

Development of an Effective Quality System Using ISO9001

Centre
for SOFTWARE
Engineering



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The CSE has been working with companies for many years helping them to implement effective Quality Systems that meet the needs of the ISO standard. More recently ISO has updated the standard and a new version *ISO 9001:2000* was formally launched in December 2000. CSE is actively helping software companies to attain certification to the new version, with one client certified to the revised standard as early as Jan 01.

This new version of the standard enables an organisation to understand its key processes and does not require the overhead of numerous procedures. Instead you use the Process Model approach where you identify your inputs, activities and outputs from each process and the interrelationship between the processes. This can be in diagrammatic format making it far easier than the previous text based Quality Systems.

The emphasis is much more on having evidence that you have done the right things during your software development life cycle and this pragmatic approach makes new Quality Systems far easier to implement and to maintain.

CSE Services

CSE offers a range of services to support organisations with Quality System implementation.

Training

We offer the following courses specifically designed for assisting the Quality Champion.

- Effective Quality System Implementation
- Upgrading Software Companies to ISO 9001: 2000

Also modules from the Implementation Support Programme can be run internally to provide the knowledge necessary for in-house development of a Quality System.

Self-Assessment

If you are unsure what you already have in place and how it might fit with the ISO standard we can help you do a self-assessment.

Individual Consultancy Assignments

These are tailored to the needs of an organisation offering a flexible approach to suit your own timetable. We have experience in a range of assignments including mentoring for companies to help them implement a Quality System including preparation and pre-assessment for ISO 9001:2000 and also advice and assistance on implementing cultural change.

Implementation Support Programme for ISO9001

This programme has been offered by CSE for many years and provides a low cost option for software companies wanting to implement a Quality System but without the internal expertise to do it on their own.

Implementation Support Programme for ISO9001

Although the programme uses ISO 9001:2000 as a framework, many companies have gained benefits from it without ever wanting ISO certification. The programme consists of a combination of training, on-site mentoring by an assigned Tutor and audits. At the end of the training period each company works to their own timetable, depending on internal resource availability, to complete the Quality System. Your assigned Tutor will ensure that momentum is maintained and that work is completed satisfactorily.

During this period each company starts to build the mandatory records required for ISO. For those companies planning to apply for ISO certification a minimum of 3 months records is required.

The main elements of the programme are:

Self Assessment

At the start of the programme you will carry out a self-assessment to ascertain your starting position and to assist with the planning of the work required. This is repeated at the end of the programme to show how far you have progressed.

Training Sessions

The training is given at the start of the programme, spread over the first 3 months. During this time each 1-day training session is followed by assignments carried out back at the ranch. Each assignment builds the next part of your Quality System.

On-Site Mentoring

An integral part of the programme is the site visits by your Tutor. These are used to maintain progress and to ensure that any difficulties can be addressed immediately. Site visits may also be used for the Tutor to give a presentation to the staff at the start of the project in order to ensure:

- they understand their own role in the project
- they know the reasons for doing the programme and the benefits to the individuals as well as the organisation
- anyone with reservations about the project can voice their concerns early so that any fears can be addressed

Audits

The programme includes the Tutor doing 2 different audits.

1. Documentation Audit

You send your Tutor all the Quality System documents, templates, forms, process diagrams etc for review against the standard. A report is produced indicating any errors, omissions etc.,

2. Compliance Audit

Your Tutor visits your site and interviews a number of staff and management from each of the key areas to assess the use of the Quality System and to ascertain if you are ready to apply for ISO Certification.

Benefits to Attendee

The programme enables an individual to implement an in-house Quality System with excellent training and individual support from an assigned Tutor. The training sessions are taken as a Cluster, with other companies going through the same process, and enables you to discuss progress and to exchange ideas and ways of overcoming problems if and when they occur. Having confidence to do the work in-house but with the knowledge that there is support available when you need it makes this programme an excellent choice.

By allowing two people to attend each of the training sessions, you are sharing the expertise and not relying solely on one individual to make the project succeed.

Benefits to Employer

By following the programme you will be sure of implementing a Quality System that not only meets the requirements of ISO 9001:2000 but will be flexible to change as your operation evolves into the future. The Quality System will enable you to understand and to streamline your key processes, which ensures:

- New staff get up to speed much quicker
- You will have less reliance on individuals
- You can identify problems quicker
- You will be able to improve the way you do things to increase efficiency.

Implementation Support Programme for ISO9001 - Programme Content

Training Sessions covering:

- ISO 9001:2000 Introduction
- Self Assessment
- Cultural Change
- Software Life Cycle (Including V&V and SQA)
- Project Management
- Configuration Management
- Documenting / Diagramming the Quality System
- Supporting activities
- Continuous Process Improvement
- ISO certification – how to go about it

Plus Site Visits

- **Visit 1** Tutor getting to know the organisation and their needs
- **Visit 2** Self assessment and planning the QMS implementation
- **Visit 3** Life cycle and progress review
- **Visit 4** Life cycle and progress review
- **Visit 5** Life cycle and progress review
- **Visit 6** ISO audit preparation

Plus Audits

- **Audit 1** Documentation audit against the standard and audit report
- **Audit 2** On-site compliance audit and report.

Apply for ISO Certification (Optional)

For those companies wishing to apply for ISO Certification with one of the certification bodies.

Note: Programme details may be subject to change in the light of technology developments or participant feedback

For More Information

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