Conceptual Design Study

Designing a Next-Generation Radio Facility for Multi-Messenger Astronomy

Deliverable No:	**D1.4**
Deliverable/Document Title:	**Project Management Plan**
Version:	**2.0**
Release date:	**02.06.2023**
Dissemination level:	**Public**
Status:	**Submitted**
Author:	**John Antoniadis**

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement ***No 101094354***. The content of this material reflects the opinions of its authors and does not in any way represent the opinions of the European Union

Document history

Version	Date	Content and changes	Edited by
0.1[1]	09.02.2023	Document first draft	John Antoniadis
0.2	10.02.2023	Minor typos corrected	John Antoniadis
1.0	10.02.2023	First version submitted to the PO	John Antoniadis
2.0	02.06.2023	Update of names, urls and minor typo corrections / Change of dissemination level from sensitive to public	John Antoniadis

Peer review history

Partner	Reviewer	Date	Version
FORTH	George Tzagkarakis	09.02.23	0.1
CEA	Samuel Farrens	10.02.23	0.2

Release history

Signed off by	Release Date	Version	Signature
John Antoniadis (FORTH)	10.02.23	1.0	
John Antoniadis (FORTH)	02.06.23	2.0	IOANNIS ANTONIADIS Digitally signed by IOANNIS ANTONIADIS Date: 2023.06.02 14:37:03 +03'00'

Disclaimer

ARGOS-CDS is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. The European Union cannot be held responsible for them.

Applicable documents

In the event of conflict between the contents of the following documents and this document, the following documents shall take precedence.

1. ARGOS-CDS Grant Agreement (no 101094354): ARGOS_Grant_Agreement_101094354_v1.pdf
2. Consortium Agreement (being drafted): ARGOS_Consortium_Agreement_V0.1.pdf

Reference Documents

In the event of conflict between the contents of the following document and this document, this document shall take precedence.

[1] *Drafts should be version numbered "0.1", "1.2", etc. Accepted Releases should be version numbered "1.0", "2.0", etc.*

Table of Contents

Abbreviations and Acronyms

Acronym	Description
ARGOS-CDS	Argos Conceptual Design Study
CA	Consortium Agreement
DoA	Description of Action (Annex I of the Grant Agreement)
DoW	Description of Work (Annex I of the Grant Agreement)
EC	European Commission
EWG	Engineering Working Group
GA	General Assembly
KPI	Key Performance Indicator
PAD	Project Advisory Board
PC	Project Coordinator
PMC	Project Management Committee
PM	Person Month
PO	Project Officer
QM	Quality Management
SWG	Science Working Group
TL	Task Leader
WBS	Work Breakdown Structure
WP	Work Package
WPL	Work Package Leader

Executive Summary

This document provides guidelines for the management of the Horizon project ARGOS-CDS. It establishes the consortium structure and gives a general overview of the responsibilities of each person/partner. It also establishes the Quality Plan and the Risk Management plan. The document's main purpose is to provide a reference for all Consortium Members.

1. Project Overview

Project Description

Astronomy is being transformed by *public surveys* performed with instruments that are searching the sky for multi-messenger signals with high speed and sensitivity, while delivering science-ready datasets to the community. While radio astronomy is not yet fully participating in this revolution, an instrument following the same philosophy, which would finally open the dynamic radio sky for exploration, *is not only urgent but inevitable*.

ARGOS is a concept for a leading-edge, low-cost, sustainable European astronomical facility that will finally realize this ambition, directly addressing multiple fundamental scientific questions, from the nature of dark matter and dark energy to the origin of fast radio bursts and the properties of extreme gravity, thereby satisfying urgent needs of the community. *ARGOS* will enable, for the first time, continuous wide-field monitoring of the sky at centimetre wavelengths, while publicly distributing science-ready data and alerts in real time. To make the strategic scientific need for such a facility clear and accessible to funding and policy bodies, a detailed design study is necessary. This should include technical studies, community groundwork and prototyping, as well as quantitative cost-to-benefit analysis, well-calibrated project budget, and assessments of scientific and socioeconomic impact, sustainability, technological readiness, and innovation needs.

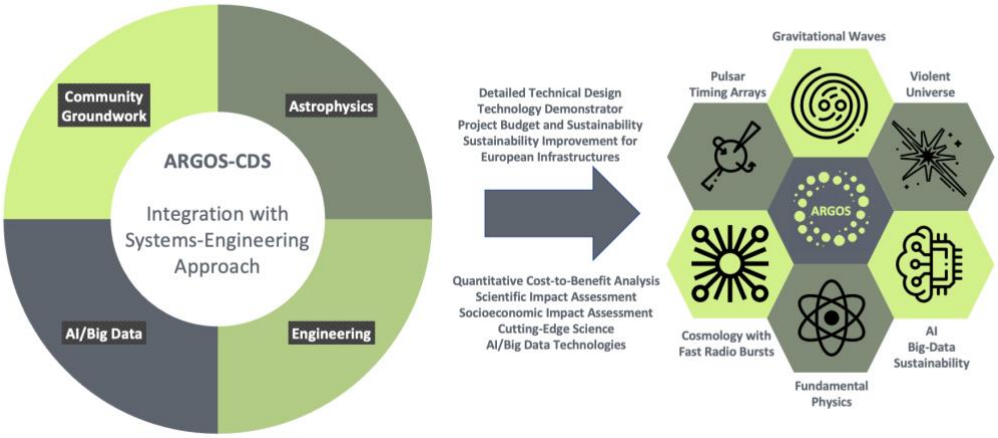


Figure 1: *ARGOS-CDS overview.*

The *ARGOS-CDS* vision is to conduct a *conceptual design study* that will fully prepare the subsequent rapid implementation of a leading-edge public radio facility on European grounds and ensure its optimal integration into the network of existing and future international astronomical infrastructures. *ARGOS-CDS* will achieve this by directly addressing these challenges via an integrated systems-engineering approach, producing explicit deliverables for each. As part of the design process, *ARGOS-CDS* will also produce cutting-edge science, as well as big data and artificial intelligence (AI) technologies with significant scientific impact and lasting spill-over societal benefits. These technologies will also improve the sustainability and alignment of the entire European Astronomical Research Infrastructure ecosystem.

Legal Basis

The project operates within the Horizon Europe framework and is bound by the Grant Agreement 101094354 with the EC. The DoW (Annex I of the Grant Agreement) determines the work to be carried out as part of the project. The current version of the DoW can be found in the project's NextCloud repository.

Objectives

The overarching objective for the *ARGOS* conceptual design study (henceforth *ARGOS-CDS*) is to prepare fully for the subsequent rapid implementation of a leading-edge astronomical instrument in Europe and ensure its optimal integration into the network of existing and future international astronomical facilities. *ARGOS-*

CDS comprises a 3-year project organized in 9 Work Packages (WPs) to address all relevant scientific, technological, sustainability and policy-making challenges, following a top-down systems engineering approach. With *ARGOS-CDS* we wish to achieve the following objectives:

Objective 1: Identify and optimize specific Science Use Cases (SUCs) for *ARGOS* and quantify the corresponding system-wide design requirements to meet these objectives

This will be achieved with input from the *ARGOS* stakeholders who will be involved in the definition and design processes. Stakeholders include the scientific community, funding and policy-making bodies (at the regional, national, EU and international levels), as well as the public (industry, students, public).

Objective 2: Produce a comprehensive Technical Design for *ARGOS*

ARGOS-CDS will produce detailed plans for all *ARGOS* subsystems (frontend, backend and software) and their interfacing, as well as sustainability plans for the facility and the required supporting infrastructure. This will include cost estimates for construction, operation and maintenance, as well as comprehensive risk assessments. The fully costed design, sustainability and roll-out plan reports will advance the project from the conceptual level (TRL2) to the Verification and Prototyping Stage (TRL7).

Objective 3: Characterize the suitability and sustainability of candidate deployment sites

To achieve the objective of characterizing the environment at the main candidate deployment site (Crete, Greece), the prototyping site (Skinakas Observatory, Crete) and alternative sites in Europe, our team will continue its Radio Frequency Interference (RFI) and weather monitoring activities. These reports will be complemented by detailed blueprints, environmental and safety studies that will feed into the design study.

Objective 4: Assemble an *ARGOS* prototype for verification, validation and technology pathfinding

Within the context of the design process, we will construct *ARGOS-pathfinder*, a scaled-down prototype of the instrument that will be assembled at the last phase of the project. The main objective of the prototype will be to validate the System Design in a real-world setting and bring all sub-system designs to full maturity (TRL2→7). Beyond its main purpose, *ARGOS-pathfinder* will also serve as a unique testbed for new technologies and solutions, such as optimized and sustainable digital signal processing software and AI-based image reconstruction algorithms, while also producing leading-edge science. These products and science results will be made publicly available and exploited to advance the interoperability of international astronomical facilities.

Objective 5: Enhance the R&I potential of the EU southern periphery in this highly competitive research area and create capacity for lasting scientific and socioeconomic impact beyond the immediate field of Astronomy

Lastly, *ARGOS-CDS* will significantly enhance the R&I potential of Europe and Greece, in Astronomy and beyond. This will be achieved via multiple ways, for instance a) the training of PhD students, scientists and engineers in a highly multidisciplinary and rapidly evolving research area, b) close collaboration with national, European and international consortia and R&I actions, c) participation in European experiments, such as the EPTA, d) the publication of forefront research, and e) the direct involvement of societal stakeholders (students, public, industry) in the design of the instrument and its services, and their training on the use of its products.

Assumptions and Constraints

- **Time**: ARGOS-CDS has a duration of 36 months. The project started on January 1st 2023 and will end on December 31st 2025.
- **Budget**: The total budget of the project is 3,000,000 EUR, including 25% overhead costs.
- **Legal**: The project is bound by the Grant Agreement No. 101094354 with the European Union.
- **Consortium**: The consortium comprises the four partners that signed the grant agreement (see below). The project is coordinated by the FORTH Institute of Astrophysics.

Project Work Packages

The activities of the project are organized under the following work packages.

No.	Title	Partner	WP Leader
1	Management	FORTH	Emmanouela Soultatou
2	Astrophysics	FORTH	John Antoniadis
3	System Design Management	FORTH	Stefanos Papadakis
4	Site Characterization and Architectural Blueprints	FORTH	Nikolaos Petroulakis
5	Frontend Subsystem	UPRC	Athanasios Kanatas
6	Backend Subsystem	MPG	Ewan Barr
7	Signal Processing Subsystem	CEA	Sammuel Farrens
8	Archiving and Alerts Subsystem	FORTH	George Tzagkarakis
9	Dissemination, Exploitation and Communication	FORTH	Vassilis Charmandaris

Project Deliverables

The project deliverables are established by the Grant Agreement and are summarized here for convenience.

No.	Deliverable Name	WP	Partner	Dis. Lev.	Due Date
D1.1	MOUs with TURBO, EPTA, PASIPHAE	1	FORTH	SEN	12/2023
D1.2	Central Project Repository	1	FORTH	PU	01/2023
D1.3	Meeting Reports	1	FORTH	SEN	12/2025
D1.4	Project Management Plan	1	FORTH	PU	01/2023
D1.5	Data Management Plan	1	FORTH	PU	03/2023
D1.6	Preliminary Design Review Report	1	FORTH	PU	06/2024
D1.7	Final Design Document	1	FORTH	PU	12/2025
D2.1	Science Requirements Specification	2	FORTH	PU	12/2023
D2.2	ARGOS White Paper	2	FORTH	PU	10/2024
D2.3	Verification Plan	2	FORTH	SEN	12/2023
D3.1	SEMP	3	FORTH	PU	06/2024
D3.2	System Requirements Specification	3	FORTH	PU	12/2023
D3.3	ARGOS pathfinder	3	FORTH	PU	12/2025
D4.1	Legal, environmental and RFI report	4	FORTH	PU	06/2024
D5.1	Report on RF simulation results	5	UPRC	PU	06/2024
D5.2	Report on RF tradeoff analysis	5	UPRC	PU	12/2025
D5.3	Frontend subsystem design	5	UPRC	PU	06/2024
D6.1	Backend simulations and prototyping report	6	MPG	PU	06/2024
D6.2	Backend subsystem design	6	MPG	PU	06/2024
D7.1	Subsystem design and status report	7	CEA	PU	12/2024
D8.1	Archiving and alerts software subsystem	8	FORTH	PU	06/2024
D9.1	Website	9	FORTH	PU	03/2023
D9.2	Dissemination and Communication Plan	9	FORTH	PU	03/2023
D9.3	Exploitation and Sustainability Plan	9	FORTH	PU	12/2025

Project Milestones

No.	Milestone name	Due date	Means of verification
1	Kick-off meeting	Jan 2023	Meeting Report (**D1.3**)
2	Stakeholders' workshop	Oct 2023	Meeting Report (**D1.3**) – Preliminary Science Requirements Specification (**D2.1**) – Presentations and preliminary list of

			supporting stakeholders published on website (**D9.1**)
3	PDR	June 2024	PDR report (**D1.6**)
4	*ARGOS-pathfinder*	Dec 2025	Up and running (**D3.3**)
5	CDR	Dec 2025	Final Design Document (**D1.7**)
6	Project ends successfully	Dec 2025	Final Reports delivered to EC

Reports and Reporting Periods

The project is divided in two 18-month long reporting periods as follows:

- January 1, 2023 – June 30, 2024
- July 1, 2024 – December 31, 2025

The reporting requirements for the project are described in detail in the consortium agreement. The periodic report to the commission should contain a summary, project objectives for the period, work progress and achievements, updates on deliverables and milestones, report on PMT activities, explanation on use of resources, financial statements from each partner and audit certificates.

In addition to the aforementioned reports, the project coordinator and the project manager shall compile quarterly partner reports detailing the progress for each task.

Deliverables and Milestones

Deliverables and milestones should be completed on time. Progress on deliverables or milestones should be reported in the annual reports and WP reports for the period in which they are due. If any deliverable or milestone due in the period is late, an explanation for this MUST be given, as well as any mitigation actions and the anticipated completion date. For deliverables, which are not written reports, a brief written summary should nevertheless be produced to accompany the deliverable. A template for the deliverable reports will be produced and will be available on the ARGOS NextCloud repository.

2. Consortium Structure and Management

Consortium Partners

The consortium comprises four partners:

1. Foundation for Research and Technology – Hellas (**FORTH**; the coordinator). FORTH participates via the following institutes:
   > Institute of Astrophysics (**FORTH-IA**)
   > Institute of Computer Science (**FORTH-ICS**)
2. Max Planck Gesellschaft zur Förderung der Wissenschaften (**MPG**)
3. Commissariat à l'énergie atomique et aux énergies alternatives (**CEA**)
4. University of Piraeus Research Center (**UPRC**)

Internal Structure of the Consortium

The structure of the consortium is established by the DoA and the CA. Figure 2 summarises the relations and interactions between different actors in *ARGOS-CDS* and the workflow of the Project. The management structure for *ARGOS-CDS* is designed to provide the framework, guidance and communication for all activities underpinning the project. The main actors and decision-making bodies are the following:

- **Science Working Group (SWG):** Members participating in science activities – namely those working in WP2 together with external collaborators and interested members from other WGs, form the **Science Working Group**.
- **Engineering Working Group (EWG):** To coordinate engineering activities, the working groups related to WP3–8 form the Engineering Working Group.

- **Project Manager:** Project execution is overseen by the Project Manager (**Emmanouela Soultatou**). The Project Manager is responsible for monitoring the overall project progress. The responsibilities of the project manager are specified below.
- **Project Management Team (PMT):** The Project Manager, together with the WP leaders comprise the PMT. The latter is responsible for the effective management of the project, the timely execution of tasks and delivery of products, and the direct communication with officials. Every member of the PMT has one vote and decisions are made by majority voting. The PMT holds regular virtual meetings (every second Monday at 3:00 PM CET/CEST), as well as in-person meetings every six months.
- **General Assembly:** The general assembly is the ultimate decision-making body of the consortium. It consists of one representative from each party. The roles and responsibilities of the General Assembly are described in the ARGOS-CDS Consortium Agreement.
- **Coordinator:** The ARGOS-CDS coordinator is John Antoniadis. The responsibilities of the coordinator are specified below.

Responsibilities of the Project Manager

The primary responsibilities for the PM are:

- Monitoring the execution and overall progress of the project (jointly with the PMT) using established Project Management methodologies (such as the PM^2 guidelines)
- Maintenance of Consortium Agreement
- Producing financial reports for the project
- Submission of cost claims and audit certificates
- Risk Management
- Writing periodic management reports and keeping the PMP up to date
- Quality Assurance Monitoring
- Communicating with the ARGOS stakeholders
- Monitoring the flow of information between the different ARGOS consortium bodies (Advisory Board, General Assembly, PMT, Stakeholders)

Responsibilities of the Coordinator

The primary responsibilities of the coordinator are:

- Ensuring the timely submission of technical and financial reports to the EC
- Receiving and distributing payments from the EC
- Coordinating the entry and exit of partners from the consortium
- Resolving gender equality issues and ensuring ethical standards are met
- Acting as primary contact for the EC
- High level monitoring and steering of the project
- Timely submission of deliverables to the PO and the EC
- Coordinating the PDR and CDR processes
- Organizing the meetings, schools and conferences listed in the Grant Agreement

External Interfaces

- **External Stakeholders:** Stakeholders are defined as parties that can affect, or be affected by the project, positively or negatively. Examples include the scientific community, local authorities, members of the partner institutes, etc.
- **Advisory Board:** The work of the PMT will be assisted by an external **Advisory Board** composed of world-leading experts in astrophysics, astronomical instrumentation, AI, big data, digital signal processing, as well as representatives from the local authorities and decision-making bodies (more specifically the Municipality of Anogia, the Greek General Secretariat for Research and Technology, and the Greek Ministry of Culture). The role of the board will be aiding and guiding action planning, as well as helping the Consortium to attract funding. The project manager and the PMT will communicate regularly with the Board, which will also participate in annual face-to-face meetings of the consortium.

- **Preliminary Design Review Panel:** The PDR panel shall consist of independent experts who will be appointed by the General Assembly, with the help of the Advisory Board.
- **Critical Design Review Panel:** Similarly, the CDR panel will be appointed by the General Assembly and the Advisory Board.

Stakeholder Register

A stakeholder register, developed and maintained by the Project Manager is available on the ARGOS -CDS NextCloud Repository. The register is meant to keep track of who (individual, group, or organization) is affected by the project, and their effect and impact on the project. It provides information about each Stakeholders contact information (name and email, as well as phone and physical address if necessary) as well as their preferred communication channel. Where necessary, an assessment is also made for the influence, involvement, and risk appetite of each stakeholder. The following table summarizes some of information available in the register:

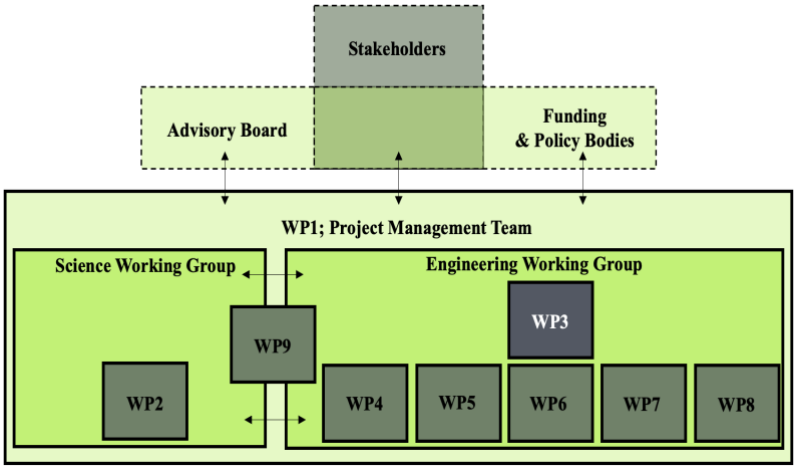


Figure 2: Relation between different ARGOS-CDS WPs and actors.

Field	Values
Stakeholder Category	Sponsor, support, legal, management, government, service provider, vendor, observer, public, other
Influence	0 – 5 for each of the following categories: power, interest, opinion
Risk Appetite	0 – 5 for each of the following categories: budget, timing, scope
Involvement	0 – 5 for each of the following phases: planning, executing, closing
Preferred communication channel	f2f, phone, text, email, mattermost, slack, skype, zoom, social, newsletter, other
Preferred communication frequency	Daily, weekly, bi-weekly, monthly, quarterly, yearly, crisis

Collaboration Tools

Name	Description
ARGOS website	Provides information about the project and its results
ARGOS Wiki pages	The private home page of the consortium. The purpose of the wiki is to manage information flow and provide easy access to all information related to the project
NextCloud Repository	A dedicated cloud repository based on NextCloud has been set up by the Coordinating Institute. The repository is used to store all documents and files related to the project
Mattermost Channel	A dedicated Mattermost server is used for every-day communications
Project Management Software	Work is coordinated using EMDESK
Mailing lists	Multiple email lists have been set up to communicate important information to various sub-groups within the consortium

Consortium Calendar	A NextCloud-based calendar containing all consortium meetings and important events

Online Meetings

In addition to the project's Mattermost channel, it is recommended that all individuals who are able to do so should install the Internet-based voice, video and chat facility "Skype" and communicate their Skype ID to the Project Coordinator, so that all members of the team are able to communicate freely and directly with each other. Alternatively, the "Zoom" platform can be utilized, by sharing the teleconference room link among the participants. Both Skype and Zoom calls are peer-to-peer, thus the individuals must have good internet bandwidth in place to do this.

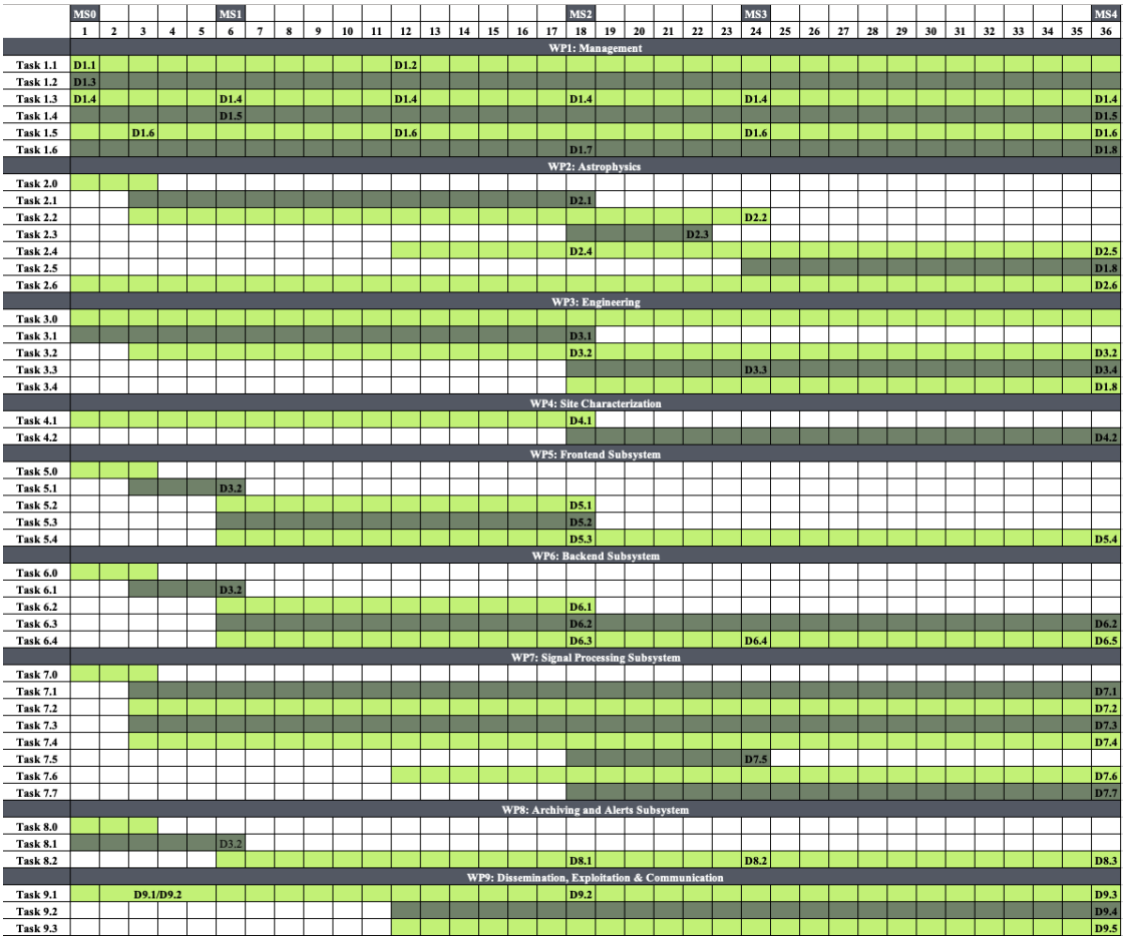
Minutes of Meetings

The keeping of minutes for all project-related meetings is extremely important as they are a record of decisions taken and actions required by members involved in the project. It is the responsibility of the chair of the meeting to organize the taking of minutes. The minutes are to be written up and circulated to all members of the meeting for comments and corrections as soon as possible after the meeting. The author should set a deadline for response, e.g. 5 working days. After this period, the minutes can be circulated to other team members and uploaded on the website as a permanent record of the meeting.

3. Project Implementation

Timewise, *ARGOS-CDS* is divided into three main phases: i) Concept Phase (months 1 – 6), ii) Definition and

Figure 3: Gantt chart for ARGOS-CDS



Preliminary Design Phase (months 6 – 18), and iii) Detailed Design Phase (months 18 – 36). Transitions

between the two first phases will be marked by major milestones (the Stakeholders' workshop and the PDR respectively), while the third phase (and the project) will be concluded with the CDR.

Work Breakdown Structure (WBS)

Each WP is divided into tasks and subtasks. This deliverable-oriented hierarchical decomposition of the work is called the *ARGOS Work Breakdown Structure*. The WBS is available on the ARGOS *OpenProject* and is the main tool used to ensure that the project plans are in alignment and on track. A Gantt chart of the WPS is shown in Figure 3.

RACI methodology

The RACI methodology is a simple grid system to identify responsibilities and ensure that the team needs are met. The RACI roles for each task/subtask listed in the WBS are:

- **R – Responsible**: The person, group, or partner in charge of the execution of the task.
- **A – Accountable**: The person, group, or partner responsible for determining whether a task has been executed successfully. By default, the accountable person is the WPL, unless agreed otherwise.
- **C – Consulted**: The people who need to be consulted if a decision needs to be taken.
- **I – Informed**: The people who should be informed after a decision has been taken.

Management of External Stakeholders

The project's external stakeholders can be placed on a power-interest grid, as shown in Figure 4. This grid shall form the basis for effective communication with the project's external stakeholders. It shall be maintained and revised regularly by the project manager.

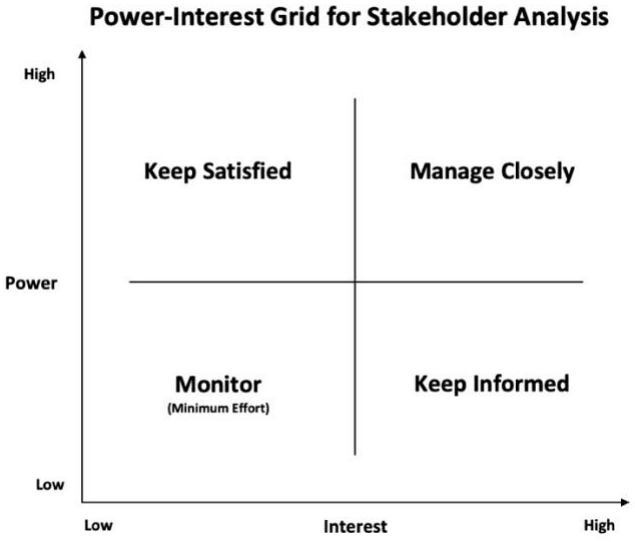


Figure 4: RACI Grid

4. Risk Management

To identify implementation risks and trace their evolution over time, the ARGOS consortium maintains a detailed risk register that is based on a custom quantitative risk model. In summary, project exposure to each risk is placed on a scale of -100 to +100, depending on its likelihood and estimated impact on cost, schedule, and performance. A detailed escalation and response strategy is then developed to *avoid*, *reduce*, *accept*, or *transfer* each risk and assign it to an individual within the consortium. The risk register is available on the ARGOS NextCloud repository and contains the following information.

Variable Name	Description
Risk ID	A unique identifier for each risk. The naming convention is described below
Risk Category	The most relevant category for the risk. Can be one of the following: cost, schedule, performance, operational, governance, equipment, strategic, legal, execution, scientific, feasibility, security, consortium, other
Type	Risks can be either threats or opportunities, depending on whether they have a negative or positive effect on the project
Title	The risk title
Description	A brief description of the risk. This field contains information about the **cause**, **trigger effect** and **impact**
Level	The design level most relevant to the risk (LEV0 – LEV5)

WP	The work package responsible for the risk (WP1 – WP9 or WP0 if the risk is relevant to more than one WPs)
Identifier	The person who identified the risk
Status	Can be one of: proposed, assessing, reviewing, approved, rejected, closed
Likelihood	A quantitative estimate for the probability a given risk may materialize. Can take values from 0 (completely unlikely), to 100 (certain)
Impact	A quantitative estimate for the impact each risk may have on the project. Can take values from –5 (strongly positive) to +5 (strongly negative) for each of the following categories: Cost, Schedule, Performance
Exposure	The exposure of the project to a give risk is calculated as follows: $$Exposure = Likelihood \times \frac{(C + S + P)}{15}$$ Where, C, S, P correspond to the impact on cost, schedule and performance, respectively
Risk Owner	The person or group responsible for monitoring and responding to the risk
Escalation	The person or group that should be informed should a risk materialize. Can be one of: None, General Assembly, WPL, PMT, Advisory Board, Project Officer
Response Strategy	Each risk can be accepted, avoided, reduced, transferred, or shared
Action	A description of the proposed mitigation action

The risk register is maintained by the PMT. All consortium members can propose the inclusion of new risks in the register. Once a new entry has been reviewed and approved by the PMT, the designated risk owner becomes responsible for the monitoring and management of the risk, according to the approved strategy.

Risk Naming

Risks are uniquely identified following a standard naming convention. The risk id includes information on the risk type (threat/opportunity), responsible WP, risk category and design level. As an example, *THR_WP0_EXE_LEV0_00001* is a thread related to all work packages, related to the execution of the project. *LEV0* in this case means that the risk affects the entire design study, not just a specific design component. The excel formula used to assign the unique risk IDs is given by:

```
CONCATENATE(IFS(REGEXMATCH(E3, "threat"),"THR", REGEXMATCH(E3, "opportunity"),
"OPP"),"_","WP",F3,"_",IFS(REGEXMATCH(C3, "cost"),"COS",REGEXMATCH(C3, "schedule"),"SCH", REGEXMATCH(C3,
"performance"),"PER",REGEXMATCH(C3, "operational"),"OPR",REGEXMATCH(C3, "governance"),"GOV",REGEXMATCH(C3,
"equipment"),"EQP",REGEXMATCH(C3, "strategic"),"STR",REGEXMATCH(C3, "legal"),"LEG",REGEXMATCH(C3, "force
majeure"),"FMJ",REGEXMATCH(C3, "execution"),"EXE",REGEXMATCH(C3, "OTHER"),"OTH",REGEXMATCH(C3,
"consortium"),"CON",REGEXMATCH(C3, "security"),"SEC",REGEXMATCH(C3, "scientific"),"SCI",REGEXMATCH(C3,
"feasibility"),"FEA"),"_",D3,"_",A3)
```

5. Quality Management

Review and Approval of deliverables

To ensure that deliverables are of an appropriate standard, all deliverables will be reviewed by at least the WP leader and/or a PMT member who has not been part of the group members developing the deliverable. The prime responsibility of a reviewer is to ensure that the deliverable is complete and of an appropriate standard. Typically, the Project Coordinator will act as reviewer for major deliverables. Alternatively, the PMT will nominate a reviewer. The reviewer will then receive the final draft of the deliverable and provide the project member responsible for the deliverable and the relevant WP co-leader with a written response indicating that the deliverable is ready for release or that elements of the deliverable require further attention giving details.

The reviewer may also make minor corrections and format adjustments directly. The reviewer should respond within 5 working days of receiving the draft deliverable. If revisions are required, the above process is repeated. Once the deliverable has been accepted, the date of sign off will be added to the cover page, together with details of the reviewer. The review process is part of the preparation of the deliverable and WP co-leaders should take appropriate steps to ensure that the review is completed, and the deliverable issued before the due date. The due date is the last day of the month that is specified for the deliverable in the Project's Grant Agreement. The Project Coordinator will circulate the final deliverable to the involved team members and also place a copy on the project's web site and NextCloud server. The coordinator will submit all deliverables to the EC.

Structure of formal documents

All deliverables and public documents should be based on the approved templates available on the project's NextCloud repository.

File Naming and Version Control

It is essential that every document circulated among the team members includes a version number and date. This will help to avoid the situation where the members are working with old or obsolete versions of documents. In terms of file names, it is difficult to have a fixed file naming convention, which can cover every situation. However, the guidelines below should be followed as much as possible:

- The filename should be descriptive of the contents and should include the project name, e.g. "ARGOS_EPTA_050323" for a presentation at an EPTA meeting on the fifth of March, 2023.
- Whenever a document is specific to a particular date, this date should be included in the filename in the form 'ddmmyy'. For example, minutes of a WP4 meeting on 1st March 2023 will be called "ARGOS_WP4_Minutes_010323".
- Whenever a document is likely to be produced in a similar format by various team members, the member's initials should be included in the filename, e.g. "ARGOS_Y1_Report_JA" for first annual report written by John Antoniadis.
- Where different versions of a document are used, e.g. for deliverables and reports, the version number should be included at the end of the filename. For draft documents, the version number should start at v0.1, and increment in 0.1 steps. Once the document is formally issued, the version should change to v1.0 and then increment in 0.1 steps for minor changes. For a major change, the version will change to v2.0. For example, "ARGOS_D1.4_ProjectManagementPlan_v0.1.doc" will be used for the first draft version of deliverable D1.4.
- When commenting on a document provided by another member, the filename should be changed to include the initials of the person making the changes, e.g. "ARGOS_D1.4_ProjectManagementPlan_v0.1_GT.doc" if changes to D1.4 have been made by George Tzagkarakis.
- When suggesting changes to a document, the use of the track changes feature in Word is recommended to assist the document author/owner.
- Only the originating author or owner of a document should increment the version number, i.e., when the author has received and implemented all changes to the first draft version of deliverable D1.4, it becomes "ARGOS_D1.4_ProjectManagementPlan_v0.1".

6. Code of Conduct

The ARGOS-CDS consortium seeks to foster an environment where all members are supported as individuals and as scientists, regardless of their age, race, ethnicity, religion, gender identity or expression, sexual orientation, and disability status. Each partner is bound by the code-of-conduct of their parent institutions. The coordinator is bound by the Code of Conduct which applies to all Greek Public Institutions, and the Code of Conduct established by the Research Ethics Committee of FORTH. In addition, members of the consortium are encouraged to:

Respect and support all members of the consortium:

- Be courteous in their interactions

- Refrain from personally critical comments
- Give colleagues a chance to voice their thoughts
- Respect the professional, physical, and personal boundaries of colleagues
- Clearly distinguish professional comments from opinions based on personal views
- Be aware of power differentials, and act to empower those in more junior positions
- Promote equity amongst colleagues and trainees in access to opportunities, including networking that happens in a social context
- Ensure that, when offered, criticism is constructive and aims to create positive discussion
- Avoid judging, discriminating, or making unwelcome jokes or disparaging remarks based on stereotypes
- Support those who report violations of the policy of FORTH

Commit to openness:

- Be receptive to discussions of ways to improve the work environment and work relationships
- Challenge your own assumptions about people and the sources of those assumptions
- Take it upon themselves to eliminate particular challenges or barriers to success that colleagues may face as members of under-represented groups
- Do not engage in any overt or perceived retaliation against others

Take initiative:

- Intervene when others are exhibiting conduct unbecoming of a community member
- Speak up when colleagues are disrespectful of a group or class of people, even when members of that group are not present
- Seek opportunities for education/training on diversity, inclusivity, reporting, and bystander intervention techniques, and encourage others to do the same

Report of violations

The consortium partners are committed to value the initiative of their members who identify and speak up about potential problems that need to be addressed. We thus strongly encourage members of the consortium to report suspected violations of the Code of Conduct to the Coordinator, Dr. John Antoniadis. If the coordinator is involved, consortium members are encouraged to contact another member of the PMT.

An anonymous complaint form, an ombudsperson and a resolution procedure shall be established by the GA and documented in a future version of the PMP.

7. Settlement of Disputes

The consortium partners shall endeavour to settle their disputes amicably. Any dispute, controversy or claim arising under, out of, or relating to this contract and any subsequent amendments of this contract, including, without limitation, its formation, validity, binding effect, interpretation, performance, breach or termination, as well as non-contractual claims, shall be submitted to mediation in accordance with the WIPO Mediation Rules. The place of mediation shall be Brussels unless otherwise agreed upon. The language to be used in the mediation shall be English unless otherwise agreed upon. If, and to the extent that, any such dispute, controversy or claim has not been settled pursuant to the mediation within 60 calendar days of the commencement of the mediation, it shall, upon the filing of a Request for Arbitration by either Party, be referred to and finally determined by arbitration in accordance with the WIPO Expedited Arbitration Rules. Alternatively, if, before the expiration of the said period of 60 calendar days, either partner fails to participate or to continue to participate in the mediation, the dispute, controversy, or claim shall, upon the filing of a Request for Arbitration by the other Party, be referred to and finally determined by arbitration in accordance with the WIPO Expedited Arbitration Rules. The place of arbitration shall be Brussels unless otherwise agreed upon. The language to be used in the arbitral proceedings shall be English unless otherwise agreed upon. The award of the arbitration will be final and binding upon the Parties.

8. Dissemination and Publication Clearance

The preliminary publication clearance procedure is detailed below. During the course of the project, the team members will disseminate information about the project through:

- Presentations at public events.
- Posters at public events.
- Submission of articles for publication in professional and other journals.
- And by other means.

There is a duty within the team to ensure that information is not disclosed that may be used to prepare patent applications. If this type of information inadvertently becomes public, then any subsequent patent applications relying on this information would be invalid. Any information prepared for public dissemination must be made available for review by the PC and WP co-leaders in advance of its submission for publication, i.e., in good time to review it and make comments and changes if necessary.

The team member wishing to publish, present or disclose information about the project must follow the following procedure.
In the event that the dissemination activity consists of a publication not intended for a conference (e.g., a journal paper):

- The member wishing to publish shall forward an abstract to the project's PMT and WP co-leaders.
- As a general rule, the time-limit for prior notice of any such dissemination activity to be given to the PMT and WP co-leaders shall be 3 weeks.
- Following receipt of the aforementioned notification, the PMT may object to such dissemination activity within 15 days from the date of notification's reception (or/and in the event of a publication, from the date of receipt of prior notice in the form of a copy of the publication abstract).
- Should the PMT fails to reply within the said period, it shall be deemed that the PMT does not object to the relevant publication.

In the event that the dissemination activity consists of publications intended for congresses:

- The team member wishing to publish shall forward an abstract or draft presentation to the PMT and WP co-leaders.
- The time-limit for prior notice of any communication (e.g. a poster or presentation) concerning a congress shall be 15 days. The member wishing to publish shall provide enough information about the planned communication.
- A period of 7 calendar days shall apply for any objections.
- Should the PMT fails to reply within the said period, it shall be deemed that the PMT does not object to the relevant publication.
- An objection is justified if:
    - The protection of the objecting Party's Foreground or Background is adversely affected; or
    - The proposed contribution includes the Foreground, Background or Confidential information of the objecting Party.

  The objection has to include a precise request for necessary modifications. If an objection has been raised, the involved members shall discuss how to overcome the justified grounds for the objection on a timely basis (for example, by amendment to the planned publication and/or by protecting information before publication).

It is noted that all publications MUST acknowledge the funding from the EC in suitable form of words is "This work was funded from the EC under grant agreement No. 101094354 (ARGOS-CDS project)."