



## JISC Project Quality Plan Template

*This document defines the quality expectations the project must achieve and how they will be met.*

### 1. Quality Expectations

*The JISC programme manager completes this section defining the standards and level of quality expected to be achieved by the project.*

The project will deliver the eLearning Tool(s) as specified in their proposal and refined in the JISC project plan document in line with following standards/guidelines:

- JISC (draft) Open Source Policy May 2004
- JISC (draft) Software Quality Assurance August 2004
- JISC Project Management Guidelines December 2003
- Release versions of development and final code are to placed with <http://sourceforge.net/>
- CETIS project page be maintained to communicate development progress and mapping of software to the ELF (eLearning Framework). <http://www.cetis.ac.uk/>
- Software should meet the high level functional specification as specified in the project plan.
- Software should be robust, maintainable and extendable (see JISC (draft) Software Quality Assurance August 2004).

#### Tolerances

- Cost – project must be completed within agreed grant.
- Time – project must be completed by 31<sup>st</sup> March 2005.
- Scope – given the short time scale of the project the scope of the deliverable (i.e. eLearning Tool(s)) may be narrowed to ensure completion on time and to budget. Any changes to scope must be agreed with the programme manager and documented via the change control procedure.
- Quality – project must adhere to the standards as defined for open standards, open source and software quality

### 2. Acceptance Criteria

*For each of the main deliverables of the project criteria for its acceptance / completion are defined.*

Successful completion of an external evaluation of the projects software outputs and development process.

### 3. Quality Responsibilities

*List of who is responsible for monitoring and ensuring quality for deferent aspects of the project?*

Aspect of Quality	Monitored by
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General project documentation	Project Manager
Change Control	Project Manager
Usability Quality	Developer
Code Standards Compliance	Tech. Dev. Manager
Code Documentation	Tech. Dev. Manager
User Documentation	Project Manager
Design (e.g. UML)	Tech. Dev. Manager
System testing	Tech. Dev. Manager

#### 4. Standards and Technologies

Referenced list of standards and technologies to be used by this project.

- C# Language Specification – ISO / IEC 23270 & ECMA 334
- Common Language Infrastructure (CLI) – ISO / IEC 23271 & ECMA 335
- J2ME - MIDP1.0 – CLDC <http://java.sun.com/j2me/>
- SOAP (1.2) <http://www.w3.org>
- XML <http://www.w3.org/XML/>
- RSS
- MIDP1.0
- Javadoc Guidelines
- XMPP <http://www.xmpp.org/>
- iCalendar <http://www.ietf.org/rfc/rfc2445.txt>
- WebDAV <http://www.webdav.org/specs/>
- IMS Learner Information Profile (LIP) 1.0 <http://www.imsglobal.org/profiles/index.cfm>
- IEEE Learning Object Metadata (LOM) <http://ltsc.ieee.org/wg12/>
- UML 1.4 Specification <http://www.uml.org>
- WSDL 1.1 <http://www.w3.org/TR/wsdl> for services to be consumed

#### 5. Quality Control and Audit Processes

Description of the process to be used to control project quality and enable auditing.

1	<b>Test</b>	Initial prototype testing	<b>Method</b>	Conformity testing of prototype to original specifications.
	<b>Date</b>	27-9-2004	<b>Recording Process</b>	Test report. Issues identified to be record in the issues tracking section of online Sharepoint portal.
			<b>Level</b>	Functional.
			<b>Tools</b>	Manual testing. Online issues tracking.
2	<b>Test</b>	User testing	<b>Method</b>	Standard Heuristic Evaluation and Usability testing.
	<b>Date</b>	4-10-2004	<b>Recording Process</b>	User feedback form online. Test report. Issues identified to be recorded via issues tracking tool.
			<b>Level</b>	Usability.
			<b>Tools</b>	User testing. Online feedback tool.
3	<b>Test</b>	User Requirement and Functional Specification Review	<b>Method</b>	Use cases/Scenario walkthroughs.
	<b>Date</b>	14-10-2004	<b>Recording Process</b>	Report on walkthroughs. Issues tracking online.
			<b>Level</b>	High level.
			<b>Tools</b>	Issues tracking tool.
4	<b>Test</b>	J2ME Demonstrator	<b>Method</b>	Conformity testing of demonstrator to specifications.

		Review		
	<b>Date</b>	29-10-2004	<b>Recording Process</b>	Test report. Online issues tracking.
			<b>Level</b>	Functional.
			<b>Tools</b>	Issues tracking tool.
5	<b>Test</b>	Developer code testing	<b>Method</b>	White box testing. Unit testing. Conformity of build to specifications.
	<b>Date</b>	19-11-2004(Alpha) 21-1-2005 (Beta) 21-2-2005(RC) 18-3-2005(Final)	<b>Recording Process</b>	Test report. Online issues tracking.
			<b>Level</b>	Code.
			<b>Tools</b>	Issues tracking tool. Unit testing tool from <a href="http://www.nunit.org">www.nunit.org</a>
6	<b>Test</b>	User testing	<b>Method</b>	Standard Heuristic Evaluation and Usability testing.
	<b>Date</b>	1-12-2004(Alpha) 21-1-2005(Beta) 21-2-2005(RC) 18-3-2005(Final)	<b>Recording Process</b>	User feedback form online. Test report. Issues identified to be recorded via issues tracking tool.
			<b>Level</b>	Usability.
			<b>Tools</b>	User testing. Online feedback tool.
7	<b>Test</b>	System conformity testing	<b>Method</b>	Conformity testing of system to specifications.
	<b>Date</b>	28-3-2005	<b>Recording Process</b>	Test report. Online issues tracking.
			<b>Level</b>	Functional.
			<b>Tools</b>	Issues tracking tool.

## 6. Change Control and Configuration Management Processes

*Description of the process to be used to manage change and configuration management.*

Changes will be considered to be:

- Functional / design changes following the completion of the design phase (Work Package 3)
- Changes to standards, at any point throughout the analysis, design and development phases.

Testing occurs frequently throughout the project, as evidenced by the Work Package Plan. Each test will be followed by a review meeting, involving the whole team. The individual responsible for leading the test will bring to the group's attention issues that are raised. These will be discussed and raised as change requests as appropriate.

Change requests will be raised through the project portal (<http://portal.cetadl.bham.ac.uk/ilogbook>), which provides an issue tracking tool. Issues that are flagged by members of the team or external contributors in between formal tests will be discussed at regular team meetings, where appropriate action will be chosen, the level of priority selected, timetable for inclusion set and responsible person nominated.

All code changes will be tracked, managed and maintained via Visual SourceSafe, with a snapshot of all code being taken at least once a week, and after any significant change.

## 7. Quality Tools

*List any tools to be used to help ensure quality.*

- UML Diagrams will be created either in Microsoft® Visio or Borland® Together® Designer Community Edition.
- .NET / CLI based software components will be tested using Microsoft's .NET Framework runtime version 1.1 (<http://www.microsoft.com/net/>) as well as Mono 1.0 (<http://www.mono-project.com>) on Microsoft® Windows® platform.
- XML will be used considerably and will be tested for general validity via standard PERL XML Parser
- RSS feed validated using RSS validator (<http://feedvalidator.org/>)
- SOAP requests validated using online validator (<http://www.eggheadcafe.com/soapvalidatorform.asp>)
- J2ME will meet the MIDP1.0 guidelines and will be tested in line with the 'Nokia guidelines for testing J2ME Apps' (<http://forum.nokia.com>)
- CETIS will be consulted with respect to testing for IMS LIP compliance.
- Visual SourceSafe for code management.
- SourceForge for release management.