

<Project Identifier>

*[Project Title]*

AITC intern report

Prepared by

<Author/s>

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Advanced Instrumentation and Technology Centre

# Executive summary

Text goes here…

Amendment Log

| Version | Date | Author | Change |
| --- | --- | --- | --- |
| 0.1 | 1 Jan 2016 |  | Raised draft AITC Intern Report. |
| 0.2 | 22 Sep 2016 |  | Updated to fulfil ANU Marketing requirements (fonts, logo) |
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# Introduction

## Document Purpose

This document is the final report following and internship at the AITC detailing…

## Document Scope

This report:

* Defines the project (background, objectives and scope);
* Identifies project stakeholders;
* Identifies project constraints, risks and assumptions;
* Identifies the project team;
* Identifies the resources, activities and schedule to complete the project;
* Identifies strategies for co-ordinating and guiding the project team;
* Identifies plans for engineering management;
* Identifies strategies for controlling the project;
* Identifies strategies for project close out; and
* Does not define or manage project financials.

## Intended Audience

This document is intended for the following stakeholders:

* Stakeholder 1
* Stakeholder 2

## Applicable documents

The documents applicable for this project are listed in Table 1.

The reference column shows a simplified version of the full document description to improve readability through the rest of this document.

Table 1. Project documents

| Reference | Description |
| --- | --- |
| <Project> Project Logs | Master project management logs containing WBS, schedule, risk log, issue log, lessons learned log, decision log & master question list (MQL) |
|  |  |
|  |  |
|  |  |

## Acronyms and abbreviations

The acronyms and abbreviations used in this document are defined in Table 2.

Table 2. Acronyms/abbreviations

| Term | Definition |
| --- | --- |
|  |  |
|  |  |
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## Definitions

The definitions used in this document are defined in Table 3.

Table 3. Definitions

| Term | Definition | Reference |
| --- | --- | --- |
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# Project Definition

**Guidance:**

This section is used to capture and define the project. Typical information includes:

Providing a background of the project

Determining what the project should accomplish (objectives/goals)

Defining the approach to achieve the overall project goal

Defining the general project scope

Defining the stakeholders along with their general expectations.

Defining assumptions, risks, constraints and applicable government laws, policy and legislation.

## Background

Text goes here …

**Guidance:**

Provide a few paragraphs describing the project’s background.

Write it as if you are trying to explain it to someone who has no prior knowledge of your project.

Some items to consider when writing your summary:

Type of project (i.e. Research, software development, trade study, system design etc.),

Description of previous related projects /tasks,

How your project falls within the larger picture (perhaps your project is a deliverable or component of a larger project).

How and why did the project arise?

Is the project or deliverables of the project urgent or critical in any way?

If relevant, position your project in relation to other efforts and show how your project:

Will extend the work that has been previously done,

Will avoid the mistakes and/or errors that have been previously made (have you consulted similar projects lessons learned logs), or

Will serve to develop stronger collaboration between existing initiatives, or is unique since it does not follow the same path as previously followed.

It is essential to include a well documented statement of the need/problem that is the basis for your project.

What are the pressing problems that you want to address?

How do you know these problems are important?

What other sources/tasks similarly support these needs as major needs?

## Objective

Text goes here …

**Guidance:**

Provide a paragraph describing your project’s high level objective(s). This should be short and concise. Objectives consist of specific aims and require clear concise writing so project participants understand each one.

## Scope

Text goes here …

**Guidance:**

The section defines the scope (size) of the project. The scope determines how many resources, how much time, and how large the final product is.

For example, the scope for developing a simulation tool for a single missile system is considerably smaller than that of developing a generic tool for simulating all current in-service and future missile systems.

Project scope can include one or more of the following considerations:

How much is to be achieved in the project.

The length of the project window (when it must be completed)

Obligation of resources (the usual: people and resources)

The scope section should complement the system-scope section (i.e. the scope of the system the project is to develop). System scope appears separately in the Engineering Management section because explicitly stating it is an important part of software approval and certification.

When identifying the scope it is important to identify where the project ends. Failing to do this can lead to “scope creep”, where the list of activities and deliverables continue to grow. Although a project may be part of a larger vision, it is important to clarify what is part of your project and what is not. A useful tool to assist project managers do this is the “what’s in/what’s out” table, though of course it is optional. Use the table provided below to identify why a particular item is “out” (i.e. it may be future functionality/project but is not essential now).

Table 4. Project scope summary

| What’s In | What’s Out |
| --- | --- |
| Assistance for projects which use Mission 2 and 3 | Assistance for Mission 1 and 4 |
| Development of the operational concept and requirements for using the WSAF in Mission 1 | Development of the operational concept and requirements for using the WSAF in Mission 4 |
| Development of scripts and a portal for Mission 2 and 3 | Development of scripts and portal for Mission 1 and 4 |
| Development of the process for Mission 1, 2 and 3 | Development of the process for Mission 4 |

## Approach

**Guidance:**

Describe your approach to achieving the project objectives. You may have already developed a high-level structure/design/plan for your project based on earlier meetings, feasibility studies, brain storming sessions and the like. If so, you can describe the approach agreed on during these sessions.

You may include a description of the items that make your project feasible such as the existence of a particular COTS Software Library (e.g. a visualisation or charting package).

If the project has critical requirements, including safety, security and privacy assurance issues, some words should appear here outlining how they will be handled. If there aren’t any such requirements, the PMP should say so.

Example:

Given the importance of the FMS and high consequence of risks with this project to overall company operations, our project approach will be gradual (as opposed to ‘big bang’) change with careful consideration of impacts prior to implementation.

The first change will be replacement of our MYOB accounting software with the much more modern ‘Xero’ application which offers multiple add-on options, multi-person, simultaneous access, multi-currency capability and a far easier-to-use user interface. Xero also operates entirely ‘in the cloud’ and is accessed via web browser and hence requires no locally-installed software.

Following a successful transition to Xero, next will be upgrade-by-replacement of the remainder of the FMS using a ‘spiral’ approach to definition and solution development. The project will implement only a few tasks or tools at a time, leaving existing systems in place as a backup and allowing time for transitioned systems to be ‘bedded down’ before the next change with a formal ‘lessons learned’ analysis conducted at each stage review.

The project will be split into defined stages aligned to the major changes to enhance management oversight and reporting to the company. Broadly, the project will aim to complete one stage per quarter. Each stage will be ‘bedded down’ before moving on to the next in order to normalise operations and discover any unforeseen bugs and quirks.

Text goes here …

## Stakeholders

**Guidance:**

Stakeholders are people who have an interest in the end results (and sometimes the impact caused during the process) of your project. Not all stakeholders are involved in completing the actual work on the project. Common stakeholders include customers, managers, corporate executives, and representatives of government agencies.

Along with listing the stakeholders detail the expectation, interest and define the involvement of each stakeholder. The involvement is classified as either High or Low: describing the stakeholder’s interest in the project.

Some common stakeholders include:

* Project Champion - An advocate and supporter of the project who aids in making it eventuate.
* Project Manager - the leader of the project who defines, plans, controls and leads the project.
* Project team members - the people who perform the work and produce the outputs (deliverables).
* Project Owner - the formal authority who is ultimately responsible for the project. Generally the sponsor is the person or group that provides the financial resources for the project.
* Project assurance advisor - an independent person who reports project health to the sponsor or customer. This person may also suggest improvements to the project processes, etc.
* Users - the person or group whose needs and requirements drive the project. The Users provide the product requirements and will use the project’s product.
* Task Managers - organises the resources utilised on the project. Generally acts as the liaison between the sponsor and the Project Manager.
* Influencers/Affecters - People or groups that are not directly related to the acquisition or use of the project’s product, but due to an individual’s position in the organisation, can influence or affect the course of the project.

Make sure that all the stakeholders are considered in the communications plan.

Identified AITC intern report stakeholders are listed in Table 5.

Table 5. Stakeholders

| Stakeholder & contact details | Involvement | Expectations / interest |
| --- | --- | --- |
| Stakeholder party A  *Contacts:*   John Smith | High/Medium/Low | Expectation:  Completed on time according to task plan  Interest:  Experiment A test system capability further developed |
|  |  |  |
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## Deliverables and outcomes

**Guidance:**

Deliverables are clearly defined results, products or services produced during the project or at its outcome. Provide a list of your deliverables and outcomes in the table provided below. Refer to the examples provided in the table below.

Table 6 describes the formal deliverables and outcomes of AITC intern report. Additional detail is provided in the Work Breakdown Structure (WBS) located in the Project Logs <Insert Link>.

Table 6. Deliverables and outcomes

| # | Deliverable | Outcome |
| --- | --- | --- |
| 1 | Project documentation | Outlines the requirements and solution as well as how the project was carried out |
| 2 | Project status reports via e-mail | Monitor and report progress |
|  |  |  |
|  |  |  |

# Project Management

**Guidance:**

This section of the project plan captures the elements associated with managing and executing your project.

This section will help you to detail the following areas of your project;

* Project Organisation/Structure/ Governance: That is, who is responsible, who owns the project and who manages the project along with their relationship.
* Project Milestones: The significant stages of the projects
* Project Network Diagram: Flow diagram showing the logical progression between stages of the project and their relationship.
* Project Work Breakdown Structure (WBS): The logical breakdown of your project into activities.
* Project Schedule: Develop a schedule for activities, assign resources and dates.
* Resources: Staffing, equipment and facilities.
* Communication & Reporting strategy: Communicating the goals of the project to all team members and stakeholders. Basic operating procedures including required reports, meetings and other on-going communications.

## Project organisation

**Guidance:**

Provide the details of your project team. Depending on your project providing information such as contact details may not be necessary.

The Project Team members consist of both the most important players who will be associated with the project team from start to finish and also other significant contributors. The project team is directly responsible for the overall success of the project, assuring it finishes on time, within budget, and to the necessary engineering quality standards. The larger a project is, the more likely Table 8 will list only the team leaders and other key people, rather than everyone.

The Support/Consulting Network are the other people required for your project like those in a consulting role, occasional contributors or key administration support staff. This table is critical for safety-related or safety-certified projects as it specifies the project’s Design Support Network.

If there is a possibility that in the future the products of this project may require actual engineering approval and acceptance, then it would be helpful to include some details of the qualifications of people in technical lead and design support roles, including degrees and how many years of relevant experience. THIS IS MANDATORY FOR SAFETY-RELATED PROJECTS.

Table 7. Project organisational roles

| Role | Responsibility |
| --- | --- |
|  |  |
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|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Table 8. Project team members

| Role(s) | Name, Organisation | Contact Details | Qualifications |
| --- | --- | --- | --- |
|  |  | E: <email>  T: <phone> |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Table 9. Support / consulting network

| Name, organisation | Capabilities and/or role | Contact details |
| --- | --- | --- |
|  |  | E: <email>  T: <phone> |
|  |  | E: <email>  T: <phone> |

## Work Breakdown Structure (WBS)

**Guidance:**

The WBS is used break down the project into logical packages of work as per the example shown in Figure 1. Despite its name, the WBS is actually best written as a product breakdown expressed as deliverables, not activities (noting that some activities, such as management, are needed to make the project run).



Figure 1. Example Work Breakdown Structure

## Schedule

**Guidance:**

A schedule should be prepared that lays out in what sequence work will be done and by what dates.

This is best done by defining **milestones** which indicates completion of a block of work or an important event in a project such as a presentation to stakeholders. Milestones should always be expressed in outcome-oriented terms such as ‘*sub-system testing completed*’ and ‘*plan approved*’. Remember to include management and technical reviews, including peer reviews, as required.

The milestones are then grouped into a number of sensible stages where the first stage covers **initiation** and the last stage covers **closure** activities; for example:

1. Project initiation.
2. Concept definition.
3. Prototype development (including testing)
4. Project closure

The Milestone Network Chart, shown in Figure 2, is suggested as a relatively simple form of presenting a schedule. Alternatively, a timeline or even a table might suffice.



Figure 2. Example schedule (Milestone Network Chart form)

## Risk and issue management

**Guidance:**

**Risks** are *possible future* events that would adversely affect the project *if* they occur. Risks are usually expressed in terms of *consequence* and *probability* to allow suitable counter-measures / treatments / mitigations to be planned.

**Issues** are *actual* events that will adversely affect the project. Issues are usually expressed in terms of just *consequence* to allow suitable counter-measures / treatments / mitigations to be planned.

Key risks and issues should be identified, assessed and mitigations planned as necessary. To make this manageable in a small project, only the top five or so risk and issues should be addressed in any detail.

Project risks and issues are identified and assessed in Table 10.

Table 10. Risk & issue assessment

| # | Risk | Mitigations |
| --- | --- | --- |
| 1 | Client does not appreciate complexity of task | Close liaison with Defence staff to ensure full understanding. |
| 2 | Deliverables are not endorsed by client | Close collaboration between VCDF Group project staff and the Contractor team will reduce the risk that deliverables do not meet Commonwealth needs.  This collaboration would be supplemented by project management activities required by our Integrated Management System (IMS).  Regular project communication through Project Status Reports (PSR). |
| 3 | Scope of the task is too large to achieve given the task timeframe | We have proposed a sizable team to ensure that work can be done in a timely manner with additional resources available by agreement.  Our IMS defines a rigorous process for capture, assessment and treatment of issues and risks. These would be dealt with in priority order to ensure that more important issues are assigned appropriate resources as early as possible.  We will use a standard capability design approach, methods and tools that have been used previously on multiple projects. |
| 4 | Task is cancelled, delayed or re-scoped due to changes in the project | Proposed approach and payment schedule are designed to produce milestone results useable by VCDF Group, internal consistency for ongoing work, and alignment of payments to work done (and value earned). |

# 4Literature Review

## Current best practice

Text goes here…

## Gap analysis

Text goes here…

# Methodology

## Experimental methodology section A

Text goes here…

# Table of Experiments

## Experimental procedure A

Text goes here…

# Results and Discussion

## Experiment A

Text goes here…

# Conclusion

## Experiment A

Text goes here…

# Future Work

## Experiment A

Text goes here…

# References

Reference style to be used is XXXX. Software such as word referencing function or Endnote may be used to fill this section. Apply the format style XXXX to this reference list once generated to ensure consistency.

# Appendices

## Appendix 1: Test material A data sheet

Text goes here…