D1.1 HS4U Handbook, Risk Management and Quality Assurance

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DOCUMENT SHEET

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CO	Confidential, only for members of the consortium (including the EC)	

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0.6	23/08/2025	Reviewers' comments	CAM, AETHON
1.0	25/08/2025	Prepared for submission	ABS

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ABBREVIATIONS

CA	Consortium Agreement
CDF	Collaborative Digital Framework
D	Deliverable
DPO	Data Protection Officer
DEM	Demonstration
EC	European Commission
EEAB	External Experts Advisory Board
GA	Grant Agreement
KPI	Key Performance Indicator
MOM	Minutes of Meeting
NDA	Non-Disclosure Agreement
PC	Project Coordinator
PO	Project Officer
PEB	Project Ethics Board
R	Report
SEN	Sensitive
STC	Scientific-Technical Committee
STM	Scientific-Technical Manager
T	Task
TL	Task Leader
WP	Work Package
WPL	Work Package Leader

LIST OF TABLES

Publishable Summary

The HS4U Project Management Handbook has been developed with the aim of providing a single point of reference for the quality assurance procedures applied during the HS4U project implementation. This deliverable presents the project's quality and risk management framework, outlining the guidelines and procedures that all HS4U Partners are expected to follow. It also defines the project structure, emphasizing the various roles and responsibilities involved. Over the course of the project, the Handbook has been periodically updated to incorporate additional content and address evolving project-specific requirements.

1. INTRODUCTION

The present document is the Deliverable D1.1 “HS4U Handbook, Risk Management and Quality Assurance” in the framework of the WP1, Task 1.3 “Quality Assurance and Risk Management” of the HS4U project.

This handbook is intended to establish the general structure for proper interaction between all HS4U participants in order to accomplish the project’s objectives and results. It is developed as a tool for reference; providing guidance on project execution, management, quality assurance and internal communication procedures to ensure adequate compliance to the European Commission (EC) requirements.

The next chapters give thorough information about the project management organization, execution, reporting, and communication methods, as well as references to the project deliverables and milestones.

In this context, the handbook is divided into four main sections:

- Chapter 2 describes the project management structures, defines the various roles and responsibilities, and outlines the reporting channels.
- Chapter 3 presents all aspects of project implementation, such as the definition of the tasks, including scheduled deliverables and milestones, communications, data management, the resolution of conflicts as well as the management of change procedures.
- Chapter 4 illustrates the project’s quality assurance approach by presenting the internal and external reporting procedures, the deliverables review processes and the project’s performance metrics.
- In Chapter 5, the risk management plan is presented with details on the ways in which the project management team identifies, classifies, and responds to risks throughout the whole project duration.

This document complements the Grant Agreement (GA) [1], and the Consortium Agreement (CA) [2], documents by providing additional details and clarifications. In case of a discrepancy, the above-mentioned documents shall always prevail.

2. PROJECT MANAGEMENT STRUCTURE

This chapter provides a brief description of the HS4U project management structure. The main roles are defined, describing their main responsibilities and day-to-day activities.

2.1 Project Coordinator

The Project Coordinator (PC) is the legal entity acting as the intermediary between the project beneficiaries and the granting authority. The PC shall, in addition to its responsibilities as a project member, perform the tasks assigned to it as described in the Grant Agreement and the Consortium Agreement.

In particular, the PC is responsible for:

- monitoring compliance of the partners with their obligations under the Consortium Agreement and the Grant Agreement,
- keeping the address list of partners and other contact persons updated and available,
- collecting, reviewing, and submitting reports, deliverables, and other specific requested documents to the granting authority,
- scheduling the meetings, chairing the meetings, keeping the minutes of meetings, and monitoring the implementation of decisions taken at formal meetings such as the General Assembly,
- transmitting promptly documents and information connected with the Project to any other Party concerned,
- administering the financial contribution of the granting authority and fulfilling the financial tasks as described in detail, in Section 7.2 of the Consortium Agreement document,
- reporting any major issues that could jeopardize the progress of the project to the granting authority.

Table 1: Project Coordination team

PC	Project Coordination	ABS	Konstantinos Voutzoulidis kvoutzoulidis@eagle.org Katerina Vasileiadou kvasileiadou@eagle.org Yvonni Damianidou ydamianidou@eagle.org Vassilis Zouzoulas vzouzoulas@eagle.org

2.2 Scientific-Technical Manager

The Scientific Technical Manager (STM) is a technological oriented partner who is in charge of overseeing the overall technical management of the project and ensures that the technical activities are carried out in accordance with the Grant Agreement.

The STM together with the PC and the Work Package Leaders, form the Scientific Technical Committee, which overviews and regularly discusses the project progress and in case deviations or risks are identified, it decides on proper actions.

Table 2: Scientific and Technical Management team

STM	Scientific and Technical Manager	NTUA	Dimitrios V. Lyridis dsvlr@mail.ntua.gr Panagiotis Evangelou panosevangelou@gmail.com Dimosthenis Akouros d_akouros@mail.ntua.gr

2.3 Work Package Leaders

The Work Package Leaders (WPLs) are responsible for the completion of the WP activities and deliverables on time, within the provided budget and with the highest possible quality. WPL's main responsibilities include, but are not limited to:

- leading and coordinating the task activities involved in the WP through the Task Leaders,
- ensuring adequate quality of the WP work and deliverables,
- stimulating interaction and proactive sharing of information with other WPs
- reporting and presenting in the WPL's monthly meetings and in the bi-annual progress meetings the related WP activities and progress.
- reporting to the Project Coordinator and WPLs risks and unforeseen events that may affect the Project's smooth progress.

The WP leaders decide on the frequency, duration, and agenda of the WP meetings. However, it is expected that at least one regular, monthly meeting, during the course of the respective WP activities, is scheduled. The minutes of the meeting should be kept and be available to all partners in the project's repository folders.

The WP leaders are listed in the following table:

Table 3: Work Package Leaders

WP No.	WP Title	WP Leader	Responsible Person
WP1	Project Coordination, Administration	ABS	Konstantinos Voutzoulidis kvoutzoulidis@eagle.org
WP2	Project Requirements' Elicitation and Architecture	NTUA	Dimitrios V. Lyridis dsvlr@mail.ntua.gr
WP3	Technical and Technological research	AETHON	Zoe Petrakou z.petrakou@aethon.gr
WP4	Digital Tools Creation	INTRA	Amalia Ntemou Amalia.NTEMOU@netcompany.com
WP5	Experimentation and Pilot Implementation	LEDRA	Stamatina Rassia contact@ledragroup.org
WP6	Dissemination and Exploitation	VAR	Joshua Yeres Joshua.y@variance-ascola.com

2.4 Task leaders

Each task is led by a Task Leader (TL), who oversees the execution activities, coordination of work, and makes the day-to-day technical decisions that affect the subject task. More specifically, the TLs are responsible for:

- planning and monitoring activities outlined in each task,
- timely submission of related deliverables,
- regular communication with the WPL to discuss progress,
- communicating potential problems identified during the implementation of the activities,
- compiling other partners' input in deliverable,
- sending the deliverable in time to the WPL for review,
- integrating reviewers' comments in the deliverable and preparing the final version.

The specific tasks and the respective Task Leaders as per the Grant Agreement are listed in the next table:

Table 4: Tasks and assigned Task Leaders

Task No.	Task title	Leader	Start	End
T1.1	Administration, Scientific and Technical Management	ABS	1	36
T1.2	Ethics, GDPR and Legal Management	ABS	1	36
T1.3	Quality Assurance and Risk Management	NTUA	1	36
T2.1	Mappings of existing framework conditions, challenges, system failures and gap analysis	HPI	1	9
T2.2	Creation of the HS4U scenarios	NTUA	6	18
T2.3	Creation of the HS4U Architecture	HYDRUS	~~12~~ 10 (rev.)	~~24~~ 27 (rev.)
T3.1	Identify the requirements for hardware with respect to sensing and actuation systems	UNI EIFFEL	~~16~~ 2 (rev.)	~~26~~ 28 (rev.)
T3.2	Research and development of risk assessment methodologies, models, and algorithms	UTH	~~16~~ 10 (rev.)	30
T3.3	Research and development of a passenger behavioural model	AETHON	20	36
T3.4	Creation of learning material for crew on the operation of the CDF and safe conduct during health hazard events	ABS	24	36
T4.1	Data Stream-handler for seamless, secure, and continuous data availability	INTRA	16	36
T4.2	Design and develop the CDF and continuous improvement	EPSILON	16	36
T4.3	Integrate the passenger model, IoT/edge devices of the robot cabin and pilots and develop test cases	INF	16	36
T5.1	Pilots planning and assessment	LEDRA	~~18~~ 2 (rev.)	36
T5.2	Robot cabin creation	LEDRA	26	36
T5.3	Pilots' execution and determination of best practices, methods and tools implemented on policy recommendations, crew training, space use and surveillance	ABS	26	36
T6.1	Dissemination and exploitation plan including communication activities	WR	1	36
T6.2	Communication & Dissemination tools and activities	WR	3	36
T6.3	Exploitation and IPR Management	VAR	18	36

2.5 General assembly

The General Assembly is the ultimate decision-making body of the consortium for all issues concerning matters not considered within the Grant Agreement. The General Assembly is chaired by the Project Coordinator and composed of one representative person from each partner for voting purposes.

Every partner should be present, or represented, or appoint a substitute to attend and vote at the GA meetings. The GA shall not decide validly in meetings unless two-thirds (2/3) of its members are present or represented.

Decisions shall be taken by a majority of two-thirds (2/3) of the votes cast. The decisions taken by the GA are binding for all partners.

The GA is held approximately twice a year with the purpose of discussing, face-to-face, the overall status, challenges, and shape the course of the project. For effective collaboration, it is expected that every partner actively engages and contributes in a cooperative manner during the meetings.

2.6 Project Ethics Board

The members of the Project Ethics Board (PEB) are partners involved in tasks related with:

- handling or processing data originating from people's participation,
- testing sites and pilot facilities with people's participation.

The person participating in the PEB can be a member of the project management team from the associated partner, under the condition that they may redeem within their organization to a colleague with legal or ethics experience who can advise them as appropriate.

The detailed scope of the PEB and related procedures are documented in the D1.2 Compliance to security and ethics, Annex II – Project Ethics Board Procedures [3].

The PEB assembles every time that a partner completes an application for action that requires human participation or participation of third parties, e.g. for processing data of members of the crew, passengers, or whenever an ethical issue arises that needs to be resolved within the consortium.

The members of the PEB as of the 24th of January 2023 are the following:

Table 5: Ethics Board members

ABS Hellenic	Konstantinos Voutzoulidis *kvoutzoulidis@eagle.org*
ABS Hellenic	Yvonni Damianidou *ydamianidou@eagle.org*
NTUA	Dimitrios V. Lyridis *dsvlr@mail.ntua.gr*
AETHON	Magdalena Pawlikowska *magdalenapawlikowska@yahoo.gr*

INFILI	Ioannis Orthopoulos *iorthopoulos@infili.com*
LEDRA	Stamatina Rassia *contact@ledragroup.org*
HYDRUS	Astrinos Papadakis *a.papadakis@hydrus-eng.com*

2.7 External Experts Advisory Board

The External Expert Advisory Board (EEAB) is composed of external experts recognized in their respective field and their role is to provide independent opinion, acting as advisors of the project's progress. More specifically, the aims of the EEAB are to:

- Provide recommendation on scientific developments of the project,
- Provide consultation on selected project activities,
- Validate at high-level the results of the project,
- Help identify new fields of application and market potential,
- Amplify the dissemination and awareness of the initiative.

The PC should ensure that a Non-Disclosure Agreement (NDA) is signed between all Parties and each EEAB member before any confidential information is exchanged/disclosed and not later than 30 days after their nomination.

3. PROJECT EXECUTION

3.1 Main Work Packages

The HS4U project consists of the following six (6) Work Packages (WP) with detailed description of each Work Package being available in the Annex 1 of the Grant Agreement.

- WP1 – Project Coordination, Administration
- WP2 – Project Requirements' Elicitation and Architecture
- WP3 – Technical and Technological research
- WP4 – Digital Tools Creation
- WP5 – Experimentation and Pilot Implementation
- WP6 – Dissemination and Exploitation

3.2 Deliverables

The deliverables are the official project outputs submitted to the European Commission (EC) as the product of research or advancements in each Work Package or Task.

The table below contains a list of all planned deliverables, in date order. The deliverables that have a "Public" (PU) dissemination level shall be published on a dedicated section of the project website while the rest are restricted for use only within the consortium.

Table 6: List of Deliverables

No.	Deliverable Title	Work Package	Type	Dissemination	Due month
D6.1	Plan for dissemination and exploitation, including communication activities	WP6	R	SEN	3
D1.2	Compliance to security and ethics	WP1	R	SEN	5
D1.3	Data Management Plan	WP1	R	SEN	6
D2.1	Mappings of existing framework conditions, challenges, system failures and gap analysis	WP2	R	PU	9
D6.4	Plan for dissemination and exploitation, including communication activities, First Update	WP6	R	SEN	12
D2.2	HS4U scenarios	WP2	R	SEN	18
D3.1	Requirements for hardware-related with respect to sensing and actuation systems and overview of hardware development and functionalities	WP3	R	SEN	~~22~~ 28 (rev.)
D2.3	HS4U Architecture	WP2	R	SEN	~~24~~ 26 (rev.)

D6.5	Plan for dissemination and exploitation, including communication activities, Second Update	WP6	R	SEN	24
D1.4	Revised Data Management Plan	WP1	R	SEN	~~30~~ 34 (rev.)
D3.2	Risk assessment methodologies, models, and algorithms	WP3	R	PU	30
D1.1	HS4U Handbook, Risk Management and Quality Assurance	WP1	R	PU	36
D3.3	Passenger behavioural model	WP3	DEM	SEN	36
D3.4	Learning material for crew	WP3	R	SEN	36
D4.1	CDF interoperability framework and data ingestion systems	WP4	DEM	SEN	36
D4.2	The CDF platform and outcomes of continuous improvement	WP4	DEM	SEN	36
D4.3	Overview of integration activities and pilot test cases	WP4	DEM	SEN	36
D5.1	Pilots plan and assessment	WP5	R	SEN	36
D5.2	Robot cabin creation and validation	WP5	DEM	PU	36
D5.3	A preliminary policy recommendation based upon the HS4U pilots and technologies	WP5	R	PU	36
D6.2	Report on communication and dissemination activities	WP6	R	SEN	36
D6.3	Business models and exploitation plans	WP6	R	SEN	36
D6.6	Plan for dissemination and exploitation, including communication activities, Third update	WP6	R	SEN	36

3.3 Internal communications

Effective channels for internal communication are established from the beginning of the project to allow for proper coordination, smooth cooperation, and efficient exchange of necessary information between the project partners.

Communication within the project is performed via:

- Email by using the official contact lists set by the PC and stored in the project's repository folders,
- Formal (ordinary) meetings that take place physically,
- Other periodic, internal, meetings which are held virtually.

3.3.1 Formal meetings

To serve as project milestones, several meetings will be arranged at regular intervals as shown in Table 7.

Table 7: Formal meetings

No.	Meeting type	Type	Verification	Due month
1	Kick-off	Physical	Minutes of meeting	M1
2	1st Progress Meeting	Virtual	Minutes of meeting	M6
3	General Assembly Meeting (1st)	Physical	Minutes of meeting	M9
4	2nd Progress Meeting	Virtual	Minutes of meeting	M12
5	General Assembly Meeting (2nd)	Physical	Minutes of meeting	M16
6	3rd Progress Meeting	Virtual	Minutes of meeting	M18
7	General Assembly Meeting (3rd)	Physical	Minutes of meeting	M22
8	4th Progress Meeting	Virtual	Minutes of meeting	M24
9	General Assembly Meeting (4th)	Physical	Minutes of meeting	M29
10	5th Progress Meeting	Virtual	Minutes of meeting	M30
11	Final event	Physical	Photos	M36

The Project Coordinator (PC) shall call meetings no later than 30 days before the date of the meeting. Especially for physical meetings, proposed dates will be discussed and decided over polls at an early stage, i.e. at least four (4) months before the meeting.

A written agenda shall be prepared and sent by the PC no later than 14 days before the date of the meeting. Any Member of the Consortium may add an item to the original agenda by written notification to all the other Members of the Consortium no later than 7 days before the date of the meeting.

Any agenda item requiring a decision by the Members of the Consortium must be identified as such on the agenda. During a meeting the Members present or represented can unanimously agree to add a new item to the original agenda.

The PC shall chair the meeting and produce written minutes of the meeting which shall be the formal record of all decisions taken. The chairperson shall send the draft minutes to all members within 10 days after the date the meeting was held.

Each member of the Consortium that attended the meeting has the right to request amendments and additions to the written minutes of the meeting (MoM) based on factual data. The MoM shall be considered as accepted if, within 10 days after the date the MoM was sent, no Member raises an objection, in writing, to the chairperson with respect to the accuracy of the draft MoM.

The final version of MoM shall be stored in the project's repository.

Each partner shall make every reasonable effort to attend, by at least one representative person, at every GA meeting.

The maximum number of participants and/or the number of participants from any partner, may be limited by decision of the PC, as long as objective difficulties are presented and communicated early in advance.

3.3.2 Other periodic meetings

To track progress and project activities, regular monthly meetings should be held virtually, through Microsoft TEAMS or other equivalent service provider.

- Monthly meetings per Work Package chaired by the responsible WPL,
- Monthly meetings with the WPLs, chaired by the PC.

Although meetings of this type may have a tentative nature and may be held at the discretion of each WPL or PC, the minutes of meetings should be produced and made available to the other partners right after each meeting.

Other meetings may be held on an ad-hoc basis, called by any WPL or the PC as required by the project needs.

3.3.3 Email Communications

Daily communications are supported by using the established mailing lists found in the Project's repository, namely:

- A mailing list that includes all project participants,
- A mailing list that includes only the Work Package Leaders,
- A mailing list per Work Package (WP1, WP2, etc.) that includes personnel concerned,
- A mailing list that includes only the General Assembly representatives from each partner.

During the course of the project, the mailing lists will be updated, and additional ones may be added to meet the project's specific needs. All requests related to the email lists shall be addressed to the Project Coordination team.

3.3.4 Conflicts

Technical issues or conflicts within the project activities that do not involve any contract, budget, resource allocation or overall project goals changes shall be discussed within the related WP level first. If the decisions reached at WP level are unacceptable by any single consortium partner, the conflict will be resolved according to a conflict resolution procedure that can be summarized in the next steps:

1. Consortium members involved in the implementation of a WP, shall notify the WP leader about an emerging conflict.
2. The WP leader evaluates whether the matter requires bilateral discussions or a larger group meeting. The WPL shall then inform the PC on the following steps.
3. The outcome of the bilateral discussions or group meeting shall be reported to the PC.
4. If no consensus can be reached, the PC shall contact the responsible parties and try to resolve the conflict on the basis of mutual agreement.

5. If the disagreement remains, the issue is escalated to the GA. The decision that will be made at that level will be considered as the final resolution of the issue.

3.3.5 Project repository

HS4U project repository is a dedicated folder in Microsoft SharePoint in which all partners are granted access by the Project's Coordinator. Partners shall use this repository to avoid sharing documents via email; however, if partners prefer their own workspace tools, they may do so, as long as the final documents, such as the submitted deliverables, draft documents that require contribution and collaboration, etc., are uploaded to the HS4U repository.

The repository shall serve as the single source of truth for project documentation. Sensitive or confidential information must not be shared outside the consortium unless explicitly authorised, in line with the Grant Agreement and Consortium Agreement provisions on confidentiality and data protection.

All administrative documents relevant to the meetings such as agendas, presentations and minutes of meetings need to be uploaded to the project's repository.

All data produced by the project management activities are confidential and shall be available only to the members of the consortium, unless agreed otherwise.

3.4 External communications

All material used for external communication purposes should comply with the project identity characteristics as specified in the deliverable *D6.1 Plan for dissemination and exploitation including communication activities* [4] and found in the project's repository folder. Partners should refer to this deliverable to ensure that any future published material meets the set requirements.

All partners should strive to establish and maximize the project's visibility through various actions:

- Use of project logo and templates.
- Promoting project material such as posters, leaflets, videos.
- Preparing publications (e.g., scientific papers, deliverables, press releases).
- Participating in events (e.g., workshops, training sessions, conferences).
- Online presence (e.g., website, newsletters, social media).
- Synergies with other projects.

Partners participating in dissemination actions should notify the dissemination activities task leader and report said actions by filling out the dedicated Dissemination Reporting template, stored in the project's repository folder.

3.5 Change Management

The change management process defines the activities related to identifying, documenting, assessing, approving, prioritizing, planning, and controlling changes and communicating them to all

relevant stakeholders. It is a four-step process that the project management team (PC, STM) executes whenever required throughout the project lifecycle.

- Change Identification: a request for a change can be raised during meetings as a result of decisions, issues, risks or submitted formally via an email to the Project Coordinator.
- Change Assessment: the impact of the change on the project scope, schedule, budget, quality, or other project boundaries is assessed by the project management team and recommended actions are evaluated.
- Change Approval: For changes which do not have a significant impact on delivery times, budget, or project goals the changes can be agreed between the parties concerned. For other changes, consensus shall be reached by the General Assembly and then, the PC will submit a request for amendment of the Grant Agreement to the granting authority.
- Change Implementation: upon Change Approval, all involved partners shall be formally informed by the PC, and the activities related to the implementation of changes will be documented.

3.6 Data Management

Over the course of the project several data collection campaigns through interviews, workshops and questionnaires are expected to be carried out to gather information from a wider group of stakeholders. The obtained data will be utilized for analysis and development purposes and should be protected in accordance with the ethics and privacy protocols outlined in the Consortium Agreement and the deliverable *D1.2* [3].

All project partners involved with the data collection and analysis activities should refer to the deliverable *D1.3 Data Management plan* [5], and its subsequent updated version D1.4 [6], which define the procedures to handle the data collected or generated as well as how they should be processed and preserved.

The parties must keep confidential any data, documents or other material that is identified as sensitive during the implementation of the project and for at least 5 years after then end of the project.

4. QUALITY PLAN

The quality plan provides the PC, WPLs, and the rest of the project partners with practical directions for monitoring the project's progress and ensuring the quality of its outputs.

4.1 Progress reporting

The progress of each WP is officially reported by the WPLs to the PC and the General Assembly during the bi-annual progress meetings. WPLs are responsible for providing the following information using the Progress Reporting template found in the project repository and includes:

- Work performed during the last reporting period and main results achieved (if any),
- Status of each WP task, details on the work carried out by each beneficiary involved in,
- Activities planned for the following reporting period,
- Status of ongoing deliverables (if any),
- Status of the risks associated with the WP activities,
- Assessment of the technical progress:
- deviations from the original plan,
- proposed measures.

Clear and detailed explanations should be provided, in cases where:

- tasks are not fully implemented,
- key objectives are not achieved or not on schedule,
- impact on other tasks, budget, overall planning.

4.2 Financial reporting

During the bi-annual progress meetings, the PC provides the following information to the GA:

- The total project expenses declared so far against the planned budget.
- The personnel effort (Person-Months) declared so far, within each Work Package and per partner, against the planned budget.

The Finance Report is compiled by the PC using the information gathered by each beneficiary. Rules of eligibility of costs and procedures for computing them are extensively described in the GA. All partners are requested to submit their finance information to the PC not later than 15 days after the deadline of the periodic report.

The financial statement should be according to the partners' normal accounting rules. However, each partner should check that:

- The project costs are correctly identified within their accounts.
- Only eligible costs are claimed for and can be separated from any non-eligible costs.

- All records (timesheets, invoices, receipts etc.) are properly stored and are retrievable in the case of an audit up to 5 years after the end of the project.

The PC is responsible for collecting, checking, and compiling the project's Financial Report. The PC will also inform the Project Officer (PO) of any delays or difficulties encountered in the production and compilation of the report including any delay in receiving information from a partner or a major discrepancy and, where necessary, propose a contingency plan.

In the case of a partner not submitting their financial statement on time, the PC can decide whether or not to include that partner's data in the submission to EC. Excluding a partner's financial statement will result in them having to wait until the next reporting period for further funds but would allow the payments to all other partners to be delivered on schedule and avoid the delay of payment to majority of the consortium.

4.3 Project reviews

Besides the bi-annual progress meetings and the planned deliverables submission, the consortium is also bound to provide periodic technical and financial reports to the European Commission. The reporting calendar is established in the Grant Agreement and shown in Table 8.

Table 8: Official project review

Review No.	Meeting type	Comments	Due month
1	Interim Review meeting		M18
2	Final Review meeting		M36

During these reviews, the progress is presented by the Project Coordinator to the Project Officer who assess the proper implementation of the action and compliance with the obligations under the Agreement.

On specific issues and upon timely notice by the PC, Work Package Leaders or other partners may be asked to participate in the review meeting to support the process with their expertise.

4.4 Project Objectives and KPIs

The project addresses six objectives as described in detail within the GA document and outlined below:

1. The validation of the proposed HS4U technologies through the realization in a demonstrator environment.
2. The development of a collaborative digital framework (CDF) for the live interaction of humans, IoT devices and Artificial Intelligence models.
3. The development of a training package for the crew based on role-playing gaming.
4. The development of a passenger behavioural model, based on live experiments, to be used for passenger prediction by the CDF platform.
5. The full development, testing, validation, and commercialization of a Viral Detection Sensor for the detection of airborne pathogens.

6. The development of the Robot-cabin environment to showcase the HS4U systems and technologies.

Key Performance Indicators (KPIs) have been defined to support high quality project outcomes. These KPIs are used as a means of implementing quality planning in relation to processes, roles and responsibilities that have been described in the previous sections. The KPIs will be used as an instrument for the internal quality assessment of various project procedures conducted by the Project Coordinator. Any noteworthy issue arising from the quality assessment or quality control implementation will be promptly notified to all relevant partners.

Table 9 Project Key Performance Indicators (KPIs)

KPI	Short Description	Explanations
KPI-1	50% increase of reaction speed at early stage after the detection of health hazard event.	Benchmarked against the baseline of actual cruise ship cases and relative data. The baseline will be set over the first months of the project based on examination of these cases, such as covid infections, to establish average reaction times and speeds, as well as time to confirm infection.
KPI-2	50% increase of crew awareness around the impacts of fast health risk mitigation and management actions.	This will be achieved through the training of the crew and measured through evaluation activities in WP5.
KPI-3	80% certainty of crew regarding the implementation of HS4U measures.	This will showcase the confidence of the crew to make use of the H24U concept, methodologies, and results. The confidence of the crew to use the H24U tools, including the CDF, will be measured within WP5 through appropriate satisfaction and awareness surveys to crew.
KPI-4	Monitoring Streamhandler health status	Streamhandler application provides certain functionalities such as: dashboards, panels, loading status for monitoring its proper operation and connectivity
KPI-5	5 social innovation and awareness raising events.	Events related to blue economy, smart state-of-the-art innovation, capacities of interoperable societal/environmental/technological / biomedical aspects of HS4U.
KPI-6	90% satisfaction of “robot-cabin” participants	Measured through the real-life demonstrator: of the connections of HS4U design and smart systems solutions.
KPI-7	80% of stakeholders are interested in the adoption of demonstrated technologies	Percentage of participating stakeholders in robot cabin demonstration show, willing to receive more information to implement the technologies.
KPI-8	50 stakeholders for the development of the simulation models and scenarios.	Stakeholders to be engaged during the requirements elicitation of WP2 that will provide feedback to the simulation modelling design and functional operations of WP3.
KPI-9	At least 10000 stakeholders reached out	Via campaigns, downloading material from our toolkit and/or participating in at least one of HS4U’s events.

KPI-10	At least 5 Scientific and practical knowledge reports deployed.	2 publications in scientific journals, 3 publications of chapters in the already contracted "BLUE BOOK" by Springer Nature (LEDRA) for the passenger behavioural, environmental, medical, technological models.
KPI-11	2 analysis reports from CEL & CBS cruise ship cases	Evidence from our real-life cruise ship cases and data. Integrating best-practices and protocols that will be shared with 10 policymakers internationally.
KPI-12	15 large passenger ships adopting HS4U solutions	Assuming interactions with policy stakeholders, enhanced exploitation potential of our approach, participation of end-users in H24U consortium and dissemination activities to assist results uptake by 15 cases within 5 years after the project end.

4.5 Quality assurance of deliverables

To ensure high quality of deliverables as per the formal requirements established in the Grant Agreement and the Consortium Agreement, a review process is adopted.

Each deliverable shall be subject to review by two (2) reviewers before it is submitted to the EC portal. The reviewers should be partners who were not actively involved in the development of the deliverable and are selected by the Scientific-Technical Manager in consultation with the relevant Work Package Leader.

The following steps, as shown in Table 10, shall be followed to ensure a timely submission of the deliverable.

Table 10: Deliverable review procedure

When	Who	Action	Recipient
3 weeks before official submission date	WPL	Submits the 1st draft to the PC and the Reviewers	PC, Reviewers
10 days before official submission date	Reviewers, PC	Submit the reviewed deliverable with their comments back to the WPL	WPL
2 days before official submission date	WPL	Submits the 2nd draft to the PC	PC
1 day before official submission date	PC	Reviews the revised deliverable and if fount of high quality, submits it to the EU portal; otherwise, additional review round is initiated and informs for a two-weeks delay	EU portal, WPL
Submission date	PC	Informs the Consortium about the successful submission	All partners

The quality of the deliverables shall be assessed against specific quality criteria to ensure uniformity and consistency in the review process and the reviewers' clear understanding of their task. The criteria, along with the aspects to be investigated, are outlined in Table 11.

Table 11: Quality criteria of deliverables

Quality Criteria	Description
Clarity	The language of the text is clear with proper sentence structure, The text is in English, The text is unambiguous, The terminology, including acronyms, is explained, There are no spelling errors, Any potentially sensitive information is appropriately worded,
Completeness	All aspects of the deliverable, as described in Annex I (Part A) of the GA, are fully addressed
Accuracy	All information used in the deliverable is supported by the respective references,
Added Value	Each aspect of the deliverable is analysed in adequate detail;
Relevance	The content is relevant to the scope of the deliverable, The deliverable is relevant to the targeted readers/audience
Compliance	The text is written in line with the project's deliverable template

5. CONCLUSIONS

The HS4U Handbook on Project Management, Risk Management and Quality Assurance has served as a guiding reference throughout the project's lifecycle. By providing clear procedures, roles, and tools, it enabled effective coordination, timely identification and mitigation of risks, and ensured the quality and compliance of project deliverables.

At project closeout, this handbook consolidates the practices that supported the consortium in achieving the project objectives and meeting the obligations towards the European Commission. The methodologies described herein may serve as a valuable reference for future initiatives, ensuring continuity and knowledge transfer beyond the HS4U project.

6. RISK MANAGEMENT PLAN

Risk management involves the systematic identification, assessment, and prioritization of risks to effectively minimize, monitor, and control the likelihood and impact of adverse events, commonly referred to as threats. Recognizing that not all risks can be eliminated, the development of mitigation strategies and contingency plans is essential to reduce their potential impact should they materialize.

During the proposal phase, the Consortium proactively identified potential risks that could affect the successful implementation of the project. These risks have been continuously monitored and updated throughout the project as part of WP1's quality and risk management processes, enabling the Consortium to proactively identify and mitigate them when necessary. Responsibility for managing project risks lies with the Project Coordinator (PC) and the Scientific and Technical Manager (STM). Identified risks are actively addressed, and alerts are raised when any risk escalates to a higher level. All risk management activities are overseen by the PC and STM, with support from Work Package Leaders (WPLs) for issues specific to their respective work packages.

The following table presents the levels of risk likelihood and impact used for assessing project risks.

Table 12 Risk matrix

		Severity		
		S1	*S2*	*S3*
Likelihood	*L3*			
	L2			
	L1			

Table 13 Risk levels

High	The level of risk is not acceptable and risk control measures are required to move the risk to the lower levels.
Medium	The level of risks is acceptable, provided that further reduction measures are not practically applicable. Close monitoring is required.
Low	The level of risks is acceptable

6.1 Risk tables

Table 14 summarizes the risks identified during the proposal phase, along with the corresponding mitigation measures that have been planned to address them. This table has been periodically updated following each meeting of the Scientific Technical Committee (STC), whenever a decision has been made to revise the risk matrix due to any of the following reasons:

- New potential risks have been identified and classified,
- Risks have been realized, and their mitigation measures need to be re-assessed,
- Additional mitigation actions need to be determined.

Table 14: Critical risks and mitigation measures (As of 15th June 2022 – Rev.0)

Risk ID	Description	Work Package	Likelihood	Severity	Risk Level	Mitigation Measures
1	Failure to provide the CDF and modules of HS4U	WP4	L1	S2	Low	HS4U consortium consists of partners with vertical expertise in all proposed modules relevant to the DTs. The phases introduced in the project are placed in such a way to spot early if (and any) problems arise per tool.
2	High rotation of Human Resources	All	L2	S1	Low	Partners involved have high expertise and back-up personnel can be assigned in a short period of time.
3	Delays	All	L2	S1	Low	The consortium management team will monitor the progress of each task. Several milestones in lace will serve as checks. Frequent internal online meetings will raise forward awareness of potential delay causes.
4	Staff changes, resignations	All	L1	S1	Low	This should be limited to very few cases. Nevertheless, members of the consortium represent strong academia and business teams with sufficient staff to provide quality replacements
5	Non-performance	All	L1	S3	Medium	Internal QA for deliverables by non-authoring team members, regular progress meetings of the consortium, Plan for data collection to monitor KPIs
6	Insufficient communication	All	L1	S1	Low	Progress meetings for the consortium, regular meetings of partners within WPs using online conference platforms. Use of electronic communication to facilitate contacts. Project leaders and task leaders will maintain information exchange.

Risk ID	Description	Work Package	Likelihood	Severity	Risk Level	Mitigation Measures
7	Ethical issues	All	L1	S2	Low	Data collection procedure will be supervised, partners will complete comprehensive privacy and ethical impact assessment (E/PIA). Incorporating a privacy-by-design approach
8	IT security	All	L1	S2	Low	All partners have strong IT departments within their structures, which will prepare proper channels for data storage, exchange.
9	Lack of crew members for interviews	WP2	L1	S3	Medium	The pilot partners (Columbia Blue and Celestyal) will be requested to communicate and arrange dates for the interviews well in advance. Other stakeholders will also be engaged as well as ship crew organizations.
10	Insufficient data for analysis	WP3, WP4, WP2	L1	S1	Low	Inclusion of academia ensures good knowledge of the state of the art. In the field. The inclusion of commercial entities allows for first-hand data access.
11	Inability to organize workshops with stakeholders due to pandemic situations or other reasons	WP2	L2	S2	Medium	Option to move workshops to the online-only environment
12	Not enough data to perform simulation modelling	WP3	L1	S3	Medium	The https://data.europa.eu/en will be sought as well as contacts with other stakeholders. Synthetic data will be used while simulations will be compared towards small experiments with consortium members' personnel.
13	Lack of technical expertise required for the development of IT tools proposed	WP4	L1	S3	Medium	Redundancy of competencies in IT staff selection for the project
14	Problems with technology integration	WP4	L1	S1	Low	Proper planning of technologies (sensors and actuators) that need to be integrated will be based on communication standards (Zigbee, Z-wave) minimizing the risk for integration problems.

Risk ID	Description	Work Package	Likelihood	Severity	Risk Level	Mitigation Measures
						Should further issues arise, sensors will be adapted to said standards.
15	Inability to conduct pilot study due to covid-19	WP5	L1	S3	Medium	In case of further pandemic outbreaks, crowding conditions will need to be avoided. In such a case replacement location will be selected and virtual pilots will be considered.
16	Non-involvement or lacklustre involvement of business partners	WP5	L1	S2	Low	Companies involved in the consortium will ensure that project knowledge is disseminated internally in their managerial structures
17	A small range of dissemination activities	WP6	L1	S2	Low	While not critical to project success limited dissemination will reduce the real (market) impact of the project. As a countermeasure, all partners will ensure that project results will be disseminated through their partner networks
18	Low response among potential stakeholders / or some target groups do not participate in the dissemination activities	WP3, WP6, WP4, WP2, WP5	L1	S1	Low	Another set of stakeholders will be identified, and communications strategies will be adapted to target them.
19	Changes in regulation that alters the ship operations	WP3, WP4, WP2, WP5	L1	S1	Low	New regulations will be incorporated in the studies with proper reference towards their impact.

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Table 15 Critical risks and mitigation measures (As of October 2023 – Rev.1)

Risk ID	Description	Work Package	Likelihood	Severity	Risk Level	Mitigation Measures
1	Failure to provide the CDF and modules of HS4U	WP4	L1	S2	Low	HS4U consortium consists of partners with vertical expertise in all proposed modules relevant to the DTs. The phases introduced in the project are placed in such a way to spot early if (and any) problems arise per tool.
2	High rotation of Human Resources	All	L2	S1	Low	Partners involved have high expertise and back-up personnel can be assigned in a short period of time.
3	Delays	All	L2	S1	Low	The consortium management team will monitor the progress of each task. Several milestones in lace will serve as checks. Frequent internal online meetings will raise forward awareness of potential delay causes.
4	Staff changes, resignations	All	L1	S1	Low	This should be limited to very few cases. Nevertheless, members of the consortium represent strong academia and business teams with sufficient staff to provide quality replacements
5	Non-performance	All	L1	S3	Medium	Internal QA for deliverables by non-authoring team members, regular progress meetings of the consortium, Plan for data collection to monitor KPIs
6	Insufficient communication	All	L1	S1	Low	Progress meetings for the consortium, regular meetings of partners within WPs using online conference platforms. Use of electronic communication to facilitate contacts. Project leaders and task leaders will maintain information exchange.
7	Ethical issues	All	L1	S2	Low	Data collection procedure will be supervised, partners will complete comprehensive privacy and ethical impact assessment (E/PIA). Incorporating a privacy-by-design approach
8	IT security	All	L1	S2	Low	All partners have strong IT departments within their structures, which will prepare proper channels for data storage, exchange.

9	Lack of crew members for interviews	WP2	L1	S3	Medium	The pilot partners (Columbia Blue and Celestyal) will be requested to communicate and arrange dates for the interviews well in advance. Other stakeholders will also be engaged as well as ship crew organizations.
10	Insufficient data for analysis	WP3, WP4, WP2	L1	S1	Low	Inclusion of academia ensures good knowledge of the state of the art. In the field. The inclusion of commercial entities allows for first-hand data access.
11	Inability to organize workshops with stakeholders due to pandemic situations or other reasons	WP2	L2	S2	Medium	Option to move workshops to the online-only environment
12	Not enough data to perform simulation modelling	WP3	L1	S3	Medium	The https://data.europa.eu/en will be sought as well as contacts with other stakeholders. Synthetic data will be used while simulations will be compared towards small experiments with consortium members' personnel.
13	Lack of technical expertise required for the development of IT tools proposed	WP4	L1	S3	Medium	Redundancy of competencies in IT staff selection for the project
14	Problems with technology integration	WP4	L1	S1	Low	Proper planning of technologies (sensors and actuators) that need to be integrated will be based on communication standards (Zigbee, Z-wave) minimizing the risk for integration problems. Should further issues arise, sensors will be adapted to said standards.
15	Inability to conduct pilot study due to covid-19	WP5	L1	S3	Medium	In case of further pandemic outbreaks, crowding conditions will need to be avoided. In such a case replacement location will be selected and virtual pilots will be considered.
16	Non-involvement or lacklustre involvement of business partners	WP5	L1	S2	Low	Companies involved in the consortium will ensure that project knowledge is disseminated internally in their managerial structures
17	A small range of dissemination activities	WP6	L1	S2	Low	While not critical to project success limited dissemination will reduce the real (market) impact of the project. As a countermeasure, all partners will ensure that project results will be disseminated through their partner networks

18	Low response among potential stakeholders / or some target groups do not participate in the dissemination activities	WP3, WP6, WP4, WP2, WP5	L1	S1	Low	Another set of stakeholders will be identified, and communications strategies will be adapted to target them.
19	Changes in regulation that alters the ship operations	WP3, WP4, WP2, WP5	L1	S1	Low	New regulations will be incorporated in the studies with proper reference towards their impact.
20 (rev.1)	Impact of war in Gaza on the planning and implementation of the project deliverables by the Israeli HS4U partners	WP3, WP4, WP6	Low	High	Medium	Maintain frequent communication with the Israeli partners for assessing the current situation and for applying mitigation measures if needed, early enough.

Table 16 Critical risks and mitigation measures (As of December 2023 – Rev.2)

Risk ID	Description	Work Package	Likelihood	Severity	Risk Level	Mitigation Measures
1	Failure to provide the CDF and modules of HS4U	WP4	L1	S2	Low	HS4U consortium consists of partners with vertical expertise in all proposed modules relevant to the DTs. The phases introduced in the project are placed in such a way to spot early if (and any) problems arise per tool.
2	High rotation of Human Resources	All	L2	S1	Low	Partners involved have high expertise and back-up personnel can be assigned in a short period of time.
3	Delays	All	L2	S1	Low	The consortium management team will monitor the progress of each task. Several milestones in lace will serve as checks. Frequent internal online meetings will raise forward awareness of potential delay causes.
4 (rev.2)	Staff changes, resignations	All	L2	S2	Medium	This should be limited to very few cases. Nevertheless, members of the consortium represent strong academia and business teams with sufficient staff to provide quality replacements
5	Non-performance	All	L1	S3	Medium	Internal QA for deliverables by non-authoring team members, regular progress meetings of the consortium, Plan for data collection to monitor KPIs
6	Insufficient communication	All	L1	S1	Low	Progress meetings for the consortium, regular meetings of partners within WPs using online conference platforms. Use of electronic communication to facilitate contacts. Project leaders and task leaders will maintain information exchange.
7	Ethical issues	All	L1	S2	Low	Data collection procedure will be supervised, partners will complete comprehensive privacy and ethical impact assessment (E/PIA). Incorporating a privacy-by-design approach
8	IT security	All	L1	S2	Low	All partners have strong IT departments within their structures, which will prepare proper channels for data storage, exchange.

9	Lack of crew members for interviews	WP2	L1	S3	Medium	The pilot partners (Columbia Blue and Celestyal) will be requested to communicate and arrange dates for the interviews well in advance. Other stakeholders will also be engaged as well as ship crew organizations.
10	Insufficient data for analysis	WP3, WP4, WP2	L1	S1	Low	Inclusion of academia ensures good knowledge of the state of the art. In the field. The inclusion of commercial entities allows for first-hand data access.
11	Inability to organize workshops with stakeholders due to pandemic situations or other reasons	WP2	L2	S2	Medium	Option to move workshops to the online-only environment
12	Not enough data to perform simulation modelling	WP3	L1	S3	Medium	The https://data.europa.eu/en will be sought as well as contacts with other stakeholders. Synthetic data will be used while simulations will be compared towards small experiments with consortium members' personnel.
13	Lack of technical expertise required for the development of IT tools proposed	WP4	L1	S3	Medium	Redundancy of competencies in IT staff selection for the project
14	Problems with technology integration	WP4	L1	S1	Low	Proper planning of technologies (sensors and actuators) that need to be integrated will be based on communication standards (Zigbee, Z-wave) minimizing the risk for integration problems. Should further issues arise, sensors will be adapted to said standards.
15	Inability to conduct pilot study due to covid-19	WP5	L1	S3	Medium	In case of further pandemic outbreaks, crowding conditions will need to be avoided. In such a case replacement location will be selected and virtual pilots will be considered.
16	Non-involvement or lacklustre involvement of business partners	WP5	L1	S2	Low	Companies involved in the consortium will ensure that project knowledge is disseminated internally in their managerial structures
17	A small range of dissemination activities	WP6	L1	S2	Low	While not critical to project success limited dissemination will reduce the real (market) impact of the project. As a countermeasure, all partners will ensure that project results will be disseminated through their partner networks

18	Low response among potential stakeholders / or some target groups do not participate in the dissemination activities	WP3, WP6, WP4, WP2, WP5	L1	S1	Low	Another set of stakeholders will be identified, and communications strategies will be adapted to target them.
19	Changes in regulation that alters the ship operations	WP3, WP4, WP2, WP5	L1	S1	Low	New regulations will be incorporated in the studies with proper reference towards their impact.
20 (rev.1)	Impact of war in Gaza on the planning and implementation of the project deliverables by the Israeli HS4U partners	WP3, WP4, WP6	Low	High	Medium	Maintain frequent communication with the Israeli partners for assessing the current situation and for applying mitigation measures if needed, early enough.

Table 17.Critical risks and mitigation measures (As of August 2025 – Rev.3)

Risk ID	Description	Work Package	Likelihood	Severity	Risk Level	Mitigation Measures
1	Failure to provide the CDF and modules of HS4U	WP4	L1	S2	Low	HS4U consortium consists of partners with vertical expertise in all proposed modules relevant to the DTs. The phases introduced in the project are placed in such a way to spot early if (and any) problems arise per tool.
2	High rotation of Human Resources	All	L2	S1	Low	Partners involved have high expertise and back-up personnel can be assigned in a short period of time.
3	Delays	All	L2	S1	Low	The consortium management team will monitor the progress of each task. Several milestones in lace will serve as checks. Frequent internal online meetings will raise forward awareness of potential delay causes.
4 (rev.2)	Staff changes, resignations	All	L2	S2	Medium	This should be limited to very few cases. Nevertheless, members of the consortium represent strong academia and business teams with sufficient staff to provide quality replacements
5	Non-performance	All	L1	S3	Medium	Internal QA for deliverables by non-authoring team members, regular progress meetings of the consortium, Plan for data collection to monitor KPIs
6	Insufficient communication	All	L1	S1	Low	Progress meetings for the consortium, regular meetings of partners within WPs using online conference platforms. Use of electronic communication to facilitate contacts. Project leaders and task leaders will maintain information exchange.
7	Ethical issues	All	L1	S2	Low	Data collection procedure will be supervised, partners will complete comprehensive privacy and ethical impact assessment (E/PIA). Incorporating a privacy-by-design approach

8	IT security	All	L1	S2	Low	All partners have strong IT departments within their structures, which will prepare proper channels for data storage, exchange.
9	Lack of crew members for interviews	WP2	L1	S3	Medium	The pilot partners (Columbia Blue and Celestyal) will be requested to communicate and arrange dates for the interviews well in advance. Other stakeholders will also be engaged as well as ship crew organizations.
10	Insufficient data for analysis	WP3, WP4, WP2	L1	S1	Low	Inclusion of academia ensures good knowledge of the state of the art. In the field. The inclusion of commercial entities allows for first-hand data access.
11	Inability to organize workshops with stakeholders due to pandemic situations or other reasons	WP2	L2	S2	Medium	Option to move workshops to the online-only environment
12	Not enough data to perform simulation modelling	WP3	L1	S3	Medium	The https://data.europa.eu/en will be sought as well as contacts with other stakeholders. Synthetic data will be used while simulations will be compared towards small experiments with consortium members' personnel.
13	Lack of technical expertise required for the development of IT tools proposed	WP4	L1	S3	Medium	Redundancy of competencies in IT staff selection for the project
14	Problems with technology integration	WP4	L1	S1	Low	Proper planning of technologies (sensors and actuators) that need to be integrated will be based on communication standards (Zigbee, Z-wave) minimizing the risk for integration problems. Should further issues arise, sensors will be adapted to said standards.
15	Inability to conduct pilot study due to covid-19	WP5	L1	S3	Medium	In case of further pandemic outbreaks, crowding conditions will need to be avoided. In such a case replacement location will be selected and virtual pilots will be considered.

16	Non-involvement or lacklustre involvement of business partners	WP5	L1	S2	Low	Companies involved in the consortium will ensure that project knowledge is disseminated internally in their managerial structures
17	A small range of dissemination activities	WP6	L1	S2	Low	While not critical to project success limited dissemination will reduce the real (market) impact of the project. As a countermeasure, all partners will ensure that project results will be disseminated through their partner networks
18	Low response among potential stakeholders / or some target groups do not participate in the dissemination activities	WP3, WP6, WP4, WP2, WP5	L1	S1	Low	Another set of stakeholders will be identified, and communications strategies will be adapted to target them.
19	Changes in regulation that alters the ship operations	WP3, WP4, WP2, WP5	L1	S1	Low	New regulations will be incorporated in the studies with proper reference towards their impact.
20 (rev.1)	Impact of war in Gaza on the planning and implementation of the project deliverables by the Israeli HS4U partners	WP3, WP4, WP6	L1	High	Medium	Maintain frequent communication with the Israeli partners for assessing the current situation and for applying mitigation measures if needed, early enough.
21 (rev.3)	Deviation from Planned Technology Development WP3.1 There is a shift from developing a sewage virus detection sensor to creating an air-based virus detection sensor. This change is driven by a reassessment of project priorities and technological capabilities, which now favor air-based detection to address immediate health monitoring needs on ships.	WP3, WP1	L2	S1	Low	Prepare a detailed justification document that clearly outlines the rationale behind the shift, including technological feasibility, enhanced detection capabilities, and alignment with project goals. Maintain open and regular communication with the project officer, providing updates and responses to queries promptly to facilitate a smooth approval process. Develop a contingency plan to continue some level of progress within the project's original scope while awaiting approval, ensuring that resources are utilized effectively during the waiting period.
22 (rev.3)	Delays in the technologies delivery by the providers	WP3	L1	S3	High	Strengthen engagement with technology providers to ensure better alignment and commitment to the project timelines. Set up regular check-ins and progress tracking with each technology provider to catch potential delays early.

7. REFERENCES

[1] HORIZON-Research and Innovation Actions, Project HS4U (101069937), “Grant Agreement, FINAL version 01,” 2022-06-15.

[2] HORIZON-Research and Innovation Actions, Project HS4U (101069937), “Consortium Agreement, FINAL version 01,” 2022-05-24.

[3] HORIZON-Research and Innovation Actions, Project HS4U (101069937), “Deliverable 1.2 Compliance to security and ethics,” 2023.

[4] HORIZON-Research and Innovation Actions, Project HS4U (101069937), “Deliverable 6.1 Plan for dissemination and exploitation including communication activities,” 2022.

[5] HORIZON-Research and Innovation Actions, Project HS4U (101069937), “Deliverable 1.3 Data Management plan,” 2022.

[6] HORIZON-Research and Innovation Actions, Project HS4U (101069937), “Deliverable 1.4 Revised Data Management plan,” 2025.

ANNEX 1

HS4U PROGRESS REPORTING FORM	
WORK PACKAGE	Choose an item.
TASK	Choose an item.
TASK LEADER	xxx
DATE	31/8/2023
TASK STATUS	In Progress
INVOLVED PARTNERS	xxx

Achievements/Actions completed (publications, deliverables, conferences, workshops, etc.):

1.
2.
3.

Expected activities/work items for the next 6-month period:

1.
2.
3.

Foreseeable Risks/Problems/Deviations and their impact on the project's budget/schedule:

1.
2.
3.

*Note: Table should refer to a single task. For reporting multiple tasks, please copy the table to next pages.