

# SHIFT

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MetamorphoSis of cultural Heritage  
Into augmented hypermedia assets  
For enhanced accessibiliTy  
and inclusion



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<b>Abstract:</b>	The SHIFT DMP outlines how (personal) data are to be handled as part of the research project and after the project is completed. The document presents data management protocols, metadata generation, data storage and analytical tools. Finally, the document sets the ethical grounds and oversight mechanisms to ensure responsible research fosters high data privacy standards.
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## EXECUTIVE SUMMARY

The deliverable D7.3 Data Management Plan & Ethical compliance sets out guidelines for data management during the SHIFT project, including detailed research ethics guidelines included in its second bloc. The Deliverable is necessary for Horizon Europe research projects as it enables accountability and promotes a cautious approach to data management and use. The document also assists partners with determining and planning the practical aspects of research throughout the project. In order to be easy to use by consortium partners, the document has two main parts:

- The Data Management Plan; and
- The Research Ethics Guidelines.

The Data Management Plan aims to lay down the main legal requirements concerning personal data, summarizing the primary data (including personal data) and identifying sensitive personal data processed by the project. It also seeks to lay down the basis of the consortium policy regarding data protection and security and establish the main measures to be carried out by the consortium to make data FAIR (Findable, Accessible, Interoperable and Reusable).

The Research Ethics Guidelines provide an overview of issues and guidelines related to conducting ethical research under the SHIFT project and also set out the basic principles and responsibilities that result from European Commission regulation on research ethics in H2020. This section also describes the ethics review processes and gives specific guidelines on where responsibilities lie and how they can be fulfilled and the procedures for assessing the need for ethics issue mitigation and provides tools for the practical work of managing research ethics issues (the Research Ethics Protocol). Overall, this part of the document aims to support the consortium partners in project SHIFT to recognise, understand and mitigate ethical issues inherent in their work.

ETICAS has elaborated D7.3. It will be updated regularly, and the final version will be submitted before the final review (M36) to reflect the relevant changes undergone by the document.



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## Abbreviations and Acronyms

Abbreviation / Acronym	Description
GDPR	General Data Protection Regulation
AI	Artificial Intelligence
COO	Concept of operations
D	Deliverable
EU	European Union
ML	Machine Learning

## Glossary of terms

Terminology	Description
Machine Learning	<i>Machine learning is a subfield of artificial intelligence that gives computers the ability to learn without explicitly being programmed<sup>1</sup>.</i>
Computer Vision	<i>Field of artificial intelligence in which programs attempt to identify objects represented in digitized images provided by cameras<sup>2</sup>.</i>
Personal data	<i>Personal data are any information which are related to an identified or identifiable natural person (Art. 4 (1) GDPR).</i>
Sensitive data	<i>Personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, 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 (Art. 9 GDPR).</i>
Pseudonymized data	<i>Personal data in such a way that the data can no longer be attributed to a specific data subject without the use of additional information (Article 4(5) of the GDPR)</i>

<sup>1</sup> See at: <https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained>

<sup>2</sup> See at: <https://www.britannica.com/technology/computer-vision>



## 1. INTRODUCTION

### 1.1. SCOPE AND OBJECTIVES

SHIFT is an EU-funded project within the H2020 framework, addressing the topic HORIZON-CL2-2021-HERITAGE-01: Preserving and enhancing cultural heritage with advanced digital technologies. It began on the 1st of October 2022 and will finish on the 30th of September 2025. The project is strategically conceived to deliver loosely coupled technological tools that offer cultural heritage institutions the necessary impetus to stimulate growth and embrace the latest innovations in artificial intelligence. Machine learning, multi-modal data processing and digital content transformation methodologies will be used in this context. SHIFT also expects to provide enhanced technologies for heritage institutions based on semantic representation, linguistic analysis of historical records, and haptics interfaces to effectively and efficiently communicate new experiences to all citizens, including people with disabilities.

The development of SHIFT tools will be carried out in **close consultation with the user communities** represented in the project. The two Culture and Heritage (CH) networks (BMN, ANBPR) will launch open consultation to aggregate views from their members. Together with the cultural heritage institutions (SOMKL, SMB) and heritage professionals (Heritage Management), they will provide requirements based on the cultural assets being maintained within each organisation. As a result, the diversity of digital media transformation and the semantic formalisation of the cultural assets will be individually demonstrated across each museum and library.

The inclusion of by-design principles adopted within the project will be evaluated by CH networks and vulnerable group partners (DBSV), who will engage with the various tools developed in the project. In addition to the stakeholders and end-users, the SHIFT project also brings together leading industrial (SIMAVI) and academic institutions (FORTH, UAU, QMUL). The consortium is complemented by SMEs (MDS, AUD) with high-tech product development teams and ethical expertise (ERC).

Collectively, the project will release **12 technology solutions clustered into five thematic areas**: computer vision, audio, text-to-speech, haptics, semantics and linguistics. As mentioned above, these tools will support accessibility and inclusion by design to overcome the shortcomings and limitations of the Culture and Creative Industries (CCI) sector to enable growth and stimulation.



SHIFT is divided into seven Work Packages. This document is the third deliverable within Work Package 7 (project coordination) and is based on work carried out in Task 7. In the Grant Agreement, Task 7.5 is described as follows:

*"T7.5: Data management & Ethical compliance (Leader: ERC; Contributors: All; M1-M36): The objective of the task is to develop and provide data management policies and recommendations that relate to the planning, implementation and administration of the IT systems concerned with the acquisition, storage, security and retrieval, dissemination, archival and disposal of data collected within the project. The Data Management Plan & Ethical compliance (M6) will be created during the first six months of the project and will describe all the measures that the project will use to maximise the transparency and accountability of any data generated throughout the project, increase its impact and visibility. It will also set the roles and responsibilities for the process of collection, verification, harmonization, dissemination and conservation of the data that will be gathered during the project. Lastly, it will specify how the project will comply with the Open Access requirements of the European, and operationalize FAIR principles into protocols for the overall project development."*

D7.3 includes a **Data Management Plan for SHIFT**, which lays out the requirements for protecting (personal) data that will be produced during the project lifespan, as well as the consortium's strategy to make data FAIR (Findable, openly Accessible, Interoperable and Reusable). To integrate by-design requirements and conduct validation activities, SHIFT will potentially involve managing sensitive data belonging to protected groups associated with addressed technologies. All the measures that the consortium will put in place in order to maximise the transparency and accountability of any data generated throughout the project increase its impact and visibility. In this way, SHIFT will also comply with the national and European Union legislation on data protection to be addressed as part of this deliverable. According to the Grant Agreement, this DMP will be updated in M36.

Lastly, D7.3 includes a section on **Ethical and responsible research** (section 4), which provides guidelines on ethical issues concerning SHIFT and protocols to support the consortium partners to recognise, understand and mitigate ethical issues intrinsic in their work. It further articulates the basic principles and responsibilities resulting from European Commission regulation on research ethics in Horizon Europe, and describes the ethics review processes and gives specific guidelines on where responsibilities lie and how they can be fulfilled. Furthermore, it outlines concrete procedures for assessing the need for mitigating ethical issues



and provides tools for managing research ethics issues and support materials (consent form templates, etc.). Moreover, IP aspects are included as part of the DMP.

This document is PUBLIC and will be used by all members of the SHIFT consortium.

It should be noted that other deliverables will tackle some of the above questions in more depth. For instance, the SHIFT end-user ethics and legal framework (D1.3) will set the main legal requirements for the SHIFT technologies design and implementation. Also, other systems requirements discussed in WPs 1 and 7 will be aimed at ensuring compliance with the EC ethics framework, addressing issues such as data misuse, human participants' recruitment and AI fairness.

## 1.2. STRUCTURE OF THE REPORT

After the Introduction in Section 1, this DMP includes a Section setting the legal and ethical requirements and principles guiding the data processing protocols in Section 2. Next, Section 3 describes the Data Management Plan detailing the types of data to be collected for SHIFT activities, the implementation of FAIR mechanisms for their management, data governance and data security. After this, Section 4 details ethical aspects related to personal data administration during the Project development, including also factors associated with the responsible research approach to be implemented in SHFT. The document closes with the conclusions (Section 5), references (Section 6) and Annexes, which present the Consent Form for the Project.

## 2. DMP GROUNDS, LEGAL FRAMEWORK AND GUIDELINES

D7.3 is elaborated according to the guidance given by the Commission regarding the content that should be included in a DMP (European Commission, 2016). It also includes a succinct overview of the privacy and data protection legislation due to the central role they play in terms of the processing of personal data.

In regards to the level of comprehensiveness of this document, the consortium abides by the guidelines established by the European Commission on the issue:

*"It is not required to provide detailed answers to all the questions in the first version of the DMP that needs to be submitted by month 6 of the project. Rather, the DMP is*



*intended to be a living document in which information can be made available on a finer level of granularity through updates as the implementation of the project progresses and when significant changes occur. Therefore, DMPs should have a clear version number and include a timetable for updates. As a minimum, the DMP should be updated in the context of the periodic evaluation/assessment of the project. If there are no other periodic reviews envisaged within the grant agreement, an update needs to be made in time for the final review at the latest."*

Along these lines, this document will be updated in order for it to incorporate the successive changes that may need to be reflected in it and in the event of a review performed by the European Commission. These subsequent updates and plan adjustments will be reflected in the final version of this Deliverable (M36).

## 2.1. DATA PROTECTION LEGAL FRAMEWORK

In terms of data protection and impact of the research on fundamental rights and values, the relevant legislation listed below shall be considered:

- I. The Charter of Fundamental Rights of the EU (2000/c 364/01);
- II. General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679);
- III. Convention No. 108 of the Council of Europe for the Protection of Individuals about
- IV. Automatic Processing of Personal Data adopted on 28 January 1997;
- V. Recommendation No. R (97) 18 of Committee of Ministers to Member States concerning the protection of personal data collected and processed for statistical purposes, adopted on 30 September 1997;
- VI. Directive 96/9/EC of the European Parliament and the Council of 11 March 1996 on the legal protection of databases;
- VII. Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications).

SHIFT will design data collection processes that adhere to the **principles of data protection** detailed in the following subsection, striving for data minimization, pseudonymisation and anonymisation whenever possible. While a more extensive legal analysis will be carried out in WP1, Section 2.1.1 is aimed at providing a legal context for some of the questions that will be addressed as part of Section 3 (Data Management Plan), leaving a more extensive legal review for D1.3 "SHIFT end-user ethics and legal framework" in charge of ERC.



### 2.1.1 MAIN APPLICABLE GENERAL DATA PROTECTION REGULATION (GDPR) REQUIREMENTS AND PRINCIPLES

The full name of the main data protection legislation in Europe is “*Regulation 2016/679 on the protection of natural persons about the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC*”. It is otherwise known as the General Data Protection Regulation (GDPR) and replaces the previous regime of European data protection law embodied in Directive 95/46/EC. It is a Regulation, not a Directive, which means that it enters into force in all Member States without the need for transposition. The main definitions and concepts contained within the regulation are briefed below.

#### - Definition of data controllers and data processors:

**Article 4 (7):** “**controller**’ means the natural or legal person, public authority, agency or other 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;”

**Article 4 (8):** “**processor**’ means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller.”

Following the above, it is vital to distinguish the above figures as far as compliance with the GDPR is concerned, given that the data controller bears the bulk of the responsibility in terms of compliance. However, the processor is also responsible for assisting controllers in complying with the GDPR requirements. Additionally, a **joint controller relationship** arises where two or more controllers jointly determine the purposes and means of processing personal data, which is relevant to the SHIFT project, as we will see in the following sections.

#### - Definition of personal data:

**Article 4(1):** “**personal data**’ means 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”.



This deliverable **reports on personal and non-personal data**, as the questionnaire used for collecting information from partners (Annex I) shows. Still, personal data plays a particular role within it as its processing, management and technical validation in WPs 2-5, which must be done in alignment with the GDPR. With ETICAS' assistance, consortium partners have self-assessed whether the data they will process is personal or not. This analysis, based on a template and supported by a informative session led by ETICAS on February 16 2023<sup>3</sup>, aimed at adequately identifying the SHIFT data life cycle.

- **Principles in the GDPR:**

The GDPR is structured around the following seven main principles, which must guide SHIFT research development:

**Article 5 (1) a:** "personal data shall be processed lawfully, fairly and in a transparent manner in relation to the data subject (**'lawfulness, fairness and transparency'**)."

Processing data lawfully means that it has to be processed based on some of the circumstances and following a specific legal basis established in Article 6 of GDPR (consent, performance of a contract, a legitimate interest, a vital interest, a legal requirement, and a public interest). In the case of SHIFT, personal data will be processed **based on informed consent** in most already identified scenarios.

**Article 5 (1) b:** collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes shall, in accordance with Article 89(1), not be considered to be incompatible with the initial purposes (**'purpose limitation'**)

SHIFT partners must only collect personal data for a **specific, explicit and legitimate purpose**. Partner organizations and researchers must clearly state what this purpose(s) is, communicate this goal to data subjects when possible and only collect data for as long as is necessary to achieve that purpose. One of the implications of this will be that the purpose of the processing must be made explicit. This constitutes a precondition for consent to be considered free and informed.

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<sup>3</sup> See the template sent to the partners in Annex 1.



**Article 5 (1) c:** adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed ('data minimisation');

The personal data collected in the context of the SHIFT project will be no more than the **minimum required to achieve its purposes**. This Deliverable will explain the criteria and measures in place to ensure that all the personal data that will be processed within SHIFT will be relevant and limited to the purposes of the research project.

**Article 5 (1) d:** accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay ('**accuracy**');

SHIFT partners must take every reasonable step to **update or remove inaccurate or incomplete data**. All data subjects whose personal data is managed by the project have the right to request that project partners erase or rectify without delay erroneous data that concerns them according to Articles 16 and 17 GDPR.

**Article 5 (1) e:** 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; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) subject to implementation of the appropriate technical and organisational measures required by this Regulation in order to safeguard the rights and freedoms of the data subject ('**storage limitation**');

SHIFT partners **must delete personal data when they no longer need it** and, under all circumstances, at the latest, by five years after the end of the project (September 2030). As is said above, the concrete retention period/s to be established is not fixed by law. Instead, it must be determined on a case-by-case basis, considering the nature of the processing and its purposes. In other words, the retention period needs to be justified on the **grounds of its utility**. Data can only be held if it serves the purpose for which it was collected in the first place. In this regard, the SHIFT consortium has considered, as a general period, that five years is enough to achieve the project's aims. This data retention period forms



part of the technical and organizational measures that the consortium will put in place to safeguard the rights and freedoms of the data subjects and research participants. Anonymized data may be kept for longer for research purposes in certain cases. In any case and following the principle of data minimization, this period may be shortened in the next versions of this deliverable if the consortium comes to the conclusion that 5 years is not required.

**Article 5 (1) f:** processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures (**'integrity and confidentiality'**).

Following this requirement, SHIFT partners must **keep personal data safe**, secure and protected by using appropriate technical and/or organisational measures. The consortium aspires to implement measures that ensure high levels of security, which are briefly discussed in Section 3.5.

**Article 5 (2):** The controller shall be responsible for, and be able to demonstrate compliance with, paragraph 1 ('accountability').

## Data Protection Impact Assessment (DPIA)

Article 35 GDPR establishes the conditions under which a DPIA must be carried out.

### Article 35

1. Where a type of processing in particular using new technologies, and taking into account the nature, scope, context and purposes of the processing, is likely to result in a high risk to the rights and freedoms of natural persons, the controller shall, prior to the processing, carry out an assessment of the impact of the envisaged processing operations on the protection of personal data. A single assessment may address a set of similar processing operations that present similar risks

[...]

3. A data protection impact assessment referred to in paragraph 1 shall in particular be required in the case of:

a) systematic and extensive evaluation of personal aspects relating to natural persons which is based on automated processing, including profiling, and on which decisions are based that produce legal effects concerning the natural person or similarly significantly affect the natural person;



- b) processing on a large scale of special categories of data referred to in Article 9(1), or of personal data relating to criminal convictions and offences referred to in Article 10; or  
c) systematic monitoring of a publicly accessible area on a large scale.

Section 4 below evaluates the ethical risks linked to processing personal data in SHIFT and gives an opinion about the need for a data protection impact assessment as described. Its conclusions will be reflected in this deliverable in M36.

#### - Pseudonymisation and anonymisation of data

According to Article 26 of the GDPR, the **principles of data protection do not apply to anonymous information**. This is information which does not relate to an identified or identifiable natural person or to personal data rendered anonymous in such a manner that the data subject is not or no longer identifiable, directly or indirectly. Therefore, the GDPR does not concern processing such anonymous information, including for statistical or research purposes.

Since GDPR does not apply to anonymous information, it is crucial to distinguish between anonymized and **pseudonymized data**. Pseudonymized data is data that can no longer be attributed to a specific data subject without the use of additional information (Art. 4 (5) GDPR). While anonymization processes ensure that no information about individuals can be recovered from a dataset, pseudonymization involves the replacement of a value, usually an identifier (an attribute that identifies the individual to whom it refers directly, for example, name), by another value to render it more challenging to re-identify. Following this principle, pseudonymizing personal data should ensure that additional information can be kept separately. It should also be subjected to technical and organizational measures to ensure that the **personal data are not attributed to an identified or identifiable natural person**. Many authors have underlined the limitations of pseudonymization techniques in some contexts, as individual records can be re-identified due to various de-anonymization attacks (Lubarsky, 2017; Article 29 Working Party, 2014). This means that, under certain technical circumstances, data relying on pseudo-identifiers could be turned into identification data. Along these lines, Article 28 of the GDPR states the following:

*"The application of pseudonymisation to personal data can reduce the risks to the data subjects concerned and help controllers and processors to meet their data-protection*



*obligations. The explicit introduction of 'pseudonymisation' in this Regulation is not intended to preclude any other measures of data protection."*

SHIFT partners shall take all steps **to pseudonymize and/or anonymize data when and if necessary**. Specifically, personal data should be anonymized before dissemination outside the Consortium and/or before use for future research and/or scientific purposes. This should be the generally applicable criteria unless the data subjects grant explicit and informed consent for disseminating certain types of personal data (such as pictures) and the Consortium decides to allow its processing per the terms of the Grant Agreement. When it comes to pseudonymization, following Article 4(5) GDPR, pseudonymization should always be applied when it allows for achieving the purposes of data collection and is in line with the protocols or technological systems at hand.

#### **2.1.1.1 DATA GOVERNANCE**

The technical and organisational measures put in place by the consortium in order to safeguard the rights and freedoms of the data subjects and research participants. The SHIFT consortium has decided to establish itself as **a joint single controller** by means of a joint controllers agreement (see Article 26 GDPR) in order to facilitate compliance with the principle of accountability, given that personal data will be shared between the different members of the consortium for research purposes.

Moreover, each of the members of the consortium has been asked to **appoint a Data Protection Officer (DPO)**, as is requested by the SHIFT DoA, in Task 1.4 (See Section 3.4). The DPO has the following responsibilities:

- To inform and advise the consortium partner's research team on their obligations under the Regulation (EU) 2016/679 General Data Protection Regulation (GDPR) and national law when personal data is gathered or processed during research activities; in particular, the DPO advises and supports the research team to fill in the Research Ethics Protocol;
- To monitor the consortium partner's research team compliance with EU and national data protection laws during project activities; and
- To function as the main consortium partner's contact point for project members and project management team, including National Data Protection Authority.



### 2.1.1.2 DATA MANAGEMENT REQUIREMENTS

Data management is composed of the following five phases:

- I. Data collection;
- II. Data storage;
- III. Data protection;
- IV. Data sharing/transfer; and
- V. Data retention/destruction.

All those elements are addressed within the present DMP, which will be updated in order to include more information as soon as it is available or significant changes are made to the project. When going through the above data processing phases, there are three main legal principles and requirements that should be taken into consideration by partners regarding data management, given their importance:

- **Article 30:** “*Record of processing activities*”, according to which an accurate description of the processing activities shall be kept by the data controller and the data processor and, upon request, made available to supervisory authorities. This article also establishes the obligation to keep a record of processing activities. However, this obligation does not always apply. Article 5 establishes the situations in which the obligation of keeping records will apply in the following manner:

*The obligations referred to in paragraphs 1 and 2 shall not apply to an enterprise or an organisation employing fewer than 250 persons unless the processing it carries out is likely to result in a risk to the rights and freedoms of data subjects, the processing is not occasional, or the processing includes special categories of data as referred to in Article 9(1) or personal data relating to criminal convictions and offences referred to in Article 10.*

Therefore, at least the partners that will process personal data belonging to special categories will need to keep records of the processing activities that involve data belonging to those special categories (see Glossary above).

- **Article 32:** “Security of processing”. This article aims to ensure that the data controller and the data processor process and **keep the data security** to avoid data being destroyed, lost, altered, disclosed or accessed accidentally or unlawfully. Therefore, the controller has an obligation to ensure that data is kept in a secure manner. The measures



adopted to ensure compliance in this sense are included in Section 3 of this deliverable.

- **Article 25:** “Data protection by design and by default”, including procedures for pseudonymization and data minimization. This article establishes that, after performing a contextual analysis of the risks that the processing can cause, **appropriate data protection measures must be put in place**. This obligation has been partially fulfilled by means of the present deliverable, which takes stock of the personal data collected within the context of SHIFT and the preventative measures adopted to mitigate the risks associated with their processing.

#### *2.1.1.3 DATA BELONGING TO SPECIAL CATEGORIES OF PERSONAL DATA*

The GDPR defines what sensitive personal data is in Article 9.1 and forbids its processing under normal conditions. Article 9.2 lays down the cases in which the processing of sensitive data can be considered lawful.

##### **Article 9.1**

Processing of personal 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 shall be prohibited.

##### **Article 9.2**

Paragraph 1 shall not apply if one of the following applies:

the data subject has given explicit consent to the processing of those personal data for one or more specified purposes, except where Union or Member State law provide that the prohibition referred to in paragraph 1 may not be lifted by the data subject;

(b) processing is necessary for the purposes of carrying out the obligations and exercising specific rights of the controller or of the data subject in the field of employment and social security and social protection law in so far as it is authorised by Union or Member State law or a collective agreement pursuant to Member State law providing for appropriate safeguards for the fundamental rights and the interests of the data subject;

(c) processing is necessary to protect the vital interests of the data subject or of another natural person where the data subject is physically or legally incapable of giving consent;

(d) processing is carried out in the course of its legitimate activities with appropriate safeguards by a foundation, association or any other not-for-profit body with a political, philosophical, religious or trade union aim and on condition that the processing relates solely to the members or to former members of the body or to persons who have regular contact with it in connection with its purposes and that the personal data are not disclosed outside that body without the consent of the data subjects;



- (e) processing relates to personal data which are manifestly made public by the data subject;
- (f) processing is necessary for the establishment, exercise or defence of legal claims or whenever courts are acting in their judicial capacity;
- (g) processing is necessary for reasons of substantial public interest, on the basis of Union or Member State law which shall be proportionate to the aim pursued, respect the essence of the right to data protection and provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject;
- (h) processing is necessary for the purposes of preventive or occupational medicine, for the assessment of the working capacity of the employee, medical diagnosis, the provision of health or social care or treatment or the management of health or social care systems and services on the basis of Union or Member State law or pursuant to contract with a health professional and subject to the conditions and safeguards referred to in paragraph 3;
- (i) processing is necessary for reasons of public interest in the area of public health, such as protecting against serious cross-border threats to health or ensuring high standards of quality and safety of health care and of medicinal products or medical devices, on the basis of Union or Member State law which provides for suitable and specific measures to safeguard the rights and freedoms of the data subject, in particular professional secrecy;
- (j) processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) based on Union or Member State law which shall be proportionate to the aim pursued, respect the essence of the right to data protection and provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject.

Section 3.5 identifies the sensitive data that are going to be processed within SHIFT, which is presented along with basic information regarding their processing. Some of this sensitive information falls under the categories defined in the regulation as special categories of personal data. Security measures defined in this Deliverable shall be proportionate to the type of data and their sensitivities.

## 2.2 HORIZON EUROPE PROGRAM ETHICAL GUIDELINES

All the research and innovation activities carried out under Horizon Europe<sup>4</sup> **shall comply with ethical principles** and relevant national, Union and international legislation, including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights and its Supplementary Protocols.

<sup>4</sup> More information at: [https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)



Attention shall be paid to the principle of **proportionality**, the right to **privacy**, the right to the protection of personal data, the right to the physical and mental integrity of a person, the right to **non-discrimination** and the need to ensure high levels of human health protection.

The primary obligation to comply with principles of ethics in all Horizon Europe projects is enshrined in Article 14 of the SHIFT Grant Agreement:

**Article 14 – Ethics and values**

## 14.1 Ethics

The action must be carried out in line with the highest ethical standards and the applicable EU, international and national law on ethical principles.

## 14.2 Values

The beneficiaries must commit to and ensure the respect of basic EU values (such as respect for human dignity, freedom, democracy, equality, the rule of law and human rights, including the rights of minorities).

Moreover, following the criteria established in the "[Guidelines for the classification of information in research projects](#)", the different deliverables have been classified as public and confidential as laid down in the Grant Agreement. A list of the SENSITIVE deliverables can be found in Section 3.5 of this document. The dissemination status of the SHIFT deliverables set in the Grant Agreement has been decided following the guidelines issued by the European Commission (2016).

Another key considered text is the "[Guidelines on FAIR Data Management in Horizon 2020](#)", which provides proper guidelines to **make data FAIR** (Findable, Accessible, Interoperable and Reusable). This is one of the main objectives of a DMP in a research project. The document, therefore, is, according to the guidelines, "a key element of good data management" (European Commission, 2016:4). The above guidelines established that a DMP must include the following aspects:

- The handling of research data during and after the end of the project;
- What data will be collected, processed and/or generated;
- Which methodology and standards will be applied;
- Whether data will be shared/made open access; and
- How data will be curated and preserved (including after the end of the project).



The consortium’s general approach to these aspects is outlined in this deliverable. The above H2020 guidelines -applicable to Horizon Europe- also require that the DMP reflect the current state of consortium agreements on data management, be consistent with exploitation and Intellectual Property Rights (IPR) requirements and ensure resource and budgetary planning for data management. All these issues are properly addressed in this document. As established in Section 2, the deliverable will be updated before the final review. As for IPR, they are addressed in Section 3 of this document. Last, the financial resources allocated for data management are described in the same section.

### 3. DATA MANAGEMENT PLAN

#### 3.1. DATA SUMMARY

The discussion of the data management policy that is going to be followed by the SHIFT consortium needs to be preceded by a brief summary of the data that are going to be generated or used by the consortium. The table below provides a general view of the data that is going to be generated or used and also provides information regarding its format and origin:

**Table 1. Overview of the data that is going to be generated or used, its format and origin.**

Data / Data sources	Data format	Data origin							
		Consortium meetings	Interviews	Training	Pilots	Deliverables preparation	Literature review	Tech solutions	Partner
WPs		All WPs	WPs1, 2,3, 5 & 6	WPs 2& 3	WP5	All WPs	All WPs	WP4	
Literature	Word (.doc/.docx) Pdf					X	X		ALL
Non-disclosure agreement	Word (.doc/.docx)		X		X				MDS, SPK, ETICAS



Data / Data sources	Data format	Data origin							
		Consortium meetings	Interviews	Training	Pilots	Deliverables preparation	Literature review	Technologies	Partners
WPs		All WPs	WPs1, 2,3, 5 & 6	WPs 2& 3	WP5	All WPs	All WPs	WP4	
	Pdf								
References	Endnote database (.enl) Word (.doc/.docx)								ALL
Consent forms	Word (.doc/.docx) . Pdf		X		X				MDS, BMN, UAU, ETICAS, ANBPR, QMUL
Questionnaires	Word (.doc/.docx) . Pdf		X	X	X				MDS, BMN, UAU, SPK, DBSV, AUDEERING, HERITAGE, ETICAS, ANBPR, QMUL, SOMKL
Images	TIFF, JPEG, PNG, JPEG/JFIF, GIF etc.			X	X				BMN, UAU, SPK, AUDEERING, HERITAGE, ANBPR, QMUL, SOMKL
Audio files	WAVE, AIFF, MP3, MXF, FLAC etc.	X	X	X	X				BMN, UAU, SPK, AUDEERING, HERITAGE,



Data / Data sources	Data format	Data origin							
		Consortium meetings	Interviews	Training	Pilots	Deliverables preparation	Literature review	Tech solutions	Partner
WPs		All WPs	WPs1, 2,3, 5 & 6	WPs 2& 3	WP5	All WPs	All WPs	WP4	
									ANBPR, SOMKL
Video files	MOV, MPEG-4, AVI, MXF etc.	X		X	X			X	BMN, UAU, SPK, AUDEERING, HERITAGE, ANBPR, QMUL, SIMAVI, SOMKL
Deliverables	Word (.doc/.docx) Excel (.xls/.xlsx) Pdf	X			X	X			All partners
Software	Several software languages		X		X			X	MDS, FORTH, UAU, SPK, AUDEERING, ANBPR, SOMKL
Contact details			X + WP7		X				BMN, FORTH, UAU, DBSV, HERITAGE, ETICAS, ANBPR, SIMAVI, SOMKL



The table puts together data that was collected from the different partners through a questionnaire that ETICAS circulated among them. Answers were received by the end of February of 2023. Concerning types of data processed, Table 2 summarizes partners collecting personal data and their input regarding data storage security used in their management.

**Table 2. Identifying personal data and applied storage security measures**

Partner	Collecting personal &/or sensitive data?	Data measures concerning storage in place?
MDS	NO	All data will be stored locally in MDS server following the security protocol for data storing. In case MDS will need to use a cloud storage a space in Amazon, AWS, is available.
FORTH	NO	On Project’s repository and in a password-secured workstation on FORTH’s premises.
BMN	YES	Paper: institutional file archive data. Storage network infrastructure – server and NAS backup systems, protected by Firewall, Windows network PCs protected by licenced AVG, e-mail servers.
UAU	YES	Locker / PC / Cloud.
SPK	YES	Paper: institutional file archive. Digital data: storage network infrastructure with several SAN and NAS systems connected via BRAIN   protected by Firewall, VPN and Backup facilities   Windows network and active directory services (ADS)   IT-Security Concept.
DBSV	YES	Organisation Server, and SHIFT Repository.
audERING	YES	Data storage network infrastructure   email servers
HERITAGE	YES	Anonymization of personal data and reduction to roles. Data storage network infrastructure   email servers
ANBPR	YES	Paper: institutional file archive data. Storage network infrastructure – server and NAS backup systems, protected by Firewall, Windows network PCs protected by licenced Kaspersky, e-mail servers.
QMUL	YES	At the QMUL internal repository.
SIMAVI	YES	Secured data store for data lake, software repository and project space.
SOM	YES	Paper: institutional file archive data. Storage network infrastructure – server and NAS backup systems, protected by Firewall, Windows network PCs protected by licenced AVG, e-mail servers.

According to the principle of data minimisation, personal data collected from individuals must always be limited to the minimum needed to accomplish the



purpose of the processing. As it has been previously said, SHIFT will implement policies and measures to ensure that the minimisation principle is properly executed. The following list lays out the files, including personal data that will be collected within the project and its relation to the project's objectives:

- **Consent forms:** They will be written in a way that guarantees the rights of research participants (Art 6 GDPR). They will include personal data such as name, date, place, and signature for the purposes of ensuring that research participants engage in data collection activities on the basis of informed consent as it is defined in the GDPR.
- **Non-disclosure agreements:** These documents will identify a natural person representing an organisation that has decided to collaborate with the project, such as users and heritage stakeholders validating SHIFT in WP5. They include personal data such as name, signature and contact details. Any case of confidential data to be protected as part of this relationship will be secured on this basis.
- **Questionnaires:** They will be used in order to gather information from relevant stakeholders (end users, vulnerable individuals, and others) and members of the public (i.e. museum visitors) in order to achieve the research objectives as part of various tasks. Completed versions are likely to contain sensitive personal data, so their implementation will be based on informed consent.
- **Images, audio and video files:** Consortium members will produce this type of information for research purposes during the pilots (WP5) and at consortium meetings, as shown in Table 1, also based on informed consent. Research participants will have to agree to the possibility of the media taking pictures or recording video material, including them, to participate in the pilots or the project dissemination activities.
- **Deliverables:** They have been classified between Public and Sensitive according to the European Commission's guidelines (European Commission, 2016).
- **Contact details:** Name and surname of participants, e-mail address, name of company/organisation, and participants' IP addresses will be processed for the purposes of managing the project research and dissemination activities in WPs 5 and 6. Also, the contact details of the members of the two Advisory Boards will be processed in order to enable



communications with them and will be kept in a secure manner. Contact details will also be gathered and shared within WP1.

Regarding **special categories of personal data** (Article 9 GDPR), SHIFT is expected to generate datasets including specific information about cultural heritage users and participants associated with their accessibility condition. This information can therefore include health or cultural data connected to ethnicity information that may be sensitive. However, like many other aspects of the project at this stage, this information is still being determined as the partners still have to decide how they will implement the research methodology, which will directly affect what data is collected, how, when and from whom.

### 3.2. MAKING SHIFT DATA FAIR

Section 3.2 will aim to lay down the policies and specific measures put in place by the SHIFT consortium to **make data FAIR** (Findable, Accessible, Interoperable and Reusable) according to existing guidelines (European Commission, 2016). Following the EC open research approach, relevant results not subject to any restrictions due to the protection of intellectual property, security rules or legitimate interests will be made publicly available as soon as possible.

#### 3.2.1. MAKING SHIFT DATA FINDABLE

SHIFT aims to improve the CH field by addressing issues regarding the demand to enhance the appeal of cultural heritage, the lack of accessibility to cultural assets and the lack of inclusion by design within cultural heritage. Therefore, ensuring **proper dissemination** of the project's public results must be a core part of the project efforts.

The SHIFT consortium will publish relevant results of the project in peer-reviewed scientific journals, and as part of the publication process, most of the different papers will be assigned a standard identification mechanism called a digital object identifier (DOI).

Moreover, in order to enhance the findability of the data, the SHIFT consortium will **adequately identify all Deliverables** (publication (author(s), title, and date of publication will be included). Regarding version numbers, all deliverables reference the version so readers can determine if the version they are reading is the final one available.



Public results will also be made available to the users and third parties collaborating with the project to further disseminate them in line with the aims and objectives of Project SHIFT. Additionally, Public deliverables will be **available on the project website**.

### 3.2.2. MAKING SHIFT DATA OPENLY ACCESSIBLE

Article 17 of the Grant Agreement regulates the question of Open Access in SHIFT. In particular, it indicates:

#### **Open science: open access to scientific publications**

The beneficiaries must ensure open access to peer-reviewed scientific publications relating to their results. In particular, they must ensure that:

- At the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights; for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND) and - information is given via the repository about any research output or any other tools and instruments needed to validate the conclusions of the scientific publication.
- Beneficiaries (or authors) must retain sufficient intellectual property rights to comply with the open access requirements.
- Metadata of deposited publications must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent, in line with the FAIR principles (in particular machine- actionable) and provide information at least about the following: publication (author(s), title, date of publication, publication venue); Horizon Europe or Euratom funding; grant project name, acronym and number; licensing terms; persistent identifiers for the publication, the authors involved in the action and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for any research output or any other tools and instruments needed to validate the conclusions of the publication.
  - Only publication fees in full open access venues for peer-reviewed scientific publications are eligible for reimbursement.

The SHIFT consortium will fulfil the above obligation stated in the Grant Agreement by publishing relevant project results **in peer-reviewed scientific journals in open access**. To this end, the project’s dissemination budget includes funding to



pay for Open Access publication fees and article processing charges (APC) journals. Furthermore, pre-published versions will be available on different online repositories for journals that do not offer open access. In addition to that, the project's results will be made publicly accessible through the partners' publication network and via EU-supported public repositories for datasets and publications such as ZENODO and OpenAIRE. Regarding software and any other requirements that will be needed to access the openly accessible data from SHIT, access to a computer and the internet should suffice.

Moreover the SHIFT GA points out regarding the project Open Science strategy:

SHIFT consortium is committed to contributing to open science. The project outcomes generated in collaboration with partners will rely on the knowledge reuse and transparency for promoting the outcomes to EU, CH communities, and citizens based on the following Open Science practices:

- **Open Access Publications:** Open access to all peer-reviewed scientific publications of the project will be provided. Selected publications will be made available with the highest standard (Gold Open Access). The rest of the publications will be made open in the project's website and also in OpenAIRE's Zenodo.org.
- **Early Access to SHIFT results:** SHIFT will provide early access to its results, through informal publications to reputable repositories, including the Computing Research Repository (CoRR) (a partnership of ACM, arXiv.org and other), and the Electronic Colloquium on Computational Complexity (ECCC). Many repositories (e.g., IEEE, MDPI, ACM, DBLP, Google Scholar) index publications of these repositories, increasing their outreach.
- **Open Peer Review:** SHIFT will allow self-selected reviewers to provide comments on the project's scientific outputs (i.e., publications, blueprints), beyond reviewers selected by the Open Access journals (or other forums), where the results will be made available. Likewise, SHIFT partners will participate as open peer reviewers to open peer reviews of results from related projects such as projects funded under the same call.
- **Open Research Europe Publishing Platform (OREPP):** SHIFT will publish a minimum of three ( $\geq 3$ ) articles in the OREPP, including one project overview article at the beginning of the project and a concluding article providing a summary of the project's main research offerings and achievements at the end of the project.
- **Open-Source Software (OSS):** Most of the developments of the academic partners will be made available at open-source software, published in Github and OFair Data Marketplace. The open-source strategy foresees offering OSS results in a business-friendly way, thus SHIFT commits to selecting a business-friendly license (MPL/LGPL), whereas consortium partners already have a track record of OSS contributions and experience.



- **Open Data and FAIR Data:** The project's datasets will be anonymized and made available as open data in various FAIR repositories (e.g., EOSC, re3data.org, DataHub) and OFair Data Marketplace. The project will also share the constructed AI models and data analysis flows in open repositories (e.g., OpenML).
- **Open Innovation:** SHIFT will promote open innovation in national/international networks. It will utilize collaboration with partners' academic and business networks, as well as with projects from other Horizon EU clusters, and collaborate with stakeholders across diverse domains (e.g., health, environment, ICT), aiming to adapt and/or extend the developed systems and techniques, whilst sharing ideas, knowledge, and best practices for their adoption.
- **Open Citizen Science:** SHIFT will reinforce citizens' knowledge of research upon climate change and its human health impact by exposing incentive programs and material, ensuring citizens' involvement, whereas via the trinity visualization citizens will adjust their prior awareness and strengthen their research knowledge. Research data management SHIFT will capitalize on sharing knowledge created during the project, as is feasible, without jeopardizing project exploitation and impact. Thus, SHIFT will participate in the Open Research Data Pilot.

### 3.2.3. MAKING SHIFT DATA INTEROPERABLE

The openly accessible materials will be in **commonly used formats**, enhancing interoperability. Furthermore, the SHIFT standardisation policy will include formal normalisation to make documents findable. The consortium will also consider compliance with existing standards for data presentation corresponding to specific heritage or cultural fields (metadata schema, etc.).

### 3.2.4. INCREASE SHIFT DATA RE-USE (THROUGH CLARIFYING LICENCES)

The consortium's arrangements concerning intellectual property can be found in Article 16 of the Consortium Agreement as follows:

#### **Background and access rights to background**

The beneficiaries must give each other and the other participants access to the background identified as needed for implementing the action, subject to any specific rules in Annex 5.

'Background' means any data, know-how or information — whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that is:

- (a) held by the beneficiaries before they acceded to the Agreement and
- (b) needed to implement the action or exploit the results.



If background is subject to rights of a third party, the beneficiary concerned must ensure that it is able to comply with its obligations under the Agreement.

**Ownership of results**

The granting authority does not obtain ownership of the results produced under the action.

'Results' means any tangible or intangible effect of the action, such as data, know-how or information, whatever its form or nature, whether or not it can be protected, as well as any rights attached to it, including intellectual property rights.

As a general rule, results are owned by the party that generates them, although there is the possibility for joint ownership to be established through an agreement. In the absence of an agreement reached by the parties concerned, the **Consortium Agreement establishes a set of rules to be followed** (Article 8.2 of the Consortium Agreement). At this point, the SHIFT consortium has not decided on its license and intellectual property policy. **By default**, ownership will correspond to each partner generating a property right-protected outcome. All parties have yet to express their interest in seeking arrangements different from those established in the Consortium Agreement and the Grant Agreement. Further details will be provided in the following version of this DMP.

**3.3. RESOURCES DEDICATED TO DATA MANAGEMENT**

Following the applicable guidelines (European Commission, 2016), SHIFT DMP needs to include information regarding the funds allocated to making data FAIR. The following information on SHIFT budget with Workshops/events / dissemination, including Open Access publications, is relevant in that respect:

*Table 3. Open access publications budget summary*

	QMUL	SOMKL	ANBPR	SMB-PK	BMN	HERITAGE
Number of Person*months	40.5	59.0	64.0	28.0	50.0	38.0
Workshops/ events / dissemination (Open Access publications)	14,000.0	5,000.0	5,000.0	5,000.0	5,000.0	9,000.0

As we can see, a total of 6 project partners have specific budget dedication to different forms of dissemination, which include Open Access publications.



### 3.4 DATA GOVERNANCE

Following the data governance requirements defined in Section 2, roles and responsibilities concerning data management have to be assigned. According to the Grant Agreement, all **partners are responsible for data management in SHIFT**, although the data governance approach defined in WP7 has SIMAVI and ERC as leading actors in this field.

Still, it should be noted that the consortium has decided to sign a **joint controller agreement**. All issues involving personal data will be approached from this perspective, which simplifies matters and better protects the privacy and data protection rights of research participants and all concerned individuals.

In addition, each partner has been asked to appoint a **Data Protection Officer (DPO)** to enhance how data protection rights are guaranteed in this project. Information on each partner's data governance arrangements is also relevant since specific data collection processes will be subjected to particular end users' activities. Based on the project survey conducted for this Deliverable, each partner DPO has been identified as follows:

*Table 4. Identified DPOs and contact data*

Project Partner	DPO name	DPO contact
1.SOFTWARE IMAGINATION & VISION SRL (SIMAVI)	Radu Soare	radu.soare@siveco.ro
2.MAGYAR NEMZETI MUZEUM (SOMKL)	Enikő Kissné Berger	kissneberger.eniko@hnm.hu
3.ASOCIATIA NATIONALA A BIBLIOTECARILOR SI BIBLIOTECILOR PUBLICE DIN ROMANIA (ANBPR)	Ioana Cornelia Cristina Crihană	ioanacrihana@yahoo.com
4.IDRYMA TECHNOLOGIAS KAI EREVNAS (FORTH)	George Margetis	gmarget@ics.forth.gr
5.MASSIVE DYNAMIC SWEDEN AB (MDS)	Sokratis Nifakos	sokratis@massivedynamic.se
6.AUDEERING GMBH (audEERING)	Stefan Rottmann	s.rottmann@rottmannsit.com
7.UNIVERSITAET AUGSBURG (UAU)	Ulrich M. Gassner	<a href="https://www.uni-augsburg.de/de/organisation/einrichtungen/datenschutz">https://www.uni-augsburg.de/de/organisation/einrichtungen/datenschutz</a>
8.STIFTUNG PREUSSISCHER KULTURBESITZ (SMB)	Barbara Kaspari	B.Kaspari@hv.spk-berlin.de
9.UDRUZENJA BALKANSKA MREZA MUZEJA (BMN)	Jove Pargovski	jovep305@gmail.com



10.INITIATIVE FOR HERITAGE CONSERVATION (HERITAGE)	Nikos Mandrekas	mandrekas@bee.gr
11.ETICAS RESEARCH AND CONSULTING SL (ERC)	Mariano Zamorano	martin@eticas.tech
12.DEUTSCHER BLINDEN- UND SEHBEHINDERTENVERBAND (DBSV)	Christiane Möller	c.moeller@dbsv.org,
13.QUEEN MARY UNIVERSITY OF LONDON (QMUL)	Krishna Chandramouli	k.chandramouli@qmul.ac.uk

Finally, the long-term preservation of the project is ensured by the fact that the project website set by SOMKL, as part of T6.1, will remain online once the project is finished.

### 3.5 CONFIDENTIALITY LEVELS AND DATA SECURITY IN SHIFT

Article 13 of the Grant Agreement provides relevant requirements as far as security goes. Following this approach, the GA has established a list of the deliverables that are labelled as **Sensitive**, which means that they are limited under the conditions of the Grant Agreement. Along these lines and as stated in the EC guidelines for the classification of EU project information<sup>5</sup>, this type of data must be managed according to handling rules defined by the consortium. The following table includes all the SENSITIVE deliverables in SHIFT:

**Table 5. List of SENSITIVE (SEN) deliverables**

Number	Title	Lead beneficiary
D2.1	Automatic generation of motion sequences from pictorial repositories	QMUL
D2.2	Automatic generation of motion sequences from pictorial repositories - final version	QMUL
D3.1	Tool for the textual representation of CH assets	UAU
D3.2	Text and video to affective speech synthesis	audEERING
D3.3	Haptic based interaction with CH assets' digital twins	FORTH
D3.4	Accessible framework of inclusive museum exhibits for 3D digital asset perception	FORTH
D3.5	Tool for the textual representation of CH assets - final version	UAU
D3.6	Text and video to affective speech synthesis- final version	audEERING

<sup>5</sup> See: [https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/classification-of-information-in-he-projects\\_he\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/classification-of-information-in-he-projects_he_en.pdf)



D3.7	Haptic based interaction with CH assets' digital twins - final version	FORTH
D4.1	Tools for Cultural Asset Curation and features extraction	UAU
D4.3	Tools for Cultural Asset Curation and features extraction - final version	UAU
D5.2	Integration and functional testing	SIMAVI
D5.5	Integration and functional testing - final version	SIMAVI

The above SEN deliverables circulation will be **limited to the consortium organisations** and the EC due to the inclusion of property-protected data and the presentation of potentially sensitive information about human participants taking part in the validation process.

### 3.5.1 SECURING DATA STORAGE

Regarding how data will be stored, two different approaches will be taken:

- **one concerning the general management of public research results**, and
- another about research outcomes included in the **knowledge-based repository**.

As for the knowledge-based repository policy, as stated in the GA (P.24): SHIFT will store its research results in an open scientific repository to be accessible to a wider community. General awareness and wider access to the SHIFT research data will be ensured by including the repository in registries of scientific repositories. The description of T4.2 in the Grant Agreement describes the repository in which the various deliverables will be stored in the following manner:

*It constitutes the knowledge base repository of the project, interoperating with the rest components for the necessary information provision to appropriate formats. Also, it will provide User Interfaces through which the Museum staff will be able to further curate the existing content. Finally, the repository employs the necessary mechanisms for digital right management of the content providing authentication of accessibility to content processed by SHIFT platform.*

Therefore, the main outcomes of the project (deliverables and other consortium documents) will be stored in a safe server that has appropriate security measures. In addition to that, the members of the partner teams dealing with this data



(SIMAVI, QMUL) are sufficiently qualified and familiarised with what dealing with classified information implies.

Regarding the data that will be collected **directly from human participants** taking part in the demonstrations by partner organisations (among them SIMAVI, FORTH, UAU, SMB, ERC MDS, BMN, SPK, DBSV, AUDEERING, HERITAGE), they will be collected, stored and shared in accordance with the requirements established in the GDPR detailed above and the recommendations and guidelines laid down in this Deliverable.

All the partners concerned have provided evidence that they will **keep the data safe** and will share it following secure protocols, especially when special categories of data (personal information, details on persons with disabilities, etc.) are concerned. All partners have been asked to give information regarding the security measures they have established for keeping personal data safely stored, especially if data is sensitive (Table 2). Such security measures have been considered appropriate and proportional to the risks involved in their processing.

Personal data will be gathered by means of **information sheets and consent forms** that are fully compliant with the GDPR's requirements and will be pseudonymised as soon as possible if that does not come at the detriment of the research. Once the project has ended and data are no longer useful for research purposes, they will be deleted after 5 years at most.

Regarding the issue of data transfer with partners coming from outside of the EU, it must be noted that SHIFT involves collaboration with partners located in **Bosnia and Herzegovina and Serbia**. Neither of these countries has obtained an adequacy decision issued by the European Commission. Therefore, further preventative measures will need to be taken in order to comply with the GDPR when sharing personal data with BMN. This includes the proper anonymization of documents containing personal data before sharing them with these partner organizations and the review of data exchanges raised during the project between partners located in the EEA and these partners by the IEAB (see below).

### 3.5.2 SPECIFIC SECURITY MEASURES

This subsection is aimed at compiling the various security measures that have been implemented in relation to the data and documents handled by the consortium that are more relevant from a data protection standpoint, especially those including sensitive personal information:



**Table 6. Type of materials including personal data a and standard security measures**

<b>Material</b>	<b>Security measures</b>
Non-disclosure Agreements	Stored in a personal computer owned by SIMAVI, which is secured by a password.
Consent forms	Stored both on a computer owned by SIMAVI, which is secured by a password and on SIMAVI’s Extranet, which is also secured by passwords. MDS, BMN, UAU, ETICAS, ANBPR, QMUL will store theirs in a locked cabinet. All partners will keep them in a locker when they are in paper and on a protected file if they are in digital format.
Questionnaires	MDS, BMN, UAU, SPK, DBSV, AUDEERING, HERITAGE, ETICAS, ANBPR, QMUL will store theirs in a locked cabinet and/or a password-protected computer. These partners will store files containing personal information on a dedicated secure server for PII, paper questionnaires will be stored in a secure cabinet.
Contact details	Stored on SIMAVI computers and the Extranet. Both are secured by passwords. SOMKL, BMN, FORTH, UAU, DBSV, HERITAGE, ETICAS, ANBPR will keep them in a locker when they are in paper and on a protected file if they are in digital format.
Photos, videos and audio files	SOMKL, BMN, UAU, SPK, AUDEERING, HERITAGE. ANBPR, QMUL, UAU, SPK, HERITAGE, QMUL will store files containing personal information on a dedicated secure server for PII. All audio files will be deleted as soon as they are no longer required, although transcripts will be kept on a secure server.

## 4. GUIDELINES FOR ETHICAL AND RESPONSIBLE RESEARCH IN SHIFT

### 4.1 ETHICAL AND RESEARCH INTEGRITY PRINCIPLES

This section describes the ethical and research integrity principles that should guide SHIFT research activities. The project's partners must carry out the research actions in compliance with Ethical principles (including the highest standards of research integrity) and EU national law and conform to the ethical standards and guidelines of Horizon Europe. This is particularly important regarding activities involving human participants, such as SHIFT pilots in WP5.



Among the different ethical frameworks to be considered in this context, the project's ethical principles must align with those embedded in the Declaration of Helsinki (1964) and The Belmont Report (1979). These documents sought to ensure the voluntary nature of human participation in research and pointed out the requirement of establishing mechanisms for informed consent, also providing that people involved in research can withdraw from it at any time. In addition, researchers must ensure the welfare and protect the interests of participants and establish in advance mitigation measures for addressing any risk of harm to them. The Declaration of Helsinki followed the same approach. Conversely, the Belmont Report developed four fundamental ethical principles to be considered when carrying out research activities:

- respect for people: research subjects must be treated protecting their safety, respecting their autonomy and ensuring their consent on an informed basis,
- beneficence: possible benefits for the participants will be maximized while possible harm or risk will be minimized,
- justice: any benefits and burdens derived from research must be weighted,
- competence: the limitations and boundaries of the researcher competence must be recognized and made explicit.

Concerning rewards and possible incentives for participation, the principle of proportionality must be observed. This principle is oriented towards avoiding any risk of coercion derived from economic, reputational or other kinds of compensation.

Furthermore, the SHIFT project's partners must align with the standards of research integrity set out in the European Code of Conduct for Research Integrity (All European Academies, 2017). Notably, this implies compliance with the following essential principles:

- Honesty;
- Reliability;
- Objectivity;
- Impartiality;
- Open communication;
- Duty of care;
- Fairness; and



- Responsibility for future science generations.

The above principles imply that **researchers conducting SHIFT tasks should:**

- Present their investigation goals and preferences honestly and transparently
- Design their research carefully and conduct it in a reliable fashion, taking its impact on society into account;
- Use techniques and methodologies (including for data collection and management) that are appropriate for the field(s) concerned;
- Exercise due care for the subjects of research — be they human beings, animals, the environment or cultural objects;
- Ensure objectivity, accuracy, and impartiality when disseminating the results;
- Following the open research data approach, allow as much as possible and taking into account the legitimate interest of the beneficiaries, access to research data;
- Make the necessary references to their work and that of other researchers and refrain from practising any form of plagiarism;
- Make the necessary references to their work and that of other researchers;
- Refrain from practising any form of plagiarism, data falsification or fabrication; and
- Avoid double funding, conflicts of interest and misrepresentation of credentials or other research misconduct.

## 4.2 ETHICAL AND LEGAL GOVERNANCE STRUCTURE:

### 4.2.1 PROJECT ETHICS OFFICER'S TERMS OF REFERENCE

Dr Mariano Zamorano, a project partner from ERC, was appointed to act as **Project Ethics Officer (PEO)**. The PEO will ensure a good ethics governance of the project. The PEO is responsible for presenting all relevant documents to the **Internal Ethical Advisory Board (IEAB)** for them to review and approve. Furthermore, the PEO will work closely with the IEAB and will be the contact person for both members of the project and members of IEAB on everything that regards research ethics (ethics protocols, information sheets, consent forms, reporting, supervising pilots, etc.).



#### 4.2.2 INTERNAL ETHICS ADVISORY BOARD TERMS OF REFERENCE

The SHIFT project has established an Internal Ethics Advisory Board (IEAB). The IEAB includes ethics and technology experts with solid knowledge of the EU directives in the sensitive and evolving area of the Ethical Legal and Social Implication. Given the importance of (vulnerable) citizens for this project, the IEAB is a vital part to the project's success. The members of the IEAB are three experts to the project:

- Dr. Mariano Martín Zamorano (ERC)
- Dr. Krishna Chandramouli (QMUL)
- Klaudia Klára Tvergyák (SOMKL)

The IEAB members will have to **provide advice and suggestions on the solutions and results of the project to the SHIFT consortium**. Further, IEAB members will provide feedback and advice on the data protection and ethical issues of project research development. Lastly, IEAB members will also provide open consultation on specific ethical questions if needed and upon request.

It is not expected that each IEAB member will contribute to every activity. This is to be decided between the Project Ethics Officer (Mariano Martín Zamorano) and the Project Management Board. More concretely, IEAB members will review the Data Management Plan and Research Ethics deliverables (D7.3 and D7.4). The Board will also review other deliverables that may raise the project's ethics-related aspects as deemed appropriate by the PEO, particularly **D5.3 and D5.4**. The process of reviewing outputs is laid out in Section 5.5.

#### 4.3. ETHICAL AND LEGAL GOVERNANCE FRAMEWORK FOR SHIFT RESEARCH ACTIVITIES

An important goal of the SHIFT project is to evaluate and validate current accessibility policies in the cultural domain against the needs and requirements of the civil society, especially considering vulnerable groups of citizens. These groups reflect the most important societal aspects, in line with the European Security Model (e.g. possible side effects of technological solutions, cross cutting issues involving Social Sciences and Humanities (SSH) and gender- and age-related behaviour, and disabilities).

In that respect, the methodology of project **SHIFT involves consultation** (through interviews, focus-groups, questionnaires and workshops) with users and citizens (including members of vulnerable groups) (WP5, SHIFT architecture



design, integration, validation, and demonstration), followed by detailed examination of selected tools and procedures and the subsequent provision of four field demonstrations to evaluate their effectiveness via an effective, legal and ethical research. The **SHIFT case studies** (WP5, SHIFT architecture design, integration, validation, and demonstration) will demonstrate SHIFT project outcomes with end-users in four different environments:

- **T5.5.1: 19th to modern days Serbian paintings and modern art** (Leader: BMN): The objective of this task is to realize an iterative evaluation of the selected tools, as described in 1.2.3 SHIFT use-cases and demonstrations, with the aim to augment the experience of visitors for an exhibition focused on the most significant 19th century and contemporary Serbian paintings using innovative tools.
- **T5.5.2: Experimenting the transformation of medicine and pharmacy** (Leader: SOMKL): The objective of this task is to aims to emerge the visitors into the history of medicine and let them “feel” how different illnesses have been treated before modern times.
- **T5.5.3: Romanian history and customs explained to digital natives** (Leader: ANBPR): The objective of this task is to test the innovative SHIFT tools and to support and engage at least 10 member libraries, to revitalize their book collections presentations and descriptions, to boost the interest also for the digital native generation of European citizens.
- **T5.5.4: CH exhibition as a visitor's journey with no sensing boundaries** (Leader: SMB): The objective of this task is to realize an iterative evaluation of the provided tools by individuals with disabilities. In more detail, several runs of end-user evaluation are foreseen in the pilot sites, which will be aligned with the implementation phases of the system. To this end, it will be possible to early identify caveats and barriers regarding the system’s accessibility and inclusiveness, and thus timely proceed to corrective actions that will improve the effectiveness of the system during the later implementation stages.

In these trials, a wide variety of citizens will be represented, including vulnerable groups (e.g. different ages, genders, chronic health conditions, impairments, etc.). Integral to the question of capturing and analysing individuals' and groups' feedback concerning digital technologies used in CH environments is the achievement of a balance between a citizen's right to privacy and their right to be safe and secure. These issues need to be addressed by ensuring monitoring is regulated and commensurate with the purpose and that acquired data must be protected in compliance with national regulations.



SHIFT will use data that the citizens themselves will mainly provide, whether through primary data collection or through their participation online. While using **volunteers for trials in WP5** is possible for components of this dataset, the nature of the research dictates that an acceptable policy is agreed upon for the use of data that includes members of the public. Aware of the potential ethical issues mentioned above, SHIFT has embedded ethical, legal and social safeguards for the proposed technical solutions and methodologies into the DoA. More specifically:

- **Legal and ethical state of the art**

**T1.5** Ethics and legal aspects regarding SHIFT end-user evaluation (Leader: ERC, Contributors: SOMKL, ANBPR, SMB, BMN, HERITAGE, DBSV; M1-M12) will address cultural and historical heritage data entailing many ethical and legal challenges. Besides providing by-design requirements on data protection regulation, so new technological systems developed by SHIFT protect privacy rights, this Task will problematize legal aspects (data protection, AI, etc.) to be considered when managing SHIFT data during the research process. Therefore, D1.5 will provide relevant guidelines for implementing ethical protocols in research development concerning informed consent, equal treatment, and privacy. This will ensure that the final results meet the highest standards and are desirable and acceptable to the key users of the project.

- **Ethical and societal Impact assessment for project outputs**

**T1.3** assess the ethical risks associated with SHIFT technical solutions and methodologies, including all its resulting guidelines. The ethical and societal risk assessment methodology, conceived as a practical risk management tool, will be applied to both the results of WP3, WP4, WP5, and also to the outputs of the exercises in WP5. It will also contain forms for recording ethical risk assessment.

#### 4.4. ETHICAL SCREENING OF SHIFT RESEARCH AND DELIVERABLES

Ethical, privacy and data protection issues relevant to research and development activities must be accurately identified and addressed throughout the project. Project SHIFT attributes equal importance to the research process's ethical, legal and scientific aspects. The PEO aims to inform and advise project participants of the ethics issues which might impact the research process and to provide guidance concerning appropriate ethical approaches. If any uncertainties arise during the project, the PEO will arrange a teleconference with the project participants at



request. In addition, PEO reviews the selected final deliverables to ensure proper handling of ethical issues.

SHIFT project partners are related to the following ethics screening tasks:

- The task leader should make a preliminary assessment of the task work from an ethics point of view, based on D1.3 and D.73, to decide if there are ethical issues that have to be discussed with PEO and the WP1 coordinator during project meetings.
- When addressing the PEO during the time in-between consortium meetings the correspondence should be copied to the project coordinator, Razvan Purcarea, (SIMAVI) and to the PEO, Mariano Martin Zamorano (ETICAS);
- All deliverables of SHIFT should be developed under the ethical guidance of the PEO and the project coordinator. When uncertain if there are ethical issues, check with the PEO (Dr Mariano Zamorano).

SHIFT PEO is related to following points:

- The PEO should confer in conjunction with SHIFT consortium meetings to be efficient in carrying out the ethics screening for the upcoming deliverables;
- The PEO can organise teleconferences with the WP leaders at their request;
- The PEO should reply to ethics related questions as they arise in-between meetings.

The procedure for contacting the PEO in case of matters arising in-between consortium meetings is by email (*martin@eticas.tech*). If the nature of the question presented to the PEO cannot easily be answered, the question will be referred to the IEAB.

Lastly, SHIFT IEAB members will be associated with the following points screening actions:

- The PEO would confer in conjunction with SHIFT IEAB to decide which IEAB member(s) would review a particular deliverable;
- The PEO will send the deliverable to the IEAB member(s) nominated for review (EC deadline –3 weeks);



- The IEAB member(s) will review the deliverable and send the comments and suggestions to the PEO within one week (EC deadline –2 weeks);
- The PEO will discuss the suggestions with the deliverable leader and where needed with the project SHIFT team, will implement the suggestions made by IEAB (in close cooperation with the deliverable leader), and will send the revised version back to the IEAB for approval (EC deadline –1 week).

## 4.5 RESPONSIBLE RESEARCH PROTOCOL

### 4.5.1. RESEARCH ETHICS REQUIREMENTS: INFORMED CONSENT, PRIVACY AND DATA PROTECTION

SHIFT research activities may involve the processing of **special categories of personal data** (data concerning the health of vulnerable people), hence, following the EU commission requirements, special attention must be paid to procedures and criteria that will be used to identify/recruit research participants, and informed consent procedures that will be implemented for the participation of humans. Ethical ground rules for research involving volunteers will include the following:

- All exercises and assessment sections involving SHIFT stakeholders and all exercises will be **designed and deployed according to the legal and ethical guidelines** provided by Tasks 1.3 and 7.5.
- In the exercises and assessment sections all involved participants will be included based **on direct negotiation and informed** in detail about the set-up of the research, about privacy and data management issues, as well as any potential risk of being harmed in any way. Moreover, they will consent to participate in the research and will be free to cease their participation at any time if they so wish.
- Only individuals having legal decision capacity and autonomy will be allowed to participate in the exercises.
  - For adults voluntarily engaged: a detailed consent form will be signed.
  - For minors voluntarily engaged: in case their participation is required, the recruitment process will be thoroughly reviewed, adapted and monitored, a detailed and informed consent form by the guardians/parents will be signed, a detailed and assent form for the minors will be requested.



SHIFT is committed to respecting and protecting individuals' personal identifiable data. Any associated report produced by the consortium will respect the privacy of the participants, and therefore only anonymized/pseudonymized names and institutions will be used. Any personal data collected and handled during the validation of the exercises will be destroyed after 5 years at most.

Ethical rules for research involving members of vulnerable groups will follow GDPR. Under this Regulation, a person's disability status is regarded as sensitive personal information which should enjoy higher standards of protection. The ethics risks related to the data processing activities of the Project, including an opinion if a data protection impact assessment should be conducted under Article 35 GDPR. Data collection and storage practices, whether paper, recordings or electronic records, must be secured to safeguard confidentiality. Researchers have ensured that any electronic storage of material is password-protected. The Project will retain only records or data that have been made anonymous/pseudonymized.

In all cases defined by law, copies of approvals or notifications by the National Data Protection Authorities will be gathered before processing any personal data. Furthermore, when applying for approval or notification from the competent local/national Data Protection Authorities and Ethics Committees, clear and detailed information will be provided on the source of the personal data to be used, detailed information will be provided on the procedures that will be used for the recruitment of participants (e.g. the number of participants, inclusion/exclusion criteria, direct/indirect incentives for participation, the risks and benefits for the participants, etc.) and the nature of the material that will be collected.

#### 4.5.3 UPDATING THE SHIFT DMP

As it has been said in the introduction, the **DMP will be reviewed in M36**, in time for the final review. However, the consortium remains committed to updating it whenever it is appropriate. As indicated in the guidelines (European Commission, 2016), this DMP has to be updated at least before the final review is carried out. As is established in the Commission's guidelines (European Commission, 2016), it is not required to provide detailed answers to all the questions in the first version of the DMP that needs to be submitted by month 6 of the project (the current one). Instead, the document is meant to be updated as significant changes occur.

The following templates are attached to this deliverable:

- A1: SHIFT Data questionnaire template



- A2: SHIFT Information sheet and consent form

## 5. CONCLUSIONS

This first version of D7.4 has successfully achieved its objectives regarding data management's descriptive and risk assessment levels. The ongoing communication necessary between Task leaders and the rest of the consortium members to find out about the relevant information concerning the different partners has been smooth and ongoing. In addition, the information collected about the types of data to be used in the research and its methods and forms of treatment will be of great use going forward. The Research ethics section provides the project with a substantial foundation for framing all ethical issues concerning SHIFT. Given the DMP is delivered in M6 allows the project to account for questions regarding data protection, security and research ethics from the beginning. This document will be updated in M36 to reflect the necessary changes before the final review.

## 6. REFERENCES

- European Commission. (2016, October 13). Template Horizon 2020 Data Management Plan (DMP).
- All European Academies . (2017). The European Code of Conduct for Research Integrity. Berlin.
- Article 29 Working Party. (2014, April 10). Opinion 05/2014 on Anonymisation Techniques.
- Council of Europe, Committee of experts on internet intermediaries. (2017). Study on the human rights dimensions of automated data processing techniques (in particular algorithms) and possible regulatory implications.
- European Commission. (2016). Guidelines for the classification of information in research projects.
- European Commission. (2016). Guidelines on FAIR Data Management in Horizon 2020.
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European Parliament (Committee on Civil Liberties). (2016). Report on fundamental rights implication of big data: privacy, data protection, non-discrimination, security and law enforcement.

Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020. (2013).

Lubarsky, B. (2017). Re-identification of "Anonymized Data". *Georgetown Law Technology Review*, 202(1), 202-212. <https://perma.cc/86RR-JUFT>

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## ANNEX



## ANNEX 1. QUESTIONNAIRE TEMPLATE

Type of data	Processed or produced?	Personal data?	Sensitive data?*	WP/Task concerned	Where will it be stored? Security measures	Is it being shared? With whom?
Non-disclosure agreements	Yes/No	Yes/No	Yes(What type?)/No			
Consent forms	Yes/No	Yes/No	Yes(What type?)/No			
Questionnaires	Yes/No	Yes/No	Yes(What type?)/No			
Images	Yes/No	Yes/No	Yes(What type?)/No			
Audio files	Yes/No	Yes/No	Yes(What type?)/No			
Video files	Yes/No	Yes/No	Yes(What type?)/No			
Documents (Deliverables, reports)	Yes/No	Yes/No	Yes(What type?)/No			
Software	Yes/No	Yes/No	Yes(What type?)/No			
Contact details	Yes/No	Yes/No	Yes(What type?)/No			



Others	Yes/No	Yes/No	Yes(What type?)/No			
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Annex 2. Information sheet and consent form

**Information sheet- SHIFT (focus group model)**

As part of a European Commission funded project we are developing public information about how to improve and secure accessibility of users and end users to CH resources and facilities.

We are now seeking an individual / group of people to (detailed explanation of the activity xxxxxxxx)

**What is the purpose of the current activity?**

Focus groups/interviews (etc) are being carried out as part of the SHIFT project,

**Why have I been invited to take part?**

You have been invited to take part as you reside in the EU and are over 18 years old.

**Do I have to take part?**

No. You will have the opportunity to ask questions of the (researcher) before deciding whether or not to take part. If you do decide to take part, you may withdraw yourself at any time either prior to or during the focus group, without giving a reason. Although you may withdraw from the study at any point, as the study is anonymous, if you withdraw after the start of the focus group any contributions you have provided up to that point will not be able to be withdrawn. The focus groups will be recorded so to keep it anonymous please don't say anything that would identify you.

**What will happen during the (fieldwork activity)?**

If you are happy to take part, you will be contacted by one of the researchers to arrange a convenient time for the (focus groups/interview, etc.). Before the focus group you will be sent a consent form to sign.



The activity will be conducted [online / face to face]. [if online] Activity will be conducted on [Teams, Zoom, Google Meet] at a time that is convenient for you. You will be emailed a link to the session before. [if in person] Activities will be held at [address] at a convenient time for you. You will be emailed with information on the location, date and time of the focus group before.

The activity will involve discussing (xxxxx)

### **Are there any potential risks in taking part?**

**NO**

If you feel distressed after taking part in this activity, further support can be obtained by contacting [add country specific helpline].

### **Are there any benefits in taking part?**

There will be no direct or personal benefit to you from taking part. However, the information that you provide will facilitate: a) the optimisation of recommendations to improve the management of accessibility in CH technologies; b) ongoing work within the SHIFT project and its technological outcomes, c).....

### **What happens to the information provided?**

The information you provide during the activities will be anonymous and will be stored securely by the xxxxxxxx. Any identifiable information will be removed from the transcribed notes and the recording will be deleted when focus groups/interviews have been transcribed.

Information provided (including consent forms) will be processed lawfully in compliance with GDPR and the Data Protection Act 2018. xxxxxxxx

### **For how long will we store your data?**

The SHIFT project retains your personal data for XXXXX

### **What are your rights and how can you exercise them?**

In accordance with the applicable legislation and within its limits, you may request:

- access to your personal data, and a copy;
- rectification of your data if they are not correct or incomplete;



- erasure of your data;
- restriction of the data processed to the extent this request is compatible with the purposes of processing.

Furthermore, you can withdraw your given consent (without this having an effect on the lawfulness of the prior processing).

You can exercise your right by sending an e-mail to the below mentioned address, accompanied by proof of your identity.

If you do not agree with the way we handle your personal data, you may lodge a complaint with the data protection authority.

### **Will findings from the survey be published?**

Findings may be published in academic publications and SHIFT Deliverables. Any quotes used will be completely anonymous and no identifiable information will be published.

### **Who has reviewed this work?**

This work has been approved by the SHIFT Internal Ethics Advisory Board.

### **Who do I contact if I have a concern about the study or I wish to complain?**

If you have a question or concern about any aspect of this focus group, please contact [**insert SHIFT project partner name and email**] or ...



**Consent form**

**Please  
initial each  
box**

1	I confirm that I have read and understand the information sheet for the above activity. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without any adverse consequences or penalty.	
3	I understand that this project has been reviewed by, and received ethics clearance through the SHIFT Internal Ethics Advisory Board.	
4	I understand who will have access to data provided, how the data will be stored and what will happen to the data at the end of the project.	
5	I understand how this research will be written up and published (i.e., including only anonymized data).	
6	I understand how to raise a concern or make a complaint.	
7	I agree to take part in the research activity.	
8	I understand that during focus groups/interviews, audio recording will take place. I give my permission for audio recordings to be taken of me during the interview. I understand that the audio recordings will be used for this study alone and will be deleted once they have been transcribed.	

Name of Participant

Date

Signature

(dd/mm/yy)

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Name of person taking consent



