

ISO 9001 QUALITY TIPS



HANDBOOK



CONTENTS PAGE

TERMS AND CONDITIONS OF USE	5
FOREWORD	7
Overview of - Quality management systems	8
Documentation process	12
Examples of documents an organization can develop	12
Quality Manual	13
Control of Documents	13
What do auditors want to see?	14
Control of Records	15
Example of Records	15
What do auditors want to see?	16
Overview of - Management Responsibility	18
Quality policy	18
Customer focus process	19
Example of Records	19
Planning process	19
Example of Records	19
Communication process	19
Example of Records	20
Management Representative	20
Management Review process	20
Example of Records	20
What do auditors want to see?	21
Overview of - Resource Management	23
Human resource process	23
Competence, training and awareness	23
Infrastructure	24
Work environment	24
Example of Records	25
What do auditors want to see?	25
Overview of - Planning your Processes	27



Customer related processes	30
Example of Records	30
Customer communication	30
Design and development process	33
Design and development inputs	35
Design and development outputs	35
Design and development reviews	36
Design and development verification	36
Design and development validation	36
Control of design and development changes	36
Example of Records	37
What do auditors want to see?	37
Purchasing process	39
Purchasing Information	39
Confirmation of purchased products	40
Example of Records	40
What do auditors want to see?	40
Control of products and services processes	42
Controls	42
Validation	42
Identification and traceability	42
Customer property	43
Product preservation	43
Example of Records	43
Monitoring and measurement process	45
Points to consider	45
Example of Records	46
Overview of - Measurement, analysis and improvement	49
What needs to be in place?	49
Feedback from the Customer	49
Example of Records	50
Internal audit process	52
Example of Records	52
What do auditors want to see?	53
Monitoring and measurement of processes	55



Monitoring and measurement of product	55
Example of Records	56
What do auditors want to see?	56
Non-Conforming of Goods & Services	57
Examples of Records	57
What do auditors want to see?	57
Data analysis	58
Improvement	59
Corrective and Preventive Action	59
Example of Records	60
What do auditors want to see?	60
ACKNOWI EDGEMENTS	62



TERMS AND CONDITIONS OF USE

In accessing, viewing and using the Tips Handbook, you agree that you have read, understood and accept these Terms and Conditions of use in full. If you disagree with these terms and conditions or any part of these terms and conditions, you must not continue accessing or viewing this Handbook.

Handbook

The Handbook contains information about the implementation of ISO 9001, based on the researched opinions and experience of the author.

Any information contained wherein does not constitute advice, and should not be treated or acted upon as such. Information must not be relied upon as an alternative to legal or financial advice obtained from a qualified professional. Questions on any legal, regulatory, financial, taxation, or other related matters should be directed to an appropriately qualified professional.

Licence

or

Potential Unlocked Pty Ltd ("Potential Unlocked") owns the intellectual property rights in this Handbook and other information and material contained herein. Potential Unlocked's rights in the Handbook do not transfer to you.

Subject to these Terms and Conditions, you are granted a limited licence to view and use this handbook for your own personal use and must not, except with the written permission of Potential Unlocked:

- a) Republish parts or the full content of the Handbook;
- b) Sell, reproduce, duplicate, copy or otherwise use the Handbook for commercial gain;
- c) Edit or modify the contents of the Handbook.

No Warranties or Representations

To the maximum extent permitted by the law of the Commonwealth of Australia, Potential Unlocked rejects all alleged representations, warranties, undertakings and guarantees relating to the Handbook.

Without prejudice to the generality of the foregoing paragraph, Potential Unlocked does not represent, warrant, undertake or guarantee that:

- a) The information in the Handbook is complete or non-misleading;
- Abiding by the guidance provided in the Handbook will lead to any particular outcome or result; or

.....



- By using the guidance in the Handbook you will be able to gain ISO 9001 certification/accreditation without further input from internal and external certification/accreditation auditors; or
- d) The information in the Handbook is current and up to date.

Limitation of Liability

The limitations of liability set out in this section and elsewhere in the Terms and Conditions of use govern all liabilities arising in relation to the Handbook and its application, including liabilities arising in contract, in tort (including negligence) and for breach of statutory duty.

Potential Unlocked does not accept any legal responsibility or liability:

- a) Where this Handbook has not been used in accordance with these Terms and Conditions;
- b) For any business losses, including but not excluded to loss of or damage to profits, income, revenue, production, anticipated savings, business, contracts, commercial opportunities and goodwill;
- c) For any loss or corruption of any data, database or software resulting from the use of information contained in the Handbook; or
- d) For any special, indirect or consequential loss or damage.

Indemnity

You hereby indemnify and undertake to keep indemnified Potential Unlocked against any losses, damages, claims, costs, liabilities and expenses including but not limited to legal costs and any amounts paid by Potential Unlocked in relation to third party claims suffered by it arising directly or indirectly of your breach of any of these Terms and Conditions of use.

Jurisdiction

The Terms and Conditions of use are governed by the laws of Western Australia. You agree that any disputes relating to the Terms and Conditions of use will be subject to the non-exclusive jurisdiction of the courts of Western Australia.

Severability

In the event that any provision or any part of any provision of the Terms and Conditions of use is found invalid or unenforceable:

- a) Such provision or part of that provision is to be severed; and
- b) The remaining provisions of this terms and conditions of use remain operative and effective or are otherwise not in any way impaired.

Page 6



ISO 9001 QUALITY TIPS

For the planning, developing and implementing a quality management system

FOREWORD

The ISO 9001 Quality management systems standard provides an outline of what is to be considered when looking to plan, develop and implement a quality system. However, it doesn't tell the organization 'how' as this is up to each organization to determine and this is the stumbling block for Top Management and personnel who have been assigned to 'make it happen'.

The author of this Handbook has many years' experience as a quality consultant, auditor and trainer and has amassed many stories and examples of organizations' frustration and anxiety due to having little understanding of the ISO standard or its requirements or for supporting documentation.

A question often asked is "what will the auditor want to see?" It is really important that the organization documents and collects information that will benefit them and assist them in delivering products and services to the standard their customer requires and improves where it needs to rather than setting-up their system just to 'satisfy the auditor'.

The ISO 9001 Quality Tips Handbook will assist an organization in understanding what is required in the development of a quality management system and will address the following:

- Why it is necessary to have processes in place, which are controlled and documented where deemed necessary;
- The importance of keeping records providing evidence that activities have been performed;
- The importance of ensuring that monitoring, measurement and analysis is being conducted where ISO 9001 stipulates;
- Where the organization requires information for making decisions and improvements.

While this Handbook has a focus on quality management systems it can form the foundation of an eventual integrated management system where work, health & safety, environmental, food, finance, training and other systems can be added.

It is recommended that the ISO 9001 standard be read in conjunction with the information provided in ISO 9001 Quality Tips.

Christine Brown - Managing Director Potential Unlocked



4. Quality management processes:

- Determining operational processes & sequence & interaction.
- Documentation process
 - Quality manual
 - o Control of documents
 - Control of records

Overview of - Quality management systems

What needs to be in place?

Before you start your 'quality journey' or your organization has decided to review what is currently in place, it is a good idea to take a planned approach. The following model is a very useful tool and is called the **PDCA model**:

P - Plan

D - Do

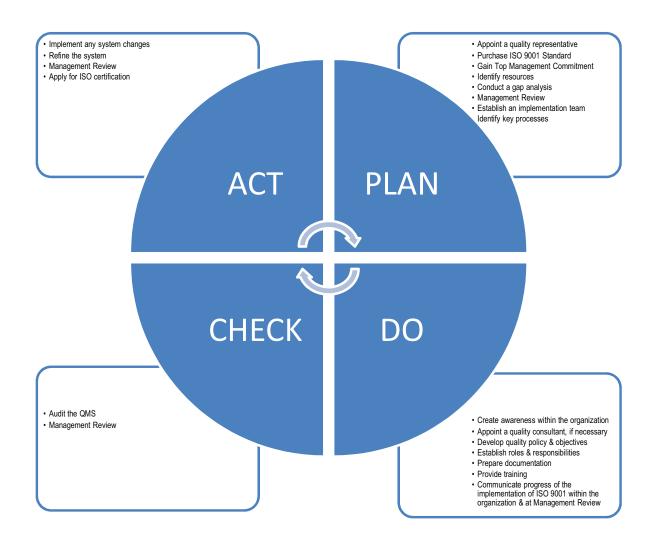
C - Check

A - Act

Determining operational processes, sequence & interaction

The following is an example of steps to be thought through when planning, developing and implementing a quality management system.





General requirements

When thinking about the design of a Quality management System for your organization consider the following:

- ldentify business processes and how they relate with each other to deliver high quality goods / services to the customer.
- ➤ Have controls in place to 'check things' during goods / services development and prior to release to the customer.
- > Ensure suitable resources and information is available for staff to perform their job.
- Monitor, measure and analyse (where applicable) data to confirm that processes and resources are achieving planned results.



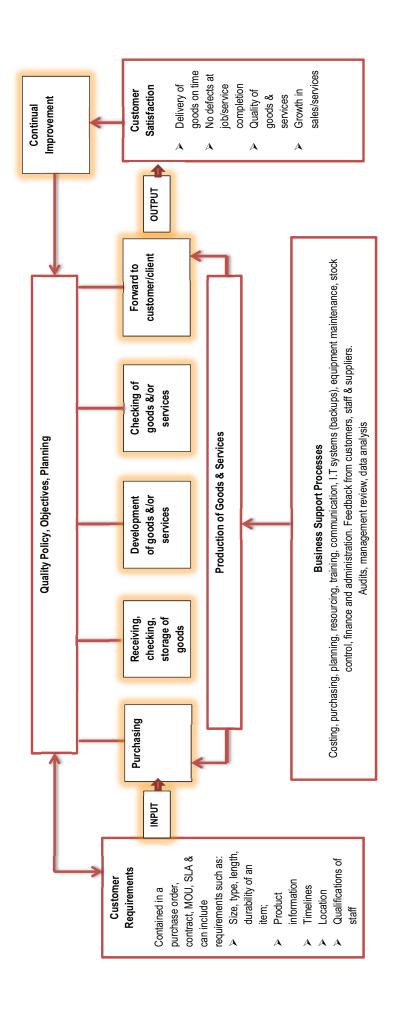
The following model shows the interrelationship of processes typical in an organization's quality management system, as described in ISO 9001.

Please note staff includes – full time / part time / casual employees, employers, owners, volunteers and contractors.

.....



ORGANIZATION QUALITY MANAGEMENT SYSTEM





Documentation process

Depending on the type of goods and / or services your organization provides (engineering/architectural services, welding, construction, piping, marketing, training, health services etc.) is dependent on the complexity and details of your documents. In general staff become discouraged if a system is overly complex or there is too much paperwork, so it is a good idea for an organization to consider *what* needs to be documented, *how* it will be documented and *where* these documents will be kept for easy access and use.

Why do we need to document?

Usually we generate policies, procedures, work instructions, specifications, guidelines, and drawings etc. to show staff what we want 'produced' and the standard to be achieved which meets organization, customer, legal, regulatory, and/or industry (etc.) requirements. Processes documented by an organization can be used as:

- A training tool and during inductions.
- > A means for sharing experiences and knowledge.
- Evidence that what was planned has actually been done (records)

Examples of documents an organization can develop

- Quality policy
- Quality objectives
- > Strategic & Business plans
- > Risk tools & registers
- Quality manual
- Procedure outlining how your organization controls its documents
- Procedure outlining how your organization controls its records
- Procedure outlining an organization's internal audit program
- Procedures describing how the organization handles non-conforming products and the processes in place for corrective and preventive action
- Procedures, work instructions/guidelines etc. outlining how an organization controls its internal business processes
- Quality plans
- > Test and inspection plans
- Approved supplier lists
- Specifications
- Audit schedules
- Etc.



Quality Manual

It doesn't matter what an organization calls its 'Quality Manual' for example "Business Operations Manual", "Procedures Manual", "Operation Standards" but what is important is the information it holds.

Your 'Manual' is telling the reader what your quality management system is going to do and which parts of the organization are involved and identifies any areas of the organization / processes which will be excluded from its quality management system.

Basic information held in a 'Manual' is telling the reader:

- How it will control its documents and records
- Its approach to and frequency of internal audits, and
- ➤ How it will manage any potential non-conformance of product / service

These components are commonly referred to as 'the building blocks' of a quality management system. Small organizations may choose to include everything in its quality management system while large, geographically dispersed or multi-national organizations may need several manuals.

To assist the reader in understanding the organization and its quality management system a little better, organization charts and flow charts/process maps of key organizational processes and how they relate to each other can be included.

Exclusions/non-applicability can be claimed within section 7 "Product Realization" of ISO 9001 only. "Exclusion" should only be applied for clause 7.3 Design and Development and 7.6 Control of Monitoring and Measuring Equipment and must be fully justified in the quality manual.

Control of Documents

What is a document?

For further information on the section below ISO/TR 10013 Guidelines for quality management systems documentation and ISO 9001:2008 – 4.2.3) may assist you.

Below is a simple overview of what to consider when deciding which documents are to be controlled.

Primarily a document is for:

- Communicating information
- Evidence of conformity
- Knowledge sharing



Documentation contributes towards:

- Achievement of conformity to customer requirements
- > Repeatability and traceability
- Provision of objective evidence
- > Evaluation of the effectiveness and continuing suitability of the quality management system.

When planning how to control the documents developed by the organization and documents received from an external source the following issues need to be thought through:

- ➤ Who approves and reviews newly or updated written policies, procedures, work instructions, drawings etc.?
- ➤ When changes are made how do you let staff know, where is this documented?
 - In the actual document and/or in a document register?
 - Is there information in a document header / footer advising them of version number and date?
- ➤ How Documents are made available to staff where they work? For example electronically, hardcopy and accessible in the office, on-site, in a vehicle or vessel and are they protected from water damage, grease, soil, theft etc. so they are easy to read and understand.
- > Documents received from an external source, distributed to appropriate staff within the organization; or transfer compliance obligations into policy, procedures & internal audits.
- ➤ How obsolete documents are identified and labelled as such and removed from general access. Electronic documents must also be removed for example from old websites, multiple content management systems.

Procedures required by ISO 9001 Standard

Control of Documents

What do auditors want to see?

- > A mandatory procedure outlining the organization's process for controlling documents.
- Electronic structure for document management.
- Document version control.



- How and where organizational documents are stored including E-doc. back-up and information security protocols.
- > Time-lines for reviewing currency of information.
- > Evidence that a record of updates to policies, procedures, work instructions, forms etc. is in place. These updates can be placed in the actual policy, procedure or work instruction or kept in a register.
- Evidence that all staff has access to documented information at 'point of use' meaning at their place of work. However, at times it is not feasible for staff to have access to controlled information and an arrangement must be put in place whereby their supervisor or manager provides such information when requested.

Control of Records

Definition of a Record

ISO 9000:2005 - Fundamentals & Vocabulary

3.7.6 Record document - stating results achieved or providing evidence of activities performed.

Records can be used for:

- Traceability
- Verification
- Preventive action
- Corrective action.

Once key activities or tasks have been carried out, an organization should keep a record. Generally, organizations develop a 'procedure template' for staff to use so there is consistency in the format, a record generally doesn't.

Example of Records

- > Purchase orders
- Dockets
- Inspections
- Feedback
- Personnel files
- > Vehicle check sheets
- Meeting minutes
- Pre-start checks
- > Test Inspection Plans
- Approved supplier lists
- > Production schedules
- Organization chart



Each of the above examples is in a different format, however what needs to be uniform throughout the organization is:

- ➤ How to identify records it can be through project identification, customer code or job number, a bar code, job number, drawing number, name of client or some other form of identifier.
- Where records are stored by hardcopy and/or softcopy and through a central or de-centralised system.
- ➤ Protection of records if stored electronically with only limited access, what steps are in place to ensure this? For example user passwords, virus/spam & firewalls, off-site secure back-up. Images do they need light, humidity controls or a special storage facility?
- ➤ Retrieval of records whether centrally stored or de-centralised throughout the organization, it can become extremely frustrating if records have not been identified at the beginning and there is not a clear 'storage' process in place with responsibilities identified.
- ➤ Retention of records an organization must determine how long they need to keep records and this can be dependent on the life of a project, constructed item, legislative or customer requirements, business decision, insurance requirements etc.
- ➤ **Disposition of records** depending on the type of record you want to dispose of and security/confidentiality requirements will determine how you dispose of records. At the low-medium risk end, shredding and/or placing the document in a bin with a padlock (to be removed by a company representative selected by the organization) is the option most commonly used.

Procedures required by ISO 9001 Standard

Control of records

What do auditors want to see?

- A mandatory procedure outlining the organization's process for handling records.
- ➤ A records matrix identifying the type of record, where it is stored (electronically and/or hardcopy), how long the record is kept and whether any archiving or disposing requirements are in place.
- ➤ Who has access to records and where they are kept e.g. central data base and/or within a department / business unit / site.



➤ How records are identified e.g. by job number, invoice number, location number or title etc.

Tips

- > Keep your system simple.
- > Decide what processes can be mapped or flow-charted as some people are very visual and prefer this to the written text procedure.
- Make sure staffs have access to the documents they require to do their job both in hard copy or softcopy and at their place of work, or have another agreed process in place if not feasible due to location etc.
- Develop procedures, work instructions, standard operating procedures, guidelines, etc. in a language that staff will understand and decide how much detail is needed in each document you write and ensure you take into consideration compliance requirements, skills, language difficulties, work or industry experience and any training that staff have.
- ➤ Information required in the header and footer of procedures and work instructions is document name and number, issue date, revision date (this can depend on legislation, regulation, standards, customer requirements, when changes are made to the process or at planned regular times e.g. annual, every 2, 3, 4, 5 years etc.)
- In-house YouTube channels, blog sites, photographs are used in many industries showing a step by step process while drawings are used by architects and engineers; Schedules, models and DVDs are other ways of informing staff what needs to be done, how it is to be done and when. You can be creative as you like when documenting your organizational processes.
- > Determine who has the prime responsibility for document control and records. Ensure that management and all staff is aware of who occupies this position.
- > If the organization restructures ensure all components of the system are associated to the new owner.