



Edith Cowan University

Scope and Project Plan

National Benchmarking System

Draft

NATBES Project - Scope
Release 1.1
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(Quality Inspector)

Accepted: Date:/...../.....
(Sponsor)

Authorized: Date:/...../.....
(Project Manager)

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SCOPE AND PROJECT PLAN NATIONAL BENCHMARKING SYSTEM

Appendix A: Project Schedule

1. Project Summary

Project Title	: National Benchmarking System
Project Code	: NATBES
Organisation	: ECU
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Sponsor	: Dean Ward – Manager Strategic Information Services
Quality Assurance Representative	: Rick Movick – Manager Information Delivery Systems
Project Manager	: Peter Corbett, Bono Poon
Project Team	: Dean Ward (Chair) : Tony Lazzara (GPS) : Peter Corbett (SIS) : Bono Poon (SIS) : Paul Redman (Consultant) : Steve Johnston (KITSC) : Rick Movick (KITSC)
Reference Group	: Andrea Matulick (Uni SA) : Graeme Poole (Uni SA) : Ted Gallop (Curtin Uni) : Rob Rispoli (UWA) : Laurie Money (DES) : AAIR - SIG : Nick Booth (Consultant)
Steering Committee	: Dean Ward (Chair) : Peter Corbett (SIS) : Bono Poon (SIS) : Linda McLain (Professional Development) : Jim Millar (LDS) : Laurie Money (DES) : Phil Draper (RMAA) : Rick Movick (KITSC) : Steve Johnson (KITSC) : Paul Redman (Consultant)

SCOPE AND PROJECT PLAN NATIONAL BENCHMARKING SYSTEM

Status Reporting	:	At scheduled Steering Committee Meetings
Agreed Budget	:	\$175,000.00
Start Date	:	6/11/06
Completion Date	:	To be confirmed
Project Deliverables	:	The National Benchmarking System is the primary deliverable. Other supporting deliverables are noted in this document.

2. Introduction

ECU developed a number of bids to obtain funding via the Workplace Productivity Programme (WPP). The objective of the WPP is to encourage Universities to continue reforms which increase productivity through workplace change.

DEST approved ECU's Bid that related to a Unit & Course Improvement Toolset which comprises four Sub-Projects:

1. National Benchmarking System for student data (NATBES)
2. Mid Course CEQ
3. Enhanced Course and Unit Co-ordinators Report
4. Develop a trainer Module in the use of the above

This Scope and Project Plan Document relates to the first Sub-Project, National Benchmarking System for Student Data.

2.1. Project Overview

Benchmarking is an inherent activity associated with quality systems and is undertaken for a variety of reasons:

- Determining relative productivity
- Improving competitive positioning
- Overcoming performance disbelief or misperception
- Identifying growth potential
- As a performance management tool
- As a continuous improvement tool

Currently, Universities undertake benchmarking at a number of levels including:

- through the activities of professional associations
- networks set up by groups of universities for benchmarking and other quality assurance purposes
- central facilitation through governmental authorities/agencies

Although a number of Australian Universities have undertaken benchmarking there is not an overarching approach in the Australian Higher Education sector. DEST does provide benchmarking information for student data via a number of limited national datasets from their website including:

- Student Enrolments
- Student Load
- Student Past Course Completions

Due to deficiencies in the general information released, Universities have created their own warehouses of data for NATBES purposes. In addition not all Universities have utilised this information due to the complexity and cost of creating their own warehouse.

In recognition of the significant resources and activities allocated by:

- Universities to create their own NATBES warehouses
- Research groups and researchers within or outside Universities that request NATBES type information from DEST or Universities
- DEST to provide the information

it is considered effective and efficient, to provide an option to the potential users of this information to obtain the data from a general source thus promoting economies of scale.

The goal of this project is to develop a National Benchmarking system for Student Data that is accessible to all Universities.

2.2. Project Description

The NATBES project will build and implement a National Benchmarking system for Student data collected by DEST as part of the Higher Education Student Collection. NATBES is a web-based application that stores University benchmarking information. This application will be hosted by ECU but made available to all interested parties via the web. Users will be asked to register, prior to using the system and will be able to extract data in a standard format based upon a set number of parameters and conditions they may select from.

The objectives of this project are to design, develop and implement the NATBES application.

2.3. Scope and Boundaries

The scope of the project includes:

- Creating a Functional Requirements Specification (FRS)
- Building a National Benchmarking system application as per requirements specified in the FRS
- Building a database that will store Higher Education Student Data sourced from DEST's Student Collection
- Developing business rules that will enforce a controlled approach to data retrieval
- Developing data suppression rules that will ensure privacy of information is maintained
- Developing standard reports
- No specific client software required by users for purchase (excluding standard Desktop Applications)

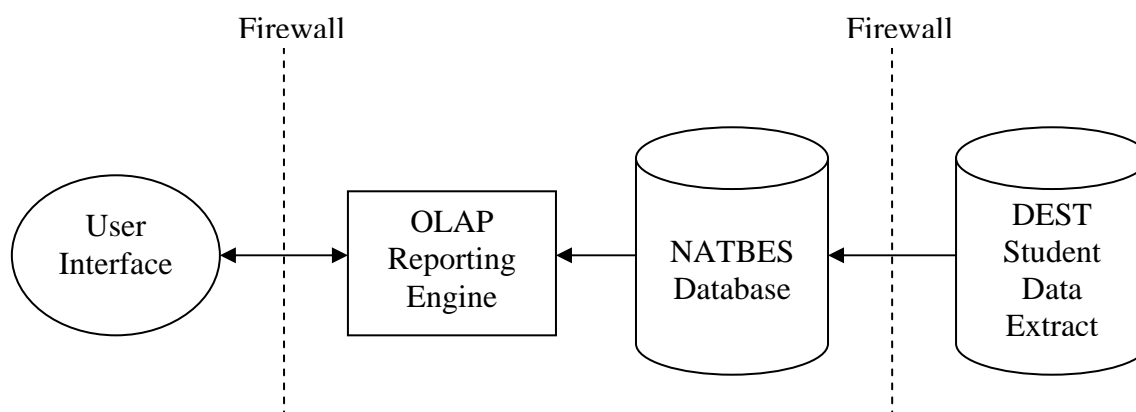
- Developing export process for Data extraction on a WYSIWYG basis into standard formats (i.e. EXCEL, CSV)
- Developing a registration system where users will be required to register before being given access to the data
- Developing System Audit Trails
- Performing testing as defined in this document
- Producing documentation as defined in this document
- Implementing the system

The scope specifically excludes the following areas:

- No cleansing of DEST data will be applied – the data will be accepted as is

2.4. Conceptual Model

The high level conceptual model for how NATBES would operate is:



Users will interface with the NATBES database via a custom interface that may utilise an OLAP reporting engine to retrieve information based on selected criteria.

Source data will be imported into the NATBES database from the DEST Student Data Extract on an annual or periodic basis via a custom import process. The method of import will be based on physical media supplied by DEST.

3. Management Plan

3.1. Management

3.1.1. Project Management

A Project Manager has been appointed to manage the project. The project management process will be based on the following principles:

- A Steering Committee has been convened to direct the course of the project
- A Project Team has been established to design and develop the system and perform related tasks
- A Reference Group has been selected to be responsible providing input into the system from the perspective of the potential users and to undertake a number of related tasks including reviewing key documents and user testing
- The Scope and Project plan has been prepared to define the scope and purpose of the project and how it will be conducted and managed
- A schedule has been prepared to define the major tasks and activities and to provide a basis for monitoring progress

3.1.2. The Steering Committee

The Steering Committee guides the management of the project. Meetings of the Steering Committee are spaced at regular intervals throughout the project. The Steering Committee consists of:

Tony Lazzara	Director, Policy, Planning and Academic Support
Dean Ward (Chair)	Manager, Strategic Information Services
Rick Movick	Manager, Information Delivery Systems
Steve Johnston	Manager, IT Infrastructure
Peter Corbett	Project Manager, Strategic Information Services
Bono Poon	Project Manager, Strategic Information Services
Linda McLain	Manager, Professional Development
Jim Millar	Director, Learning & Development Services Centre
Laurie Money	Principal Research and Planning Officer, Higher Education Office, WA Department of Education Services
Phil Draper	Director, Risk Management & Audit Assurance
Paul Redman	Consultant, Redbell Technology

Typical responsibilities of the Steering Committee include:

- Monitoring project progress;
- Reviewing Project Status Reports;
- Approving deliverables;
- Authorising progress to the next project phase;
- Approving project variations;
- Resolving issues raised;
- Making decisions on priorities;
- Progressing project issues that require decisions by management;

3.1.3. Project Team

The Project Team is responsible for the technical and design aspects of the project. The Project Team consists of:

Dean Ward (Chair)	Manager, Strategic Information Services
Rick Movick	Manager, Information Delivery Systems
Steve Johnston	Manager, IT Infrastructure
Peter Corbett	Project Manager, Strategic Information Services
Bono Poon	Project Manager, Strategic Information Services
Paul Redman	Consultant, Redbell Technology

The Project Team is responsible for:

- Developing the Functional Requirements Specification (FRS);
- Develop the Request for Information (RFI) document;
- Performing scheduled tasks and activities;
- Producing assigned deliverables

3.1.4. Development Team

The Development Team is responsible for developing and implementing the application. The Development Team has not been determined at this time. The Planning Phase of the Project will be used to issue an RFI and the development team will be selected by the following panel:

Dean Ward	Manager, Strategic Information Services
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Rick Movick	Manager, Information Delivery Systems
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3.1.5. Reference Group

The Reference Group provides an interface between the Project Team and the users and other stakeholders. While the Project Team is focussed on delivering the technical products, the Reference Group is focussed on how these products will work with user processes.

The Reference Group consists of:

Andrea Matulick	University of SA, AAIR SIG Convener
Graeme Poole	University of SA, AAIR SIG Convener
Ted Gallop	Associate Director, Strategic Information, Curtin University
Rob Rispoli	Senior Information Analyst, University of WA
Nick Booth	Consultant
Laurie Money	Principal Research and Planning Officer, Higher Education Office, WA Department of Education Services

Typical responsibilities of the Reference Group include:

- Provide answers to business process questions;
- Provide user input;
- Perform assigned project tasks;
- Perform user related tasks and activities;
- Provide feedback on completed tasks and functions;
- Undertake user testing

3.2. Status Reporting

Status Reports will be produced for each scheduled Steering Committee meeting. Section 5 – “Records and Deliverables” specifies the relevant details for Status Reporting including the template to use, who produces the reports and who receives them.

3.3. Risk and Issues Management

ECU has a standard Risk Management process that will be used to manage the higher-level risks associated with the business processes relevant to the application. However the Scope and Project Plan specifies a process to handle risks that are specific to the development project.

Project risks will be recorded in a Risks and Issues Log. The log will be summarised on Status Reports so that the Steering Committee is aware of risks and of the mitigation strategies that are being used.

The following table outlines typical risks and the strategies that will be used to manage them.

Risk	Management Strategy
Project Variations	The Project Variation approach is defined in the Scope and Project Plan
Delays by the Project Team	The Project Manager will raise the matter with the Manager Strategic Information Services in the first instance.
Approval Delays	This Scope and Project Plan specifies approval constraints for all items requiring acceptance sign off. The Acceptance approach is also defined in the Scope and Project Plan
Technical Issues	The Project Manager will raise the matter with the Manager Information Delivery Systems in the first instance.
Delays by users	The matter will be raised with the Project Team and will be escalated to the Steering Committee if required

3.4. Provision of Facilities

All needed facilities including office accommodation, office equipment and necessary hardware and software will be provided by the University.

3.5. Confidentiality

All parties involved in the project including staff, agents, contractors and sub-contractors shall respect the confidentiality of each other's business and technology and not reveal any information concerning the other party without the written permission of the other party.

3.6. Project Variation Approach

Any issues that are considered to be variations of the scope will be raised by the Project Manager and reported to the Project Steering Committee as part of the project status reports. Approval to proceed with work that is considered outside the scope will be requested prior to initiating the work.

Project Variations are recorded using the Change Request form specified by the APT methodology. A Change Request form may be raised for any request for changes to the functionality in the FRS as well as any issue that impacts the projected budget or schedule of the project.

3.6.1. Project Variation Procedure

When a Project Variation is identified the following procedure is followed:

- The details of the request are recorded on a Change Request form by the Project Manager or a delegate;
- Preliminary analysis will be performed on the impact of the change;
- The Project Manager and the Steering Committee Chair, or a Steering Committee representative must approve Change Requests before the work is commenced. The Steering Committee Chair will seek authorisation from the Steering Committee members as appropriate. Major Project Variations may incur a delay while authorisation is sought;
- Change Requests are scheduled and work is performed according to the schedule and resource availability;

3.7. Deliverable Acceptance Approach

The Project Manager will ensure that deliverables are submitted for review and acceptance in accordance with the tasks defined on the current Project Schedule. The deliverable will be accompanied by an "Acceptance Form" as specified by the APT methodology. This form is to be signed and returned by the specified approver within the time constraints defined for the deliverable in the Scope and Project Plan.

Section 5 – "Records and Deliverables" defines the responsibilities for review, acceptance criteria and time constraints for completing the review of each deliverable.

If the reviewer considers that the deliverable is unacceptable, then the reviewer will endorse the "Acceptance Form" with reasons for rejection of the deliverable and return it to the originator within the defined time constraints. Such reasons will be based on acceptable criteria such as not meeting defined specifications or specifically identified errors or omissions.

Acceptance shall not be unreasonably withheld.

3.8. Audit

All projects should be audited to ensure that appropriate standards are met and that procedures have been followed.

3.9. Updating the Scope and Project Plan

The Scope and Project Plan will be updated when there are changes in process, approach or scope that are considered significant in the delivery of the project. In such cases a new release of the Scope and Project Plan will be issued.

4. Quality Plan

4.1. Standards

Documentation and deliverables produced as part of this project will follow the guidelines provided in the APT methodology. Guiding principles include:

- Standard document presentation principles apply with documents being clear and concise and fit for purpose;
- Review processes will be used to ensure that document content has been considered by relevant stakeholders;
- Testing processes will be used for deliverables such as application functions and scripts;
- The ECU IT Standards for Server and Workstation SOE will apply;
- The APT Methodology will be used as a basis for defining the development process.

4.2. Environment Baseline

The target technical environment will be selected from one of three options:

Option 1

- Win 2003 operating system;
- IIS Web Server;
- SQL Server 2005 Database with OLAP;
- ASP.NET

Option 2

- Linux operating system;
- Apache Web Server;
- Oracle 10G Database with OLAP;
- ASP.NET

Option 3

- SuperSTAR Suite developed by Space Time Research;

All three options will be evaluated and trialled (where possible) by the Project Team who will determine which option suits the application best. It is anticipated that the preferred environment will be selected prior to completion of the Functional Requirements Specification.

A dedicated server will be purchased and configured with the preferred environment. Specifications for this server will be agreed upon by the Manager, Strategic Information Services, and the Manager, Information Delivery Systems.

4.3. Development Cycle

This project will follow a standard application development lifecycle. The FRS will include sample screen shots and considerable details and is thus suitable as the basis for development.

5. Records and Deliverables

The following sections specify the records and deliverables that will be produced as part of the project. For each item, a table is provided to indicate specific responsibilities and other relevant details.

5.1. Records

5.1.1. Status Report

Status Reports are produced for each scheduled Steering Committee meeting.

Soft Copy Name	NATBES Status Report YYYYMMDD.doc
Templates Applicable	Standard: APT Status Report Template
Produced By	Project Manager
Reviewed By	Steering Committee
Accepted By:	Steering Committee
Acceptance Criteria	Scope and Project Plan compliance
Acceptance Method	Any issues will be noted in Steering Committee meeting minutes
Acceptance Constraint	N/A
Distribution	Copies to Project Steering Committee, copy in the Project Directory, Original in Project Handbook
Configuration Control	Version identified by date

5.1.2. Meeting Minutes

Typically, Steering Committee meetings will be minuted. Other meetings, including Reference Group meetings, may be minuted if required.

Soft Copy Name	NATBES xxxx Minutes YYYYMMDD.doc Where xxxx denotes the type of meeting, eg Steering Committee
Templates Applicable	Standard: N/A Project Specific: A suitable minutes template will be used

Produced By	Project Manager
Reviewed By	Meeting attendees as an item on the agenda
Accepted By:	Meeting attendees
Acceptance Criteria	Reasonable reflection of the meeting
Acceptance Method	Any issues will be noted in the next minutes
Acceptance Constraint	N/A
Distribution	Copies to attendees, copy in the Project Directory, Original in Project Handbook
Configuration Control	Version identified by date

5.1.3. Acceptance Records

Each deliverable needing explicit acceptance will be accompanied by an acceptance form to record the acceptance.

Soft Copy Name	NATBES Accept xxxx.doc Where xxxx denotes the item and version being approved
Templates Applicable	Standard: APT Acceptance Form
Produced By	Project Manager
Reviewed By	N/A
Accepted By:	N/A
Acceptance Criteria	N/A
Acceptance Method	N/A
Acceptance Constraint	N/A
Distribution	Copy in the Project Directory, Original in Project Handbook
Configuration Control	Version identified in soft copy name

5.1.4. Issues Log

The Project Manager will design a spreadsheet to be used as an Issues Log to record any issues and risks that are identified in the course of the project and to track their status until resolved.

Soft Copy Name	NATBES Issues Log.xls
Templates Applicable	Standard: N/A Project Specific: A suitable spreadsheet will be designed
Produced By	Project Manager
Reviewed By	Issues are reported in the Status Report
Accepted By:	N/A
Acceptance Criteria	N/A
Acceptance Method	N/A
Acceptance Constraint	N/A
Distribution	Located in the Project Directory
Configuration Control	Issues are dated

5.1.5. Change Request (Form and Log)

A Change Request form is created to document any change in scope or other cause that results in a variation to the project. A log is maintained to give a summary of the change requests to date.

Soft Copy Name	NATBES Change Request xxx.doc NATBES Change Request Log.doc Where xxx is a number to identify the request
Templates Applicable	Standard: APT Change Request Form
Produced By	Project Manager
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative
Acceptance Criteria	Project and stakeholder considerations

Acceptance Method	Signed Change Request Form
Acceptance Constraint	Decision within 2 days of submission
Distribution	Copy in the Project Directory, signed original in Project Handbook
Configuration Control	Forms are uniquely identified by their number

5.2. Products to be Developed

5.2.1. Scope and Project Plan including Schedule

The Scope and Project Plan including the Schedule are the two key project planning deliverables. The Schedule is a Gantt chart maintained in Microsoft Project. Note that no specific acceptance form will be raised for the schedule. Rather acceptance of the Scope and Project Plan will imply acceptance of the schedule. The reason for this is that the Schedule is continuously being changed and updated and hence the acceptance form process is inappropriate.

Soft Copy Name	NATBES Scope vx.x.doc NATBES Schedule vx.x.mpp Where x.x is the version number
Templates Applicable	Standard: APT PEP Template
Produced By	Project Manager
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative
Acceptance Criteria	Project and stakeholder considerations
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.2.2. Functional Requirements Specification

The Functional Requirements Specification (FRS) will be used as the blueprint for system design and construction by the Development Team. This document will detail application functionality and processes including:

- Registration and System Processes
- Navigation Menus
- Screen Designs
- Business, Data Suppression, and Security Rules
- Data Model
- Database Schema
- Data Dictionary
- Report Layouts
- Import and Export File Layouts

Soft Copy Name	NATBES FRS vx.x.doc Where x.x is the version number
Templates Applicable	Standard: APT PEP Template
Produced By	Project Manager
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative
Acceptance Criteria	Project and stakeholder considerations
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.2.3. Request for Information

The Request for Information (RFI) document will be used to solicit interest from a short-listed group of suppliers that will be considered to be selected to form the Development Team, who will develop and implement the application. Suppliers will be given a two week period to respond to the RFI, and their responses will be evaluated by the FRI selection panel who will determine which supplier will be engaged to provide development services.

Soft Copy Name	NATBES RFI vx.x.doc Where x.x is the version number
Templates Applicable	Standard: APT PEP Template
Produced By	Project Manager
Reviewed By	Project Team
Accepted By:	Project Team
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.2.4. System Manual

Currently there is no System Manual for this application. However the scope of the project includes the preparation of a System Manual.

The System Manual is the basic system documentation that will be used to assist with maintenance, support and enhancement of the system. It will outline details including:

- An overview of the system and how it is used;
- A listing of the various parts or components of the application;
- Specific details required for maintenance such as where the code is located, how to build the application, how to make changes, how to configure settings, etc;
- Technical details of the application

Soft Copy Name	NATBES System Manual x.x.doc Where x.x is the version number
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Templates Applicable	Standard: N/A Project Specific: As required to meet project needs
Produced By	Development Team
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative
Acceptance Criteria	Project and stakeholder considerations
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.2.5. Test Plans

Three types of testing will be performed to achieve the quality requirements of the project. Unit testing is performed by the developer to ensure that each function developed meets the requirements. System testing is performed by the development team to ensure the application works as a whole when performing defined business processes. User Acceptance Testing (UAT) is performed by users to validate that the system satisfies documented business requirements.

Soft Copy Name	NATBES Unit Test Plan x.x.doc NATBES System Test Plan x.x.doc NATBES UAT Test Plan x.x.doc Where x.x is the version number
Templates Applicable	Standard: N/A Project Specific: As required to meet project needs
Produced By	Unit Test and System Test Plans by the Project Manager, UAT Plan by users
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative

Acceptance Criteria	Project and stakeholder considerations
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.2.6. Acceptance of System Testing

At the conclusion of System Testing, the Project QA Manager will review the results of the process to ensure that both the quantity and quality of testing is appropriate and to verify that issues have been addressed. The approval of System Testing by the QA Manager will be recorded on an Acceptance Form. The following table documents the relevant details.

Soft Copy Name	As standard for an acceptance form
Templates Applicable	Standard: Acceptance Form
Produced By	Project Manager
Reviewed By	QA Manager will review System Testing
Accepted By:	QA Manager
Acceptance Criteria	Appropriate quantity and quality of testing
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Softcopy located in the Project Directory, original in Project Handbook
Configuration Control	As standard for an acceptance form

5.2.7. Implementation Plan

The Implementation Plan outlines the tasks and activities that are required to install and deploy the system for operational use.

Soft Copy Name	NATBES Implementation Plan x.x.doc Where x.x is the version number
----------------	---

Templates Applicable	Standard: N/A Project Specific: As required to meet project needs
Produced By	Development Team
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative
Acceptance Criteria	Project and stakeholder considerations
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.2.8. User Manuals

Currently there is no User Manual for this application. However the scope of the project includes the preparation of a User Manual.

The User Manual is the basic user documentation that will be used to assist the user in utilising the system. It will outline details including:

- An overview of the system and how it is used;
- A listing of the various parts or components of the application;
- A listing of Business processes and rules;
- Output format options

Soft Copy Name	NATBES User Manual x.x.doc Where x.x is the version number
Templates Applicable	Standard: N/A Project Specific: As required to meet project needs
Produced By	Users
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative

Acceptance Criteria	Project and stakeholder considerations
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.2.9. Delivered Application

Delivery of the application, installed and ready for operational use, will be recorded and approved by means of an acceptance form.

Soft Copy Name	N/A (Deliverable is the installed application)
Templates Applicable	N/A
Produced By	Development Team
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative
Acceptance Criteria	Confirmed UAT issues have been resolved
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	N/A
Configuration Control	N/A

5.2.10. Project Review Report

A post project review will be conducted after at least 2 months of operational usage. The Review Report is a deliverable of the project but will not be produced as part of the development and implementation cycle. Hence acceptance of the delivered application will take place well before the Review Report is produced.

Soft Copy Name	NATBES Review Report x.x.doc Where x.x is the version number
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Templates Applicable	Standard: APT Methodology
Produced By	TBA (can be an independent third party)
Reviewed By	Steering Committee
Accepted By:	Steering Committee or its representative
Acceptance Criteria	Identified issues have been captured
Acceptance Method	Acceptance Form
Acceptance Constraint	Acceptance within 2 days of submission
Distribution	Located in the Project Directory, copies distributed as required
Configuration Control	Version number

5.3. Project Close-Out

The project will be considered closed once all deliverables recorded in the Scope and Project Plan (other than the Review Report) have been accepted and the installed system has been made available for operational use.

5.3.1. Retention of Records

Record retention will be as per ECU policy and procedures.

6. Development Plan

6.1. Functional Requirements Phase

A Functional Requirements Specification (FRS) document will be produced for this application. This will be used as the basis for developing and delivering the functionality required.

6.2. Design Phase

The FRS contains screen shots and considerable detail that enables it to be used as the basis for development. A separate Design Document is not considered necessary.

6.2.1. Design Methodology

The design of the system will be incorporated in the FRS.

6.3. Planning Phase

A Request for Information document (RFI) will be developed by the Project Team during this phase and distributed to a short list of candidates who will quote for the system build phase of the project. The purchase and installation of software and hardware will also occur during this phase.

6.3.1. Selection of Developer

The Manager, Strategic Information Services, and the Manager, Information Delivery Systems will select the development team based on responses from the RFI.

6.3.2. Installation of Software and Hardware

The Manager, IT infrastructure will be responsible for organising the purchasing, installation, and configuration of software and hardware required for the application.

6.4. Build Phase

The system will be developed using the target technical environment specified in the Scope and Project Plan.

6.4.1. Build Methodology

The following approach will be used:

- Functions will be developed;
- For each function, the developer will follow the Unit Testing process as defined in the Unit Test Plan

6.5. System Test Phase

System Testing provides the development team with the opportunity to verify that the application as a whole works without errors. It is focussed on verifying that business processes defined in the FRS can be executed using the application.

6.5.1. System Test Methodology

The approach to be used for System Testing will be defined in a System Test Plan to be produced during the Build Phase. The following points apply:

- The System Test Plan will define how testing will be conducted;
- Test Cases will be prepared to document the tests that will be performed;
- The development team will prepare the Test Cases;
- The Project Manager will prepare the System Test Plan;
- The development team will perform System Testing as per the time frame specified in the Project Schedule
- Identified issues that are within scope will be resolved by the development team

6.6. Documentation Phase

Various documents will be developed as part of this project. The Scope and Project Plan defines these documents, the approval process required and who is responsible for producing them. The Project Schedule defines when each document will be produced. Some documents are produced during other phases of the project. However a specific Documentation Phase has been incorporated to ensure that any other documents are completed before User Acceptance Testing.

6.6.1. Documentation Methodology

Documents may be started at the earliest point feasible, for example during the Design and Build Phases. Any remaining documents will be prepared in the Documentation Phase. Some documents may need to be updated after the User Acceptance Test Phase or after Implementation to reflect last minute decisions or changes.

6.7. User Acceptance Testing Phase

The Reference Group will be responsible for conducting UAT. This phase involves testing the system to verify that the requirements documented in the FRS have been addressed.

6.7.1. UAT Methodology

The following points apply:

- Users will prepare a UAT Plan to define how testing will be conducted;

- Users will also document the tests that will be performed. These are referred to as Test Cases;
- The development team will provide needed assistance by providing copies of the System Test Plan and System Test Cases;
- It is assumed that users participating will be familiar with the goals and objectives of this project;
- Users will perform UAT as per the time frame specified in the Project Schedule;
- Identified issues that are within scope will be resolved by the development team

6.8. Implementation Phase

During this phase the completed application will be installed on the target environment and will be configured ready for operational use.

6.8.1. Implementation Methodology

The following points apply:

- The development team will prepare an Implementation Plan to define how implementation is to be performed;
- The target technical environment will be provided by ECU;
- The development team will follow the Implementation Plan to install and configure the application;
- Users will confirm that the application can be accessed and used;
- Handover to the users will be by means of an acceptance form to record acceptance of the installed application

6.9. Project Review Phase

A post project review will be conducted after at least 3 months of operational usage.

6.9.1. Review Methodology

The following points apply:

- A resource to perform the review will be assigned at that time;
- The review will focus on assessing the success of the project and identifying any issues that will improve future projects;
- A Review Report will be prepared to document the conclusions formed

7. Product Management Plan

The major deliverable or product of this project is the completed application. The Product Management Plan (sometimes called a configuration management plan), defines how the application will be managed and controlled in terms of:

- Source code location and versioning;
- Application environments;
- Application releases

7.1. Source Code Version Control

Source code will be developed by the selected development team At ECU and will be managed according to standard ECU practices.

7.2. Application Environments

The following application environments will be established:

- A development environment where code will be assembled and unit tested. This will be at ECU.
- A Test environment that will be used for System Testing and for UAT. This will be at ECU.
- The production environment for the implementation of the application for operational use. This will be at ECU.

7.3. Change Control Process

The following approach defined the change control process during the development cycle:

- Change control during the development will be the responsibility of the development team
- The application as a whole will be installed in the TEST environment as a complete build;
- Once the system has been implemented, Production change control will be as per ECU standards.

7.4. Application Releases

Application releases or builds will be defined by a sequence of numbers. The following points apply:

- Build numbers follow the pattern xx.yy.zzzz;
- The major release version is denoted by the number xx. This will be set to 1 for the first production release;

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- The minor release version is denoted by yy. This will be set to 1 for the first production release and incremented for any release that provides additional functionality or patches but that is considered too small to be a major release;
- The build version is denoted by zzzz and this is incremented every time a build is created.

8. Maintenance Plan

This is an internal application and as such does not have a formal warranty period. Rather, the application will continue to be maintained and supported by the Strategic Information Services section.

9. Project Monitoring and Control

9.1. Budget

The budget for this project is \$175,000.00.

9.2. Milestones

The following table indicates significant milestones that can be used as a high level mechanism for project monitoring and control.

Milestone	Due Date
Scope and Project Plan Approved	17/11/2006
Functional Requirements Specification Approved	12/12/2006
Planning Phase Completed	TBA
System Build Phase Completed	TBA
System Test Phase Completed	TBA
Documentation Phase Completed	TBA
UAT Phase Completed	TBA
Implementation Phase Completed	TBA
Project Review Phase Completed	TBA

9.3. Project Schedule

The Project Schedule is a Microsoft Project Gantt chart that is maintained as a separate document to the Scope and Project Plan. The Project Schedule defines tasks, resources and dependencies and is maintained to track progress. The initial version of the Project Schedule is attached as an appendix to the Scope and Project Plan.

9.4. Project Monitoring

The following process will be implemented:

- Consultants will regularly advise the Project Manager of costs to date;
- Consultants will regularly advise the Project Manager of actual time to date for each task;
- The Project Manager will use the information to assess progress and to prepare status reports.

Appendix A
PROJECT SCHEDULE