Name this Newsletter Contest (see page 4)

Newsletter Title Goes Here

Volume 1, Issue 1

October 2, 2000

INSIDE THIS ISSUE:

Who Are We & Why Are We Here?

Who are we? We are the Quality Management Organization (QMO) and we are here to support the definition and implementation of a formal Quality Management System (QMS) here at DSET.

What is the QMS? In order for DSET Corporation to maintain its position as nation's premier provider of electronic bonding gateways to the CLEC and ILEC market place, it is essential that we consistently meet or exceed our customers' requirements and expectations for the quality, performance, timeliness, and cost of the products and services we provide. In order to achieve this, DSET is putting in place a QMS. This QMS is designed to implement the ISO 9001, TL 9000 and the Software Engineering Institute (SEI) Capability Maturity Model (CMM℠) levels 2 and 3.

The QMS focuses on the requirements, design, development, test, production, installation and servicing activities associated with DSET's software and services. QMS activities shall include management responsibilities, which ensure continuous improvement to produce high quality products.

Who are the QMO personnel?

Mike Smith, the Vice President of Quality Management and our fearless leader, who has been asked by Bill McHale to lead the QMS effort.

H.N Carter, Sr. Process Engineer joined DSET in April of 2000. His experience over the past ten years includes ISO, SEI CMM℠, Malcolm Baldrige, Total Quality Management, and Quality Management System implementation and assessment. He has worked with U.S. West, Raynet, Microwave Modules and Devices and National Technologies Associates.

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Are You On Board for the Quality Journey?

Who is responsible for quality? Is it the job of Quality Assurance? How about the Quality Management Organization (QMO)? Well, they certainly have a role to play, but the real answer is that *quality is everyone's job*. While that may sound simplistic, each and every one of us has a direct impact on the quality of the products and services we provide.

Our customers expect and are looking for improved products with greater reliability and lower lifecycle costs. To meet that challenge we must constantly strive for new and better ways of doing things. Sometimes that means assisting others as they attempt to employ our best practices and methods. Other times, we are the ones who have to change how we do something. For our quality journey to succeed, we need to remain open to change and be willing to move outside our own comfort zones. Ultimately, we need to be prepared to change how we do things. Sometimes that can be hard.

Members of the QMO work closely with people throughout DSET to develop procedures, templates and training to facilitate our quality journey. Quality goals are being established at senior levels of the company. You will be seeing and reading more about them in future issues of this newsletter and elsewhere. But the QMO cannot do it alone. The procedures, templates and training need to be more than just documents to satisfy an auditor. They need to be living mechanisms that are actually used and improved.

Our quality journey has begun with this first step.

Welcome Aboard!

What's a Quality Manual?

The Quality Manual (QM) and its implementing procedures define DSET's quality objectives and executive management's commitment to achieving those objectives.

The Quality Manual defines the DSET's policies that reflect the requirements of:

- ISO 9001, *Quality Systems–Model for Quality Assurance in Design, Development, Production, Installation, and Servicing*
- TL 9000, *Quality System Requirements*
- Software Engineering Institute (SEI) Capability Maturity Model (CMM[SM]) Level 2 and 3 activities and Key Process Areas (KPAs).

Implementation of these policies ensures that we consistently meet the quality and performance requirements of our customers in a timely and cost-effective manner.

The first release of the Quality Manual has been approved by the QMS Steering committee and has been distributed to the executive council for review.

QMS Steering Committee has approved the DSET Quality Manual

What's the Role of The QMS Steering Committee?

The Quality Management System (QMS) Steering Committee provides the management level sponsorship for the QMS project. They are overseeing the implementation and on-going operations of the QMS.

The QMS Steering Team shall:

- Ensure that the QMS is established, documented, implemented and maintained in accordance with DSET's policies, ISO 9001 and TL 9000 requirements, and the SEI CMM[SM] activities.
- Identify subject matter experts to work with the Quality Management Organization (QMO) and ensure that those individuals are given the time required to participate in the QMS effort.
- Review and approve QMS System Level Procedures (SLPs), and Work Instructions (WIs) and metrics.

Members of the QMS Steering Committee include:

- Buddy Hull
- Dennis Potwora
- Mike Smith
- Quyen Duong
- Tom Carangelo
- Vijay Kanchi
- Vishal Walia

What's the Role of The Executive Council?

The Executive Council establishes and communicates DSET's quality policy. They set the directions and Policy for DSET's Quality Management System (QMS).

The Executive Council shall:

- Define responsibilities associated with the QMS project.
- Provide resources necessary to ensure successful implementation and maintenance of the QMS.
- Review and approve corporate-level QMS Project Plan and QMM.
- Review the QMS on an annual basis.

Members of the Executive Council include:

- Bill McHale, Chairman of the Board, President & CEO
- Phil Cavallo, Sr. VP Sales & Marketing
- Paul Smith, SR. VP Strategic Planning & Product Management
- Jimmy Jobe, VP Product Develoment
- Mike Smith, VP Quality Management
- Bruce Cromwell, VP & Chief Financial Officer
- Jeff Gill , VP Professional Services

What is ISO 9001?

ISO 9000 is set of general manufacturing standards for Quality Management Systems (QMS) from the International Standards Organization (ISO). The ISO 9000 standards are probably the most well known and widely accepted quality system standard in the world.

ISO 9001 is the most comprehensive of these standards, covering quality requirements for design and development as well as for production, installation and servicing. Since DSET designs and develops software systems, ISO 9001 is the standard that applies to our work.

The ISO 9001 standard basically requires that we define what we do, capture that definition in a documentation system, and do what we say we do.

DSET will use the requirements defined in ISO 9001 as the starting point for implementing its Quality Management System.

DSETs customers have strongly urged us to obtain ISO 9000 certification. This requires DSET must pass a formal audit conducted by an approved Registrar based on the 9001 requirements.

What is the SEI CMM℠?

The Software Engineering Institute's (SEI) Capability Maturity Model (CMM℠) was initially funded by the Department of Defense to promote reliable software processes in the software industry. The CMM℠ provides a framework for implementing continuous software process improvement. This framework has five maturity levels.

At level 1 the software process is characterized as ad hoc. Few, if any, processes are defined and success depends on the skills, abilities and efforts of individuals.

At level 2 the basic project planning and management processes are established. Software processes are now disciplined and repeatable.

At level 3 both software management and engineering processes are standardized, documented and integrated at an organizational level. Individual projects use an approved, tailored version of the organizational processes to develop and maintain their software products.

At level 4 detailed measures are collected and used to understand and control both software products and processes.

At level 5 continuous process improvement is based on quantitative feedback from processes and product and from piloting innovative ideas and new technologies.

Each level 2-5 is made up of several Key Process Areas (KPAs), which define the "requirements" which must be met to Achieve that level of process capability. For example, the KPAs for level 2 are:

- Software project planning
- Software project tracking
- Software subcontractor management
- Software quality assurance
- Software configuration management
- Requirement management

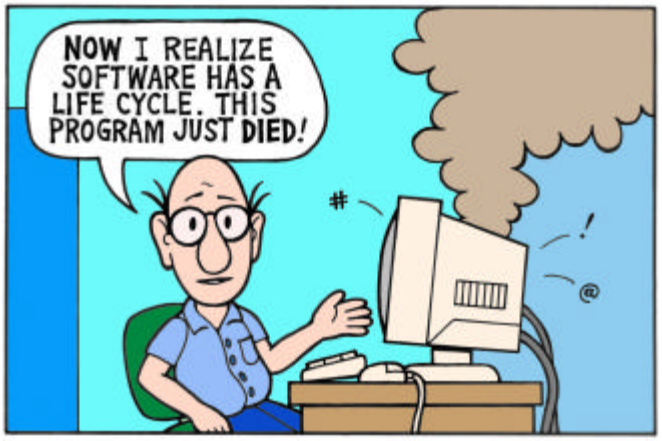
What is TL 9000?

The Quality Excellence for Suppliers of Telecommunications Leadership Forum (QuEST Forum) was founded to foster continued improvements to the quality and reliability of telecommunications service.

This Forum has established the TL 9000 standard, a common set of quality system requirement and metrics for the telecommunications industry. These requirements are built upon existing industry standards, including ISO 9001 and include requirements for the design, development, production, delivery, installation and maintenance of products.

The goals of TL 9000 are to:

- Foster quality systems that effectively protect the integrity and use of telecommunications products: hardware, software or services
- Establish and maintain a common set of quality requirements
- Reduce the number of telecommunications quality system standards
- Drive continuous improvement
- Enhance customer-supplier relationships
- Define effective cost and performance-based metrics to guide progress and evaluate results of quality system implementation
- Leverage industry conformity assessment processes



Who Are We & Why Are We Here? (continued from page 1)

John Lakey, Sr. Process Engineer joined DSET's Quality Management Organization in September, 2000. His prior experience includes software project management, configuration management, quality engineering, process improvement, and training course development and delivery. He has been actively involved in SEI-based process improvement for over 10 years.

Caroline Richards, Sr. Metrics Engineer joined DSET in March, 2000. Her previous experience includes software development and software project team leadership positions with a defense contracting company as well as a software quality metrics engineering position at Alcatel (formerly DSC) responsible for external customer reporting according to Telcordia (formerly Bellcore) and other customer requirements.

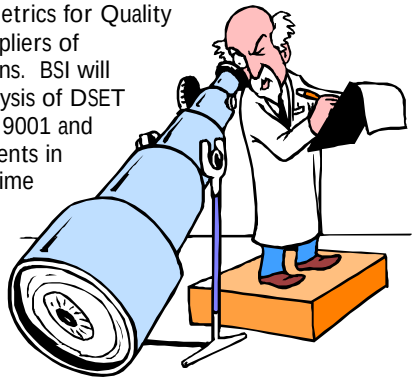
The newest member of our team is Doug Flanigin, our technical publications expert and web guru. Doug joined DSET on the date we published this first edition of our newsletter. Doug's prior experience includes ISO 9001-2 procedure development, standards development, technical writing and WEB documentation and design. He has worked in the telecommunications industry for 3 years and in technical documentation for 25 years.

Who is Our ISO Registrar?

DSET has selected British Standards Institute (BSI) as the 3rd party, qualified ISO Registrar. BSI is headquartered in London, England and has its main U.S. office in Reston, Virginia. DSET will be working through the Houston, TX office of BSI for the evaluation of all DSET locations.

DSET selects BSI as our ISO Registrar

BSI has registered over 35,000 companies world wide (95 countries) to ISO 9001 and has been one of the leaders in the quest for TL 9000, Quality Systems Metrics for Quality Excellence for Suppliers of Telecommunications. BSI will perform a gap analysis of DSET capabilities to ISO 9001 and TL 9000 requirements in the January 2001 time frame.



DSET

How to Send Us Your Input

This is our first newsletter and we hope you have enjoyed our efforts and maybe learned a thing or two.

But being the continuous process improvement types that we are, we are not happy just hoping for the best. **WE WANT YOUR FEEDBACK AND INPUT !!!** That's how we are going to learn from our mistakes and how we identify what we did well so we can repeat our successes.

So help us out. Let us know:

- What do you want to see in the newsletter?
- What can we do better the next time?
- What did you like? And what didn't you like?

We are also looking for input into the contents of this newsletter. You can contribute articles to the newsletter. For example, you can write about:

- What works & what doesn't in your area
- DSET best practices

Your experiences in implementing the DSET Quality Management System (QMS)

- Your lessons learned in software process improvement
- Metrics & measures you have used successfully

You can also submit your questions about quality and DSET's QMS. We will be starting a Frequently Asked Questions section in the next newsletter and you may just see your question answered in print.

We want your feedback & input !!!

To send us your feedback and input, or to submit an article or question, please send an email to:

H.N. Carter at hncarter@dal.dset.com

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Contest Announcement
Name this Newsletter!
Win a Prize!

Your tireless editor could not come up with a clever, catchy, interesting title for this newsletter, and has decided to conduct a contest.

Contest Rules

1. The contest is open to all DSET employees except members of the Quality Management Organization.
2. Multiple entries by the same individual are allowed.
3. Entries must be submitted via e-mail to hncarter@dal.dset.com no later than 5 pm CDT, Oct 27, 2000. Include the words, "Newsletter Name Contest" in the subject line of the e-mail.
4. All entries will be judged by an elite panel of judges.
5. The contest winner will be announced in the next issue of the newsletter.
6. A $25 American Express Check will be awarded for the winning entry.

Enter Early! Enter Often!

Why Measure?

Measurement is common. We measure all the time to obtain the information we need to make good decisions. In fact, one of the first things you probably did this morning was measure. The alarm clock went off and you looked at the time (measure). Then you made a decision based on that measurement – can I hit the snooze button and catch 10 more minutes of rest or do I have to get up right now.

But why do we measure? According to Watts Humphrey, there are four major roles for software metrics:

Understand: We can use software measurements to learn about our current products, processes & capabilities. For example, measurements can provide us with information to answer questions like:

- How much are we spending on software development?
- How much does it cost us to fix an externally reported software fault?
- How many errors & what types of errors are typical in our software products?
- What are our current productivity levels?

This information can be used to:

- Establish baselines, standards & goals
- Derive models of our software processes
- Examine relationships among process parameters
- Identify process, product & service that need to be targeted for quality improvement initiatives
- Better estimate project effort, costs & schedules

Evaluate: We can use software measurements to examine & analyze information as a part of decision-making. For example we:

- Perform a reliability analysis of defect rates during system test to determine if the product is ready to ship
- Evaluate how much we can compress the schedule if we add two more programmers
- Perform a cost benefit analysis on purchasing a new tool

Control: We can use measurements to help us control our software resources, processes, products and services. For example, measurements can be used as our early warning system to identify problems.

Predict: We can use software measurements to estimate the future values of attributes. For example, predicting cost, schedule, effort, resources, staffing, quality, reliability or risk.

As part of its quality improvement program, DSET will uses software measurements to promote best practices for the systematic improvement of our:

- Products, processes & services
- Software engineering practices
- Program, product and project management