Recognizing the need for standard approaches, Nortel became involved with QuEST Forum as a founding member in 1997. QuEST Forum provided Nortel with unique opportunities to better understand the needs of its customers.

The TL 9000 Implementation

Harmonization of quality standards. Prior to TL 9000, Nortel was subject to numerous standards pertaining to the implementation of its Quality Management System (QMS). In addition to ISO 9000, customers were mandating compliance to numerous Telcordia requirements such as GR-1202, GR-1252, TR-179 and GR-929. The elimination of multiple standards reduced costs in several ways:

- Reduced costs in maintaining a single standard. Prior to TL 9000, Nortel was paying a fee to Telcordia to support the evolution of the various standards.
- Reduced costs in obtaining documentation. Organizations need to purchase a single set of handbooks (TL 9000 requirements and measurements) rather than the numerous documents previously required.
- Simplification of process implementation. By eliminating the overlapping requirements and consolidating all QMS related requirements into a single handbook, process implementation was streamlined.

Reduction in external audit costs. Before the TL 9000 implementation, Nortel was paying to maintain CSQP (a Telcordia quality program) registration as well as ISO 9000 registration. These were two separate programs with separate external audit functions.

The TL 9000 QMS saves two separate registrar fees, and requires fewer external resources to support a single, consolidated audit activity as well as a smaller number of customer audits.

Common measurements and benchmarking. Nortel has been able to utilize TL 9000 measurements as a part of its overall quality improvement efforts. TL 9000 measurements data has been built into the Nortel Global Quality Scorecard that is used to drive business improvements. It utilizes the industry data published by QuEST Forum as a data point to track performance in comparison to the industry.

Foundation of Nortel QMS. TL 9000 has been beneficial as a single source set of requirements that serve as the foundation for Nortel Network’s QMS. This has facilitated communication and training across the various organizations within the company. It has used QuEST Forum’s recommended training vendors in this task.
**Winning new business.** TL 9000 registration adds value to Nortel's customer requests for quote and helps win new business. TL 9000 registration is fast becoming a base-line requirement because of its focus on design for reliability, which is also a key element of Nortel's product life cycle model.

**Supplier governance.** TL 9000 registration is being passed along to Nortel's key suppliers to establish a common quality framework across its supply chain.

**Advantages of participating in QuEST Forum.** In addition to the benefits obtained by implementing a TL 9000 based QMS, there are significant benefits derived from participating in the QuEST Forum. Engagement in QuEST Forum has allowed Nortel to interact more effectively with key customers as well as peer quality professionals across the industry. Participation has ensured that the organization has a voice in the content of the TL 9000 handbooks. The QuEST Forum web site also serves as a marketing tool for Nortel's own TL 9000 registration and quality focus.

**Overall Benefits of TL 9000**

TL 9000 is a foundational element of the Nortel Quality Management System. Along with the Quality Policy and Core Values, TL 9000 provides the organization with a set of industry sanctioned, standard quality requirements and measurements. These standards are central to its measurement and analysis process and enhance Nortel's continual improvement efforts. The measurement system provides the organization with valuable insight into the customers' product experience.

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