Haiku
Human AI teaming Knowledge and Understanding for aviation safety

Deliverable 9.2

HAIKU Dissemination, Communication and Exploitation Plan

Authors: Evangelos, Spyrou (CERTH/HIT)

Abstract: This document describes the dissemination, communication and exploitation strategy to be implemented in the framework of HAIKU.

This project has received funding by the European Union's Horizon Europe research and innovation programme HORIZON-CL5-2021-D6-01-13 under Grant Agreement no 101075332

Information Table

Deliverable Number	9.2
Deliverable Title	HAIKU Dissemination, Communication and Exploitation Plan
Version	2.0
Status	Final version
Responsible Partner	CERTH
Contractual Date of Delivery	31/01/2023
Actual Date of Delivery	10/02/2023
Date of Delivery - 2nd version	19/07/2024
Dissemination Level	Public

Document History

Version	Date	Status	Author	Description
0.1	10/01/23	Draft	Evangelos Spyrou (CERTH/HIT)	Initial Draft
0.2	18/01/23	Draft	Vasileios Kappatos (CERTH/HIT)	Review with minor comments
0.3	27/01/23	Draft	Evangelos Spyrou (CERTH/HIT)	Draft for review
0.4	06/02/23	Draft	Simone Pozzi, Vanessa Arrigoni (DBL)	Internal review
1.0	10/02/23	Final	Evangelos Spyrou (CERTH/HIT)	Final version
2.0	13/07/2024	Final version	Simone Pozzi, Vanessa Arrigoni (DBL), Evangelos Spyrou (CERTH/HIT)	Updated following review by CINEA

List of Acronyms

Acronym	Definition
AI	Artificial Intelligence
CERTH	Centre for Research & Technology Hellas
DBL	Deep Blue
HE	Horizon Europe
HIT	Hellenic Institute of Transport
UAM	Urban Air Mobility
WP	Work Package

Table of Contents

List of tables

List of figures

Executive Summary

Deliverable D9.2 establishes a dissemination and exploitation strategy for the HAIKU project. The document has been implemented by Centre for Research and Technology Hellas (CERTH) / Hellenic Institute of Transport (HIT) Team and will be used as guide for the all-relevant dissemination work by all consortium members.

The HAIKU dissemination strategy relies on the following methodology:

1. Identification of dissemination stakeholder target groups according to HAIKU results and network of contacts that the project consortium brings.

Target groups that would benefit:

- All the end-users of HAIKU Use Cases: Pilots, Air Traffic Controllers, UAM Controllers, Drone Operators, Airport Safety Managers, Passengers.
- All the aviation stakeholders (e.g. airports, industry, research community, general public) for increased safety.

2. List of communication material and activities that will be used to disseminate results and project activities

The following table presents the dissemination activities for the HAIKU project and their targets based on the Grant Agreement as well as the preliminary commitments of carrying out these tasks. The following table presents the list of communication material and its intended usage.

Table 1 Communication material

Communication material	Usage
HAIKU logo	Project visual identity
Project flyer	General dissemination of project in events, conferences, meetings
Poster	General dissemination of project in events, conferences, meetings
PowerPoint template	For project related presentations
YouTube Video	Planned video for increasing visibility of the project's key outputs and outcomes

3. List of social media platforms, creation of accounts/groups and planning of dissemination content and frequency of postings

Table 2 Social Media

Social Media platform	Account name/group	Target	Creation date
Twitter®	@HAIKUproject_EU	400 followers	September 2022
LinkedIn®	HAIKU EU Project	500 followers	September 2022
Research Gate®	HAIKU EU Project	70 followers	September 2022

4. Stakeholder meetings and final conference.

Three stakeholder meetings will be organised in the duration of the project (M12, M24, M36) and will target end-users/stakeholders aiming at providing input for the project's views, activities and results. The events will also serve the purpose of presenting, collecting feedback results that will be developed by HAIKU. The feedback from the participants will be used as input for future steps as well as a method of calibrating the findings.

The project Final conference will be held in the last year of the project (late M35 to early M36), with the aim to spread the achievements of HAIKU to all potentially interested parties and create additional impact of the results.

1 Introduction

1.1 Purpose and scope

D9.2 Dissemination, Communication and Exploitation Strategy is a key deliverable of the HAIKU project that describes and outlines the key activities to be undertaken in the project's duration in order to increase visibility of the project's key outputs and outcomes and disseminate its activities and overall project implementation. Specifically, D9.2 will describe the dissemination methodology that will allow the project to have a maximum outreach and engage with all target group audiences that have the most to gain in the near-term from the results of the project, as well as the research community that could further exploit the findings.

The HAIKU dissemination strategy relies on the following actions:

- Identification of dissemination stakeholder groups and network of contacts that the project consortium brings
- List of communication material and dissemination activities (i.e. newsletters, press releases, scientific publications, participation in roadshows and conferences, workshop/stakeholder meetings, final conference) that will be used to disseminate results and project related activities as well as allocation of work, based on agreed targets in Grant Agreement (GA)
- List of social media platforms, creation of accounts/groups and planning of dissemination content and frequency of postings

1.2 Deliverable structure

This document contains the following sections:

Section 1 introduction and scope of the deliverable

Section 2 HAIKU logo visual identify

Section 3 Project flyer

Section 4 Poster

Section 5 Power Point Template

Section 6 YouTube video

Section 7 Dissemination & stakeholder dialogue

Section 8 Exploitation

2 HAIKU logo- visual identity

HAIKU logo has been developed by Deep Blue. Different variations of the logo have been created for online applications and social media (ANNEX 1). The consortium has finally reached a consensus for the version presented below.

Table 3 Logo

	Plain logo
	Logo and full acronym explanation
	Pictogram

3 Project flyer

The project flyer is an essential tool to raise awareness for the HAIKU project. Its content has been designed by DBL, EUROCONTROL and CERTH/HIT. Specifically, the leaflet provides all the necessary information in a concise form regarding the project and its objectives. The flyer will be a threefold A4 flyer and provides the following info: Project logo, company logos of project partners, website address, social media addresses, the project goal, the human-centred approach, vision etc. Between the project's duration, this flyer will be updated to reflect project results.

Figure 1 Flyer

4 Poster

A HAIKU poster will be developed on A1 – A0 dimensions that will present the project logo and acronym, project consortium logos. Its content will be designed by CERTH/HIT while the overall graphics design will be subcontracted to a professional designer. The main aim of the poster is to highlight the key objectives of the project. The poster will be used for promoting the project by the partners, when attending conferences or specific meetings. Further information and the designs of the flyer will be available on Deliverable 9.3.

5 PowerPoint template

A PowerPoint template was developed by DBL and is available for every consortium partner to use either for project meetings or promoting the project and its results.

Figure 2 PPT template

6 YouTube video

A HAIKU introductory video with a 1-1:30 minutes duration will be created and uploaded on the YouTube platform, in order to increase awareness about the project's scope, objectives and results. The use of YouTube will allow the video to have a wider reach and broad general audience. Furthermore, the video will be embedded on the HAIKU website to allow wider capture of views than directly from the YouTube site. The creation of the video has been planned for Year 2.

7 Dissemination and stakeholder dialogue

The following section includes the main activities that will be used to increase the project's visibility as well as disseminating the outcomes and main products to the target stakeholder groups

7.1 Social media

HAIKU project specific accounts and groups for Twitter, LinkedIn and Research Gate, have been created by CERTH/HIT, to raise awareness and maximise exposure. Social media will play an important role in the development of the HAIKU community.

All social media interactions will be relevant to the project's aims.

Each account's design will include the project logo, background banner images relevant to the project's topics, along with a short text explaining the project's purpose. All social media pages will include an acknowledgement that the project has received funding from the Horizon Europe research and innovation programme and the number of the GA.

The content of the social media posts will be relevant to the following subjects:

- News directly generated by the project
- News that mention the project
- News of interest to the project
- Events organised by the project
- Events related to the topics addressed by the project

The contents should further respect the following rules:

- Specific reference to brands should be justified
- Postings should not be biased

7.1.1 Social Media Strategy for Year 1

In the coming months, details on each Use Case will be released in a series of social media posts. The timing of the different postings will be defined considering the Use Case maturity. It is plan to have three posts per each Use Case – Introduction and problem statement, Digital Assistant Concept, Problems and Challenges - to present sufficient details to external stakeholders and to maintain the HAIKU communication active and relevant for an extended period of time, e.g. from March to June 2023. Visual material will be designed to capture the attention and engage the audience.

7.1.2 Twitter

Twitter® is a very effective tool to spread important pieces of information within seconds to a broad public. Twitter is widely used within the research community and is a very effective platform both for disseminating the project's results and other interesting news or reports to the followers as well as linking the information to an even wider audience through the use of hashtag groups and usernames.

The **@HAIKUproject_EU** Twitter account was created in September 2022 and is updated by CERTH. Tweets from the HAIKU account can be distinguished into two categories: 1) project related tweets (i.e. the release of project deliverables; upcoming project meetings; participation of consortium members in conferences or any type of event; promotion of project survey/interviews; project website updates) and 2) more general tweets regarding news relevant to aviation news about human factors, relevant studies to the topics covered by HAIKU project and retweets of other posts from research projects/ groups/users/EU relevant research accounts.

Hashtags (#) and handles (@) will be used in the HAIKU tweets to reach specific target groups and accounts. Tweets will contain the following groups: #AI #aviation #aviationsafety #humanfactors #HorizonEU #cinea_eu

A general strategy in order to promote the HAIKU Twitter account is to follow various research project twitter accounts that are relevant to aviation. This would allow to have a stream of useful news and retweet such information to the HAIKU twitter account. HAIKU project partners were also asked to follow the project's account from their own personal accounts or from other accounts related to safety relevant research projects that they participate in. This method aims to increase the dissemination outreach of the HAIKU twitter account. The HAIKU Twitter account as of 19/01/2022 has 29 followers and 317 followings. These are the initial figures which are expected to rise significantly since the social media network and interactions are still being built.

Figure 3 Twitter

7.1.3 LinkedIn

LinkedIn® is a professional network and discussions are rather fact based. The LinkedIn account **HAIKU EU Project**, was created on September 2022, will be used to engage with a professional public in discussions and to disseminate project results. The content that is published on the group is based on the aforementioned guidelines as Twitter.

Partners are encouraged to:

- Provide input regarding news that should be promoted
- Link and interact: Partners can launch discussions and write their own contributions via their personal profiles

The HAIKU LinkedIn group as of 19/01/2022 has 114 members. These are the initial figures which are expected to rise significantly since the social media network and interactions are still being built.

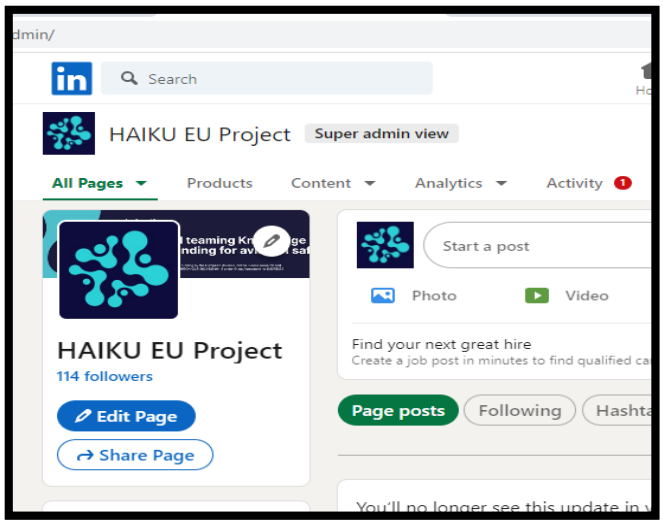

Figure 4 LinkedIn

7.1.4 ResearchGate

A HAIKU project page has been created on the ResearchGate platform under the name **HAIKU EU Project** and is maintained by CERTH/HIT. The use of ResearchGate platform allows: 1) to create a project page outlining the project's goals, 2) present list of collaborators working on the project, 3) have project followers and 4) disseminate research findings through scientific papers that can be posted online and shared with the wider research community. Open access research papers that will be produced in the project's lifetime, as well as after, will be posted on ResearchGate, provided that they do not breach copyright laws.

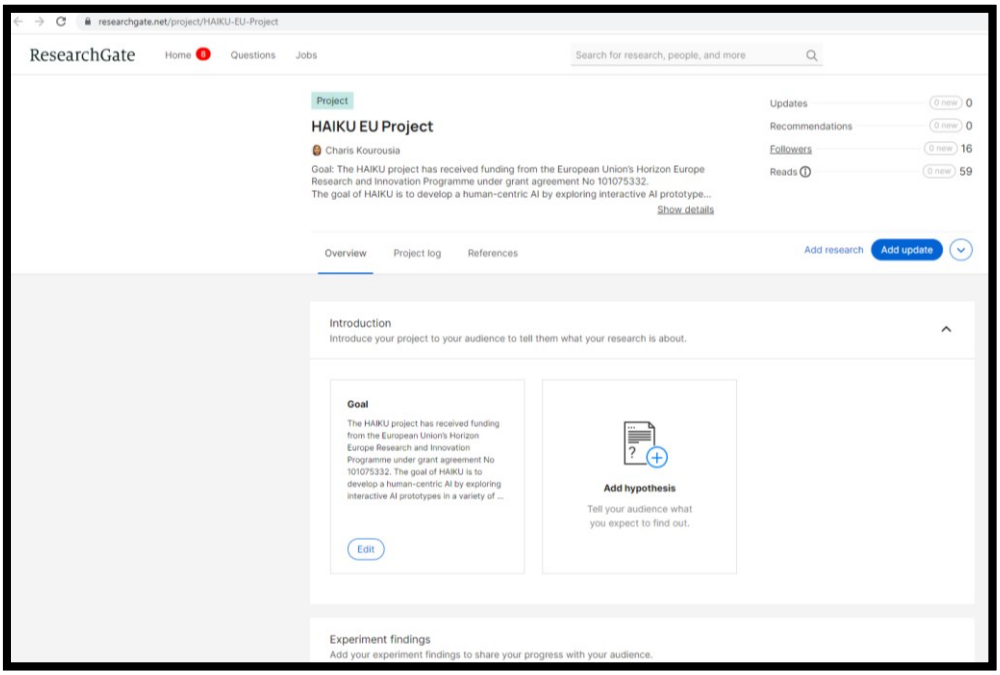

Figure 5 Research Gate

7.2 HAIKU Website

The HAIKU website https://haikuproject.eu/ has gone online in December 2022 under the main responsibility of CERTH. DBL and EUROCONTROL has supported the website creation process with providing content and support to the overall process. The project website is one of the most important dissemination tools that will introduce the project's aspects and results to the public. The website contains all the following sections:

- About
  - Vision
  - Approach
  - Consortium
  - Advisors
- Use Cases – In the coming months, details on each Use Case will be released in a series of social media posts. The timing of the different postings will be defined considering the Use Case maturity. It is plan to have three posts per each Use Case – Introduction and problem statement, Digital Assistant Concept, Problems and Challenges - to present sufficient details to external stakeholders and to maintain the HAIKU communication active and relevant for an extended period of time, e.g. from March to June 2023.
  - Use Case #1
  - Use Case #2
  - Use Case #3
  - Use Case #4
  - Use Case #5
  - Use Case #6
- Products
  - Deliverables
  - Publications
  - Dissemination material

- Event materials

- News-events (this section will contain relevant news relevant to the project such consortium meetings, attendance to conferences or any other type of meeting, release of new deliverables and results, open access papers)
- Contact us form
- Newsletter subscription area
- Social media links (links to Research Gate, Twitter, LinkedIn and YouTube channel)

Additional information regarding the project website can be found in D9.1.

Figure 6 Website

7.3 Electronic newsletters (e-news)

Six E-newsletters will be sent to the subscribed users on the project website, and overall HAIKU network of contacts, in order to create awareness about project initiatives and outcomes. The e-news will contain information such as:

- summaries of the past deliverables and project results
- information on plenary or project meetings
- review of dissemination activities i.e. attendance of consortium members in conferences etc.
- advertisement of project surveys
- information on social media and website
- information on stakeholder workshops and final conference

Table 5 presents the newsletters that will be created, their respective month of release, content and the partner allocation. The overall compilation of the newsletters will be carried out by CERTH. The emails to the subscribers will be send anonymously through a HAIKU email account.

Table 4 Newsletters

Newsletter	Month	Content
1	12	Will present the preparation of: - Vision and Scenarios - Human-AI Teaming Framework and Design Document
2	17	Will present the design framework and concepts
3	22	Will present the strategy for XAI and analysis of societal impact.
4	27	Will present: - Case studies and results of validation activities - Updated validation strategy and plan
5	34	Will present: - Case studies and results of validation activities - Updated validation strategy and plan
6	36	Will presents: - Guidance on safety culture enhancements for future aviation WIA systems - Guidance on future workforce requirements

7.4 Timing of Social media, websites updates & dissemination activities

Table 6 presents the frequency for posting about dissemination activities on social media and the news section of the website. In addition, non-project related postings on social media will take place, i.e. links to interesting results from other projects, news articles, reports or studies. The posts will be made by CERTH/HIT while all partners can contribute in finding content. Table 7 presents the frequency for such postings.

Table 5 Frequency of postings on social media and website updates

Project action	Website news section	Twitter	LinkedIn	Research Gate	Responsible partner	Schedule
Release of public deliverables	x	x	x	-	CERTH	Upon approval
Project meetings (technical meetings & workshops)	x	x	x	-	CERTH	Based on occurrence
Participation in conferences or events	x	x	x	-	CERTH	Based on occurrence
Project website launch	x	x	x	-	CERTH	M3
Newsletter	x	x	x	-	CERTH	M8, M12, M19, M25, M34, M36

Flyer	x	x	x	-	CERTH	M5
Scientific publications	x	x	x	x	CERTH	Based on occurrence

Table 6 Frequency of non-project related postings on social media

Number of postings	Social media platform		Frequency
	Twitter	LinkedIn	
	2	2	Per month

7.5 Press releases

HAIKU will produce press releases to general press and traditional media aiming to disseminate main results and project activities. The press releases will be linked to the main workshops (M12, M24, M36) and final international conference (M35-36) in order to disseminate the activities at local and international level. The final international conference will be covered both by traditional media, i.e. local newspapers as well as more general press. The remaining of the general press releases will cover news and results of the project with the aim of reaching both industry stakeholders and the public. Examples of such media are: Hellenic Institute of Transportation Engineers[1], Aviation News[2], Airlines International[3].

7.6 Scientific publications and other types of dissemination activities

Scientific publications are one of the most important dissemination activities for reaching out to the academic and research community. As presented in Table 8, the HAIKU partners and work package leaders are expected to publish a series of research papers either in scientific journals or conferences. The subject of the journals will be related to the different technical WPs covering methodologies used in the project, data, and results. The majority of the publications will have to be open access to ensure availability of the results to the wider research community and the public.

Table 7 Specialised journals and publications

Target sector	Journal / Publication
Aviation industrial and operational community	International Journal of Aviation Management, Journal of Air Transportation, Automated Software Engineering, Airside International, Frontiers in communication
Transport safety/Human Factors and Ergonomics	Human Factors and Aerospace Safety, Human Factors, IEEE Transactions on Human-Machine Systems, Aviation Psychology and Applied Human Factors, Journal of Cognitive Engineering and Decision Making, The International Journal of aviation psychology
ML/AI	IEEE journals, IEEE journal on systems; Sensors, Machine Learning and Knowledge Extraction; Journal of machine learning

The communication about HAIKU will be at national and international level through participation at conferences and other public events. Participation will have different formats, including presentations, workshops and panels. The following list of conferences and other public events will be considered as presentation venues: AeroDays, SESAR Innovation Days, ECTL Safety Team, CANSO Safety Conferences, World ATM Congress, ACI EUROPE conferences, ATM seminar, Human Factors and Ergonomics Society Annual Meeting, Digital Avionics Systems Conference, International Federation on Automatic Control–

Human-Machine Systems (IFAC-HMS), European Association for Aviation Psychology (EAAP), European Conference on Cognitive.

Table 8 Dissemination and communication

Actions	At least
Workshops organised by the project	3
Publication of articles on specialised magazines	6
Presentation of poster and talks at international conferences	6
Number of events attended representing the project	5
Number of press releases delivered	5
Number of visitors to the project website	3000
Number of references of HAIKU in other websites	6
Number of subscribers to the HAIKU newsletter	60

7.7 Stakeholder meetings

Overall the dissemination strategy is based on combining the communication and dissemination material and activities while the project evolves around its key milestones and main outputs. The dissemination strategy and its respective activities will change in the project's duration in order to adapt to the needs for dissemination according the project's progress. Specifically:

1. The first phase will involve **raising awareness** about the project itself, its objectives and scope, potential end results, identifying the target audience in the aviation and maritime communities and establishing communication channels.
2. The second phase will involve **constant engagement** with the target audience and disseminating the project's progress and results to the stakeholder groups. This phase involves all the aforementioned dissemination tools and activities with an emphasis on disseminating the right information to the appropriate groups
3. The third phase entails the last year of the project. Specifically, the project will begin its exploitation phase thus **generating impact** through the different identified channels of end users. Activities such as workshops, final conference, meetings with end users/SMEs/corporations will play a key role in the exploitation phase.

Three stakeholder meetings will be organised in the duration of the project (M12, M24, M36) and will target end-users/stakeholders aiming at providing input for the project's views, activities and results. The events will also serve the purpose of presenting, collecting feedback results that will be developed by HAIKU. The feedback from the participants will be used as input for future steps as well as a method of calibrating the findings.

7.8 Final conference

The final HAIKU conference will be held in the last year of the project (late M35 to early M36), aiming to spread the achievements of HAIKU to all potentially interested parties. The final conference will be advertised in advance at all social media platforms, project website and newsletters.

7.9 Reporting of dissemination activities

In order to track dissemination activities and targets, an internal reporting procedure will be established. All partners will be required to fill out the following table when attending dissemination events, conferences, roadshows, meetings with stakeholders or any other relevant event for the purpose of the project:

- Partner involved,
- Date
- Location
- Event name
- Event website
- Event type
- Event scope and brief description
- Type of partner participation
- Brief description of partners role in the event
- Pictures/folders to be attached
- Number of participants

Similarly, partners will have to report any scientific papers, press releases or any releases in media with the same form. These reports will be used to compile D9.4.

No.	Partner involved	Date	Location	Event name	Event website	Event type (i.e conference, workshop, webinar, exhibition, etc.)	Event scope and brief description	Type of partner participation (presentation, paper etc.)	Brief description of partners' role in the event	Pictures/folders to be attached as files to the email	Number of attendants
	i.e. any of the HAIKU partners	i.e. 14-17 November 2022	i.e. Lisbon	i.e. TRA 2022	i.e. https://traconference.eu/	i.e. conference, meeting with industry stakeholders, meeting with EU officials, project	i.e. Conference on mobility, presentation of the project to local transport stakeholders, presentation of results to EU officials	i.e. project presentation or attendee etc.	i.e. The partner presented their paper titled "..." regarding results from WP#. Networking with attendees took place and people were informed about the project. Flyers were distributed etc	Number of pictures	Number of people participating

Figure 7 Dissemination reporting template

7.10 Acknowledgement of EU funding

As the project is funded by the EU HE programme, all communication and dissemination material must clearly acknowledge the receipt of EU funding through the display of the EU flag and the following text referring to Horizon Europe:

"This project has received funding from the European Union's Horizon Europe research and innovation programme ***HORIZON-CL5-2021-D6-01-13*** *under Grant Agreement no* ***101075332****''.*

7.11 Open access

Dissemination of project results will follow open access principles where confidentiality level of data allows it. Thus, public deliverables and data sets apart from being available on the project website, they will also be uploaded on the Zenodo open access repository that allows linking deliverables, data sets and other contents with a specific project, GA and funding scheme. Zenodo will allow accessibility to the project results after the HAIKU website goes offline.

8 Exploitation

The HAIKU exploitation methodology will be structured in three phases, with the aim of supporting the partners in the definition of the project exploitation strategy

8.1 Initial Phase: 1st Year

Initial mapping of exploitable results, stakeholders, end users etc.

Identify exploitable assets with internal workshops

As it is very early for the first year to define what is exploitable (internal workshops will take place during the first year). During the Kick off Meeting in Lisbon (9th September) and the Progress Meeting in Rome (13th February 2023), partners grouped according to the Use Cases and invited to share their exploitation strategies. Table 9, presents the exploitation workshops results:

- Identify stakeholders
- Exploitation potential
- Exploitation strategy
- Target sector, users, clients, audience
- Possible competitors

Table 9 Results from exploitation workshops

Use Case #1 **Startle effect in the cockpit**	**Involved partners: ENAC, DFKI**
Stakeholders	Airlines and pilots, safety departments, training centres, regulators and incident investigators, HF Community
Exploitation Potential	Provide guidelines to higher TRL, identify technological limitations to help develop more advanced prototype, dataset and training (public)
Exploitation Strategy	Publications, Service offering for consultancy
Target Sector	Aviation industry (aircraft manufacturer, general aviation
Target users/clients/audience	Aviation scientific community (AI, human factors, HCI etc.)
Possible competitors	As we are not offering a product, there is no competition
Use Case #2 **Planning in the cockpit**	**Involved partners: Thales, Embraer, DFKI, Bordeaux INP, CATIE**
Stakeholders	Engineering department, business units, HF community, airlines, other industries

Exploitation Potential	Tools and methods to develop Intelligent Assistants, technical enablers for HAT, tools to reduce complexity in the cockpit
Exploitation Strategy	Service offering for consultancy, internal adoption, publications.
Target Sector	Aviation, automotive, space, maritime, transport in general
Target users/clients/audience	Designer engineers, operators (drivers, pilots), airlines and vehicles owners, regulators, researchers, SMEs
Possible competitors	Emerging tech companies
Use Case #3 Urban Air Mobility	**Involved partners: LiU,LFV**
Stakeholders	Software companies, regulators, UAM developers, airspace users
Exploitation Potential	City municipality, city planners, safety planners
Exploitation Strategy	HMI, Prototype system, publications, demonstration, product, guidelines to EU-city planners, research knowledge.
Target Sector	Cities, legislative
Target users/clients/audience	Logistic companies, regulators, UAM developers
Possible competitors	The market is still at a research stage, with a number of research groups working on this topic.
Use Case #4 Digital Tower	**Involved partners: SkyWay, Suite5, DFKI**
Stakeholders	ANSP, tower service providers, airport manager, AI developers, port control in maritime, transport, software companies, airspace users (i.e. pilots)
Exploitation Potential	Design guidelines for Digital assistant, liability guidelines
Exploitation Strategy	Commercial exploitation vs non-commercial, HMI, prototype system-incremental step, models of digital assistant
Target Sector	ATM, transport, aviation, tech development
Target users/clients/audience	Airspace, ATCO, clients
Possible competitors	Software companies, research projects
Use Case #5 Airport safety management	**Involved partners: Engineering, EUROCONTROL Suite5, Luton airport (as external stakeholder)**
Stakeholders	Transport and aviation industry/customers, airport group
Exploitation Potential	Publications, data models, customised data management platform, use case as whole
Exploitation Strategy	Validation in other airports with common characteristics, then airports with different characteristics, publications, consultancy service offering

Target Sector	Airport ground (fleet) transportation flight safety
Target users/clients/audience	Other airports, insurance companies, academic, vehicles owners-ports
Possible competitors	
Use Case #6 **Airport Spreading virus COVID-19) prevention**	**Involved partners: CERTH/HIT**
Stakeholders	Transport and aviation industry/customers, airport group
Exploitation Potential	Modelling and monitoring in other sectors, in general in large transportation hubs
Exploitation Strategy	Validation in other airports with common characteristics, then airports with different characteristics, then in other transportation hubs, publications, consultancy service offering
Target Sector	Aviation, transport, medical, passengers (expand to other sector)
Target users/clients/audience	Airports
Possible competitors	Current monitoring is done via a thermographic camera, to identify individuals with symptoms, tracking (mobile and GPS), monitoring platform, metro platform in London

Meetings-Events

The HAIKU project has been presented at the 12th EASN Conference 2022 to discuss HAIKU's exploitation and connection with stakeholder and end users.

Furthermore, HAIKU will participate in the high level Conference EASA AI Days 2023, which will be focused on the application of EASA AI guidance to HAIKU use cases.

During the 1st Dissemination Workshop which will take place on 26-27 June 2023 in Brussels, collaboration with other projects, such as the SafeTeam Project, fostering a sense of clustering within the field.

8.2 Mid Phase: 2nd Year

Plan with stakeholders, exploitation workshop etc.

In the project's second year, each partner was contacted directly to establish the exploitation strategy tailored to their respective companies:

- Key exploitable result (Description: The key exploitable results identified by your company/organization.)

- Exploitation potential (Description: What is the exploitation potential of each exploitable result?)

- Your interest in the exploitation (Description of the interest in the exploitation of such result.)

- Your role in the exploitation (Description of your role in the exploitation process of the result; try to be as specific as possible. Please note that you are one of the owners of the exploitable result if you contributed to its development. You are a beneficiary partner if you are interested in exploiting a result produced by other partners.)

- Exploitation strategy (Explanation of how you intend to exploit such result. Examples of possible exploitation strategies: ''product sale'', ''service offering'', ''consultancy'', ''publications'', ''involvement in new research projects'', ''recommendations to EU'', ''standard setting'', ''internal adoption''.)

- Target sector (Description of your target sector of application. Examples of target sectors are ''Air traffic management in Europe'', ''HF networks in EU', 'etc.)

- Target users/clients/audience (Description of the target users/clients/audience of your exploitation activity)

A summary of partners' exploitation strategies is reported in the tables below.

Organisation	**DBL**
Key exploitable result 1	Societal Acceptance Framework (WP2) A service for companies (industry) planning to implement AI in their working environment and services
Key exploitable result 2	IA Concepts Generation Methodology & IA concepts themselves (WP3) A service for companies (industry) and projects (research) looking to design/develop innovative concepts
Key exploitable result 3	XAI design methodology applied to UC4 (WP4/5) A service for companies (industry) designing intelligent assistants and needing assistant from a XAI perspective
Key exploitable result 4	MOC Framework (WP7) A service for companies (industry) and projects (research) that are looking to develop IA and to train new staff
Key exploitable result 5	Methodology to design the future workforce and future skills (WP8) A service for company (industry) to analyse the impact on technological changes on the human role
Key exploitable result 6	AI-CRM Training Packages (WP8) New training modules available for companies (industry) covering CRM aspects in a AI context
Exploitation strategy	DBL will offer the above mentioned exploitable results to its clients and partners as part of its consulting services. Targeted research papers may and articles will also be published.
Target sectors	Aviation in general, HF networks in EU, other safety critical domains (e.g. maritime, healthcare..)

Organisation	**ECTL**
Key exploitable result	HF Approach to Human-AI Teaming configurations (WP7) The HF approach will be adapted to other SESAR AI projects ongoing and just started (including DARWIN, JARVIS, and CODA)
Exploitation strategy	Adoption by other projects, together with academic research papers on the method.
Target sectors	Air traffic management and cockpit R&I.

Organisation	SKYWAY
Key exploitable result	Improved ATC capacity and safety awareness for ANSP/Airport operators (WP4) UC4 expertise and outcomes will be turned into a service for other airports/ANSPs with similar needs.
Exploitation strategy	A consulting service will be offered (full integration package: initial design, simulator scenarios, set up and testing)
Target sectors	EU ATM

Organisation	CHPR
Key exploitable result	IA Concepts Generation Methodology + IA concepts themselves (WP3) A service, in collaboration with DBL, for companies (industry) and projects (research) looking to design/develop innovative concepts
Exploitation strategy	Consulting service
Target sectors	Aviation in general, and HF networks in EU

Organisation	LiU
Key exploitable result	Expertise and knowledge development with respect to theoretical underpinnings of human-AI teaming and automation transparency (WP3) Contribution to the development of knowledge and expertise within the research area, disseminating findings and lessons learned, and engaging with society and industry.
Exploitation strategy	Publications, presentations, involvement in new research projects, education
Target sectors	Air traffic management in Europe, HF networks in EU, Education and training in EU

Organisation	TAVS
Key exploitable result	Tools to assist pilots in decision-making (WP4) A product for airlines to reduce pilot workload while improving mission efficiency
Exploitation strategy	Involvement in other research projects, support for standard setting (e.g. EASA in HAT certification process)
Target sectors	Commercial aviation

Organisation	BORDEAUX INP
Key exploitable result	Tools and methods to design HAT concepts and integrate AI into socio-technical systems A service for companies (industry) planning to implement AI in their working environment and services

Exploitation strategy	Consulting services, involvement in other research projects, education.
Target sectors	Civil and military aviation

Organisation	**CATIE**
Key exploitable result	Knowledge on HAT Contribution to the development of knowledge and expertise within the research area.
Exploitation strategy	Consulting services, involvement in other research projects, education.
Target sectors	Commercial aviation

Organisation	**DFKI**
Key exploitable result	Knowledge on XAI Contribution to the development of knowledge and expertise within the research area.
Exploitation strategy	Consulting services, involvement in other research projects, publications, involvement in new research projects
Target sectors	Aviation, Space, Automotive, Healthcare

Organisation	**ENG**
Key exploitable result	UC5 IA prototype A product for airports to shift toward predictive safety.
Exploitation strategy	Consulting services for industry
Target sectors	Critical Infrastructures, Safety and Security market

Organisation	**LFV**
Key exploitable result	ConOps for human-AI teaming in UTM/UAM Contribution to the development of knowledge and expertise within the research area.
Exploitation strategy	Publications, involvement in other research projects
Target sectors	UTM/UAM in Sweden and Europe

Organisation	**ENAC**
Key exploitable result	Open source Eye-tracking data processing library (ArGaze) A service that allows laboratories and industry to exploit eye tracking device capabilities in real-time.
Exploitation strategy	Publications, involvement in new research projects, conferences

Target sectors	Aviation research laboratories and industrials

Organisation	**SUITE5**
Key exploitable result 1	Airport Safety Incident AI-powered dashboard A product for airports planning to improve their safety monitoring and incident predictive capability
Key exploitable result 2	ML-based Air Traffic Sequence optimisation A product for airports/ANSPs to improve efficiency
Exploitation strategy	Service Offering to airports, as well as consultancy on AI-relevant stuff and on data management procedures. Product Sale, followed by the customisation of algorithms
Target sectors	ANSPs, Airports

Organisation	**CERTH/HIT**
Key exploitable result 1	Prototype for wireless counting + Android application for routing and health and safety tool A product for airports
Exploitation strategy	Service Offering and Product Sale
Target sectors	Airports, Passengers

Organisation	**EMBRT**
Key exploitable result 1	Guidelines for HF Methods and tools for pilot assistance assurance development Methods to improve cockpit safety
Key exploitable result 2	Pilot assistance tools and concepts and their artefacts A product to improve airline effectivity and efficiency
Exploitation strategy	Dissemination and training on the new tools and methods, Collaboration with standardisation groups (e.g. SAE 34/EUROCAE 114), further support trade-offs and developments on new concepts
Target sectors	Airlines, OEM, Regulator

Exploitation actions during the 2nd year

During the second year, the partners have also initiated a few exploitation activities, in particular regarding training.

In particular Deep Blue has piloted materials produced within the HAIKU project in three training courses, delivered at the EUROCONTROL Aviation Learning Centre in Luxembourg. More details follow:

- Human Factors for Safety Course, 26/02-01/03/2024: workshop on the definition of future human roles and competences for ATM operators. Duration: 6 hours over 2 days, with 13 participants.

- Human Factors for Safety Course, 18/03-22/03/2024: workshop on the definition of future human roles and competences for ATM operators. Duration: 6 hours over 2 days, with 17 participants.

- Innovation and Change Management for Future Systems course, 9/04-11/04/2024, Luxembourg: workshop on the definition of future human roles and competences for ATM operators. Duration: 8 hours over 2 days, with 5 participants.

ENAC interacted with one expert from a major EU airline (KLM) about UC1. The KLM expert is a flight instructor who was involved in EASA study on startle and surprise. He attended ENAC's presentation and will be re-contacted for a follow up meeting on startle effect training.
ENAC is also developing a training module on startle and surprise, including: theorical explanation, existing safety events, management of startle&surprise, one dedicated simulator scenario during the MCC (Multi Crew Coordination). The work is still ongoing, with an estimate delivery at the end of 2024.

8.3 Final Phase: 3rd Year

At the next Plenary meeting at DFKI, partners will be asked to confirm the exploitable assets listed above, and detail their exploitation actions in the form of a timeline.

Final HAIKU Conference

The ultimate conference, scheduled for the project's concluding year (M35-M36), will be a platform to disseminate HAIKU's accomplishments to interested parties and magnify the influence of the outcomes.

The exploitation of the project results will also be an objective of the dissemination and communication actions and will involve the following main stakeholders:

Aviation Community: The Aviation community is the primary group of stakeholders of the HAIKU project. The aviation stakeholders will be able to exploit the project results: solutions (i.e. Digital Assistants), methods for safety and validation assurance, Human Factors design guidance and methods for the development of new tools, development of competencies and training of workforce, including new training approaches.

Research Community: the research community is also one of the main stakeholder target groups for dissemination of HAIKU results. The research community will be able to exploit the research results carried out by HAIKU based on the solutions (digital assistants) as well as new research methodologies and conclusions reached regarding Human Factors, Human in the loop simulation, AI/ML algorithms, airport indoor air quality monitoring for COVID-19.

Educational Community: The educational community is also a potential stakeholder for exploiting the HAIKU results and the background research that will be carried out within the project. Some of the HAIKU project partners are involved in academia, consultancy and training and will be able to use literature and examples from the Use Cases as part of the educational syllabus. In addition, academia and research communities are closely linked and the available results, publications and data sets are expected to generate additional future research by the educational community. This community will also be able to exploit WP8 results: training modules and training pathways.

8.4 Full list of exploitation meetings and actions

Partner	Date	Location	Short Description
All partners	09/09/2022	Lisbon, KoM	1st Exploitation Workshop: Introduction to exploitation & what is exploitable, partners were grouped according to the Use Cases and invited to share their exploitation

			strategies: ➢ Identify stakeholders ➢ Exploitation potential ➢ Exploitation strategy ➢ Target sector, users, clients, audience ➢ Possible competitors
All partners	13/02/2023	Rome, 1st Progress Meeting	2nd Exploitation Workshop: Exploitation strategy for each organisation
DBL	24-26/10/2023	Köln, Germany	Meeting with EASA experts, focusing on the application of EASA AI guidance to HAIKU Use Cases
All partners	February 2024	On-line	Each partner was contacted directly to establish the exploitation strategy tailored to their respective companies. Exploitation questionnaire results by each organization: ➢ Key exploitable result ➢ Exploitation potential ➢ Your interest in the exploitation ➢ Your role in the exploitation ➢ Exploitation strategy ➢ Target sector ➢ Target users/clients/audience
DBL	26/02-01/03/2024	Luxembourg	HUM-HFA Workshop Testing of T8.3 SHELL Workshop for the identification of new skills and training pathways based on current and future interactions with the SHELL elements for future AI-based Intelligent Assistants, leveraging HAIKU's UC3 IA (ISA - Intelligent Sequencing Assistant). Held inside the Human Factors for ATM Safety Actors [HUM-HFA]
DBL	18-22/03/2024	Luxembourg	HUM-HFA Workshop Testing of T8.3 SHELL Workshop for the identification of new skills and training pathways based on current and future interactions with the SHELL elements for future AI-based Intelligent Assistants, leveraging HAIKU's UC3 IA (ISA - Intelligent Sequencing Assistant). Held inside the Human Factors for ATM Safety Actors [HUM-HFA]
DBL	9-11/04/2024	Luxembourg	HUM-INO Workshop Usage of T8.3 SHELL Workshop for the identification of new skills and training pathways based on current and future interactions with the SHELL elements for future AI-based Intelligent Assistants, leveraging HAIKU's UC3 IA (ISA - Intelligent Sequencing Assistant). Held inside the Innovation and change management for future systems [HUM-INO] training course
EUROCONTROL, DBL	30/04/2024	Brussels	Presentation at the FLY AI Forum: Session 3--> Human-AI Teaming
DBL	03/07/2024	Köln, Germany	Presentation at the EASA AI Days 2024: Session--> AI use cases in aviation