# Demystifying Quality in a Project Environment

# Best Practice User Group Workshop

# LESSONS LEARNED REPORT

**Purpose**

This document summarises the results of a workshop looking at 'Quality in a Project Environment', Chapter 18 of 'Managing Successful Projects with PRINCE2', 2005 Edition.

**Audience**

Those people who attended the workshop, and those people interested in learning about others experience of the chapter 'Quality in a Project Environment'.

**Document Control**

| | |
|---|---|
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REVISION HISTORY:

| Revision | Date | Summary of Change(s) |
|----------|------|---------------------|
| LLR v0.0 | 02-Apr-07 | Initial Draft of the Lessons Learned Report from Raw Data. |
| LLR v0.1 | 10-May-07 | Rough draft of the document |
| LLR v0.2 | 30-Aug-07 | More complete draft |
| LLR v0.3 | 10-Sep-07 | Draft for review |
| LLR v1.0 | 11-Sep-07 | Ready for further input from the wider PRINCE2 community. |

## Provide feedback to:

Bruce McNaughton
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## 1. Overview

The Best Practice User Group sponsored a workshop on 29-March-2007 called 'Demystifying Quality in a Project Environment'.

The purpose of the workshop was to provide a view of current Quality fundamentals and vocabulary (based upon ISO 9000:2000 (now ISO 9000:2005)) and allow the attendees to share their experience and issues related to the concepts of Quality as included in PRINCE2.

The workshop covered the following topics:

1. Introduction
2. Terminology
3. The Big Picture
4. Quality Planning
5. Quality Control
6. Quality Assurance
7. Review and Close

As a result of the workshop, we collected feedback, experiences and have condensed the information to fit into this Lessons Learned Report. The full set of workshop feedback is available on request.

To summarise the findings:

| Finding | Recommendation |
| --- | --- |
| The purpose and usage of the Project Quality Plan is not understood. | Focus Chapter 18 on the purpose and usage of the Project Quality Plan and how the Project Quality Plan defines the project's controlled environment or quality regime. |
| Quality Vocabulary not current | Upgrade the document to use the terminology of ISO 9000:2005. |
| Clarify Customer Quality Expectations, Acceptance Criteria, and Product Descriptions. | Minimise duplication of information across products and ensure that each place the information is used it is clearly differentiated. Introduce the concept of requirements and acceptance as a way to confirm requirements have been fulfilled. |

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## 2.  Management and Quality Processes

NOTE:  References to 'Managing Successful Projects with PRINCE2' may be shortened to 'the Manual'.

| What | Management and Quality Processes |
|---|---|
| Went Well | ✓ PRINCE2 processes include an integrated approach to quality planning where IP1 creates a Project Quality Plan.  The Project Quality Plan is also an integral part of the Dynamic elements of the PID.  Appendix A includes a Product Description for the Project Quality Plan.. .<br>✓ The Manual includes a component focusing on 'Quality in a Project Environment'  Chapter 18.<br>✓ Chapter 18 has an objective to 'put project quality in context with ISO quality standards'.<br>✓ A Quality Review Technique has been included in the process.  This is important for quality control. |
| Went Badly | ✓ Chapter 18 does not really explain the purpose and use of a Project Quality Plan and position this Product within the context of the quality standards and quality management system.<br>✓ The Stage Quality Plan is referred to as if it was a separate product.  The Stage Quality Plan is actually a part of the Stage Plan.  The purpose of the Stage Quality Plan overlaps with the Project Quality Plan.<br>✓ The differentiation between Project Quality and Product Quality is not clear.<br>✓ Customer Quality Expectations are described in two ways.  The product description of the Customer Quality Expectations product identifies the requirements for a Project Quality Plan.  In other areas of the manual, the Customer Quality Expectations include the more formal requirements the project must meet. |
| Was Lacking | ✓ The ISO Terminology is out of date.  The new terminology contained in ISO 9000:2000 and now ISO 9000:2005 replaces ISO 8402:1995.<br>✓ The concept of Requirements is not covered and appears to overlap with both Customer Quality Expectations and Acceptance Criteria.<br>✓ The relationship between the Final Product Description Quality Criteria and the Acceptance Criteria needs to be clearer.<br>✓ The relationships between the Project Quality Plan, the Stage Plan, CQE, Quality Tolerance and Quality Review Technique are not clear. |

## 3.  Abnormal Events Causing Deviation

Not covered in the workshop

## 4.  Assessment of Specialist Methods and Tools

Not covered in the workshop

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## 5. Project Issues and Results

There were a number of specific issues that were discussed related to the quality information. These were:

| Project Issues | Impacts / Results |
|---|---|
| Difference between Acceptance Criteria, Customer Quality Criteria, Quality Tolerance, and Quality Criteria is not clear. | The headings appear in multiple documents. The duplication of information in the Project Brief, Project Quality Plan, and the various Product Descriptions is not clear. This can create a maintenance problem if the same information is in more than one place. |
| Lack of good examples for Project Quality Plan, Acceptance Criteria, Customer Quality Criteria and Product Descriptions. | Without some good examples, there is a tendency to over-document (if sections need to be filled in) or under-document (if the value of the information is not understood). |
| The purpose and use of the Project Quality Plan is not clear or understood. | The value of the plan is not clear based upon IP1 and the Product Description A.31. The value of the plan in creating the 'Controlled Environment' or the 'Quality regime' for how the project is conducted is not clear. |
| Unclear how the Project Quality Plan is derived. How much is rewritten or reused vs a self contained document? | The document may contain too much information or duplicate information contained elsewhere. The linkage to the QMS needs to be clear. |
| Quality Tolerance is referenced in a number of places (Project Quality Plans and Product Descriptions). The purpose of each section and the level of detail is not clear. | Unclear what information goes in which document. Duplication of information leading to a maintenance problem. |
| Quality terminology is confusing and in some cases incorrect. The difference between project and quality assurance is not clear. | The Quality Terminology is not understood or used correctly. The value of the quality management area is not realised. |
| There was confusion about how to integrate customer or supplier QMS into the Project Quality Plan. | The concept of the QMS (documented in the Quality Manual) for the customer and supplier were not understood and the value of the integration through the Project Quality Plan was not clear. |
| Some organisations do not use ISO 9001:2000 and do not have a QMS. It was not clear how to approach the Project Quality Plan in this type of environment. | Without a clear purpose for a Project Quality Plan to establish the Quality Regime or Controlled environment for the project, the value and use of the plan can be missed. |

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## 6. Recommends for improvement of the project management method

These are recommendations for improving Chapter 18 'Quality in a Project Environment' and better integration of Quality into PRINCE2™.

| Area | Recommendation |
|------|----------------|
| Chapter 18 | Refocus the Chapter on the Project Quality Plan and Quality Planning.  Ensure that the purpose and usage of the Project Quality Plan is clear.<br><br>This Chapter should help people understand how to create a controlled environment or quality regime for the project.  This provides a description of 'how' the project will be carried out.  This is essentially a Quality Management System for a project rather than an organisation.  Once this concept is clear, the integration of customer and supplier organisational Quality Management Systems can be described. |
| ISO Terminology | Build the quality terminology on the ISO 9000:2005 version of the Fundamentals and Vocabulary.  This version replaces all other versions including ISO 8402.  This should lead to current definitions for Quality Management, Quality Planning, Quality Assurance and Quality Control.  Relate this terminology to the purpose and scope of the Project Quality Plan.<br><br>The document would explain how the Quality Manual describing an organisations Quality Management System relates to the Project Quality Plan.<br><br>The focus for the current terminology is on Requirements and the degree that these requirements are fulfilled.  Customer Satisfaction is related to the degree that these have been fulfilled.  The term 'Customer's Quality Expectation' in some areas of the document sounds like 'requirements' and in others sounds like 'Customer Satisfaction.  The integration of these words might align the manual with other current training and standards. |
| Contents of the Project Quality Plan. | In general, a project quality plan that establishes the Quality Management System for a project can be consistent for a class of projects.  Where this is done, any project specific information must be moved to other documents – such as product descriptions, project plans, or requirements specifications.  This can provide significant savings across multiple projects and provide a consistent controlled environment for projects to carry out their work.  In many cases, these will reference back to an organisational Quality Management System rather than duplicate descriptions in multiple documents. |
| Requirements | In the current ISO 9000:2005 terminology, the focus for quality is related to the degree that Requirements have been fulfilled.  This then directly relates to Customer Satisfaction as the customer's perception of the degree that the requirements have been fulfilled.<br><br>Acceptance criteria generally relate to a stated requirement and confirm / demonstrate that the requirement has been fulfilled.  There is also a need to be able to trace a requirement through the project. |

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| Area | Recommendation |
|------|----------------|
| Product Descriptions | The Final Product Description is referenced many times in the manual.  If this were written early in the process (possibly SU) or integrated with the Project Brief, there would be better flow into the PBS created for the Project Plan.  This product description would state the top level deliverables / outcomes (composition) and the acceptance Criteria (quality criteria) for the project.<br><br>Each product identified in the PBS is essentially establishing the scope of the project (work / deliverables).  The quality criteria for any product could also be considered the acceptance criteria for the product.<br><br>Though large projects may have detailed requirements specifications or Prioritised Requirements Lists (as separate products), product descriptions are defining the required products for the project.  The composition and quality criteria sections of the product description do provide clear statements of the required capability of the product.  One suggestion from the workshop was to change the name of the 'composition' section to 'requirements'.  This may be too narrow as some of the requirements for the product are also stated in the 'Quality Criteria' section and possibly others (e.g. Format and Presentation).<br><br>Somewhere in the manual, the concept of 'requirements' needs to be integrated into the process / products to clarify how PRINCE2 establishes and fulfils these requirements for a project. |
| Quality Tolerance | Quality Tolerance is in the Project Quality Plan and the Product Description.  The usage of this header needs to be clear in the places where it is used.  This should also be made clear how it differs from Quality Criteria which may also have upper and lower bounds. |
| Quality Control | The area of Quality Control needs to relate to the identification of defects, root cause analysis, and placing products under formal configuration management.  This area fits nicely with the Quality Review Technique.  By including quality control with the quality review technique, the purpose of this technique becomes very clear. Quality Control is wider than the Quality Review Technique. |
| Quality Assurance | Quality Assurance and Project Assurance need to be carefully explained.  Some Quality Assurance aspects are included in the Project Quality Plan (Quality Responsibilities, Audits, etc).  On the other hand, Project Assurance is clearly a responsibility of members of the project management team and is generally identified in the Project Organisation Structure and the Job / Role Descriptions. Ensuring that the team has all of the right skills, knowledge, and experience to carry out the work is a natural part of planning and identifying the resources necessary for a successful project.  This area does cause some confusion possibly due to the lack of clarity around the Project Quality Plan and may be an opportunity for simplification. |

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## 7. Product Estimates and Actuals

Not covered in the workshop:

| Product | Estimate (Actual) | Size |
|---------|-------------------|------|
|         |                   |      |
|         |                   |      |
|         |                   |      |

## 8. Quality Review Effectiveness

Not covered in the workshop.

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