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Data Management Plan

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Abstract:

This report presents the Data Management Plan (DMP) for the HAIKU project. It outlines the HAIKU approach for ensuring compliance with FAIR data management principles, as well as rules and regulations regarding data security.

The information provided hereby complements the project information in the Grant Agreement and in D1.3 *Social, Ethical, Legal, Privacy Issues Identification and Monitoring* in respect to the HAIKU research activities. This report reflects the current state of knowledge. It may be updated later in the project when new information regarding data collection activities becomes available.

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List of Acronyms

Acronym	Definition
AI	Artificial Intelligence
CA	Consortium Agreement
EC	European Commission
FAIR	Findability, Accessibility, Interoperability, and Reusability
GDPR	General Data Protection Regulation
GA	Grant Agreement
HF	Human Factors
XAI	Explainable AI
WP	Work Package

Executive Summary

This document describes the Data Management Plan for the HAIKU project and the way in which project data will be managed and shared.

The Data Management Plan report complements the project information regarding data management, data security and ethics provided in the Grant Agreement, the Consortium Agreement, the deliverable D1.3 *Social, Ethical, Legal, Privacy Issues Identification and Monitoring* and serves two purposes: (1) it establishes a framework for the project to effectively and lawfully carry out all data collection activities; and (2) describes a strategy for ensuring open access to data and research outputs of this project.

The report is divided into seven sections including a summary of data collection and its relevance to the project objectives, information about data protection, resource allocation, and aspects concerning data security. The main content of the document is further supported with an Appendix containing four templates including information sheets and informed consent forms for both surveys/experiments. These forms may be refined as needed at later stages of the project.

This report reflects the current state of knowledge. It may be updated later in the project when new information regarding data collection activities becomes available.

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1. Introduction

The Data Management Plan document complements the project information regarding data management, data security and ethics provided in the Grant Agreement, the Consortium Agreement, and in D1.3 *Social, Ethical, Legal, Privacy Issues Identification and Monitoring*. It serves two purposes: (1) it establishes a framework for the project to effectively and lawfully carry out all data collection activities; and (2) describes a strategy for ensuring open access to data and research outputs of this project while safeguarding that all project activities are respectful of human rights, particularly the right to privacy and data protection, and do not generate unwanted personal or social effects.

The report is divided into seven sections including a summary of data collection and its relevance to the project objectives, information about the re-use of existing data as well as data utility, resource allocation, and aspects concerning data security and ethics. Further information on privacy/confidentiality and the procedures that will be implemented for data collection, storage, access, and sharing policies will be provided at later stages of the project once the project activities are sufficiently detailed.

1.1 Deliverable structure

This document is divided into seven sections:

Section 1 provides a short introduction to the purpose of this document and its structure.

Section 2 introduces the main points regarding the purpose of the data collection, the means of collecting them, and data utility.

Section 3 considers FAIR data principles in the management of HAIKU data (i.e., aspects associated with making data findable, openly accessible, interoperable, and reusable), compliance with legislations and guidelines, rights of data subjects, and the security measures relevant to the storage, retention, destruction, and breaches of data.

Section 4 summarises HAIKU approach regarding data security (including secure storage, access, and data transfer)

Section 5 describes the measures to prevent potential misuse of research results

Section 6 addresses remaining considerations (other aspects).

Section 7 lists key references supporting this document and its preparation.

Annex A.

2. Data Summary

2.1 Purpose of data collection and generation

This project will address three main research questions:

- What is the recommended human-AI relationship for each of the different AI aviation applications?
- What are the AI purposes, the expected benefits for operations, and the underlying values and design principles (e.g. Cooperation, adaptability, conformity, explainability, robustness), and the best means of Human-AI interaction?
- What does it mean for AI to be explainable?

To answer these questions, the project will include a number of data collection activities throughout its duration in order to:

- (1) Deliver prototypes of AI assistants and demonstrate operational, human performance, and safety benefits in each of the HAIKU use cases,
- (2) Design human-machine teaming for the different aviation applications (cockpit, ATM, UAM, airport) to extend the system performance envelope, considering time- frame of operations, complexity, type of involved human tasks, criticality,
- (3) Define characteristics and strategy for an explainable AI (XAI),
- (4) Enable continuous and incremental learning in human-AI teams,
- (5) Build a trustworthy human-centric-AI, addressing stakeholders' acceptability and desirability, societal, liability and regulatory aspects, ethics.

A signature element of HAIKU is the development of truly human-centric Digital Assistants so that they 'fit' the way humans work. Human-centric means using a value-based design approach, bringing societal, value-based, ethical insights into the AI design. It means developing Intelligent Assistants that will understand not only the system knowledge that humans possess about a system but the way for example pilots and controllers contextualize that knowledge. Human-in-the-loop AI training will give AI the means to contextualize that knowledge, adapting it correctly to situations, so that it translates into know-how as well as know-when-not-to, a sign of true expertise. For this reason, along with their incredibly fast know-how backed up by contextualized explainability, they will become trustworthy 'digital colleagues.' The key safety risk that needs to be managed is avoiding the type of situation that happened when automation was introduced to aircraft several decades ago, moving airplanes to 'glass cockpits', which led to a spate of more than twenty air crashes in the early phase of this transition. But there are other, more subtle risks. Principal amongst these is the risk of diminishing the human ingenuity and safety culture that is embodied in our collective aviation workforce, and which keeps air transport so safe, adapting to ever-shifting demands in real-time.

HAIKU aims to correct this via improved assessment and management of human risk factors within a Risk-Based Design to facilitate the involvement of HF disciplines and techniques in the design and safety assessment stages. This will be achieved by pursuing the following objectives with associated measurable associated outcomes:

- Deliver prototypes of AI assistants and demonstrate operational, human performance, and safety benefits in each of the HAIKU use cases.
- Design human-machine teaming for the different aviation applications (cockpit, ATM, UAM, airport) to extend the system performance envelope, considering the time-frame of operations, complexity, type of involved human tasks, and criticality.
- Define characteristics and strategy for AI explainability (XAI)
- Enable continuous and incremental learning in human-AI teams.
- Build a trustful human-centric AI, addressing stakeholders' acceptability and desirability, societal, liability and regulatory aspects, and ethics.

Objectives 1, 2, and 5 are the most relevant ones for the present document.

2.2 Types and formats of data collected and generated as part of the project

The project will collect both quantitative and qualitative data, from both primary and secondary sources. For human participants, collected data will include:

- Interviews,
- Surveys,
- Observational data of human behavior, e.g. reaction times, time on task, task frequency, and physical movements,
- Human Performance data, e.g. workload, stress, attention, success or failure rates,
- Questionnaires,
- Neuro-physiological data.

Other types of data for each of the Use Cases include:

- flight simulator data to gather images from the cockpit through the eye-tracking devices, and flight parameters,
- UTM City research platform data,
- ATM simulator data, including radar data, audio, and visual streams, radio communication,
- safety data, e.g. airport occurrences regarding flights and/or personnel.

2.3 The Origin of the Data

Primary data will be collected in dedicated interviews, workshops, and human-in-the-loop experiments.

Secondary data will include past accidents, incidents, near-misses, reports, and data from everyday operations, especially for Use Case 5 on Airport Safety Data.

The expected size of the data is currently not known.

2.4 Data Utility

The outputs from this project will be useful to project partners, particularly aviation end-users, regulatory and certification bodies, and other industries. Additionally, the designed methodologies and tools forming part of this project will also benefit other professionals interested in AI applications in safety-critical sectors. The dissemination of the results from the Consortium will be done by several means, around a unified strategy, leveraging Consortium members' strong relationships with a range of audiences – academic, industrial, operational, and governmental. The dissemination plan seeks to engage with the classes of stakeholders in the aviation domain that have the most to gain in the near-term from the results of the project, as well as the research communities that could build upon more fundamental findings.

2.5 Making data openly accessible

Open access to scientific publications: Each beneficiary must ensure open access (free of charge) to all peer-reviewed scientific publications relating to project results (in accordance with Article 29 of the Annotated Grant Agreement). In particular, HAIKU project participants are committed to Open Access Publishing and will prioritize publication venues and promote Open Access to its publications. The Consortium will set up a Research Gate page to store publications coming out of the project following the green open access principle.

Open access to research data: Regarding digital research data, the beneficiaries will deposit the data, including associated metadata needed to validate the results presented in scientific publications, in a research data repository, and take measures to make it possible for third parties to access, mine, exploit, reproduce and disseminate — free of charge for any user — the data as soon as possible. As an exception, the beneficiaries do not have to ensure open access to specific parts of their research data if the achievement of the action's main objective would be jeopardized by making those specific parts of the research data openly accessible.

3. Protection of Personal Data

3.1 Definitions

According to the definitions contained in Articles 4 and 9 of the GDPR, from now on we will refer to:

Personal data as any information relating to an identified or identifiable natural person (data subject); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

In its research activities, the HAIKU Consortium will process, among other common personal data: first name, last name, email address, and date of birth. The project will collect basic biographical data, e.g., age, sex, years of experience, and position in the organization.

Special categories of personal data as data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation will not be collected.

The research activity of HAIKU may involve the collection and analysis of neurophysiological data, such as brain activity, eye tracking, heart rate, and galvanic skin response stress. These are considered special categories of personal data (specifically, data concerning physical states).

Processing as any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organization, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction;

Data gathering in case studies will be performed from different perspectives (qualitative measures, subjective assessments, and neurophysiological indicators), and then analyzed by machine-learning algorithms.

Under no circumstances will biometric data (meaning personal data resulting from specific technical processing relating to the physical, physiological, or behavioral characteristics of a natural person, which allow or confirm the unique identification of that natural person) be processed.

Controller as the natural or legal person, public authority, agency, or another body which, alone or jointly with others, determines the purposes and means of the processing of personal data; where the purposes and means of such processing are determined by Union or Member State law, the controller or the specific criteria for its nomination may be provided for by Union or Member State law;

In the HAIKU project, every partner is a controller and responsible for the data that it collects and processes. All the partners are committed to the respect of the principles and rules listed in the present document and in the following versions of it. All participants have also signed and agreed to the principles listed in the Consortium Agreement, Section 10: Non-disclosure of information.

Processor as a natural or legal person, public authority, agency, or other body which processes personal data on behalf of the controller;

Recipient as a natural or legal person, public authority, agency, or another body, to which the personal data are disclosed, whether a third party or not.

3.2 Principles for Data Protection

The HAIKU research activities will be compliant with the Principles relating to the processing of Personal Data, according to Article 5 of the GDPR:

- **Lawfulness, fairness and transparency** in relation to the data subject;
- **Purpose limitation:** Personal data will be collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes;
- **Data minimization:** Personal data will be adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed;
- **Accuracy:** Personal data will be accurate and, where necessary, kept up to date; data will not be modified or falsified.
- **Storage limitation:** Personal data will be kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed;
- **Integrity and confidentiality:** Personal data will be processed in a manner that ensures appropriate security of the personal data, including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organizational measures;
- **Data protection by design and by default:** The controller will implement appropriate technical and organizational measures, designed to implement data-protection principles in an effective manner and to integrate the necessary safeguards into the processing in order to protect the rights of data subjects. The controller will implement appropriate technical and organizational measures for ensuring that, by default, only personal data which are necessary for each specific purpose of the processing are processed;
- **Accountability:** The controller will be responsible for and be able to demonstrate compliance with the above-mentioned principles.

All final outputs of the HAIKU project will have clear version numbers.

3.3 Compliance with Legislation and Guidelines

HAIKU research activities will be compliant with the principles of dignity, freedom, equality, solidarity, citizens' rights, and justice, as stated in the Charter of Fundamental Rights of the European Union. When performing experiments and collecting data for the HAIKU project, we will use particular care for privacy and data protection rights, considering them as fundamental rights to be protected.

In particular, the HAIKU Consortium will ensure ethical and legal compliance with current regulations:

- the EU Charter of Fundamental Rights (art. 7 and 8);

- the European Convention for the Protection of Human Rights and Fundamental Freedoms (art. 8);
- the General Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR);
- the Directive on Privacy and Electronic Communications (2002/58//EC);
- the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data No.108/1981;
- the Article 29 WP Guidelines on Consent under Regulation 2016/679 (wp259rev.01);
- the Article 29 WP Guidelines on Transparency under Regulation 2016/679 (wp260rev.01);
- the Article 29 WP Opinion 05/2014 on Anonymization techniques (wp216);
- the Article 29 WP Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679 (wp251rev.01).

3.4 Processing of Personal Data

This research is carried out under the HORIZON Europe project “HAIKU.” The main aim of the HAIKU project is the development of truly human-centric Digital Assistants so that they ‘fit’ the way humans work. The HAIKU project will be implemented via six aviation Use Cases, capturing a range of aviation segments, time horizons (from tactical to strategic), task complexity, and human impact. Each Use Case will require a tailored AI concept - with specific purposes, expected AI benefits for operations and for humans, underlying values, and design principles. The Use Cases will proceed as parallel strands but will adopt a harmonized approach in terms of methods, validation exercises, and expected outcomes.

The HAIKU Consortium will process Personal data on a lawful basis, as provided in Articles 6 and 9 of the GDPR. Notably, the processing of Personal data will be based on **Consent** (for common Personal data) and **Explicit Consent** (for special categories of Personal data).

Consent of the data subject has to be freely given, specific, and informed.

If the data subject's **consent** is given in the context of a written declaration which also concerns other matters, the request for consent shall be presented in a manner which is clearly distinguishable from the other matters, in an intelligible and easily accessible form, using clear and plain language.

The data subject shall have the right to withdraw his or her consent at any time. The withdrawal of consent shall not affect the lawfulness of processing based on consent before its withdrawal. Prior to giving consent, the data subject shall be informed thereof. It shall be as easy to withdraw as to give consent.

As requested in Article 7 of the GDPR, the HAIKU Consortium will be able to demonstrate that all data subjects have consented to processing their Personal data.

Explicit consent will be obtained before processing special categories of personal data.

According to the WP29 Guidelines on Consent, consent of the data subject means any:

- freely given,
- specific,
- informed and

- unambiguous indication of the data subject's wishes by which he or she, by a statement or by clear affirmative action, signifies agreement to the processing of personal data relating to him or her.

The HAIKU Consortium will ensure the so-called “granularity” of consent:

“A service may involve multiple processing operations for more than one purpose. In such cases, the data subjects should be free to choose which purpose they accept, rather than having to consent to a bundle of processing purposes” (Guidelines, p. 3.1.3).

Prior to obtaining their consent, participants to HAIKU activities will always be provided with information listed in Article 13 of GDPR, and with any communication under Articles 15 to 22 and 34 of GDPR relating to processing to the data subject in a concise, transparent, intelligible and easily accessible form, using clear and plain language.

In all HAIKU activities, no Personal data will be processed without informed, specific, explicit consent of the data subjects.

The main user groups targeted are professionals working in the aviation domain (e.g. members of industry and government, academics, researchers, etc.). Engaged stakeholders will have the competence to understand written and oral informed consent information.

HAIKU research will NOT include children, adults unable to give informed consent, nor vulnerable individuals/groups.

3.5 Rights of Data Subjects

The General Data Protection Regulation provides a set of rules for the protection of the fundamental rights of the data subjects, listed in Chapter III of the GDPR. This section contains a selection of the provisions of the law applicable to the case and the peculiarities of HAIKU research activities.

RIGHT TO INFORMATION

According to Regulation n. 2016/679, the controller has to take appropriate measures to provide any information relating to processing the data subject in a concise, transparent, intelligible, and easily accessible form, using clear and plain language.

With regard to the activities of HAIKU, the data subject has the right to be informed at least about:

- the identity and the contact details of the controller;
- the contact details of the data protection officer;
- the purposes of the processing, and the legal basis for the processing;
- the recipients or categories of recipients of the personal data;
- the intention of the controller to transfer personal data to a third country or international organization;
- the period for which the personal data will be stored, or if that is not possible, the criteria used to determine that period;
- the existence of the right to request from the controller access to and rectification or erasure of personal data or restriction of processing concerning the data subject as well as the right to data portability;
- the existence of the right to withdraw consent at any time, without affecting the lawfulness of processing based on consent before its withdrawal;

- the right to lodge a complaint with a supervisory authority;
- the existence of automated decision-making, including profiling, and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.

RIGHT OF ACCESS (ART. 15)

The data subject has the right to obtain from the controller confirmation as to whether or not his/her personal data are being processed and access to the personal data and the basic information about the processing, such as the purposes, the categories of personal data processed, the possible recipients of data, even in third countries, the retention period, the existence of data subject's rights, the right to lodge a complaint to the supervisory authority, the existence of automated decision-making, including profiling, the source of data, when they have not been collected from the data subject.

Article 13 states that the controller has to provide the data subject with a copy of the personal data undergoing processing.

RIGHT TO RECTIFICATION (ART. 16)

The data subject has the right to ask the controller for the rectification of inaccurate personal data concerning him/her.

RIGHT TO ERASURE (ART. 17)

With regard to the activities of HAIKU the data subject has the right to obtain from the controller the erasure of personal data concerning him or her without undue delay where one of the following grounds applies:

1. the personal data are no longer necessary in relation to the purposes for which they were collected or otherwise processed;
2. the data subject withdraws consent and where there is no other legal ground for the processing;
3. the personal data have been unlawfully processed;
4. the personal data have to be erased for compliance with a legal obligation in Union or Member State law to which the controller is subject.

The above-mentioned rules do not apply to the extent that processing is necessary:

- for exercising the right of freedom of expression and information;
- for compliance with a legal obligation which requires processing by Union or Member State law to which the controller is subject or for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
- for reasons of public interest in the area of public health in accordance with points (h) and (i) of Article 9(2) as well as Article 9(3);
- for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) in so far as the right referred to in paragraph 1 is likely to render impossible or seriously impair the achievement of the objectives of that processing; or
- for the establishment, exercise or defense of legal claims.

According to Article 17, par. 2 of the GDPR "Where the controller has made the personal data public and is obliged pursuant to paragraph 1 to erase the personal data, the controller, taking

account of available technology and the cost of implementation, shall take reasonable steps, including technical measures, to inform controllers which are processing the personal data that the data subject has requested the erasure by such controllers of any links to, or copy or replication of, those personal data”.

The above-mentioned rules do not apply to the extent that processing is necessary:

- for exercising the right of freedom of expression and information;
- for compliance with a legal obligation which requires processing by Union or Member State law to which the controller is subject or for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
- for reasons of public interest in the area of public health in accordance with points (h) and (i) of Article 9(2) as well as Article 9(3);
- for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) in so far as the right referred to in paragraph 1 is likely to render impossible or seriously impair the achievement of the objectives of that processing; or
- for the establishment, exercise or defense of legal claims.

RIGHT TO RESTRICTION OF PROCESSING (ART. 18)

The data subject has the right to obtain from the controller restriction of processing when the accuracy of his/her personal data is contested, for a period enabling the controller to verify the accuracy of the personal data, when the processing is unlawful when the controller no longer needs the personal data for the purposes of the processing, but they are required by the data subject for the establishment, exercise or defense of legal claims; when verification is pending about the right to object.

Article 18 states that where processing has been restricted such personal data shall, with the exception of storage, only be processed with the data subject's consent or for the establishment, exercise, or defense of legal claims or for the protection of the rights of another natural or legal person or for reasons of important public interest of the Union or of a Member State.

NOTIFICATION ABOUT RECTIFICATION, ERASURE, RESTRICTION (ART. 19)

The controller has to communicate any rectification, erasure, or restriction of processing personal data carried out to each recipient to whom the personal data have been disclosed unless this proves impossible or involves disproportionate effort.

RIGHT TO DATA PORTABILITY (ART. 20)

As in HAIKU project personal data are collected on the legal basis of consent, the data subject has the right to receive his/her personal data in a structured, commonly used and machine-readable format and has the right to transmit those data to another controller without hindrance from the controller to which the personal data have been provided

The data subject shall have the right to have the personal data transmitted directly from one controller to another, where technically feasible.

RIGHTS ABOUT AUTOMATED INDIVIDUAL DECISION MAKING, INCLUDING PROFILING (ART. 22)

The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her, unless the processing is based on consent.

COMMUNICATION OF A PERSONAL DATA BREACH (ART. 34)

According to Article 34 of GDPR “When the personal data breach is likely to result in a high risk to the rights and freedoms of natural persons, the controller has to communicate the personal data breach to the data subject without undue delay”.

EXERCISE OF DATA SUBJECT RIGHTS (ART. 12)

The data subject shall contact the controller and submit a request by sending an email to the following contact point: Partner Representative for the concerned activity. If not known: Project Coordinator, Deep Blue, Simone Pozzi, and Vanessa Arrigoni.

The requested information will be provided to the data subject without undue delay and in any event within one month of receipt of the request.

Such a period may be extended by two further months where necessary, taking into account the complexity and number of the requests.

The controller will inform the data subject of any such extension within one month of receipt of the request, together with the reasons for the delay.

If case the controller does not take action on the request, the data subject will be informed without delay and at the latest within one month of receipt of the request of the reasons for not taking action and the possibility of lodging a complaint with a supervisory authority and seeking a judicial remedy.

The controller prepared an internal policy to manage requests of data subjects in accordance with the GDPR.

3.6 Security Measures, Data Storage, Data Retention, Data Destruction, Data Breaches

According to Article 24 of the GDPR, taking into account the nature, scope, context, and purposes of processing as well as the risks of varying likelihood and severity for the rights and freedoms of natural persons, the controller shall implement appropriate technical and organizational measures to ensure and to be able to demonstrate that processing is performed in accordance with the Regulation itself.

The HAIKU Consortium is committed to ensuring the effective protection of the personal data of all participants in its activities.

SECURITY MEASURES

The HAIKU Consortium is committed to implementing appropriate technical and organizational measures to guarantee in an effective manner the necessary safeguards for the processing of personal data. Article 32 of the GDPR recommends pseudonymization and encryption of personal data as security measures which should ensure a level of security appropriate to the risk of processing. Pseudonymisation is “the processing of personal data in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information, provided that such additional information is kept separately and is

subject to technical and organizational measures to ensure that the personal data are not attributed to an identified or identifiable natural person” (Art. 4 par. 1 n. 5).

Pseudonymisation and other security measures will be implemented in the full compliance of the most recent rules, opinions, and guidelines from European and national competent Authorities.

No data, which is not strictly necessary to accomplish the current study, will be collected; a data minimization policy will be adopted at any level of the study and will be supervised by the ethical committee of the study; any shadow (ancillary) personal data obtained in the course of the observation will be immediately canceled.

Data presented in publications or to employers will use aggregated data only, in which individuals cannot be identified. Pictures, videos, and audio will be recorded only after the signature of a detailed Information Sheet and Consent Form. Also, for videos and images, participants’ faces will not be shown to prevent identification. For audio files, no name of the participant, facilities, or companies will appear on audio files. Audio filters that distort voices will also be applied. The audio and videos will not be used for any different purposes, nor disclosed to any third party and will be destroyed two years after the end of the project.

All the HAIKU researchers involved in empirical studies and data collection activities will be trained about Social, Ethical, Legal, and Privacy issues and about current regulations.

DATA STORAGE

Data will consist of digital or/and paper records. Digital data will be stored on hard disks disconnected from the network, which will be stored in secured drawers; and/or on secured servers, with a defined protocol that limits access to authorized personnel.

The latest encryption techniques will be applied to all digital data.

Paper data will be stored in secured drawers with limited access to authorized personnel.

DATA RETENTION

Project documentation, including technical documents describing the results of research activities, will be archived after the end of the project in password-protected servers.

DATA DESTRUCTION

Data will be destroyed two years past the termination of the project. Paper data will be physically destroyed. Digital data will be overwritten to ensure that they are effectively scrambled and remain inaccessible.

DATA BREACHES

In the case of a personal data breach, the controller will without undue delay and, where feasible, not later than 72 hours after having become aware of it, notify the personal data breach to the supervisory authority competent in accordance with GDPR rules, unless the personal data breach is unlikely to result in a risk to the rights and freedoms of natural persons. Where the notification to the supervisory authority is not made within 72 hours, it shall be accompanied by reasons for the delay.

The controller prepared an internal policy to manage the event of a data breach in accordance to the GDPR. Every person affiliated with one of the HAIKU partners has to report a suspected data breach to the following email address without undue delay: simone.pozzi@dblue.it.

3.7 Transfers of Personal Data to third countries or International Organizations

HAIKU involves a non-EU partner from Brazil and stakeholders providing data from the UK. Personal data might be imported from non-EU to EU (and NOT vice-versa). In carrying out the activities of the HAIKU project, no personal data will be transferred from EU to non-EU countries.

Non-EU countries will be required to comply with the legal and ethical requirements for participation in EU research and Horizon Europe guidelines.

4. Data Security

Data will be stored in certified repositories with the highest security standards. The Consortium is currently relying on two different options:

- Google Drive for working documents and non-confidential documents
- Cryptobox for sensitive deliverables and information. Cryptobox is provided by Thales

The policies to react to cyber-attacks will be set-up by consortium partners, according to their internal security policies and risk assessment.

In addition to software and hardware security standards, data will be protected by applying strict data protection procedures.

Data collected for research purposes (including questionnaires, interviews, field observations, audio/screen recordings (where applicable)), as well as promotional materials gathered during data collection activities and HAIKU events that may be video recorded or photographed, will be subjected to current European regulations on matters of data handling and privacy (GDPR, Regulation (EU) 2016/679). The research outcomes will always be reported without contravening the right to privacy and data protection.

Secure Access Policy: data will be encrypted, and password protected. Only members of the team directly working with the data (“need to know”) will have the authorization to access the data. Each Data Controller will be responsible for the de-identification of the data or establishing a procedure to be followed by other partners in charge of personal data. This data might be transferred for further processing to other project members.

Secure Storage: Location and Hardware. All personal data will be stored on digital hard disks on computers that are not connected to WAN Internet. Removable storage will include large-capacity hard drives that will be kept in locked cabinets.

Monitoring of Data Transfer: The data will not be transferred outside the HAIKU Consortium without prior authorization.

5. Measures to Prevent Potential Misuse of Research Results

The HAIKU consortium will make every attempt to avoid the misuse of the research results. In particular, the HAIKU partners will favor a correct and rightful use of the research results, as well as of the knowledge of the techniques and theories applied. They will avoid any negative repercussions against the public reputation of each partner and of any other involved entity or individual. They will also endeavor to prevent improper exploitation of research results for obtaining commercial and business advantages, personal profits, and any other kind of unlawful application of the research results.

State-of-the-art procedures will be applied for the publication of research results, and any publication of final or intermediate results must comply with the following statements:

1. Everyone who participated in the collection of data will be acknowledged in the acknowledgments section of the publication, either individually or collectively. Co-authorship of publications will be determined and agreed based on standard academic conventions.
2. Sensitive information will only be presented to competent, responsible, and scientifically sound audiences;
3. Political and socio-economic concerns must be carefully considered in presenting the results as any opinion expressed could affect the public opinion feelings about safety in aviation transport.

6. Other issues

It is anticipated that data collection will be performed in France, Spain, the UK, Greece, and Sweden. Once the decisions regarding the plan for data collection are finalized, the relevant national procedures for data management will be included in the plan if applicable.

Data will be processed in compliance with GDPR and other local legislations respecting institutional, national, and European legislation. The protection of data collected during HAIKU research studies will comply locally with the participants' policies and Horizon2020 guidelines.

Each partner will process only the data necessary for HAIKU-specified purposes and will make sure that they keep data accurate, and up to date, and retain data only for as long as is deemed necessary for the purpose of the collection and process thereof.

Each partner will choose, for the data processing, employees with relevant professional qualifications, providing sufficient guarantees in terms of technical expertise and personal integrity to ensure such confidentiality. For data processing being carried out on behalf of the Controller, by other members of the Consortium, the relevant assignment will be made in writing.

Each partner of the HAIKU project will be responsible for the correct implementation of data.

7. References

European Commission, *Ethics Guidance Material for H2020*,
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf

European Union, *General Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data* (GDPR)

Article 29 WP, *Guidelines on Consent under Regulation 2016/679* (wp259rev.01)

Article 29 WP, *Guidelines on Transparency under Regulation 2016/679* (wp260rev.01)

Council of Europe, European Court of Human Rights, European Data Protection Supervisor, European Union Agency for Fundamental Rights, *Handbook on European data protection law*, 2018

ENISA, *Handbook on Security of Personal Data Processing*, 2017

FORCE11. The FAIR data principles. <https://www.force11.org/group/fairgroup/fairprinciples>

H2020 Manual,
<https://ec.europa.eu/research/participants/portal/desktop/en/funding/guide.html>

Annex A. Information Sheets and Consent Forms

Information sheet and consent form for survey/experiments (template)

Information sheet

You are being invited to take part in a research study forming part of the HAIKU project. Before you decide whether to participate or not, it is important that you understand why the research is being done and what it will involve. Please take time to read the following information carefully. If there is anything that is not clear, or you would like more information, please get in touch with the research team (contact details are provided at the end of this information sheet).

1. What is the purpose of this project?

This research is carried out under the HORIZON Europe project “HAIKU”. The main aim of HAIKU is the development of truly human-centric Digital Assistants so that they ‘fit’ the way humans work. The HAIKU project will be implemented via six aviation Use Cases, capturing a range of aviation segments, time horizons (from tactical to strategic), task complexity, and human impact. Each Use Case will require a tailored AI concept - with specific purposes, expected AI benefits for operations and for humans, underlying values, and design principles.

2. Why have I been chosen?

You are being asked whether you would like to participate in this survey because you have experience in safety and/or Human Factors in aviation.

3. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and you will be asked to sign a consent form. You are still free to withdraw from the study at any time and without providing a reason. You are always welcome to come back to it at a later time. Please note that whether you will participate in the study or not will not be communicated to your employer.

4. What will taking part involve?

If you decided to participate, you will be asked to fill in a paper/online questionnaire. Alternatively, you will be asked to take part in an experiment.

5. How will the data be used?

The researchers involved in the project will pre-process the data in an anonymous and confidential manner. Research results will be published in journal articles, conference presentations and via other

modes of scientific exchange and dissemination that will be seen as appropriate by the researchers, while protecting participants' anonymity.

Several steps will be taken to ensure your confidentiality:

- The data will be encrypted (made unreadable) from the time it is collected until it is transferred to a high-security data center. Once it is at the data center, care will be taken that the data are only used for legitimate research purposes.
- Data that can identify you will be handled with extra care and will only be available to authorized researchers in a secure data center.
- Anonymized data could be used in future studies as well as for publication purposes. Personal privacy and data protection will be guaranteed during these activities.
- You are responsible for taking steps to protect your privacy. Be careful when posting or disclosing your participation on any public forum including websites, Facebook, newspapers, radio, and television. Protect your role in the study in the same way that you would protect other personal and private information. If you do not keep your role in the study confidential, there is a risk that some of the data collected during the study, including your personally identifying information, may be used against you in a court case or other legal proceeding.

6. Does the research involve any risk?

There are no foreseen disadvantages or risks associated with taking part in this study. However, if at any time, you should become tired or feel other forms of discomfort, you can simply stop your participation in the study. You are always welcome to come back to it at a later stage.

7. Questions:

For any questions concerning this research project, please contact [put here the name of the person in charge of the activity] at [her/his email]. Questions regarding rights as a person in this research project should be directed to the Project Coordinator Deep Blue - simone.pozzi@dblue.it and vanessa.arrigoni@dblue.it.

Informed Consent Form

I, _____

Born on ____/____/____ in

Resident in _____

hereby freely and voluntarily give my CONSENT to participate in this study, organized and conducted on the at by the HAIKU Consortium.

Giving my consent, I undersign that:

1. I HAVE CAREFULLY READ and UNDERSTOOD THE INFORMATION SHEET.
2. All questions that I posed have been satisfactorily answered.
3. I AM FULLY AWARE THAT:

. It is my right to withdraw from the study at any time without any consequences and without the need to provide a reason;

. Audio/Video recordings, and information about myself will be treated as confidential by the research team members;

. Audio/Video recordings will be stored in a protected folder by the research team and only used for research purposes related to the evaluation of the HAIKU study;

. In any publication resulting from the HAIKU study, my personal details will not be revealed and it will not be possible to retrieve any data which might disclose my identity;

. My address and other personal identifiable information may be disclosed upon my consent only in case of formal ethical investigations by scientific journals or academic societies challenging the existence itself of this empirical investigation.

HAVING READ, UNDERSTOOD, AND ACCEPTED ALL OF THE ABOVE,

- I agree/do not agree to participate in this study;
- I agree/do not agree to the session being audio/video recorded;
- I agree/do not agree that short extracts of a video or photographs, in which what I say or what I do cannot be precisely determined and that cannot in any way damage my reputation, may be used by the HAIKU Consortium members for dissemination and illustrative purposes of the research results;
- I would like/would not like to receive publications stemming from the direct analysis of this experimental session.

For the sole purpose of receiving these publications, I provide here my email address

Place _____ Date: ____/____/____

Signature of the Participant: _____

Information sheet and consent form for neurophysiological data collection (template)

This template will be used only for human-in-the-loop experiments where neuro-physiological data are collected.

Information sheet

Investigator: _____

You are being invited to take part in a research study forming part of the HAIKU project. Before you decide whether to participate or not, it is important that you understand why the research is being done and what it will involve. Please take time to read the following information carefully. If there is anything that is not clear, or you would like more information, please get in touch with the research team (contact details are provided at the end of this information sheet).

1. What is the purpose of this project?

This research is carried out under the HORIZON Europe project “HAIKU”. The main aim of HAIKU is the development of truly human-centric Digital Assistants so that they ‘fit’ the way humans work. The HAIKU project will be implemented via six aviation Use Cases, capturing a range of aviation segments, time horizons (from tactical to strategic), task complexity, and human impact. Each Use Case will require a tailored AI concept - with specific purposes, expected AI benefits for operations and for humans, underlying values, and design principles.

2. Why have I been chosen?

You are being asked whether you would like to participate in this survey because you have experience in safety and/or Human Factors in aviation.

3. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and you will be asked to sign a consent form. You are still free to withdraw from the study at any time and without providing a reason. You are always welcome to come back to it at a later time. Please note that whether you will participate in the study or not will not be communicated to your employer.

4. What will be taking part involve?

If you decide to participate in the study, we will record some behavioral parameters (e.g. reaction times) and collect different biosignal sensors, with the purpose to record your brain, heart and skin sweating activity. The equipment will collect data continuously during the execution of the scenarios. The physiological signals will be amplified and stored on a computer for later analysis.

You will then begin the experiment, in which you will: [brief description of the experimental session].

5. How the data will be used?

The researchers involved in the project will pre-process the data in an anonymous and confidential manner. Research results will be published in journal articles, conference presentations and via other modes of scientific exchange and dissemination that will be seen as appropriate by the researchers while protecting participants’ anonymity.

Several steps will be taken to ensure your confidentiality:

- The data will be encrypted (made unreadable) from the time it is collected until it is transferred to a high-security data center. Once it is at the data center, care will be taken that the data are only used for legitimate research purposes.
- Data that can identify you will be handled with extra care and will only be available to authorized researchers in a secure data center.
- Anonymised data could be used in future studies as well as for publication purposes. Personal privacy and data protection will be guaranteed during these activities.
- You are responsible for taking steps to protect your privacy. Do not post or disclose your participation on any public forum including websites, Facebook, newspapers, radio, and television. Protect your role in the study in the same way that you would protect other personal and private information. If you do not keep your role in the study confidential, there is a risk that some of the data collected during the study, including your personally identifying information, may be used against you in a court case or other legal proceeding.

If you decide to participate, you will be asked to do the following things:

- Undergo a consent process which includes reviewing and signing a consent form.
- Allow us to install the data collection equipment.
- Complete questionnaires about your health, history, and knowledge.
- Behave as you normally would while you are participating in the study.
- After the tests, you will be interviewed in order to understand the underlying motives of some of the behaviors, and the reasons for some decisions taken during the tests.

6. What happens when the study is over?

When you leave the study, we may ask you whether we can keep your contact information to contact you for participation in future follow-on studies. This will be optional, and if you do not agree, we will delete your contact information. Once we have all the data, we will begin data analysis and reporting. It is likely that you will see references to the results of the study in the news or elsewhere. However, these reports will not identify participants by name.

7. Does the research involve any risk?

All data collection equipment is mounted such that, to the greatest extent possible, it does not pose a hazard or problem for you in your normal life. None of the data collection equipment should get in the way of your normal field of view.

However, if at any time, you are uncomfortable and wish to discontinue the experiment, you may simply withdraw from the study at any time without providing a reason.

8. Other things to consider

This research has also been approved by the HAIKU Ethics Advisory Board.

9. **Questions:**

For any questions concerning the research project, please contact _____ at _____ . Questions regarding rights as a person in this research project should be directed to _____ .

Informed Consent Form

I, _____

Born on ____ / ____ / ____ in

Resident in _____

hereby freely and voluntarily give my CONSENT to participate in this study, organized and conducted on the at by the HAIKU Consortium.

Giving my consent, I undersign that:

1. I HAVE CAREFULLY READ and UNDERSTOOD THE INFORMATION SHEET.
2. All questions that I posed have been satisfactorily answered.
3. I AM FULLY AWARE THAT:
 - . It is my right to withdraw from the study at any time without any consequences and without the need to provide a reason;
 - . Audio/Video recordings, and information about myself will be treated as confidential by the research team members;
 - . Audio/Video recordings will be stored in a protected folder by the research team and only used for research purposes related to the evaluation of the HAIKU study;
 - . Raw and elaborated neurophysiological data, screen, and audio recordings will be stored in a protected folder by the research team and only used for research purposes related to the evaluation of the HAIKU Experiment;
 - . I understand that some of my data and performance will be reviewed by the researchers, in parts related to the study, always according to data confidentiality laws and requirements.
 - . In any publication resulting from the HAIKU study, my personal details will not be revealed and it will not be possible to retrieve any data which might disclose my identity;
 - . My address and other personal identifiable information may be disclosed upon my consent only in case of formal ethical investigations by scientific journals or academic societies challenging the existence itself of this empirical investigation.

HAVING READ, UNDERSTOOD, AND ACCEPTED ALL OF THE ABOVE,

- I agree/do not agree to participate in this study;
- I agree/do not agree to the session being audio/video recorded;
- I agree/do not agree that short extracts of a video or photographs accompanied with the neurophysiological recordings, in which what I say or my physiological reaction cannot in any way damage my reputation, may be used by the HAIKU Consortium Members for dissemination and illustrative purposes of the research results;
- I would like/would not like to receive publications stemming from the direct analysis of this experimental session.

For the sole purpose of receiving these publications, I provide here my email address

Place _____ Date: ____/____/____

Signature of the Participant: _____

Information sheet ex Art. 13 of the European General Data Protection Regulation n. 2016/679 and consent form - WORKSHOPS

Information sheet

You are being invited to take part in a research study forming part of the HAIKU project. The HAIKU Consortium would like to process your personal data in order to carry out its research activities, concerning the collection and assessment of Human Factors data to inform the risk-based design of systems and operations, in the aviation domain.

Before you decide to give your consent to the processing of your personal data, it is important that you receive and understand all the relevant information about the processing of your personal data, in a transparent, intelligible, clear form. Please take time to read the following information carefully. If there is anything that is not clear, or you would like more information, please get in touch with the Controller (contact details are provided below). the research team (contact details are provided at the end of this information sheet). After having read and understood the following information, please feel free to give your express consent to the processing of your personal data.

In accordance with Article 13 of the European General Data Protection Regulation n. 2016/679 (GDPR), HAIKU is committed to providing you with any information about the lawful processing of your personal data, in full respect of the principle of transparency.

With reference to the WORKSHOP you are about to attend, we inform you that

1. The Controller is, [legal, name, address, VAT]. You shall contact the Controller at the following email address: _____.

2. You shall also contact the Data Protection Officer (DPO) at the following email address: _____.

3. The purposes of the processing of your personal data are:

- registration to the workshop (common personal data)
- carrying out the workshop activities (common and special categories of personal data)
- analysis of data collected (common and special categories of personal data)
- dissemination (common and special categories of personal data)

4. The controller will process the personal data provided by you. The provision of your personal data is necessary for your participation in the activities of the workshop. Your refusal to provide data will not allow you to participate in the workshop.

You will be asked to provide personal data such as first name and last name, organization, date of birth, place of birth, nationality, ID number (passport/driver license), ID valid until date, and email address.

You may also happen to disclose special categories of personal data such as data revealing the racial or ethnic origin and trade union membership.

The workshop may be video recorded, and photos may be taken for dissemination and communication purposes.

Your data may also be processed following your request to be included in the newsletter service.

Your personal data will be collected and handled in paper or digital format.

5. Your personal data will be only processed on the basis of explicit consent, given specifically for each of the above-mentioned purposes. You have the right to withdraw consent at any time, without affecting the lawfulness of former processing.

6. Your personal data could be transmitted to [List of recipients]. If necessary, these subjects will be appointed as personal data processors.

The controller will not disclose your data under any circumstances.

7. Your personal data will be processed by authorized and duly instructed subjects, able to ensure the safe and lawful processing of your personal data. These persons authorized to process personal data will also be bound by full confidentiality.

8. The processing of your personal data is based on the principles of correctness, lawfulness, transparency, and minimization.

The controller does not apply any fully automated decision-making process to your personal data.

9. The personal data provided will only be stored for the time needed to fulfill the purposes they are collected and processed for.

Your common personal data will be stored until.....

Audio/Screen recordings and information about yourself will be treated as confidential by the Controller. These recordings will be stored until.....

In the event that you decide to give your consent to be included in the newsletter, your data will be kept until you decide to unsubscribe.

10. As a data subject, you have the right to request from the controller access to and rectification or erasure of personal data or restriction of processing your personal data as well as the right to data portability; where the processing is based on consent, you have the right to withdraw your consent at any time, without affecting the lawfulness of processing based on consent before its withdrawal; you also have the right to lodge a complaint with a supervisory authority.

Informed Consent Form - WORKSHOPS

I, _____, Born in _____ on ____ / ____ / ____

- declare that I have carefully read the above information sheet, that I have fully understood and accepted its content

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, also belonging to the so-called special categories of personal data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent so that short extracts of a video or photographs, in which what I say or what I do cannot be precisely determined, may be used by the Controller for dissemination and illustrative purposes of the research results, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- request to be included in the newsletter service and to this end I attach my email address and give my consent to the processing of my personal data for this purpose, according to the above information sheet

Email _____

_____ on ____ / ____ / ____

Signature of the Data subject _____

Information sheet ex Art. 13 of the European General Data Protection Regulation n. 2016/679 and consent form - EXPERIMENTS

Information sheet

You are being invited to take part in a research study forming part of the HAIKU project. HAIKU Consortium would like to process your personal data in order to carry out its research activities, concerning the collection and assessment of Human Factors data to will inform the risk-based design of systems and operations in aviation.

Before you decide to give your consent to the processing of your personal data, it is important that you receive and understand all the relevant information about the processing of your personal data, in a transparent, intelligible, clear form. Please take time to read the following information carefully. If there is anything that is not clear, or you would like more information, please get in touch with the research team (contact details are provided at the end of this information sheet). After having read and understood the following information, please feel free to give your express consent to the processing of your personal data.

In accordance with Article 13 of the European General Data Protection Regulation n. 2016/679 (GDPR), HAIKU is committed to providing you with any information about the lawful processing of your personal data, in full respect of the principle of transparency.

With reference to the EXPERIMENTS you are about to participate in, we inform you that

1. The Controller is, [legal, name, address, VAT]. You shall contact the Controller at the following email address: _____.

2. You shall also contact the Data Protection Officer (DPO) at the following email address: _____.

3. The purposes of the processing of your personal data are:

- recruitment in the experiment (common personal data)
- carrying out the experiment (common and special categories of personal data)
- analysis of data collected (common and special categories of personal data)
- dissemination (common and special categories of personal data)

4. The controller will process the personal data provided by you. The provision of your personal data is necessary for your participation in the experiment. Your refusal to provide data will not allow you to participate in the activities.

You will be asked to provide personal data such as first name and last name, organization, date of birth, place of birth, nationality, ID number (passport / driver license), ID valid until data, and email address. In the performance of the experiment, other categories of personal data of yours will be processed: performance data, observation of behaviors, and actions will be collected and recorded by a Subject Matter Expert (affiliated with one of the HAIKU partners), neurophysiological data.

You may also happen to disclose special categories of personal data such as data revealing racial or ethnic origin, and trade union membership.

You will be asked to answer questionnaires and interviews, with only audio recordings and notes taken by the interviewer.

The experiment may be video recorded, and photos may be taken for dissemination and communication purposes.

Your data may also be processed following your request to be included in the newsletter service.

Your personal data will be collected and handled in paper or digital format.

5. Your personal data will be only processed on the basis of explicit consent, given specifically for each of the above-mentioned purposes. You have the right to withdraw consent at any time, without affecting the lawfulness of former processing.

6. Your personal data could be transmitted to [List of recipients]. If necessary, these subjects will be appointed as personal data processors.

The controller will not disclose your data under any circumstances.

7. Your personal data will be processed by authorized and duly instructed subjects, able to ensure the safe and lawful processing of your personal data. These persons authorized to process personal data will also be bound by full confidentiality.

8. The processing of your personal data is based on the principles of correctness, lawfulness, transparency, and minimization.

The controller does not apply any fully automated decision-making process of your personal data.

9. The personal data provided will only be stored for the time needed to fulfil the purposes they are collected and processed for.

After the experiment, the names and email addresses of the participants are recorded on the simulation roster and schedule, so they can typically be traced back. The roster and schedule are only available to the simulation manager, that has to respect a strict confidentiality commitment.

Your common personal data will be stored until

Audio/Screen recordings and information about yourself will be treated as confidential by the controller. These recordings will be stored until.....

In the event that you decide to give your consent to be included in the newsletter, your data will be kept until you decide to unsubscribe.

10. As a data subject, you have the right to request from the controller access to and rectification or erasure of personal data or restriction of processing your personal data as well as the right to data portability; where the processing is based on consent, you have the right to withdraw your consent at any time, without affecting the lawfulness of processing based on consent before its withdrawal; you also have the right to lodge a complaint with a supervisory authority.

Informed Consent Form - EXPERIMENTS

I, _____, Born in _____ on ____ / ____ / ____

- declare that I have carefully read the above information sheet, that I have fully understood and accepted its content

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, also belonging to the so-called special categories of personal data, in particular, neurophysiological data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent so that short extracts of a video or photographs, in which what I say or what I do cannot be precisely determined and that cannot in any way damage my reputation, may be used by the Controller for dissemination and illustrative purposes of the research results, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- request to be included in the newsletter service and to this end I attach my email address and give my consent to the processing of my personal data for this purpose, according to the above information sheet

Email _____

_____ on ____ / ____ / ____

Signature of the Data subject _____

Information sheet ex Art. 13 of the European General Data Protection Regulation n. 2016/679 and consent form – SAFETY DATA REPORTS

The templates in this section are meant to assist HAIKU partners or External Advisors in setting up reporting procedures, in case internal policy and procedures are not already in place. In these cases, the Controller and the Data Protection Officer are the people in the organization providing the data.

At the present moment, no company reported such a need. HAIKU partners providing safety reports all have their own policies and procedures.

Information sheet

You are being invited to take part in a research study forming part of the HAIKU project. HAIKU Consortium would like to process your personal data in order to carry out its research activities, concerning the collection and assessment of Human Factors data to will inform the risk-based design of systems and operations, in aviation.

Before you decide to give your consent to the processing of your personal data, it is important that you receive and understand all the relevant information about the processing of your personal data, in a transparent, intelligible, clear form. Please take time to read the following information carefully. If there is anything that is not clear, or you would like more information, please get in touch with the research team (contact details are provided at the end of this information sheet). After having read and understood the following information, please feel free to give your express consent to the processing of your personal data.

In accordance with Article 13 of the European General Data Protection Regulation n. 2016/679 (GDPR), HAIKU is committed to providing you with any information about the lawful processing of your personal data, in full respect of the principle of transparency.

With reference to the SAFETY DATA REPORTS you are about to provide, we inform you that

1. The Controller is, [legal, name, address, VAT]. You shall contact the Controller at the following email address: _____.

2. You shall also contact the Data Protection Officer (DPO) at the following email address: _____.

3. The purposes of the processing of your personal data are:

- analysis of data collected through the reports (common and special categories of personal data)
- anonymization before putting the processed information on a database (common and special categories of personal data)

4. The controller will process the personal data provided by you. The provision of your personal data is necessary for your participation in the activity of collection and analysis of voluntary reports called Safety Data Reports. Your refusal to provide data will not allow you to participate in the activity.

In compiling the reports you will be asked to provide information on factual data like date, time, geographical location, weather conditions, aircraft/ship identifier, and a narrative where you tell what happened in your own words.

Your personal data will be collected and handled in paper or digital format.

5. Your personal data will be only processed on the basis of explicit consent, given specifically for each of the above-mentioned purposes. You have the right to withdraw consent at any time, without affecting the lawfulness of former processing.

6. Your personal data could be transmitted to [List of recipients]. If necessary, these subjects will be appointed as personal data processors.

The controller will not disclose your data under any circumstances.

7. Your personal data will be processed by authorized and duly instructed subjects, able to ensure the safe and lawful processing of your personal data. These persons authorized to process personal data will also be bound by full confidentiality.

8. The processing of your personal data is based on the principles of correctness, lawfulness, transparency, and minimization.

The controller does not apply any fully automated decision-making process to your personal data.

9. The personal data provided will only be stored for the time needed to fulfill the purposes they are collected and processed for.

Your common personal data will be stored until.....

The reports will be subjected to pseudonymization.

10. As a data subject, you have the right to request from the controller access to and rectification or erasure of personal data or restriction of processing your personal data as well as the right to data portability; where the processing is based on consent, you have the right to withdraw your consent at any time, without affecting the lawfulness of processing based on consent before its withdrawal; you also have the right to lodge a complaint with a supervisory authority.

Informed Consent Form – SAFETY DATA REPORTS

I, _____, Born in _____ on ____ / ____ / ____

- declare that I have carefully read the above information sheet, that I have fully understood and accepted its content

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, also belonging to the so-called special categories of personal data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

Information sheet ex Art. 13 of the European General Data Protection Regulation n. 2016/679 and consent form - INTERVIEWS

Information sheet

You are being invited to take part in a research study forming part of the HAIKU project. The HAIKU Consortium would like to process your personal data in order to carry out its research activities, concerning the collection and assessment of Human Factors data to will inform risk-based design of systems and operations, in aviation.

Before you decide to give your consent to the processing of your personal data, it is important that you receive and understand all the relevant information about the processing of your personal data, in a transparent, intelligible, clear form. Please take time to read the following information carefully. If there is anything that is not clear, or you would like more information, please get in touch with the research team (contact details are provided at the end of this information sheet). After having read and understood the following information, please feel free to give your express consent to the processing of your personal data.

In accordance with Article 13 of the European General Data Protection Regulation n. 2016/679 (GDPR), HAIKU is committed to providing you with any information about the lawful processing of your personal data, in full respect of the principle of transparency.

With reference to the INTERVIEW you are about to answer, we inform you that

1. The Controller is, [legal, name, address, VAT]. You shall contact the Controller at the following email address: _____.

2. You shall also contact the Data Protection Officer (DPO) at the following email address: _____.

3. The purposes of the processing of your personal data are:

- recruitment for the interview (common personal data)
- carrying out the interview (common and special categories of personal data)
- analysis of data collected (common and special categories of personal data)
- dissemination (common and special categories of personal data)

4. The controller will process the personal data provided by you. The provision of your personal data is necessary for your participation in the interview. Your refusal to provide data will not allow you to participate in the activity.

You will be asked to provide personal data such as first name and last name, organization, and email address.

In answering the interview, you will also be asked to provide personal opinions, experiences, and comments, on safety research released topics.

You may also happen to disclose special categories of personal data such as data revealing the racial or ethnic origin and trade union membership.

The interviews will be audio recorded. You will receive a summary transcript of the interview.

Your personal data will be collected and handled in paper or digital format.

5. Your personal data will be only processed on the basis of explicit consent, given specifically for each of the above-mentioned purposes. You have the right to withdraw consent at any time, without affecting the lawfulness of former processing.

6. Your personal data could be transmitted to [List of recipients]. If necessary, these subjects will be appointed as personal data processors.

The controller will not disclose your data under any circumstances.

7. Your personal data will be processed by authorized and duly instructed subjects, able to ensure the safe and lawful processing of your personal data. These persons authorized to process personal data will also be bound by full confidentiality.

8. The processing of your personal data is based on the principles of correctness, lawfulness, transparency, and minimization.

The controller does not apply any fully automated decision-making process to your personal data.

9. The personal data provided will only be stored for the time needed to fulfill the purposes they are collected and processed for.

Your common personal data will be stored until.....

Audio recordings and information about yourself will be treated as confidential by the Controller. These recordings will be stored until.....

10. As a Data subject, you have the right to request from the controller access to and rectification or erasure of personal data or restriction of processing your personal data as well as the right to data portability; where the processing is based on consent, you have the right to withdraw your consent at any time, without affecting the lawfulness of processing based on consent before its withdrawal; you also have the right to lodge a complaint with a supervisory authority.

Informed Consent Form - INTERVIEWS

I, _____, Born in _____ on ____ / ____ / ____

- declare that I have carefully read the above information sheet, that I have fully understood and accepted its content

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent to the processing of my personal data, also belonging to the so-called special categories of personal data, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____

- give my explicit consent so the audio recording of the interview, according to the above information sheet

_____ on ____ / ____ / ____

Signature of the Data subject _____