CREXDATA

Critical Action Planning over Extreme-Scale Data

D6.1 Plan for Dissemination and Exploitation, Project Presentation and Website

Version 1.0

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Contents

Executive Summary

This comprehensive document delineates the critical aspects of the dissemination, communication, and exploitation for the CREXDATA project, including the project presentation and website. This plan seeks to strategically boost awareness and drive the adoption of CREXDATA's advanced technology across diverse user communities, creating robust and mutually beneficial relationships in the process. Periodic updates will be provided throughout the life of the project to ensure timely communication of progress and milestones achieved.

Key communities earmarked for the adoption of CREXDATA applications include domains where action-planning and decision-making is required under uncertainty. This includes public authorities like civil protection, technical relief and rescue services, critical infrastructure operators, health institutions, maritime transportation enterprises and governing authorities. A deep comprehension of their unique challenges in the context of CREXDATA tools and applications is vital for generating significant impact and driving transformation. Moreover, communication and synergy between Public Private Partnerships on AI, Data and Robotics, the European AI On Demand Platform and Ecosystem (AI4Europe) platform, and civil protection partnerships will be pursued to ensure cohesion and improve the amplification of the CREXDATA technology.

This plan further details the unique corporate image devised for the project, destined for usage by consortium partners as they begin to participate in the communication and dissemination of project results more heavily. A set of comprehensive dissemination channels and tools have been established, encompassing a dedicated project website, social media profiles, and a dissemination pack replete with a flyer and a presentation, template. Engaging audio-visual content (e.g., videos) will be prepared as the project develops. This document also furnishes a curated list of prominent events where CREXDATA's work will be showcased.

In tandem with the dissemination and communication efforts, a business plan will be formulated starting at M7. This strategy will align with the technical evolution of the project and key milestones and will consider both immediate outcomes and short-term impact and the long-term and wider impact. The three project use cases will demonstrate the scientific, technological, and societal outcomes of the CREXDATA project through pilots and demonstrators to show the tangible assets of the project that are appropriate for integration and deployment in multidisciplinary and diverse scientific and industrial approaches. Moreover, the project will seek to foster a vibrant interaction with industrial stakeholders and potential users through events, workshops, software releases.

While this summary offers a broad overview of the dissemination, communication, and exploitation strategy, a deeper dive into specific topics such as target audience profiling, pain points, dissemination tools, event planning, press strategy, and the comprehensive engagement plan is provided in the subsequent sections of this detailed plan.

1 Introduction

The CREXDATA project is a ground-breaking venture that aims to create an open-source integrated architecture and repository that effectively harnesses artificial intelligence (AI), machine learning (ML), and extreme-scale analytics to bolster various domains such as maritime navigation, health crisis management, and weather-impact prediction. A key determinant of success for CREXDATA is the seamless integration of its sophisticated systems with end-user requirements across diverse sectors, while maintaining an efficient and optimally configured infrastructure. To facilitate this, we are committed to building synergies with our target user groups, understanding their specific needs, and disseminating knowledge about the game-changing potential of CREXDATA.

This is the primary focus of the Plan for Dissemination and Exploitation, Project Presentation and Website, embodied within work package (WP6). Particular emphasis will be given to the industrial community as a potential user group. In the initial phase of the project, an analysis of target sectors was conducted to identify potential targets for exploiting CREXDATA results. Each sector´s requirements were analysed as were potential CREXDATA contributions in terms of tangible outcomes. This analysis was fundamental to crafting our bespoke dissemination and engagement strategy.

Chapter 2 of this document provides an insight into the process of stakeholder analysis and the pivotal stakeholder categories identified. It elucidates the target audiences for dissemination, communication channels, and the key messages CREXDATA will convey. An in-depth explanation of the dissemination and communication plan is offered in Chapter 3, which includes details on the corporate image, dissemination tools, press strategy, and their development over the course of the project. Chapter 4 of the document proposes a brief introduction to the steps ahead for exploitation in terms of strategic product planning and business modelling. Chapter 5 outlines the initial plan for cohesion with Public Private Partnerships on AI, Data and Robotics, the AI4Europe platform, and civil protection partnerships. The document concludes with Chapter 6 on Key Project Indicators that will help measure key activities and ensure that the dissemination, exploitation, and cohesion activities are moving according to plan.

2 Stakeholder Analysis

A comprehensive stakeholder analysis was conducted to determine the individuals, groups, and organisations that are involved or invested in the CREXDATA project. This process enables us to prioritize the groups we need to engage and determine our communication and engagement strategy with them.

Table 1: Stakeholder categories

Stakeholder Category	Working Definition
Partners	Organisations or companies who are part of the CREXDATA consortium
Maritime Companies and Organisations, and Authorities	Companies and organisations involved in vessel transportation, management, and operations including port operations
Government Authorities	Government bodies or agencies who are involved or have an interest in CREXDATA's application domains
Public Health Authorities	Organisations involved in health crisis management and use data analytics for decision-making
Civil Protection Authorities and Regulatory Bodies	Organisations and agencies that manage, coordinate and legally regulate actions aimed at protecting people, property and the environment against situations of serious collective risk, disasters and public calamities
Critical Infrastructure Operators	Companies operating critical infrastructures (transport, energy, communication, water management)
Small and medium enterprises (SMEs), Start-ups	SMEs or spin-offs involved in creating AI/ML-based solutions and applications
Weather and Climate Research Centres	Organisations that study weather patterns and climate change, and have an interest in extreme-scale data analytics
Research Institutes	Research Institutes (other than partners) that perform research in the following fields: AI, ML, Internet of Things (IoT), Big Data
Universities	Universities with study and research programmes in AI, ML, IoT, and Big Data
High Performance Computing (HPC) Centres	HPC centres that could use or contribute to the development of CREXDATA systems
Hardware Vendors	Companies that manufacture hardware components that might be used within CREXDATA
Software Companies	Companies developing software tools and platforms related to AI, ML, IoT and Big Data

European Smart Grid Providers	European entities developing and providing digital and other advanced technologies to monitor and manage the transport of electricity from all generation sources to meet the varying electricity demands of end users.
Extreme-scale-Analytics-a-Service providers	Organisations and companies providing highly scalable in-memory data grid that provides predictable responsiveness to meet exponential demand for data.
Municipality Authorities	Organisation or a body which is associated with or belonging to a city or town that has its own local government and is responsible for provision of state-run home services and basic needs as health, education, environmental cleanliness, drinking water in homes, recreation and sport.
First Responders: European and national	Organisations responsible for going immediately to the scene of an accident or emergency to provide assistance. First responders typically include law enforcement officers, paramedics, emergency medical technicians, and firefighters.
Media	General and specialized media covering technology and innovation
Technology Users	End users of AI, ML, IoT, and Big Data technologies
Open-Source Communities	Communities that contribute to open-source software development and might be interested in CREXDATA
European Smart Factories	Digitised manufacturing facility that uses connected devices, machinery and production systems to continuously collect and share data, as well improve processes by using variety of technologies including artificial intelligence (AI), big data analytics, cloud computing, and the industrial Internet of Things (IoT).
European Smart Cities	A smart city is a place where traditional networks and services are made more efficient with the use of digital solutions for the benefit of its inhabitants and business.
Scientific community (AI, ML IoT, Data Management)	The scientific community is a diverse network of scientist in (AI, ML IoT, Data Management) and their relationships and interactions
General Public	General population who may have an interest in the outcomes of CREXDATA
Non-profit Organisations	Organisations that could benefit from or contribute to the CREXDATA project based on its societal impact
Weather and Climate Research Centres	Organisations and institutions with operations in climate modelling and observations of the atmosphere.
Public Protection and Disaster Relief organisations (PPDR)	Institutions responsible for responding to crisis situations

2.1 Target audiences for dissemination and communication activities

The different stakeholders have been grouped into target audiences based on the relevant key messages and main channels of communication for each case (see Table 2). Partners have not been included among the dissemination target audiences because of their direct participation in the project. The effective internal communication established by WP6 Dissemination, exploitation, and business planning will ensure first-hand knowledge of all activities and outcomes of the project among the consortium.

Actual and potential users of CREXDATA tools and applications are included in certain stakeholder groups. It is important for CREXDATA to understand their needs and pain points, so that current users continue using the tools and applications, and potential users adopt them in the near future and contribute to their dissemination and development. Mechanisms for understanding their needs, gathering their feedback, and providing support will be set in place by CREXDATA. Pain points of different stakeholder categories, here grouped into targeted audiences, are expressed in a form of a solution, i.e., value for the target audience section in Table 2. where it is visible how various categories of professionals and institutions will benefit from using CREXDATA applications. At the same time, these stakeholders might be part of professional networks and other initiatives. To facilitate the access of these communities to CREXDATA applications, the consortium will address as many of these pain points as possible within the scope of this engagement plan.

The communication content and the focus of the activities organized for these groups will be adapted to their specific needs. For instance, in an event for Data Scientists, the focus could be on the usage of the tools while in an event with Maritime Companies, it would be on how the tools can improve vessel management and operations, with specific examples from their field. Training events tailored to specific user groups will be organized.

Table 2: Dissemination target audiences – key messages

TARGET GROUPS FOR DISSEMINATION ACTIVITIES				
REGULATORY BODIES	SERVICE AND TECHNOLOGY PROVIDERS	POTENTIAL END USERS	RESEARCHERS	GENERAL PUBLIC AND OTHER COMMUNITIES
STAKEHOLDERS				
Public Health Authorities and Regulatory Bodies, Civil Protection Authorities and Regulatory Bodies, PPDR, Government Authorities	European Smart Grid Providers, Extreme-scale Analytics-as-a-Service providers, Critical Infrastructure Operators, start-ups and SMEs, Hardware Vendors,	Maritime Professionals and Authorities, Municipality Authorities, First Responders: European and national, European	Scientific community (AI, ML IoT, Data Management) Weather and Climate Research Centres, Research Institutes, Universities, HPC Centres	General public, Media, Open Source Communities

	Software Companies	Smart Factories, European smart Cities, NGOs, Technology Users		
KEY MESSAGE				
- Multiresolution forecasts on critical events - Limited impact & reduced recovery time/costs after weather induced events, natural disaster, health crisis -Increased trust in authorities	- Diminish time to create and deploy workflows - Rapid failure localization and classification - Access to AI/ML tools for creating innovative solutions	-Truthful simulation models and data - Optimally configured infrastructure usage - Rapid failure localization and classification	- Truthful simulation models and data - Optimal usage of computing infrastructure	- Limit societal impact of natural disasters - Increase trust in authorities
VALUE				
- Access to extreme-scale data analytics tools -Improve the level of knowledge and application of big data tools in crisis management - Optimally configured infrastructure usage - Proactive health crisis management/outbreak control & - Non-pharmaceutical Intervention -Supporting the Green Deal Strategy	- Access to extreme-scale data analytics tools - Online learning & forecasting of business events - Optimal usage of computing infrastructure - Support Open Innovation Strengthen role of EU authorities/ SMEs -Supporting the Green Deal Strategy	- Improve the level of knowledge of AI/ML tools and/or upgrading their operations - Safe vessel navigation at sea - Generic data ingestion/fusion/simulation frameworks for relevant tasks -Supporting the Green Deal Strategy Reduced disaster, recovery, and administration costs	- Access to high-performance computing clusters - Knowledge of the usage of AI/ML tools - Generic online federated learning - Reduced equipment administration for target sectors - Support Open Innovation	-Benefit from shorter and more efficient response time - Minimise societal and economic impact of crisis
CHANNELS				

- Information via existing channels of the industrial/scientific project partners - Involvement in requirements collection and expert evaluation - Presentation of project results in associated events, website, social media, press releases	- Contributions to special-interest groups and magazines - Participating in and organising workshops, exhibitions and fairs - Contributions to relevant industrial consortia white papers, website, social media	-Dissemination via related authorities, industry and SMEs specific meetings, and fairs - Contribution to on-line forums mailing lists, website, social media, press releases	- Conference presentations, - Publications of papers in high-quality journals - Contribution to special-interest newsletters -Contact to other EU projects in Big Data, AI & related to CREXDATA use cases, website, social media	-Website. social media, press releases

3 Dissemination and Communication

To facilitate the collaboration and support of all partners in the dissemination and communication activities, the dissemination team has defined the CREXDATA project corporate image and has made templates and guidelines available for partners. The dissemination team provided explanations of the documents and have made them available on the internal repository. Partners have been informed of the importance of informing the dissemination team of their participations in dissemination activities and the importance of ensuring the correct acknowledgement of EU funding.

3.1 Corporate Image

A common graphic identity in all dissemination tasks allows better visibility and recognition of the project. As part of the dissemination budget, a local design company was contracted to design the CREXDATA corporate brand and prepare a series of templates. All dissemination materials are consistent with the brand guide developed (colours, typography, composition, logo) and include the name, logo, and disclaimer of the CREXDATA project. The dissemination team will make ensure that this brand is applied correctly.

3.1.1 Logo

The different versions of the logo have been uploaded to the 'Branding' section the project website. The logos and the branding guide defining their use are also available on the project's internal repository.

Table 3: Logos

	Logo with URL	Logo with full name	Logo
Colour	CREXDATA www.crexdata.eu	CREXDATA Critical Action Planning over Extreme-Scale Data	CREXDATA
Negative		CREXDATA Critical Action Planning over Extreme-Scale Data	CREXDATA

3.1.2 Font

The main project font defined is Nasalization Rg Regular and the complementary typography includes Courier & Avenir Next Condensed. It is an easy-to-read font with its own character and helps define the CREXDATA project brand. The brand font is used for the website and the presentation templates. However, to ensure better compatibility in the writing of deliverables and personalisation of the slides related to the project, Arial is a secondary font that will be used for other project texts, such as deliverables.

3.1.3 Language

The official language of the CREXDATA project is British English. However, the dissemination material should be translated into the different partners' languages, where possible. Each partner should ensure that the material is adequately translated into the local languages, e.g., in the case of the press releases for the local media. Funding for this is not included in the dissemination budget.

3.1.4 Templates

Several templates have been prepared to ensure a cohesive look to the project and to facilitate partner's ability to easily use the project's materials with correct acknowledgement and style for their dissemination purposes.

A presentation template: A template (Figure 1) has been created in PowerPoint. It is to be used for all presentations in different events. It is a basic layout template which the partners fill in with different scientific and technical content depending on the presentation objective and audience.

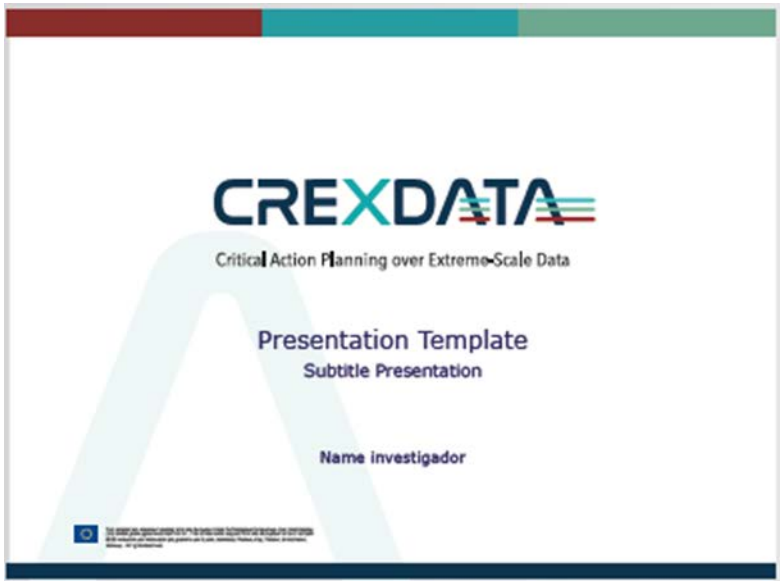

Figure 1: Power Point presentation template

Poster template: A template (Figure 2) for a poster has been created in PowerPoint. It is used to be used for all poster presentations in different events. It is a basic layout template which the partners fill in with different scientific and technical content depending on the presentation objective and audience.

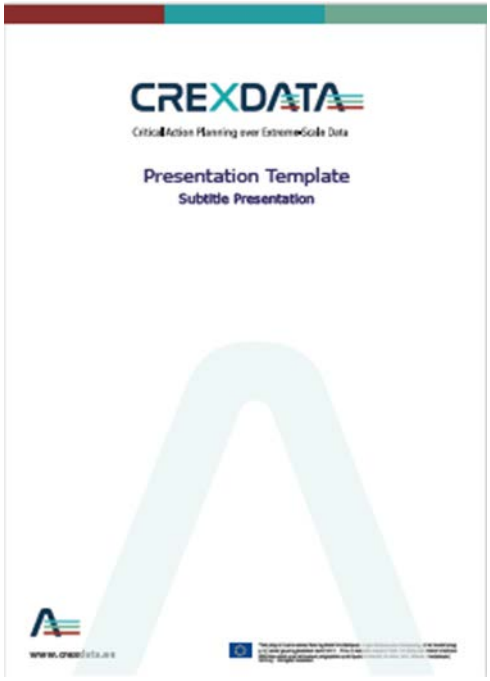

Figure 2: Poster template

Word deliverable template: Figure 3 shows the Deliverable template in Word to be used to report to the European Commission.

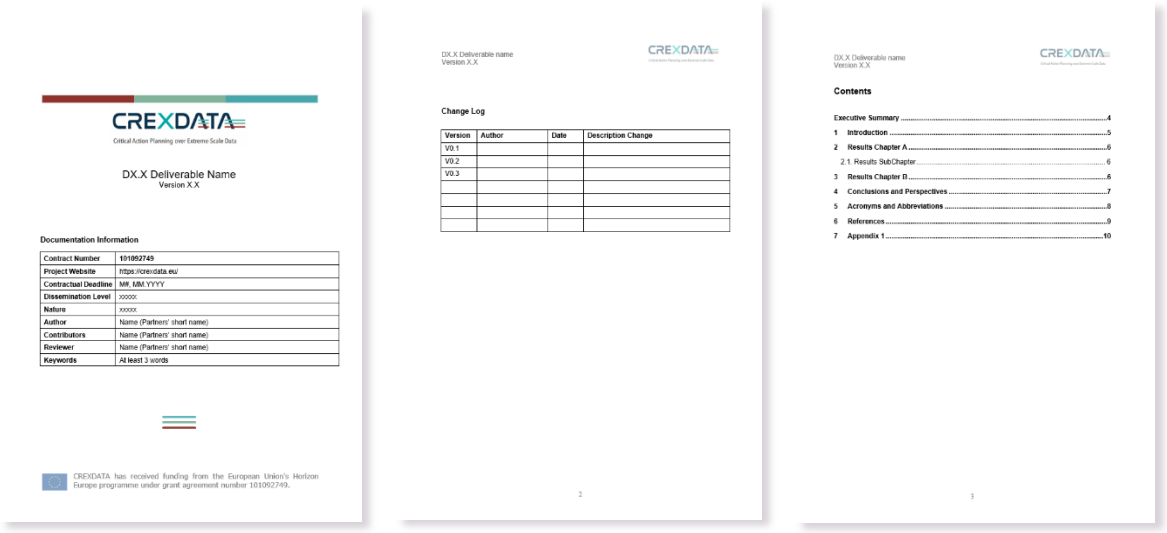

Figure 3: Deliverable template - Word

Deliverable template LaTex*:* **Figure 4** shows the Deliverable template in LaTeX to be used to report to the European Commission.

Latex_Crexdata_Deliverable_Template.tex

```
% Options for packages loaded elsewhere
\PassOptionsToPackage{unicode}{hyperref}
\PassOptionsToPackage{hyphens}{url}
%
\documentclass[11pt,a4paper]{article}
\usepackage[export]{adjustbox}
\usepackage{wrapfig}
\usepackage[headsep=1cm]{geometry}
\usepackage{fancyhdr}
\usepackage{a4wide}
\usepackage{amsmath,amssymb}
\usepackage{lmodern}
\usepackage{iftex}
\ifPDFTeX
  \usepackage[T1]{fontenc}
  \usepackage[utf8]{inputenc}
  \usepackage{textcomp} % provide euro and other symbols
\else % if luatex or xetex
  \usepackage{unicode-math}
  \defaultfontfeatures{Scale=MatchLowercase}
  \defaultfontfeatures[\rmfamily]{Ligatures=TeX,Scale=1}
\fi
% Use upquote if available, for straight quotes in verbatim environments
```

Figure 4: Deliverable template – LaTeX

3.1.5 Fact sheet

The fact sheet of the CREXDATA project, visible in *Figure 5*, was created to provide a brief legal and financial overview, as well as the vision, goals, partners, and concept of the project. Available as Annex 1.

Figure 5: CREXDATA project fact sheet

3.2 Publications

The dissemination team reviewed the provisions set out in 'The Guidelines on Open Access to Scientific Publications and Research Data' in Horizon Europe and has provided partners with information for knowledge management and protection. The team has also prepared appropriate publications guidelines that explain the publication and Open Access requirements. The guidelines were shared with all partners and are uploaded on the internal repository.

All publications from the project (publications, white papers, technical reports, etc.) must be open access and stored in an approved repository. Moreover, they must include the following acknowledgement:

The research leading to these results has received funding from the European Union's Horizon Europe Programme under the CREXDATA Project (http://www.crexdata.eu), grant agreement n° 101092749.

3.3 Dissemination tools

To efficiently reach our targets for dissemination and to maximize the visibility of the CREXDATA project, we employ a wide array of communication channels and dissemination tools. The purpose of these tools and activities is to ensure that the diverse target audiences, as identified in our stakeholder analysis, are well informed about CREXDATA and understand the strategic relevance and impact of this project for Europe.

The project's public website and our social media channels (Twitter, LinkedIn, and YouTube) serve as the first points of contact and play a significant role in our dissemination efforts. These channels are supplemented by a thoughtfully curated list of scientific conferences and a host of other external communication tools.

3.3.1 CREXDATA website https://crexdata.eu/

The public website of CREXDATA plays a pivotal role as it is the most critical medium for disseminating the project's results and activities. It provides comprehensive information about the project objectives, ongoing activities, publications, events, and achievements. The website is designed with responsiveness in mind, ensuring it can adapt to all commonly used devices, including desktop screens, laptops, smartphones, and tablets. Partners have been encouraged to include a link to the project on their institution's website.

One of the prominent features of the website is the 'News' section. This dynamic segment of the site is regularly updated with the latest news about the project's work, its achievements, and scientific publications. Furthermore, it features upcoming events in which CREXDATA researchers participate, alongside reports from past events and other dissemination activities.

Partners in the CREXDATA project play a crucial role in maintaining the 'News' section up-to-date. They are encouraged to share updates, especially when new publications are ready for distribution, and any important developments within their respective work packages. This collaborative effort to keep the news section current and relevant not only raises the profile of the CREXDATA project but also enhances its visibility and reach to a wider audience.

The task leader for WP6.2, in collaboration with the WP4 dissemination team, holds the primary responsibility for updating the content of the CREXDATA website. Frequent news updates will be published, encompassing technical information about the project and reports of events and other dissemination activities undertaken. The website also includes a contact page with a contact form and project contact details.

A monitoring tool (Google Analytics) has been implemented to gather pertinent information about the behaviour of the target audience and guide better decisions regarding content, as necessary. This analytics tool assists the dissemination team in ensuring the effectiveness of the dissemination efforts.

3.3.2 Social media

Social media plays a crucial role in enhancing the dissemination activities of the CREXDATA project and in engaging with its target audiences. The project's dissemination team has chosen two primary social media channels: Twitter and LinkedIn, which are the most frequently used platforms by the project's targeted audiences. YouTube will also be used to disseminate videos and interviews about the project.

These channels will be utilized not only to disseminate key messages and information about the project, but also to stay updated with the latest developments in fields relevant to the project, such as artificial intelligence, extreme data, critical situation management, virtual reality, high-performance computing (HPC), and more. They will also be used to keep track of trends in identified relevant sectors. We are also currently using social media to engage with our fellow cluster projects and the wider European AI community.

CREXDATA experts contribute to the project's social media strategy by creating and posting content that aims to influence the scientific community. Important technical updates and news about the project that are posted on the CREXDATA website are also shared and disseminated on the project's social media platforms to engage with a broader audience.

Figure 6: CREXDATA social media campaigns

3.3.3 Gender equality strategy

CREXDATA is committed to gender equality and diversity. The project has a dedicated section on the website devoted to equality and diversity where partners share their institutional plans and activities. CREXDATA has also taken advantage of its social media presence to bring attention to diversity campaigns (Figure 6) including the February 11, Women in Science Day and March 8 International Women´s Day. We intend to continue engaging in such campaigns the bring focus to the project´s commitment to diversity.

We want to bring attention to the many women in the project who are making CREXDATA possible. We plan to conduct a 'Women in STEM' interview series, focusing on the work done by the women in the project. This interview series will be publicly available on the website.

3.3.4 Dissemination material

An overview flyer (Figure 7) on the CREXDATA project has been prepared. The first copies of it were presented at the prominent High Performance Computing conference ISC 2023. Digital versions are available publicly on the project website or in the internal repository.

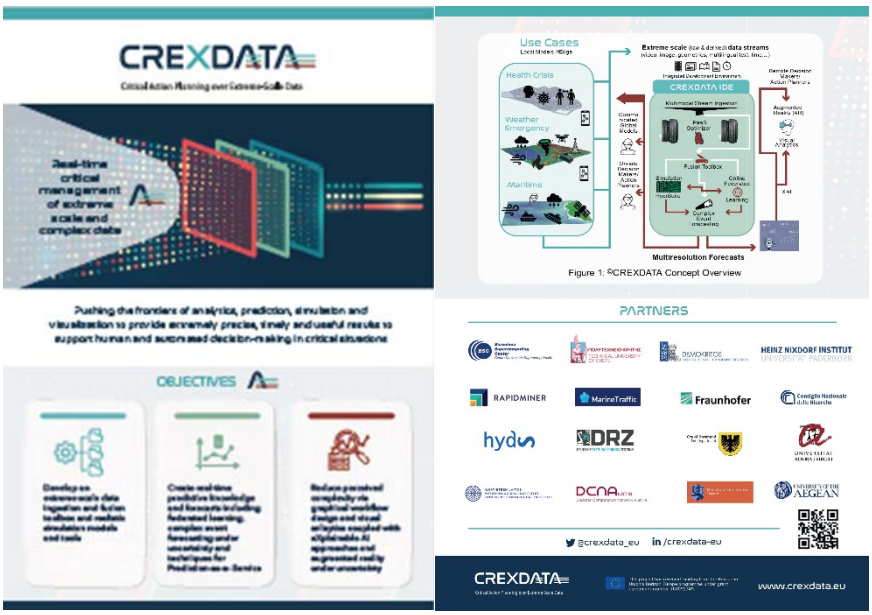

Figure 7: CREXDATA overview flyer

A zoom background is also available for project partners participating in teleconferences and wishing to bring attention to the CREXDATA project.

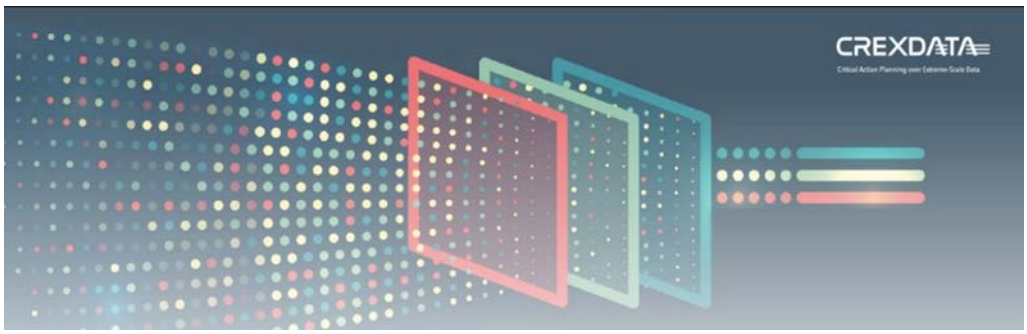

Figure 8: Zoom background

3.4 Events

Attendance and presentations at high-profile, peer-reviewed conferences in the fields of extreme data, AI, HPC, crisis management, maritime, etc., are important dissemination activities for the CREXDATA project. Showcasing the latest advancements of the project at such events, meetings, or workshops will enhance the project's visibility and facilitate its communication to researchers in diverse scientific fields, different types of companies, policymakers, professional communities, research institutions, and other related projects.

The following table is a list of the type events in which the CREXDATA project can showcase its developments and disseminate its activity. Participation in these events is not confirmed, and the events the project participates will evolve throughout the lifetime of the project.

Table 3: Events for CREXDATA dissemination

Event Information	Date and Location
IoT Solution World Conference (world's largest IoT event series)	Jan 31- Feb 2, 2023 - Barcelona, Spain
EDBT/ICDT Joint Conference (Conference on Extending Database Technology)	March 28-31, 2023 - Ioannina, Greece
ICDE (39th IEEE International Conference on Data Engineering)	April 3-7 2023- Anaheim, CA, USA
Hannover Messe (Technology show)	April 17-21, 2023- Hannover, Germany
AAMAS (International Conference on Autonomous Agents and Multiagent Systems)	May 29 -June 2, 2023 - London, UK
SeaFuture (Maritime Technologies)	June 5-8, 2023, La Spezia, Italy
ICEM (Conference on Emergency Medicine)	June 13-16, 2023, Amsterdam, Netherlands
WMRC (World Maritime Rescue Congress)	June 18-20, 2023, Rotterdam, Netherlands
SIGMOD PODS 2023 (International Conference on Management of Data)	June 18 - June 23, 2023- Seattle WA, USA

IoT Week (Latest digital developments and trends)	June 19-22 2023-Berlin, Germany
Automatica (exhibition on robotics)	June 27-30 2023- Munich, Germany
ICHECM 2023: 17. International Conference on Healthcare Emergency and Crisis Management	July 17-18, 2023, Berlin, Germany
WAF (32nd Conference on Weather Analysis and Forecasting), NWP (28th Conference on Numerical Weather Prediction), 20th Conference on Mesoscale Processes	July 17-21, 2023, Wisconsin, USA
ICML (International conference on Machine Learning)	July 23-29 2023- Honolulu, Hawaii
SIGKDD (Conference on Knowledge Discovery and Data Mining)	August 6-10 2023 - Long Beach, CA, USA
ICWPF 2023: 17. International Conference on Weather Prediction and Forecasting	August 10-11, 2023 in Barcelona, Spain
VLDB (Very Large Data Bases Conference)	August 28-September 1, 2023- Vancouver, Canada
KR (International Conference on Principles of Knowledge Representation and Reasoning)	September 2-8 2023- Rhodes, Greece
The 2023 EMS Annual Meeting of the European Meteorological Society	Bratislava, 3 to 8 September 2023.
ECML PKDD (European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases)	September 18-22 2023 - Turin, Italy
CIKM (Conference on Information and Knowledge management)	October 2023- Birmingham, UK
ECAI (European Conference on Artificial Intelligence)	October 1-6 2023 - Kraków, Poland
12th Meteorological Technology World Expo	October 3-5, 2023, Geneva, Switzerland
22nd International Exhibition for Rescue, Fire Fighting, Disaster Relief and Security	October 6-8, 2023, Montichiary, Italy
EBDVF (European Big Data Value Forum)	October 25-27, 2023, Valencia, Spain
2ND SHIP NAVIGATION AND VOYAGE OPTIMIZATION	November 1-2, 2023, Athens, Greece
SenSys (ACM Conference on Embedded Networked Sensor Systems)	November 12-16, 2023, Boston, USA

54th FEU council meeting	November 8-10, 2023, Zagreb, Croatia
HealthConf – The Future of Healthcare	November 13-16, 2023, Lisbon, Portugal
NeurIPS (Neural information processing systems Conference)	December 10-16, 2023, New Orleans, USA
BDVA Data Week 2023	13 – 15 June, 2023 / Luleå, Sweden
EENA Conference	April 24-26, 2024, Valencia, Spain
70th vfdb annual conference	May 6-8, 2024, Magdeburg, Germany
European Maritime Day (EMD)	May 2024 / Svendborg, Denmark
Transportation Research Arena 2024	15 – 18 April, 2024, Dublin, Ireland
Posidonia 2024	3 - 7 June, 2024, Athens, Greece

3.5 Press Strategy

The press strategy will align with the overall dissemination strategy and its objectives, lasting the entire duration of the CREXDATA project. Press releases serve as one of the most effective methods for communicating the existence and updates of the project, drawing attention to its progress and achievements.

During the lifespan of the project, various press releases will be issued. The initial press release was published and shared with technical media outlets on 20th of March 2023. This initial release is crucial as it outlines the objectives and working plan of the CREXDATA project. Ideally, another press release will be published midway through the project to discuss its progress, and a final one at the project's conclusion, highlighting the scientific results.

All press releases will be included on the news page of the CREXDATA website. Partners will have the opportunity to include these releases on their institutional websites to increase click rates and referrals. Additionally, all partners are encouraged to write press articles about CREXDATA for distribution to local media channels.

Press releases will be shared with key technical media outlets in the fields of HPC, climate change, artificial intelligence, personalized medicine, among others. This will enhance the project's visibility among the appropriate audiences identified in the stakeholder analysis. Some potential media outlets for distribution include HPCwire, Scientific Computing World, Science Daily, GEN Genetic Engineering & Biotechnology News, among others.

4 Exploitation

The CREXDATA approach toward exploitation may be summarized by four pillars. At its core, pillars 2 and 3 focus on the exploitation of CREXDATA technologies and sustainable uptake of outcomes. Pillar 2 focuses on facilitating the adoption of the technology and creating a concrete vision of its benefits. Thus, it means to operationalize our mission in terms of technology push. Partners that develop technologies will be able to tell a coherent story of how CREXDATA technology can be adopted across all envisaged end user groups. Pillar 3 requires strategic planning for exploitation and continuous financing after the project's lifespan.

To address these two pillars, CREXDATA combines perspectives of requirements pull and technology push. Three use cases are subject of case study-based research, driven by **requirements pull** of ambitious stakeholders. Within these use cases, applications scenarios are designed that encapsulate stakeholder requirements, but at the same time facilitate telling stories of how CREXDATA technologies can be adopted. Therefore, application scenarios are not only derived in collaboration with representative stakeholders in selected pilot sites per use case, but with a prospective view on evolving technologies throughout the project duration. **Technology push** is represented by work packages WP3 to WP5, from overall system architecture through data processing to explainability and information visualization. The overall approach is supported by systems engineering methods and tools (hinted at by the V model in Figure 9).

From a strategic product planning perspective, technology push is transferred into a description of envisaged **value proposition**. 'The CREXDATA system' is understood as a product to be developed including co-design of a business model. Open-Source is set as a fundamental choice within this model. While the systems engineering and, more specifically, requirements engineering in WP2 indicates pains and gains of stakeholders, strategic product planning transfers technological capabilities into gain creators and pain relievers. This will be done with consortium members, supported by instruments like the Value Proposition Canvas (VPC). It provides the core elements to co-design a **business models** extending those of consortium members and establishing new, collaborative ones for partners. Focusing on creating a joint eco-system of exploitation partners, sessions will be guided by tools like the Business Model Canvas (BMC). By nature, results of the CREXDATA project are not ready for market uptake from day 1 after the project but will be evolved over time. Additionally, research premises will be continuously reflected and advanced throughout the project duration. Therefore, it is planned to evaluate future-robustness by utilizing the **Scenario-Technique** as a method to systematically create and discuss consistent future scenarios for exploitation and continuous financing after the project's lifespan.

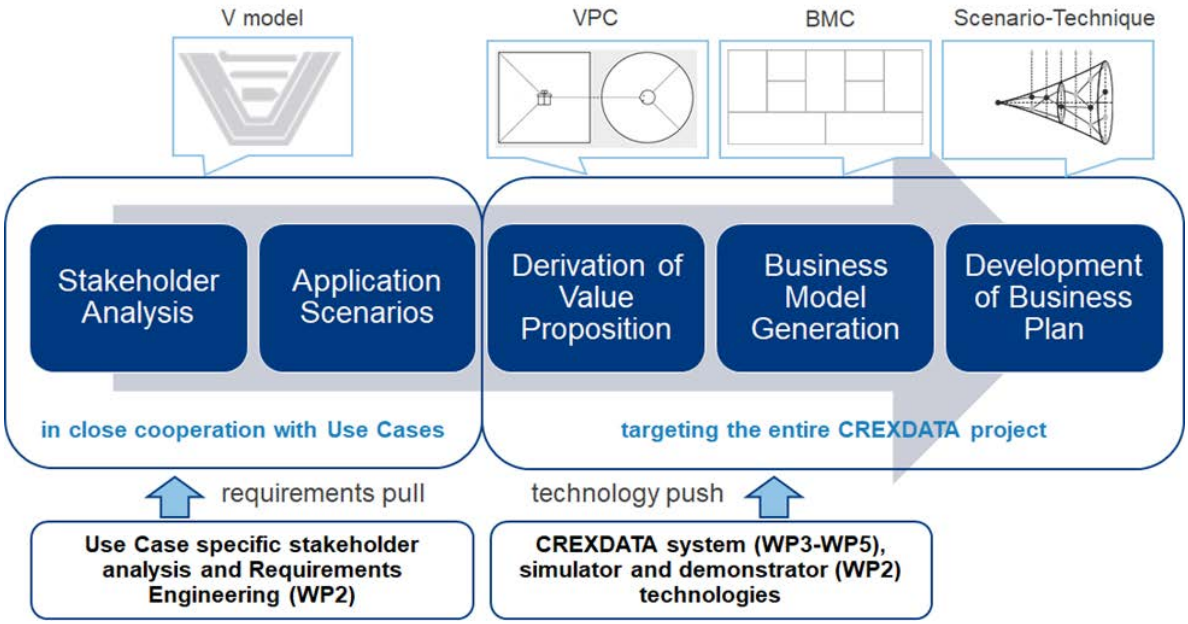

Figure 9: Scenario-Technique method

Along these activities, the objective is to co-design a clear **business plan**. It will include the envisaged releases of open-source software packages, linkages with established strategies of companies in the consortium, partners acquired by cohesion activities and support by research partners of CREXDATA. More information on the status of the exploitation activities and an initial version of the business plan will be available in D6.2 Initial Report on the Dissemination, Exploitation and Business Plan.

5 Cohesion activities

Cohesion activities offer important opportunities to pursue common goals with stakeholders who are pursuing common interests. CREXDATA will exploit cohesion opportunities through its crisis management and EU connections to assert its presence and work with others to find solutions and common ground.

5.1 Civil protection agencies and Data and Robotics

The German Rescue Robotics Centre (DRZ) and Paderborn University (UPB) are active in the emergency services community, specifically there is a strong connection to the Federation of European Fire Officers as well as the German organisation 'VFDB', that is the founding body of the INTERSCHUTZ, the world's leading international trade fair for rescue services, fire prevention, disaster relief, safety, and security. During the first 6 months of the project, the CREXDATA project has begun to establish itself in the crisis management community.

As a starting point, DRZ focused on the so called 'D-A-CH' region, which represents Germany, Austria and Switzerland:

- DRZ has been to the 'ifa Kdt-Forum' in Switzerland. This is an event for the gold level civil protection personnel where DRZ had the chance to present itself and CREXDATA.
- The RoboCup Rescue challenge, held at DRZ premises for the third time in a row, included a German-Austrian workshop. The workshop brought together experts from both countries to discuss 'innovative technologies and test methods for rescue robotics' and civil protection and industry. This was a great opportunity to introduce CREXDATA and showcase the weather emergency use case.
- To facilitate stronger connections between civil protection experts, a first workshop was held in Dortmund, Germany in May 2023. Experts joined together to connect and provide their input on the representative use case in WP2.

DRZ also took the opportunity to represent itself and CREXDATA at the European level at the 'Security Mission Information & Innovation Group Event 2023' in Paris in May. This event was specifically targeted to actors from the research community, and the CREXDATA project raised a lot of interest.

Fairs are a great way to connect and think about further cohesion activities. DRZ represented CREXDATA at the AERO drones in Friedrichshafen, Germany in April 2023. Moreover, a lot of interesting discussions were had at the annual meeting of the vfdb in Münster, Germany in May 2023. DRZ also had its own booth in the 112rescue fair in Dortmund, Germany. It shared information on CREXDATA, and DRZ and UPB were both selected for speaking slots. These activities provide especially good opportunities for fostering further connections.

More activities like these are planned but not yet fixed. Furthermore DRZ plans to involve its own international advisory board, that has experts from Japan (Prof. Satoshi Tadokoro from Tohoku university), several from Europe and also one from the USA (Adam Jacoff from NIST).

To enhance the connection to other European projects CREXDATA will held workshops. First steps in planning this have been taken as discussions at the cluster-meeting of our sister-projects were held.

5.2 Private Public Partnership on AI and the AI4EU Platform

MarineTraffic (MT) engages with the Public Private Partnership on AI and the AI4EU platform. Moreover, in the project's first 6 months, the CREXDATA project participated in the Big Data Value Association (BDVA) Data hub presented at the 2023 BDVA DataWeek alongside with other projects.

Steps have been taken to ensure cohesion and synergy with members of the Horizon-CL4-2022-DATA-01-01 Call (Methods for exploiting data and knowledge for extremely precise outcomes (analysis, prediction, decision support, reducing complexity and presenting insights in an understandable way). The three projects under this call, TEMA, ExtremeXP and CREXDATA. These projects met once within CREXDATA's first six months and has plans to continue meeting every two months to find common activities and opportunities.

CREXDATA and the AI4EU platform: In January 2019, the AI4EU consortium was established to build the first European Artificial Intelligence On-Demand (AIOD) Platform and Ecosystem with the support of the European Commission under the H2020 programme. With the completion of the initial AI4EU project at the end of 2021, the platform was renamed to AI-On-Demand and is supported by the six ICT49 projects and enriched by the Networks of Excellence.

In general, the offerings of the platform are summarized in the following categories:

1. **AI4Experiments Platform:** The AI4Experiments platform is an open space for AI developers, through which they can upload, use and share dockerized AI resources, as well as create customized AI Pipelines using a visual editor. The platform offers visual and intuitive design methods. It facilitates the creation of human-centred AI-solutions, building modular structures and using hybrid AI technologies.
2. **AI Assets Catalog:** A service to access AI resources (services, datasets, models, code, containers, executables, notebooks, libraries, and tutorials) and publish own AI assets. The AI Assets can be accessible either privately or publicly on the platform having different Intellectual Property Rights (IPR) and licenses.
3. **Research Bundles:** 'Research bundles' give a space in the AI on-demand platform where a user can collect and publish the outputs of a small research project in a compact way. A research bundle groups in a single place several different assets (code, data, tutorials, examples, etc.). Also, links to assets published elsewhere, like Github or Zenodo, can be published in this category.

Finally, the AIOD platform's AI community and dynamic content aim to provide a dedicated social network to AIOD platform users to exchange information and collaborate around AI. Different tools offered are used to help build the communities and ensure their sustainability, such as news & events and educational spaces to end users. The dynamic content is updated at short intervals and helps to both maintain and bring new knowledge to all members of the community. For example, the AI news of the AIOD platform informs users about trends, developments, cafés, and events related to AI in Europe.

6 Key Performance Indicators

All dissemination and industry engagement activities are carefully monitored. The following table summarises the Key Performance Indicators (KPIs) that will help ensure the impact of the dissemination activities. They will be monitored frequently and revised yearly, as they might change or evolve based on the project progress.

Table 4: Key Performance Indicators

KPI	Explanation	Total Target (M36)
Project branding and identity	Project logo, Project website, Project overview poster, promotional flyer	1 Project logo, 1 Project website, 1 Project overview poster, 1 promotional flyer
Social media	Indicator of the effectiveness of the community and its engagement with the online channels. Regular engagement and updates are needed to increase reach on social media channels	LinkedIn and Twitter followers, 900 followers (300 p/year) YouTube video uploads, 6 (2 per year)
Event-based dissemination	Workshops, keynotes, presentations to engage with the target audiences and share key project results.	2 industrial workshops, 1 scientific workshop, 5 keynotes/invited or tutorial talks, Participation in 2 fairs or exhibits in 2 events, 2 demo papers in top-tier industry conferences
Research/academic dissemination	Publications and participation in conferences	6-8 publications in top-tier journals, 20 academic conferences, 5 PhD/Master theses
Collaboration with other EU projects	Communicate and create synergy between, with related ongoing and future EU projects, crisis management projects, and the private public partnership (PPP) AI, Data Robotics, civil protection services and the AI4EU platform	Sign memorandum of understanding (MoU) with 2 projects, share data with 2 projects, co-organize industrial and scientific workshops with 2 projects
Transform research efforts into business value	Transfer research outcome into industry-ready technology	2 Whitepapers

In the original description of action (DOA) we expected to have more Twitter followers per year. After six months of the project, we have seen that the community is more engaged through LinkedIn. Furthermore, due to the instability of Twitter, we believe that it should be the secondary social media platform.

7 Conclusions and Perspectives

The primary objective of the Plan for Dissemination and Exploitation, Project Presentation and Website is to strategically increase awareness and promote the adoption of CREXDATA's advanced technology among diverse user communities, while fostering mutually beneficial relationships. Regular updates will be shared throughout the project's lifespan to ensure timely communication of progress and achieved milestones.

The Plan plays a crucial role in raising awareness of the project, while building partnerships and networks is equally important. Ultimately, the focus shifts towards putting the results and final products into practical use, ensuring that the project's outcomes have a tangible impact. The Plan outlines a distinctive corporate image specifically developed for the project, intended for use by consortium partners who will play an active role in the communication and dissemination of project results. It establishes a comprehensive set of dissemination channels and tools, including a dedicated project website, social media profiles, and a dissemination content package. As the project progresses, engaging audio-visual content such as videos will be created. Furthermore, a curated list of prominent events has been compiled to showcase CREXDATA's work.

The target communities identified for the adoption of CREXDATA applications comprise domains that require action-planning and decision-making in uncertain circumstances. These include public authorities such as civil protection agencies, technical relief and rescue services, critical infrastructure operators, health institutions, maritime transportation enterprises, and governing authorities. Understanding the unique challenges faced by these communities in relation to CREXDATA's tools and applications is crucial for creating a significant impact and driving transformation. Additionally, efforts will be made to enhance communication and synergy between Public Private Partnerships on AI, Data, and Robotics, the European AI On Demand Platform and Ecosystem (AI4Europe).

In parallel with the dissemination and communication efforts, a business plan will be formulated. This strategy will align with the project's technical evolution and key milestones, taking into account both immediate and short-term impacts, as well as long-term and wider impacts. The three project use cases will demonstrate the scientific, technological, and societal outcomes of CREXDATA through pilots and demonstrators, showcasing tangible assets that can be integrated and deployed across diverse scientific and industrial approaches. The project also aims to establish vibrant interactions with industrial stakeholders and potential users through events, workshops, and software releases.

Overall, the Plan is designed to effectively promote CREXDATA's advanced technology, facilitate collaboration with key stakeholders, and ensure the successful dissemination and adoption of the project's outcomes.

8 Annexes

8.1 Annex 1- CREXDATA fact sheet

This project has received funding from the European Union's Horizon Europe programme under grant agreement number 101092749.

CREXDATA

Critical Action Planning over Extreme-Scale Data

The vision of CREXDATA is to develop a generic platform for real-time critical situation management including flexible action planning and agile decision-making over streaming data of extreme scale and complexity.

The project will develop the algorithmic apparatus, software architectures, and tools for federated predictive analytics and forecasting under uncertainty. The envisioned framework boosts proactive decision making providing highly accurate and transparent short- and long-term forecasts, explainable via advanced visual analytics and accurate, real-time, augmented reality facilities. To achieve its vision, CREXDATA will develop a next-generation Prediction-as-a-Service (PaaS) system where action planners will easily register their multimodal data stream sources and compute resource federations and graphically design predictive analytics workflows.

The CREXDATA architecture will incorporate 10 exploitable assets based on cutting edge research, which will significantly outperform the current state of practice in respective fields.

Three use cases will be used to evaluate project results. These use cases include:

- Maritime domain, for forecasting hazardous situations at sea.
- Weather emergency management, to allow authorities and first responders proactively act in the case of natural disasters.
- Health crisis management, to limit pandemic outbreaks and come up with non-pharmaceutical means of patient treatment.

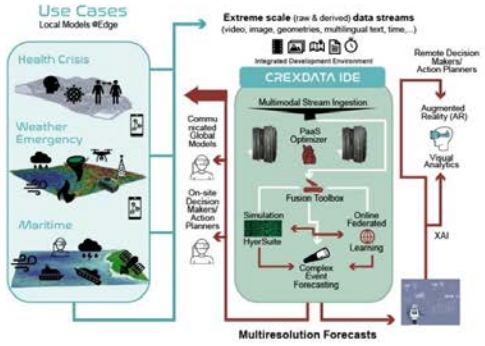

Figure 1: ©CREXDATA Concept Overview

Programme(s)
HORIZON.2.4 - Digital, Industry and Space Main Programme
HORIZON.2.4.7 - Advanced Computing and Big Data
Topic(s): HORIZON-CL4-2022-DATA-01-01 - Methods for exploiting data and knowledge for extremely precise outcomes (analysis, prediction, decision support), reducing complexity and presenting insights in understandable way (RIA)
Call for proposal: HORIZON-CL4-2022-DATA-01
Funding Scheme: RIA - Research and Innovation action

Grant agreement ID: 101092749
DOI: 10.3030/101092749
Start date: 1 January 2023
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EU contribution: € 8 698 104,75
Coordinated by: POLYTECHNEIO KRITIS, Greece

9 Acronyms and Abbreviations

- AI – Artificial Intelligence
- AIOD - Artificial Intelligence On-Demand
- AI4Europe - European AI On Demand Platform and Ecosystem
- BDVA – Big Data Value Association
- BMC – Business Model Canvas
- BSC – Barcelona Supercomputing Center
- D – deliverable
- DoA – Description of Action (Annex 1 of the Grant Agreement)
- DRZ - The German Rescue Robotics Centre
- EC – European Commission
- HPC – High Performance Computing
- IoT – Internet of Things
- KPI – Key Performance Indicator
- M – Month
- ML – Machine learning
- MoU – Memorandum of Understanding
- MT – Marine Traffic
- PPP – public private partnership
- UoA – University of the Aegean
- UPB – Paderborn University
- VPC – Value Proposition Canvas
- WP – Work Package