



UK Longitudinal Linkage Collaboration (UK LLC) Information Security Policy

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1.1	30/05/2022	Katharine Evans, Governance & Policy Manager	Section 1 – minor updates to text & added new principle re risk	Andy Boyd, Director (31/05/2022)
1.2	12/09/2022	Katharine Evans, Governance & Policy Manager	Section 1 – added information to give broader context for a public facing policy	Andy Boyd, Director (12/09/2022)

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POL-ISM-001

1 Introduction

The UK Longitudinal Linkage Collaboration (UK LLC) organisation is owned by the University of Bristol (UoB) and operated in collaboration with the University of Edinburgh (UoE).

ALL data held about longitudinal population study (LPS) participants in the UK LLC Trusted Research Environment (TRE) are de-personalised, which means that no one at the UK LLC or any of the researchers who access data in the TRE can see participants' personal identifiers, such as name or address.

Identities are protected by a depersonalisation process conducted by an NHS Trusted Third Party (NHS Digital Health and Care Wales) and technical, physical and procedural safeguards at Secure eResearch Platform UK (SeRP UK, Swansea University), the infrastructure that hosts the UK LLC TRE. Furthermore, all analytical outputs from the UK LLC TRE are checked by experts to make sure individuals can not be identified.

Safeguarding the anonymity and security of participants' data stored in the TRE are of paramount importance to the UK LLC.

This policy will be reviewed to respond to any changes in the UK LLC risk assessment or risk treatment plan and at least annually.

1.1 Purpose of this policy

This policy sets out the UK LLC's approach to safeguarding the anonymity of individual participants and ensuring the security (confidentiality, integrity and availability) of the data stored in the UK LLC TRE.

Confidentiality	Access to information shall be restricted to those with appropriate authority and a business need to access the information.
Integrity	Information shall be complete and accurate. All systems, assets and networks shall operate correctly, according to specification.
Availability	Information shall be available and delivered to the right person at the time when it is needed.

This policy should be read in conjunction with the <u>UK LLC's Data Access and Acceptable Use Policy</u>, which explains why the UK LLC was established and details the UK LLC's commitments to LPS participants, data owners and researchers, and the rules, processes and procedures that approved researchers agree to follow when accessing the TRE.

1.2 The UK LLC's Information Security Management System (ISMS)

The UK LLC organisation manages the collation, curation and access to data held in the UK LLC TRE. To provide assurance to the public, LPS participants, the contributing LPS, the NHS and other national data providers, the UK LLC wishes to demonstrate industry best practice information

security through the development, maintenance and continual improvement of an information security management system (ISMS).

An ISMS is a framework of policies and procedures that include all legal, physical and technical controls that an organisation has put in place to safeguard its information assets.

The UK LLC has achieved ISO 27001 certification and NHS Data Security and Protection Toolkit (DSPT) accreditation and is working towards UK Statistics Authority accreditation.

1.2.1 ISO 27001



ISO 27001 is an internationally recognised best practice standard for an ISMS. The UK LLC's ISMS was ISO 27001 certified by independent industry assessors in August 2022 (Certificate Number 21069).

1.2.2 NHS DSPT



The NHS DSPT enables organisations to measure their performance against the National Data Guardian's 10 data security standards. The UK LLC's ISMS is NHS DSPT accredited (Organisation Code EE133799-LLC).

1.2.3 UK Statistics Authority



The UK LLC is seeking accreditation of its ISMS from the National Statistician and the Board of the UK Statistics Authority.

1.3 Scope of this policy

The UK LLC ISMS spans two organisations: the **University of Bristol** (UoB) and the **University of Edinburgh** (UoE). This policy therefore collates and refers to guidance from both parent organisations, and then, where necessary, applies specific UK LLC requirements, to provide a standard approach within the UK LLC.

All UK LLC staff must adhere to this Information Security Policy.

This policy and the associated ISMS apply to all UK LLC information and physical assets, processes, procedures and staff; University of Bristol suppliers of critical functions to the UK LLC; and third party data processors within the scope of the deployed ISMS (UoB and UoE).

This means that all UK LLC staff will be made aware of their responsibilities to preserve information security, to report information security weaknesses, events and incidents, and to act in accordance with the requirements of the ISMS.

All UK LLC staff will receive information security awareness training and more specialised UK LLC staff will receive appropriately specialised information security training.

The consequences of breaching this policy are set out by the respective parent organisations:

- University of Bristol (UoB) Ordinance 28 Conduct Procedure for Members of Staff: <u>Conduct Procedure managers' guidance | Human Resources | University of Bristol</u>
- University of Edinburgh (UoE) Disciplinary policy: Disciplinary Policy.pdf (ed.ac.uk)

1.4 Key principles of this policy

- The UK LLC has adopted the 'Plan, Do, Check, Act' approach to operational management
- Risks are identified and managed in the Risk Register by the UK LLC Operational Management Group (OMG). Data Protection Impact Assessments (DPIAs) are developed and maintained for data flows
- The control and processing of data is restricted to UoB UK LLC staff and their contracted data processors
- The management and implementation of the UK LLC application process, communications and public/participant involvement is conducted by UoE UK LLC staff
- The data UK LLC hold under licence (from LPS and other data owners) shall only be processed and stored within the UK LLC TRE
- The data within the UK LLC TRE shall be 'functionally anonymous'
- The UK LLC is a paper-free organisation
- Removable storage media, e.g. USB flash drives, are not permitted
- Data that flow into the UK LLC TRE are encrypted in transit; physical media transit is not anticipated
- UK LLC management ensure all staff are aware of their responsibilities
- The UK LLC shall be transparent in its operations.

1.5 Objectives of this policy

Detailed below are the objectives of the UK LLC Information Security Policy.

Evidence for each objective is collated and reported to the UK LLC OMG for monitoring. Dates for objectives to be achieved and by which organisation (UoB and UoE) are detailed below each objective in italics.

OBJECTIVES of the UK LLC Information Security Policy:

- 1. To ensure all UK LLC staff are fully aware of information security and their responsibilities towards it in the UK LLC environment:
 - i. >80% of staff will have passed annual information security training
 - ii. 80% performance measures (annual external, internal audits, desk surveys, staff understanding survey and spot-audits of critical business areas) judged to be compliant
 - iii. Rising performance indicators
 - iv. Increasing trend and confidence to report weaknesses, events and incidents.

Evidence collated by Information Security Officer and Governance & Policy Manager.

Targets to be achieved by January 2023. Applies to UoB and UoE.

2. To ensure all UK LLC data are stored and handled appropriately, maintaining their CIA:

- i. 80% of internal audits take place on time measuring authorised users and other agreed controls
- Red and amber information security risks monitored fortnightly by the OMG.

Evidence collated by Information Security Officer and Governance & Policy Manager. Targets to be achieved by January 2023.

Applies to UoB and UoE.

- 3. To enable the UK LLC to meet the general principles of ISO 27001, NHS DSPT and Digital Economy Act (DEA):
 - i. Annual ISMS management review undertaken
 - ii. Successful audit by an ISO 27001 accredited organisation each year
 - iii. Successful audit for NHS DSPT each year
 - iv. Successful audit by a DEA accredited organisation each year
 - v. Improvements monitored monthly at OMG via the Continuous Improvement Log.

Evidence collated by Information Security Officer and Governance & Policy Manager. Targets to be achieved by January 2023.

(ii), (iii) and (iv) apply to UoB only; (i) and (v) apply to both UoB and UoE.

- 4. To ensure all UK LLC staff are aware of relevant legislation and its implications:
 - i. Regular update of information security issues (e.g. legislative change) via UK LLC team meeting and emails from ukllc-isms@bristol.ac.uk
 - ii. Circulating Medical Research Council regulatory support centre guidance within one month of printing.

Evidence collated by Information Security Officer and Governance & Policy Manager. Targets to be achieved by January 2023.

Applies to UoB and UoE.

- 5. To develop and maintain effective relationships with Swansea University, Digital Health and Care Wales, and Office for National Statistics regarding maintaining and evolving policy and practice:
 - To establish and maintain working contact and networking with information security staff in these organisations to share best practice and to maintain awareness of change (subscription to forum or newsletter)
 - ii. To consult and work with funders and coordinating networks (HDR UK and ADR UK) regarding sharing of best practice in research information security and governance.

Evidence collated by Director, Deputy Director and Senior Research Manager.

Taraets to be achieved by January 2023.

Applies to UoB and UoE.

2 Roles & Responsibilities

Information security is embedded throughout the UK LLC and all UK LLC staff have responsibilities towards it. The terms of reference for the Senior Information Risk Owner (SIRO) and Information Asset Owners (IAOs) are available to all staff (see section 4). All staff should know:

- What information they are using and how it should be handled, stored and transferred
- Their responsibility to raise any information security concerns
- How to report a suspected breach of information security within the UK LLC.

Managers should ensure all information security procedures are carried out correctly.

3 Information Security at the UK LLC

UK LLC staff must refer to and abide by their respective parent organisation's guidance (see Tables 1 and 2). Please let the UK LLC Information Security team know if you identify any conflicts between your organisational policy and any UK LLC policy (ukllc-isms@bristol.ac.uk).

3.1 Parent organisation policies

Table 1 Relevant UoB policies that must be read, understood and followed by UoB based UK LLC staff

UoB Policy Name	Summary/Highlights
Information Security Policy: ISP-	This is the UoB's paramount policy on information
01v1.2.pdf (bristol.ac.uk)	access and security: it defines the responsibilities of
	individuals with respect to information use and to the
	provision and use of information processing systems.
Acceptable Use Policy: <u>ISP-09.pdf</u>	'Members must ensure that their computers and
(bristol.ac.uk)	other devices are locked before being left
	unattended'.
Mobile and Remote Working Policy: <u>ISP-</u>	This policy sets out the additional principles,
14.pdf (bristol.ac.uk)	expectations and requirements relating to mobile and
	remote/home working.
Information Handling Policy: <u>ISP-07.pdf</u>	'Computer screens on which information classified as
(bristol.ac.uk)	confidential or above is processed or viewed <u>must be</u>
	sited in such a way that they cannot be viewed by
	<u>unauthorised persons</u> .'
Outsourcing and Third Party Compliance:	This policy outlines the conditions that are required
ISP-04-v1.4.pdf (bristol.ac.uk)	to maintain the security of UoB's data and systems
	when contracting external suppliers.
Compliance Policy: <u>ISP-03 v1.2.pdf</u>	This policy outlines the UoB's requirement to comply
(bristol.ac.uk)	with certain legal and regulatory frameworks – it is to
	be read in conjunction with the guide to legislation
	relevant to Information Security Policy, which
	provides details of the legislation relevant to
	information security e.g. the Data Protection Act:
	guide.pdf (bristol.ac.uk)

Table 2 Relevant UoE policies that must be read, understood and followed by UoE based UK LLC staff

UoE Policy Name	Summary/Highlights
Information Security Policy: Information	This policy details how everyone is responsible for
security policy (ed.ac.uk)	protecting UoE information. It states how the UoE

	ensures that the CIA is maintained. In Appendix 1 are
	listed all the associated standards, e.g. S.1.
	Information Classification Standard and S.6. Asset
	Management Standard.
Mobile Device Standard: Minimum, and	This document specifies the UoE's minimum
required reading The University of	mandatory requirements for the use of UoE issued
Edinburgh (only accessible to UoE staff)	mobile devices and removable media devices, both in
	and out of the office.
Information Security Classification	This standard outlines the classification levels data
Standard: Minimum, and required	may take within the UoE and what controls should be
reading The University of Edinburgh	considered as part of protecting and handling data at
(only accessible to UoE staff)	each level.
University Computing Regulations:	These regulations cover the use of all computing
University Computing Regulations	facilities administered on behalf of the UoE.
(ed.ac.uk)	

3.2 UK LLC specific policies

Table 3 Bespoke UK LLC policies and SOPs that must be read, understood and followed by all UK LLC staff

UK LLC Policy/SOP Name	Brief Summary
UK LLC Information Handling Policy (POL-ISM-	Establishes standards for the naming,
002)	classification, version control, organisation
	and management of electronic files and
	folders across all of the UK LLC's functions
	and operations, to ensure they are created,
	maintained and disposed of appropriately.
UK LLC Internal Roles, Responsibilities & Access	Sets out the roles and responsibilities for the
Policy (POL-ISM-004)	operation of the UK LLC and the access to
	information that is required for each role.
UK LLC ISMS: System Development Principles	Details the secure engineering principles that
Policy (POL-DAT-005)	must be defined and documented in all UK
	LLC projects that develop new systems or
	implement system changes.
UK LLC Data Access & Acceptable Use Policy	Details the terms and conditions under which
(POL-ISM-003)	approved researchers access data held in the
	UK LLC TRE.
Reporting Weaknesses, Events and Incidents SOP	Details the procedure UK LLC staff should
(SOP-ISM-004)	follow to report any weaknesses in the UK LLC
	ISMS, as well as events and incidents.

3.3 Incident reporting responsibilities & procedures

The responsibilities and procedures for reporting weaknesses, events and incidents, are detailed in SOP-ISM-004 'UK LLC Reporting Weaknesses, Events & Incidents'. This SOP also covers evidence gathering and continual improvement.

4 Related Documents (available to all UK LLC staff)

- UK LLC Scope (DOC-ISM-001)
- Index of Asset Registers (DOC-ISM-002)
- Risk Register (DOC-ISM-003)
- Statement of Applicability (DOC-ISM-004)
- Continuous Improvement Log (DOC-ISM-008)
- DPIA (DOC-ISM-021)
- Terms of Reference for IAOs, SIRO and Caldicott Guardian (DOC-ISM-005, 006 & 007)
- ToR for UK LLC Executive Group, Management Group, OMG and UK LLC Data Access Committee
- Data Access and Acceptable Use Policy (POL-ISM-003)
- Data sharing agreements, data deposit agreements and data processor contracts.

5 Definitions & Abbreviations

ADR UK Administrative Data Research UK
CIA Confidentiality, Integrity, Availability

DEA Digital Economy Act

DPIA Data Protection Impact Assessment

DSPT Data Security and Protection Toolkit

HDR UK Health Data Research UK

ISMS Information Security Management System

LPS Longitudinal Population Study
OMG Operational Management Group
SOP Standard Operating Procedure
TRE Trusted Research Environment

UK LLC UK Longitudinal Linkage Collaboration

UoB University of Bristol
UoE University of Edinburgh