU
INSPIRE Conference	Socioeconomic data	CREAF, AU

IoT Week	Internet of Things, data models, API, data protection	MI, ITL, ECCP, AU, ATOS
AGU (in particular the ESSI division)	Geosciences and in particular Information	CREAF, AU, KWB
EGU (in particular the ESSI division)	Geosciences and in particular Information	CREAF
Events organized by FIWARE	IoT, dataspaces	ITL, ATOS
Events organized by IDSA	Dataspaces	ITL, ATOS
Events organized by BDVA / ADRA / DAIRO	Artificial Intelligence, Big Data, Data Spaces	ATOS
ISPRS conferences	Spatial data interoperability, Open geospatial data, use of data for relevant analysis	OGC, CREAF
NordiCHI Conference	Participatory design with Citizen Scientists	FIT
Designing Interactive Systems (DIS) Conference	Analysis of GDDS UIs for Citizen Scientists	FIT
Aqua Urbanica (German)	Water	KWB
ICUD (in Delft 2024)	International Conference on urban drainage	KWB
HIC	Hydroinformatics	KWB
iEMS	International Environmental Modelling and Software Society	KWB
DIPCON	Defused Pollution Conference	KWB
International Symposium of Digital Earth	International Society of Digital Earth	CREAF

Table 12 Tentative dissemination venues

A specific joint database was generated by MI where the goal of one Sheet titled '*AD4GD Conferences*' is to monitor presence with the following fields to be filled by the participants:

- Past
  - Name of event
  - Date
  - Location
  - Link
  - Target groups
  - Partners
  - Relevance to AD4GD
- Future
  - Name of event
  - Date
  - Location
  - Link
  - Target groups

- Partners
- Relevance to AD4GD

The database is made available on the shared drive for every consortium member.

4.3 PUBLICATIONS

Publications in high impact factor journals, magazines, and international peer-reviewed conferences are expected to be submitted by the consortium members to disseminate AD4GD research findings. AD4GD partners are encouraged to collaborate on different topics and submit contributions jointly. Although, in line with the DoA, Open Access journals and magazines are preferred for the publishing, the activities will not be limited to them. Table 13 includes a tentative list of high impact factor journals, magazines, and other peer-reviewed conferences where the AD4GD consortium may consider submitting articles.

Journal/magazine/peer-reviewed conference	Topic	Lead partner
International Journal of Digital Earth	Data model	ITL, MI
Privacy Symposium Call for Papers – published by Springer	Data protection by design	ECCP, MI
NordiCHI (Conference)	Participatory design with Citizen Scientists	FIT
Designing Interactive Systems (DIS)	Analysis of GDDS UIs for Citizen Scientists	FIT
Computer Supported Cooperative Work (CSCW) published by Springer	Understanding Citizen Scientists	FIT
Computers and Geosciences	informatics	CREAF, AU
Transactions in GIS	GIS, interoperability enabler for geospatial information	CREAF, OGC
Inter. Journal of Geographical Information Science	GIS	CREAF, OGC, AU
Environmental Science and Policy	Environmental Science	ALL
Water (MDPI Journal)	Water Quality Analysis with AI	Atos, KWB
Environmental Sciences Europe (Springer)	Air Quality Analysis with AI using IoT sensors	Atos, AU
Open Research Europe	Any relevant result	OGC
PLOS One	Biodiversity / landscape ecology analysis	AU
Sensors journal	Digital technologies	ATOS
European Conference on Artificial Intelligence ECAI	Artificial Intelligence, Machine Learning, Deep Learning	ATOS
Water (MDPI Journal) or Journal of Environmental Planning and Management	Water quality and availability in small urban lakes of Berlin	KWB

Table 13 Publication strategy

A specific joint database was generated by MI where the goal of one Sheet titled '*AD4GD Publications*' is to monitor publications with the following fields to be filled by the authors:

- Document title
- Document type
- Publication date
- Journal/magazine/conference
- Name(s) and partner(s)
- Relevance to AD4GD

The database is made available on the shared drive for every consortium member.

5 STRATEGY FOR EXPLOITATION

The exploitation plan of the project will analyze and discover the different sustainability paths of the project outcomes and translate them into a set of possible products and service offerings with associated features, QoS and support. The objective is to scale up project results adapting to market opportunities and trends and leverage the diverse background and strengths of the project consortium.

From early on, the AD4GD partners will be gradually engaged in the feeding of the draft and final exploitation plan, coordinated, and facilitated by the task leader Design Terminal.

The Exploitation plan development process follows a knowledge transfer funnel strategy:

1. starting with the analysis of market potential
2. building a methodology for exploitation co-design to identify AD4GD's exploitable outputs (or Key Exploitable Results);
3. continuing by collecting individual partner sustainability plans and hosting an exploitation co-creation workshop, and
4. finally, analysing the collected results, narrowing it down to the final exploitation action plan to ensure AD4GD's longevity.

Figure 23 Development of exploitation action plan

The task is also related to the promotion of future sustainability and quality evaluation of the project. It includes activities such as announcing the results and achievements of the project, presenting the advantages of the services and support developed and identifying stakeholders willing to promote the results in the future.

The captured information will be assessed and recorded in line with the Consortium Agreement (CA), respecting privacy and Intellectual Property Rights (IPR) requirements. This approach is essential to avoid unforeseen delays or obstacles related to confidentiality or competitiveness and to provide partners with the security they need to allow them to be transparent in their findings, enabling the project to quickly identify opportunities for exploitation. The objective is to ensure the fastest route for new knowledge to where it can add value and create impact.

5.1 EXPLOITATION PLAN PHASES AND ACTIONS

Analysis of market potential:

A market study will be performed by the task leader to understand different opportunities to scale up project results, similarly, interest will be collected early on to understand future potential user requirements from relevant stakeholders. In parallel with the market study, the use case requirements will have to be defined by the consortium, which will serve as the main guide to evaluate the usability of the developed project outcomes by other users. The Scientific and Technical Coordinators and the work package coordinator oversee harmonizing the inputs by the technical and business parts.

Methodology for sustainability:

The exploitation methodology developed will be built in a co-design manner and include knowledge transfer elements on different sustainability pathways collected both from consortium partners and

previous projects' results. The methodology is developed including a literature review, internal and external interviews, online and offline focus group co-creation workshops, strategic meeting summaries towards the second half of the project and an iterative review organically embedded in the exploitation plan.

Individual and collective sustainability plans:

The exploitation plan outcomes will be based on regularly collecting key exploitable results (KER) and identifying exploitation target groups through structured questionnaires and interviews with partners responsible for developing the results. Collected and analyzed results will be assessed based on criteria related to their innovation capacity, relevance to the sector and adherence to the project, call objectives and expected impact by the Project Coordination Team. It should be noted that KERs, especially those collected early in the project, are likely to continue to develop throughout AD4GD. Collected knowledge will be periodically reviewed by the task leader Design Terminal.

Conclusions, draft and final exploitation plan:

The draft Exploitation Strategy deliverable D7.3 GDDS exploitation perspectives (initial) prepared by M18 will include the first set of collected KERs, exploitation mechanisms and identified uptake stakeholders. By applying the above-explained knowledge transfer funnel, the draft plan will be turned into an actionable final exploitation plan, summarizing the selected KERs, exploitation mechanisms and stakeholders interested to sustain and upscale the outcomes of the project, namely the D7.4 GDDS exploitation perspectives (final) by M36.

As a result of the work on the different exploitation pillars, the following outcomes are equally expected as framed in the project proposal:

- Creation of an active and agile exploitation ecosystem
- Definition of an operational and deployment plan, ensuring that technologies and solutions developed by the project can be realized in real-life conditions.
- Definition of the value chain, players needed to put the data space in operation and cost-benefit analysis.

Exploitation plan timing:

- M06 - Contribution to D7.1 Plan for dissemination and exploitation including standardization and communication activities
- M07-18 - Analysis of market potential
- M07-12 - Methodology for sustainability
- M10 - Physical exploitation workshop
- M10-18 Individual and collective sustainability plans
- M18 - D7.3 GDDS exploitation perspectives
- M19-33 Individual and collective sustainability plans
- M20 - Stakeholder exploitation validation workshop
- M36 - D7.4 GDDS exploitation perspectives

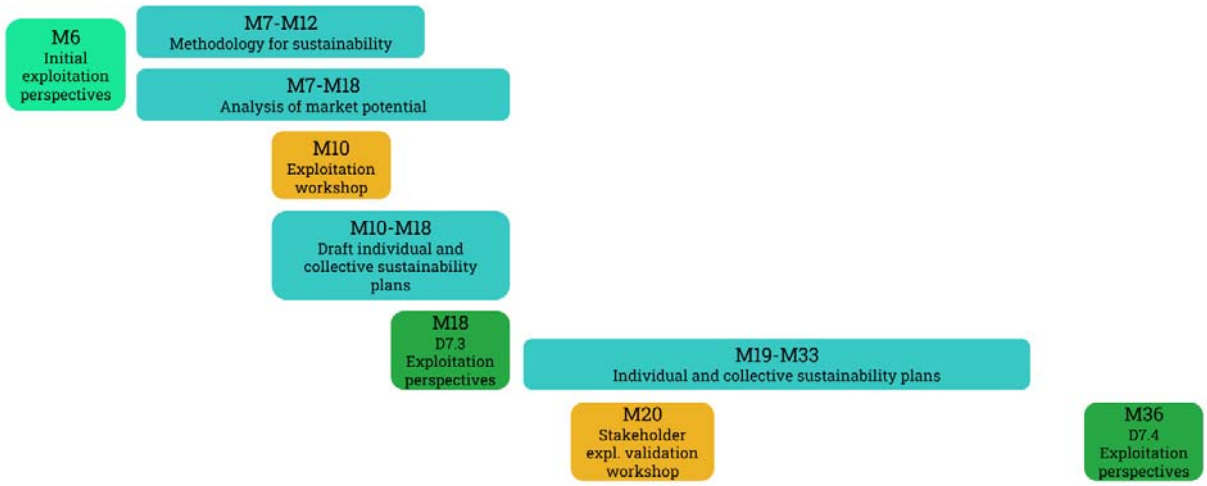

Figure 24 Exploitation plan timing

5.2 INTERNAL PARTNER EXPLOITATION PLANS

The following table provides an idea about the initial exploitation plans at the beginning of the project, focusing on the main sustainability objectives of each partner. As explained above, the plans will be followed throughout the project and updates will be documented within the periodical deliverables. Their feasibility will be equally validated by external stakeholder boards: Data consumers, Data providers, Data producers, Data owners, Data application providers, Data platform providers, Data marketplace providers, Identity providers.

Partner	Initial exploitation perspectives
Centre de Recerca Ecològica i Aplicacions Forestals	Standards implemented in MiraMon GIS and RS software and its MiraMon Map browser including quality tools. EV vocabularies included in the GeM+ (Metadata editor). QualityML enrichment.
Open Geospatial Consortium Europe	Definition Server implementation of GDDS vocabularies for EVs, further developments and testing of OGC standards and OGC APIs.
ATOS IT Solutions and Services Iberia SL	Atos will integrate the results generated in the AD4GD project and specifically in the WP5 work package to improve the capabilities of its AI and HPC products' portfolio (ThinkAI).
Kompetenzzentrum Wasser Berlin	Prioritization of measures concerning the water quality and availability for small lakes in Berlin and improvement of the transferability of solutions for the urban water cycle by using standardized data and data processing.
Instytut Chemii Bioorganicznej Polskiej Akademii Nauk - PSNC	PSNC will use the experience and insights from the work to enable semantic interoperability in the GD data space, to cross-fertilise and contribute to other data space related projects where PSNC participates, e.g., AgriDataSpace, Datamite, ILIAD, etc. Related to this, PSNC will also use the experiences and results from the design and implementation of the AD4GD information, as input (and showcase) to the standardization process of the Agriculture Information Model (AIM), which is being leveraged in AG4GD and other related projects like ILIAD. The results related to the tools for data integration will be used to extend PSNC Open-Source solution and promote its usage.

Fraunhofer -Gesellschaft zur Förderung der angewandten Forschung e.V.	Fraunhofer FIT will use the collected insights from the multi-actor analysis (WP1) to cross fertilize and to contribute to other ongoing data space projects at Fraunhofer like the "Datenraum Kultur". Furthermore, we aim to strengthen our standpoint with the planned activities with citizen scientists (WP2) in regard to citizen participation. Both will also lead to scientific publications in international journals and conferences to support doctoral students in their PhD studies.
European Centre For Medium-Range Weather Forecasts	ECMWF is responsible for implementing Pilot 3; enable technical integration new sources of data to key existing Earth Observation and Earth-Observation-based data platforms; develop a sandbox environment for testing applications and workflows; evaluate performance aspects.
European Centre for Certification and Privacy	ECCP will push an extension of the Europrivacy Certification Scheme on data spaces to the Europrivacy International Board of Experts.
Design Terminal	Design Terminal will run a hackathon for its' startup alumni using the platform database. Moreover, Design Terminal will create an AD4GD startup spinoff pathway plan.
IoT Lab	IoT Lab will use the development made in the AD4GD project, in particular WP3, to extend its IoT services to dataspaces. As IoT Lab is also involved in other research and development communities such as FIWARE and TM Forum, IoT Lab can promote and exploit the AD4GD results with the open-source software provided by these communities.
Mandat International	As a non-profit foundation, MI will exploit project results particularly through the pursuit of future research actions which intertwine the various data sources with vertical-specific datasets (e.g., health, social sciences). It will also exploit AD4GD results in the international standardization communities, including ITU-T and ISO.
Aston University	AU will exploit experience and knowledge gathered through the project to strengthen its engagement with standardization and industrial / policy outreach. We will generate evidence-based knowledge from the pilot studies which will lead to scientific publications in international journals and conferences. We will make use of project assets and deliverables in scale-up activities, follow-up projects and further applied research.

Table 14 Initial partner exploitation perspectives

Co-funded by the European Union, Switzerland and the United Kingdom

6 CONCLUSION

The goal of D7.1 Plan for dissemination and exploitation, including standardization and communication activities is to serve as a reference document for outreach activities, supporting the promotion of AD4GD activities and achievements, and the creation of long-lasting impact.

This living document will accommodate any further customization, as required. The AD4GD plan for outreach will be constantly and consistently evaluated and revised during the entire duration of the project to reflect on project developments and interim communication/dissemination results and include best practices.

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ANNEX I

AD4GD STANDARDS ENGAGEMENT SURVEY

WP7 Standardization, Outreach and Exploitation

Standards play an important role in the vision of AD4GD. For D7.1 Plan for dissemination and exploitation, including standardization and communication activities we envision to (1) provide a list of standards, protocols, and best practices to be included in the technical work of the project, as well as (2) preparing for setting up liaisons with relevant Standards Development Organizations while preparing contributions, where possible. To do so, this questionnaire is aimed towards the representatives of project partners in the AD4GD ecosystem.

CONTACT DETAILS

Partner name:

Person of contact name:

Person of contact email:

STANDARDS RELEVANCE AND STANDARDS TO BE USED IN AD4GD

In the context of FAIR data, pollution, biodiversity, communication protocols, and technology, what standards will be relevant for the development of AD4GD and for which scope (please refer to project's objectives/WPs)?

Is your organization a member of a Standards Developing Organization (SDO) involved in the development of any of the previously mentioned standards? If yes, please specify:

Is your organization directly involved in any of such standards developing processes at this SDO? If yes, please specify:

	Name of the SDO	Standards development process	Relevant link/information
1			
2			
3			
4			
5			

LIAISON WITH SDOS AND CONTRIBUTIONS TO STANDARDIZATION

What is, according to you, the value proposition of what AD4GD is developing?

What are the key elements (i.e., standardizable assets, research outputs, knowledge) that the project should push to standardization? For each of them, please specify the standard to which it contributes and the kind of standardization (e.g., standard data model / standard software protocol / best practice…).

	Key element (standardizable asset, research outputs, knowledge)	Standard to contribute to	Kind of standardization (standard data model,

			standard software protocol, best practice, etc.)
1			
2			
3			
4			
5			

Which Standards Developing Organizations should AD4GD focus on? Please give as many details as possible (working groups, questions, committees, etc.)

	Standard Development Organization	Working Group/Committee/Question	Link
1			
2			
3			
4			
5			

Is your organization interested in leading standardization contributions?

Yes/No

Is your organization interested in making joint contributions with another AD4GD partner?

Yes/No

Does your organisation have relationships with other community associations with which to interact for pushing AD4GD results into best practices or community references? Please specify which ones these are and what kind of interaction and for which purpose can be planned.

Do you have any additional comments?