

## PROJECT INITIATION DOCUMENT

**Project name** Seamless Flow: Technology Watch

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## Document History

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**Approvals** This document requires the following approvals.  
Signed approval forms are filed in the project files.

Name	Signature	Title	Date of Issue	Version
Senior Responsible Owner		Director of Government and Technology		

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Project team		8/2/2005	0.1
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## Purpose

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To define the Technology Watch project, to form the basis for its management and the assessment of overall success.

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## Background

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The Seamless Flow (SF) programme is aimed at the rationalisation and automation of appraisal, selection, transfer, storage and presentation of records received by The National Archives (TNA). The process of technology watch, which underpins the long-term accessibility of electronic records, has been identified as a key component of success of the programme. It was agreed at the first Seamless Flow Programme Board to deliver the programme through a series of projects, one of which will be technology watch. This project will focus on the planning and execution of long-term preservation strategies for electronic records. Future development of the existing PRONOM (file format database) service will be taken forward under the umbrella of this project.

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## Project Definition

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### Project objectives

The Technology Watch project (TW) is intended to ensure that electronic records stored by TNA are capable of being accessed in the long-term, within future technological environments, and to inform sustainability requirements within Other Government Departments (OGDs).

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### Defined method of approach

The project will comprise a number of discrete work packages, as follows:

- Work Package 1: Detailed requirements gathering, process modeling and technical evaluation, building on the existing work undertaken during the analysis phase of the Seamless Flow programme, to develop full requirements for each technology watch process.
  - Work Package 2: Development and implementation of systems and processes to support each technology watch process.
  - Work Package 3: Development and dissemination of policies, advice and guidance to support the technology watch process, within TNA and OGDs.
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### Project scope

The TW project will build upon a number of existing systems, including PRONOM, and components of the Digital Archive. The project will cover the following activities:

- Development and maintenance of a registry of technical information to support all TW processes.
- Technical characterisation of electronic records prior to ingest into the storage system.
- Monitoring and identification of technological changes and their potential impacts on electronic records stored by TNA and OGDs.
- Development of preservation strategies to mitigate the impact of technological change. This will focus on the development of migration pathways for the automatic migration of electronic records to new formats required for preservation or presentation purposes.
- Automated migration of electronic records to new formats for the purposes of preservation and presentation, according to defined migration pathways, and delivery of migrated records to the preservation storage system or delivery and presentation system as appropriate.
- Provision of policies, advice and guidance to support long-term preservation and broader sustainability of electronic records within TNA and OGDs.

**Project deliverables**

- Technology options report based on evaluation of existing tools and systems against user requirements. This will include a review of relevant international research and development initiatives.
  - Web-based technical registry
  - Technical characterisation system
  - Technology Watch monitoring system
  - Preservation planning system
  - Auto-migration system for preservation and presentation migration
  - A scheme of Persistent Unique Identifiers (PUID) for records stored in the technical registry, implemented as resolvable URIs.
  - A report on options for the maintenance of the information content of the technical registry.
  - A framework of advice and guidance on TW issues (e.g. recommended file formats) for OGDs.
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**Exclusions**

The TW project will deliver a framework for the monitoring and migration of electronic records, which may be utilized for the purposes of preservation or presentation. However, the requirements for the set of presentation formats which the system must be capable of generating at a given point in time will be owned by the Delivery & Presentation project.

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**Constraints**

All TW processes which require access to the bit streams of electronic records must conform to the appropriate security requirements for government records. All technical deliverables must conform with the TNA and Seamless Flow information and system architectures, and technical environments. The technology watch process must comply with the TNA preservation policy for electronic records, which will be developed by a separate SF work stream.

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**Interfaces**

The project interfaces with a large range of current internal and external programmes, work packages and services. These include:

**Internal programmes/work packages**

- Appraisal and selection project
- Metadata
- Catalogue and editorial
- Resource discovery project
- Management of survival of semi-current records in OGDs project
- Transfer to TNA project
- Preservation and maintenance project
- Delivery and presentation project
- Management and security project
- Business change, communications and training project
- TNA preservation policy for electronic records

**Government Programmes and Initiatives**

- Government Secure Intranet
- Central Government Infrastructure, e-GIF and e-GMS

**TNA Services**

- PRONOM

**External Programmes/Services**

- JISC 4/04 Preserv project (with Southampton University, British Library and Oxford University)
- Digital Curation Centre
- Global Format Registry Project

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**Assumptions**

It is assumed that the project will be appropriately resourced (staff expertise, time and budget). Allied to this, it is assumed that a significant proportion of the deliverables can be achieved through the acquisition, enhancement and integration of existing systems and technologies.

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## **Project Organisation Structure**

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The TW project will be managed according to the PRINCE2 methodology, within the Seamless Flow programme structure. The project will report to the joint Technology Watch/Preservation & Maintenance project board, and to the Seamless Flow programme board.

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## **Communication Plan**

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The project communications plan will be developed as an integral part of the programme communications plan, and will be managed by the programme Communications Manager, in liaison with the Digital Preservation Department (DPD) Communications Officer.

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## Project Quality Plan

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**Introduction** To define the quality techniques and standards to be applied, and the various responsibilities for achieving the required quality levels, during the programme.

**Contents** This plan contains the following topics:

- Customer Quality Requirements
  - Acceptance Criteria
  - Quality responsibilities
  - Use of standards
  - Quality Control and Audit Procedures
  - Configuration Management Plan
  - Change Management Procedures
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**Customer Quality Requirements**

TNA would expect that:

- All digital records which have been selected for permanent preservation would be protected until transfer time, transferred to TNA automatically, all closed material to be redacted, the records to be preserved permanently and a reading copy based on current technology to be available. Copies to be normally delivered over the Internet.
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**Acceptance criteria**

- Cost of operations compared with current semi-manual process
  - Conformance to defined requirements
  - Appropriate integration with other Seamless Flow projects
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**Quality responsibilities**

The project manager is responsible for project quality.

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**Standards**

The project will conform to appropriate Government and internal TNA standards to cover project management (Prince 2), system design (UML, RUP), system development (TNA software development standards), security (ISO 17799), data exchange (eGMS) and web interfaces (eGIF), as well as conforming to the emerging Trusted *Digital Repositories Standard* (Research Library Group RLG)

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**Quality Control and Audit Procedures**

The programme and projects will be subject to the following controls:

- TNA to be audited by auditors appointed under RLG scheme
  - Process to include rigorous integrity test for electronic records.
  - All products will undergo peer review and formal sign off.
  - The programme will be subject to the Gateway Review process.
  - TNA internal audit will review the programme at appropriate stages.
  - Project Assurance Teams (PATs)
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**Configuration Management Plan**

Software version will be controlled by a proprietary management tool.

All products created by the Programme will be treated as configuration items. They will have a version number and a date. Version numbers for formal issue of products will be numbered as version 1.0 onwards. Products which are at a draft stage will be identified by sub number as 0.1, 1.2 etc.

All project documentation will be stored in the (Objective) Electronic Records Management System at:

*Preservation  
Projects  
Technology Watch.*

**Change management procedures**

A formal process for managing change will be identified so that interaction between projects can be monitored appropriately.

All changes will be raised as Request for Change (RFCs), reviewed by originating project team and its board. This will be passed to the Programme Manager to assess cross project impact and to take to Programme Board for acceptance as necessary.

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**Project tolerances**

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Project tolerances on budgets and timetables will be set by the project board. Any variation beyond these tolerances will be reported by the project manager to the project board.

## **Project controls**

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The project will be managed in accordance with PRINCE 2 methodology. Unified Modeling Language (UML) will be used for all modeling purposes.

A programme board has been established. A joint project board has been established for the Technology Watch and Preservation & Maintenance projects. A joint project assurance team will also be established for these two projects.

Scope, cost, time, quality and risk issues will be controlled through the use of a formal PRINCE 2 approach with regular meetings of teams and boards reporting according to the PRINCE methodology. The project assurance team will form a vital role in ensuring appropriate controls are in place.

The Project Manager will hold regular Checkpoint meetings with their team to review progress against plans, address or raise issues and agree future work.

The Project Manager will produce a monthly Highlight report for the Programme Manager, the Project Assurance Team, and the Project Board.

The Programme Manager will hold monthly meetings with the project managers to review progress to date, future work and potential issues etc.

The Project Board will meet approximately every 2 months to review progress, timetable, costs and issues.

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The Project Assurance Team will meet as required, and will be circulated will all project deliverables, in draft and final form, for comment.

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