

DATA MANAGEMENT POLICY

SUMMARY OF PRINCIPAL CHANGES

General changes

Document updated with effect from 1 September 2012 to incorporate the University's revised internal management structure.

(Amendments to version 03.1, UPR IM12 are shown in italics.)

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¹ Appendix I, UPR IM12 'Assigned Date Responsibilities'

1 INTRODUCTION

- 1.1 The University operates in an increasingly complex, data-oriented, environment which requires the effective collection, management, analysis and dissemination of data. The data generated and held by the University are key assets that must be managed correctly to underpin University strategic development, essential functions and academic integrity.
- 1.2 This document:
- i provides a corporate framework with defined roles and responsibilities for the collection, quality, storage, security, maintenance and dissemination of institutional data;
 - ii has as its basis the Key Principles set out in UPR IM02²;
 - iii has been approved by the Chief Executive's Group and is effective from 14 June 2010²;
 - iv should be read in conjunction with UPR IM02² and UPR IM11³ and the following related regulatory documents: UPR IM01⁴; UPR IM03⁵; UPR IM04⁶; UPR IM08⁷; UPR IM09⁸; UPR IM10⁹; UPR IM11¹⁰; UPR CA04¹¹ and UPR RE02¹².

(Note for guidance:

Other related documents include 'University Guidance for Managing Personal and Confidential Information', 'Staff Computing Guide', and 'University instructions for downloading and using TrueCrypt encryption'.)

2 DEFINITIONS

2.1 For the purposes of this document the following definitions will apply:

2.1.1 **'data':**

distinct units of information such as facts, numbers, letters, symbols, usually formatted in a specific way, stored in a database and suitable for processing by a computer;

2.1.2 **'Data Dictionary':**

a file that defines the basic organisation of a database, containing a list of all files in the database, the number of records in each file and the names and types of each field;

2.1.3 **'Data Management Framework':**

the organisational structure in place to manage the University's data assets (section 6, refers);

² Chief Executives Group, 26 April 2010

³ UPR IM11 'Records Management and the Archiving and Retention of Prime Documents and Business Records'

⁴ UPR IM01 'Computer Networks, Security of Information Systems and the Protection of Information Systems from Computer Viruses'

⁵ UPR IM03 'Information Security Policy'

⁶ UPR IM04 'Internet/Intranet Based Information Systems'

⁷ UPR IM08 'Data Protection'

⁸ UPR IM09 'Freedom of Information'

⁹ UPR IM10 'Privacy Policy'

¹⁰ UPR IM11 'Records Management and the Archiving and Retention of Prime Documents and Business Records'

¹¹ UPR CA04 'Commercial Activities'

¹² UPR RE02 'Research Misconduct'

- 2.1.4 **'data quality'**:
the accuracy, completeness, validity and currency of the data;
- 2.1.5 **'Dataset'**:
a defined collection of data with common elements related to a specific function;
- 2.1.6 **'Data Steward'**:
The Head of the Strategic Business Unit or other Officer responsible on behalf of the University for the collection, management and use of data;
- 2.1.7 **'Data Expert'**:
the person responsible for the operational management and processing of the data in an information system who has detailed knowledge and experience in the operational management and use of specific Datasets and their structures, capture, administration, processing and reporting;
- 2.1.8 **'Data User'**:
an individual authorised to access and use data;
- 2.1.9 **'Information'**:
data combined and processed into a meaningful form;
- 2.1.10 **'Information system'**:
a computer system used to gather, store, structure, secure, process, combine and filter data into information and that makes that information available on time and in a useful form for users and institutional requirements.

3 **SCOPE**

- 3.1 The University's Data Management Policy applies to:
- i data, in all its forms, required for the management and administration of the University and the conduct of its work, whether the data are captured and accessed from on-campus or off-campus locations;
 - ii all University of Hertfordshire activities;
 - iii individual Members of the University (UPR GV06¹³, refers);
 - iv the University's wholly-owned subsidiary companies *and their wholly-owned subsidiaries* subject to the approval of their respective Boards of Directors;
 - v collaborative activities undertaken with Partner Organisations;
 - vi the management of research data.

(Note for guidance:

The Data Management Policy (UPR IM12) does not apply to document management for which the University has developed a separate policy (UPR IM11¹⁰, refers).)

¹³ UPR GV06 'Membership of the University'

4 POLICY

4.1 All data created or owned by the University, its wholly-owned subsidiary companies *and their wholly-owned subsidiaries*, are the property of the University of Hertfordshire Higher Education Corporation and are regarded as corporate assets.

(Notes for guidance:

- *These data include, but are not limited to, data relating to management and administration and to the conduct of the University's business.*
- *Although responsibility for research data may be vested elsewhere, it should be noted that this policy and the principles and standards that it defines also apply to the **management and use of research data** (section 7, refers).)*

4.2 The University recognises the value of data as an institutional resource and considers that value to be increased through the widespread and appropriate use of data and by virtue of data quality.

4.3 The University considers the value of data to be diminished through misuse, misinterpretation or unnecessary access restrictions.

4.4 Access to data will be granted to Data Users for all legitimate University purposes, subject to any limited access restrictions that may be determined from time-to-time at the absolute discretion of the University.

(Note for guidance:

Data access is determined on behalf of the University by the Chief Information Officer.)

4.5 The University is committed to the Data Management Standards set out in section 5 of this document.

5 DATA MANAGEMENT STANDARDS

5.1 The University categorises and determines data access as follows:

5.1.1 'University Internal'

Data categorised as 'University Internal' may be accessed by all Data Users, without restriction.

(Note for guidance:

'University Internal' is the default category for all data.)

5.1.2 'Limited Access'

- i At the absolute discretion of the University, specific data may be categorised as 'Limited Access'.
- ii Date will be categorised as 'Limited Access' by the *Chief Information Officer* in light of recommendations from Data Stewards and, where appropriate, legal and other advice.

(Note for guidance:

The grounds for categorising data as 'Limited Access' include, but are not limited to, personal privacy, legal requirements, commercial confidentiality, security, externally imposed constraint or other recognised good reason.)

5.1.3 'Public Access'

- i Data which, at the absolute discretion of the University, are determined, to be a matter of public record and can, therefore, be made freely available, without restriction, are categorised as 'Public Access'.
- ii Data will be categorised as 'Public Access' by the *Chief Information Officer* in the light of recommendations from Data Stewards, Freedom of Information requirements and, where appropriate, legal and other advice.

5.2 Data Stewards

(Section 6.5, also refers.)

5.2.1 Every data source and Dataset must have a designated Data Steward.

5.2.2 Data Stewardship of a Dataset will be delegated to the Head of Strategic Business Unit or other Officer with primary responsibility for the University operations to which the Dataset relates.

5.2.3 A Data Steward is responsible for the data quality, security and availability of the data for which he or she is Data Steward.

5.3 Data Experts

(Section 6.7, refers.)

Data Experts are responsible for and accountable to the relevant Data Steward for:

- a the operational management of the assigned institutional data and its integrity;
- b applying University data management standards and procedures;
- c effective liaison with the technical experts responsible for the repositories where the data are stored and for the applications and reporting systems for use of the data;
- d data analysis;
- e providing management information to support University decision-making;
- f external reporting requirements;
- g resolving queries;
- h implementing agreed data retention criteria and archiving policies;
- i making the Data Dictionary understandable to users.

5.4 Data Users

(Section 6.8, also refers.)

5.4.1 Subject to any data access restrictions determined on behalf of the University by the *Chief Information Officer*, permission to access data will be granted to:

- a all staff for legitimate University purposes and
- b other individuals, where agreed, following the conduct of a University Data Access Authorisation process.

5.4.2 Data Users are required to:

- a access and use data only in their conduct of University business;
- b access only the data needed to carry out their University work;
- c respect the confidentiality and privacy of individuals whose records they may access;
- d observe any ethical, commercial, security or other restrictions determined by the University that apply to the data to which they have access;
- e comply with all relevant legal requirements;
- f comply with the Data Management Standards (section 5, refers);
- g work within the limits of the data access that they have been granted.

5.5 Data

5.5.1 Data:

- a must be readily available to all Data Users with a legitimate University business need through easily accessible web-based interfaces;
- b must be stored in an official University data repository agreed with the Chief Information Officer (or nominee);
- c should be defined consistently across the University;
- d element names, formats and codes must be consistent across all repositories and information systems that use the data and consistent with any agreed University standards;
- e should, wherever possible, be captured or entered once only;
- f structures must be under strict change control so that business and system implications of any change can be properly managed;
- g for data capture, validation and processing should, wherever possible, be automated;
- h updating processes should be standard across the University and its systems;
- i should be recorded in an auditable and traceable manner and in accordance with any agreed change control processes;
- j should not be duplicated unless duplication is absolutely essential and has the approval of the relevant Data Steward; in such cases, one source must be clearly identified as the master and there must be a robust process to ensure copies are not modified and are kept in step with the master source;
- k exchange protocols between data repositories must be under strict change control so that business and system implications of any change can be properly managed.

5.5.2 Arrangements for the storage and use of limited access data and any third party use of the data must conform to University Data Security Guidance (Appendix II, UPR IM12¹⁴, refers).

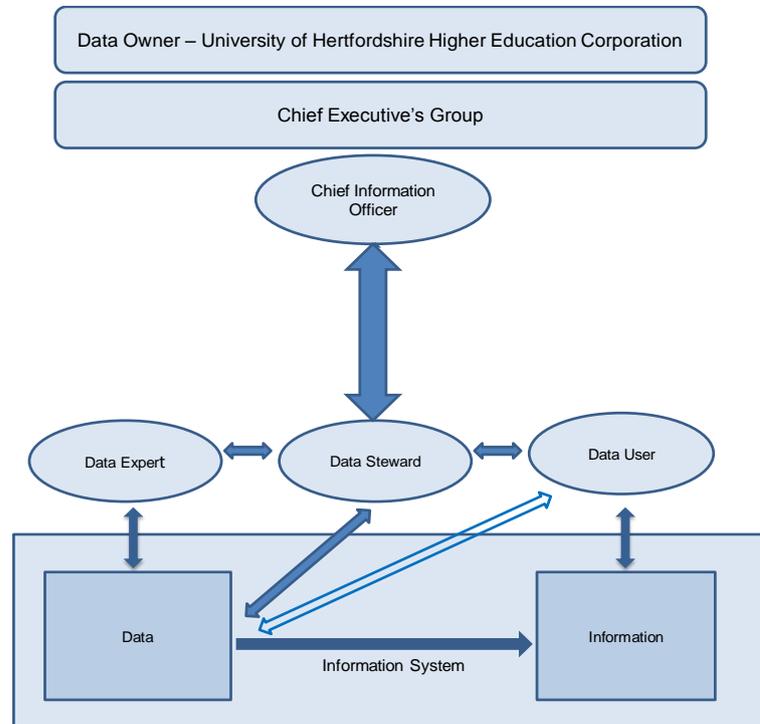
5.5.3 Whenever possible, international, national or industry standards for common data models must be adopted. When this is not possible, institutional standards will be determined.

¹⁴ Appendix II, UPR IM12 'Data Security Guidance'

6 DATA MANAGEMENT FRAMEWORK¹⁵

6.1 The following structure forms an institutional Data Management Framework, the purpose of which is to ensure data are consistent, of good quality and available for use by Data Users.

6.2 Data Management Framework



6.3 Data Owner

The University of Hertfordshire Higher Education Corporation.

6.4 Chief Information Officer

6.4.1 The Chief Information Officer is responsible:

- a to the Vice-Chancellor, through the Chief Executive's Group, for data owned and managed by the University of Hertfordshire Higher Education Corporation;
- b for data management policy, standards and procedures;
- c for the University's data model, its promotion and its implementation;
- d for monitoring and reviewing the effectiveness of data management policy, standards and procedures;
- e formulating data management policy and standards for the approval of the Chief Executive's Group;
- f advising the Chief Executive's Group on their implementation;
- g establishing procedures for the management of and access to data;
- h overseeing the implementation of and compliance with data management policy, standards and procedures;
- i adjudicating on any disputes that may arise from time-to-time;
- j in conjunction with Data Stewards, reviewing annually, the Data Management Policy (UPR IM12).

¹⁵ Appendix I, UPR IM12 'Assigned Date Responsibilities'

6.5 Data Stewards

6.5.1 Data Stewards are responsible for and accountable to the Chief Information Officer for:

- a the management of the assigned institutional data;
- b co-ordination of the associated Data Experts;
- c the collection and updating of the assigned institutional data;
- d recommending changes to institutional data management policy and procedures;
- e data quality;
- f the implementation of Data Management Standards and procedures;
- g the promotion of the management of University data as a vital corporate resource;
- h understanding and promotion of the value of data for University-wide purposes and facilitation of data sharing and integration;
- i authorisation and management of any third party use of the data in accordance with University policies and processes;
- j liaison with other Data Stewards as required;
- k advising and reporting on data management issues to the *Chief Information Officer*.

6.6 Data Experts

6.6.1 Data Experts are responsible for and accountable to the relevant Data Steward for:

- a the operational management of the data assigned to them and its integrity;
- b applying University data management standards and procedures;
- c effective liaison with the technical experts responsible for the repositories where the data are stored and for the applications and reporting systems for use of the data;
- d data analysis;
- e providing management information to support University decision-making;
- f external reporting requirements;
- g resolving queries;
- h implementation of agreed data retention criteria and archiving policies;
- i making the Data Dictionary understandable to users.

6.7 Data Users

6.7.1 Data Users are responsible for and accountable to their managers for:

- a ensuring their use of the data complies with this policy (UPR IM12) and all related standards and procedures;
- b for all data access made through their user account and the subsequent use and distribution of the data;
- c identifying any potential personal conflicts of interest resulting from the authorised data access granted to them through their user account (including potential conflicts of interest where the data user is both a member of staff and student of the University) and for seeking advice from the relevant Data Steward;
- d for obtaining permission from the Data Steward for use of the data for marketing campaigns or other contact list purposes;
- e for contributing to the accuracy and integrity of the data through the timely correction and updating of data where authorised to do so and for other data, through timely notification to the relevant Data Steward.

6.7.2 Data users must:

- a not disclose their user login account password to anyone;
- b not use data for their own personal gain or for the gain or profit of others;
- c not access data for personal business purposes or personal interest;
- d not disclose data to unauthorised persons or to any third party without the consent of the relevant Data Steward;

- e not disclose data about an individual to another person, regardless of that person's relationship with the individual concerned, without the consent of the individual concerned and/or without the consent of the relevant Data Steward;
- f present the data accurately and objectively in any use that is made of it.

7 RESEARCH DATA

(Appendix III, UPR IM12¹⁶, refers.)

7.1 Data management is an essential and integral part of the responsible conduct of research.

7.2 The University is responsible for:

- i ensuring effective data management to meet internal and external requirements, *including enabling the re-use of research data and freely available public access to research data outputs in accordance with national and funding body policies;*
- ii retention of research data in sufficient detail for a defined period to enable appropriate responses to any questions about accuracy, authenticity, primacy and compliance with legal and regulatory requirements governing the conduct of research;
- iii for supporting investigation into any allegations of misconduct or regulatory breach (UPR RE02¹⁷, refers).

7.3 This policy and the principles and standards that it defines also apply to the management *and use* of research data.

7.4 Data Steward - research data

For the purposes of research data, the Principal Investigator or agreed equivalent role (such as the Principal Supervisor of Research Students) shall fulfil the role and responsibilities of the Data Steward for the purposes of the collection, management and retention of research data.

(Note for guidance:

For further information refer to 'University Guide to Research Data Management' (Appendix III, UPR IM12¹⁶, refers).)

8 REVIEW ARRANGEMENTS

This Data Management Policy (UPR IM12) and the arrangements for its implementation will be reviewed annually by the *Chief Information Officer* in conjunction with the Data Stewards.

P E Waters
Secretary and Registrar
Signed: **1 September 2012**

¹⁶ Appendix III, UPR IM12 'University Guide to Research data Managements'
¹⁷ UPR RE02 'Research Misconduct'