

# FEB 2015 INSIGHTS & INTENTS

Raising Standards. Bridging Technologies. Building Value.



#### **Acknowledgements**

Our members power the success of QuEST Forum and we would like to thank the many volunteers and industry leaders for sharing their invaluable experience, their untold contributions, always being advocates, and the time they invested in 2014.

#### **About QuEST FORUM**

We are a global association and through our members develop and implement quality and performance practices that unite and improve the ICT industry. Our membership includes service providers, suppliers and liaisons across the globe who are dedicated to improving operational and supply chain quality and performance. QuEST Forum unifies the global ICT community through the implementation of TL 9000, an ICT specific quality management system that is built on ISO 9001.

#### **Our Vision**

Be the global force for improving quality of products and services delivered to customers of information and communication technologies (ICT).

#### **Our Mission**

Enable our customers to improve the quality, reliability, and performance of the ICT industry by:

- Driving the worldwide adoption of TL 9000
- Providing opportunities to share and discuss business impacting best practices
- Providing relevant industry performance benchmarking data
- Providing new products and services to meet our customers' needs globally

#### We invite you...

In 2015 every supplier and provider will need to understand the changes that are imminent for the ICT industry. The individual will fail if they attempt to react alone to new disruptive technologies, the impact of software-defined networks, and changes to established standards such a ISO:9001. But together, and through collaboration, we can elevate our industry and individual businesses. So we invite you to join our association, be a speaker at one of our international conferences, attend a QuEST Forum Academy webinar, or lead a work group that creates standards and best practices. Connect with us at www.questforum.org or via social

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# MESSAGE FROM THE CHAIR

While the end of the year brings a time to rest and reflect, it is the beginning of the New Year that brings us the greatest hopes and renewed energies.

2014 was an evolutionary year for the QuEST Forum. We grew in every way... size of membership, number of dedicated and talented volunteers, geographically, and with new initiatives in areas that were deemed critical by our member companies. Two of these initiatives, Sustainability and Tower Quality & Reliability, have brought a heightened relevance to QuEST Forum and are helping make 'quality cool again', as our CEO, Fraser Pajak, states so very well.

2014 was also a year where we strengthened our partnerships with like-minded organizations all over the world building on common goals and purposes. We signed a historic collaborative Memorandum of Understanding with the Shenzhen Association for Quality, a model step we intend to duplicate in many other areas globally.

In 2015, QuEST Forum's evolution continues.

We live in a global environment, increasingly dependent upon us as individuals and corporations to be responsible stewards of our natural resources. We live in a world where ICT has become intrinsic to our everyday lives. It is critical we not only ensure the quality of our products and services but that we continuously focus on sustainability as we to build and maintain networks... because indeed, quality processes are safe and sustainable processes.

The progress we make together at QuEST Forum is a result of the contributions that the members, the heavy lifters and the champions of this organization provide day in and day out throughout the year. In work groups and regions, in initiatives and partnerships, there is an ever-present realization that what we can accomplish working together is far greater than what we could ever accomplish on our own. Frankly there is too much at stake for us not to collaborate.

This publication is an outstanding example of the community and partnership of QuEST Forum. This entire publication is written by members from our Work Groups and Regions. I hope as you take time to read through these stories you get a strong and growing sense of community that is QuEST Forum and the impact this work is having across our industry and across the world.

Let 2015 be a year where we further strengthen our voice, passion and energy to build upon the foundations we have created in our first 15 years...and added to in 2014. Let 2015 be the realization of even more, in terms of relevance to our ICT industry through our quality work and dedicated efforts that drive results that might be out of reach for any one of us, but are within our grasp when we all work together.

When we share and collaborate with each other, we elevate our industry, our businesses, and ourselves.

Sincerely,

#### **Steve Pickett**

MasTec Network Solutions 2015 QuEST Forum Chair

#### 2014 OPERATIONS REPORT

QuEST Forums activities throughout 2014 were guided by the following elements: Stay relevant by keeping pace with ICT industry needs brought on by rapid technological advancements: enhancing and promoting our value proposition across the industry; continually improving operational efficiency; and maintaining fiscal growth. Thanks to the hard work and dedication of our member volunteers, 2014 was another year of growth and accomplishments.

#### **2014 Activities and Achievements**

- Managed staff turnover while maintaining continuity, knowledge, and productivity.
- Implemented a marketing communications strategy to embrace and use social media. This has allowed QuEST Forum to extend its reach well outside our normal membership and TL 9000 base.
  - Participated in speaking engagements with industry organizations (TIA, OSP, NTCA, etc.)
  - Engaged in Twitter, Facebook, and actively monitor the activity through these outlets.
  - Initiated a program to integrate all communication tools.
- Entered into a MOU with the Shenzhen
   Association of Quality to form a local group to pursue benchmarking activities within China.
   This was part of a new regional China strategy focused on Shenzhen and Guangdong Province.
- Created and added to the staff Business
   Development and Marketing Communications
   Coordinator positions.
- Relocated the QuEST Forum office to a larger and more accommodating location.
- Engaged in a project to enhance the public web with refreshed capabilities to work with all forms of multi-media devices. This site is scheduled to launch in early 2015 with refreshed branding, ease of use, intuitive access to information and resources.
- Held three highly successful global conferences sharing best practices and addressing the current and future challenges throughout the ICT Industry in a period of rapid technological advances.



#### 2014 QuEST Forum Membership

Membership growth continues strong in the Americas region. While QuEST Forum is at an all-time high in total number of members, there continues to be a challenge in attracting global service providers as active members. While we will actively focus 2015 on recruiting global service providers, the membership growth in 2015 is as follows:

- There were 198 global members as we entered 2014 as we accounted for mergers and acquisitions. Our goal which we reached was to have a net gain of 17 members bring the total to 215. This is an increase of over 9%.
- Membership growth was positively impacted by additions brought on as a result of strategic initiatives that were addressing ICT industry needs.
- We have reached out across the industry with reciprocal and honorary memberships with industry leading organizations and associations to improve our outreach and positioning.
- We have been actively targeting Tier II and Tier III Service Providers and have had some success in this endeavor.

#### **TL 9000 Certifications**

The main product of QuEST Forum is our TL 9000 Quality Management System. Since its introduction there has been steady adoption of the standard and growth in the number of companies who have obtained certification. In recent years we have focused on many new and exciting initiatives both within, and alongside TL 9000. While these initiatives bring new members and increased

relevance, we are also keenly aware we need to ensure continued adoption and growth of TL 9000 in ICT as a whole. To that end we are tracking certifications globally and will be increasing marketing activities, focused on the continued expansion and adoption of TL 9000 in 2015 and beyond.

Each time a company receives its first TL 9000 Certification they are awarded a special pyramid. During 2014 there were 51 pyramids awarded.



#### **2014 Financial Highlights**

In 2012, QuEST Forum intentionally invested in our future through some leadership changes. These one-time expenses resulted in a draw from cash reserves in 2013. The budget for 2014 planned for small return to start to replenish those reserves. Through controlled expenses and membership growth QuEST Forum was able to meet our budget and even exceed the plan for the year.

As QuEST Forum plans to execute its growth and awareness strategy the need to expand staff and to increase marketing and social media activities, the Executive Board proposed and the membership approved a dues restructure and increase for large members for 2015.

The Executive Board recognizes that 2015 will be another challenging year for QuEST Forum. In order to achieve its financial goals there will need to be membership growth and increased member sponsorships for our planned events and activities. With the continued support from our member companies we are confident that our goals are reachable and that 2015 will be a great year for QuEST Forum.

The future continues to be bright for companies that join with QuEST Forum, certify to TL 9000 and join our leading edge initiatives. We have an engaged executive board, competent staff and incredible army of knowledgeable volunteers from companies around the world. Our collaboration, influence, relevance and impact continues to grow as we see ICT increasing become essential to our daily lives.

BUDGET Shown in \$000				
(Actual)	REVENUE	EXPENSES	NET	
2011	\$2,606	\$2,284	\$303	
2012	\$2,540	\$2,500	\$40	
2013	\$2,691	\$2,726	-\$35	
2014	\$2,688	\$2,627	\$61	
2015 (Budgeted)	\$2,992	\$2,992	\$.5	



**Jennifer Simcox** Axis Teknologies Co-Chair

**Ed Bryan** ADTRAN, Inc. Co-Chair

**Ben Jernigan** NOKIA Americas Best Practices Conference Chair

**Beth Ford** AT&T Inc. Americas Secretary

Rodolfo Stecco QA - Quality Austria Latin America Secretary

#### **AMERICAS**

QuEST Forum's Americas region aims to advance the organization's strategic objectives, services, and products in the United States, Canada, Central America, South America, and the Caribbean. Throughout the region, we continually promote participation in QuEST Forum work groups and strategic initiatives.

#### 2014 Accomplishments

- Conducted Americas Best Practices Conference in Clearwater Beach, FL., September 2014.
- Organized and identified companies that support QuEST Forum's strategic goals to participate in global C-level networking meetings.
- Strengthened new-member participation in targeted work groups and sub-teams.
- Leveraged member relationships to grow Caribbean and South American membership.
- Provided valuable membereducation webinars.

#### 2015 Initiatives

- Plan and conduct the Americas Best Practices Conference in San Diego, CA., September 2015.
- Strengthen new member participation in targeted work groups and sub-teams.
- Leverage CANTO partnership to grow Caribbean and South American membership.
- Provide valuable member-education webinars.
- Deliver QuEST Forum education targeted to newly certified non-members.
- Incorporate member satisfaction survey data into improvements that increase regional value.
- Restart activities to increase TL 9000 awareness and grow QuEST Forum membership in Brazil.



Manfred Kenull Cisco Systems Chair

Helena O'Malley Xilinx Vice Chair

Michaela Feiertag Alcatel-Lucent EMEA Regional Conference Chair

**Alan Rutterford**Excel Partnership UK
Secretary

## **EMEA**

QuEST Forum's EMEA regional team works to facilitate activity and engagement in Europe, the Middle East, and Asia. This regional team delivers distinctive value by connecting the TL 9000 implementation and QuEST Forum value proposition to its business environments.

#### 2014 Accomplishments

- Agreed on and defined Managed Services key performance indicators (KPI); completed benchmarking study results.
- Validated TL 9000 framework/white paper as a solid basis for the enduser KPI concept; compared to other published documentation.
- Performed proof-of-concept study on end-user-focused KPIs, involving key worldwide operators, and presented it to the industry.
- Conducted the EMEA Regional Conference in Vienna, Austria, 24-25 June 2014.

- Promote QuEST Forum to attract more operators and grow the EMEA member base.
- Strengthen liaisons with strategic partners.
- Pursue the EMEA KPI team's top priorities:
  - Final approval to include defined
     Managed Services KPIs in TL 9000
  - Continue existing Managed Services benchmark, adding financial dimension
  - Define and benchmark customer experience KPIs
  - Update KPI framework/white paper to reflect current proof of concept presented to the industry
- Conduct EMEA Regional Conference in Munich, Germany, 15-17 June 2015.



#### **APAC**

#### Satoshi Ikeuchi

Fujitsu Co-Chair

#### Yao Cuifeng

ZTE Corporation Co-Chair

#### Shunichi Fujii

Fujitsu

APAC Regional Conference Chair

#### **Ashok Dandekar**

Fujitsu Secretary

#### **APAC - Greater China Hub**

#### **Jack Pompeo**

Huawei Technologies Co. Ltd. Executive Director, APAC Region

#### Yao Cuifeng

ZTE Corporation Co-Chair

#### **Zhang Wei Hua**

China Tel Shanghai Co-Chair

#### Din Qi

China Tel Shanghai Co-Secretary

#### Dr. Wan Juyong

CEPREI Co-Secretary

#### **APAC - India Hub**

#### Raiu Wadalkar

Tech Mahindra Limited Co-Chair

#### Satish Mittal

Vodafone Co-Chair

#### **Kavita Choure**

Tech Mahindra Limited Co-Secretary

#### APAC - Japan Hub

#### Shunichi Fujii

Fujitsu Chair

#### Chisato Kikuchi

Fujikura Co-Vice Chair

#### Isao Uchida

Technofer Co-Vice Chair

#### Hisahiro Yoshizaki

Fujitsu Secretary

#### APAC - Korea Hub

#### Junil Song KQA

Secretary

#### **APAC**

QuEST Forum's Asia-Pacific region continues to support rapid regional growth, with operational hubs in greater China, India, and Japan, as well as participation in Korea and other countries in the Association of Southeast Asian Nations.

# CHINA 2014 Accomplishments

- Launched world's first QuEST Forum collaboration with Shenzhen Association for Quality, for benchmarking.
- Held two executive meetings with the mayor of Shenzhen, director general of Invest Shenzhen, and chairman of Shenzhen Association for Quality.
- Hosted executive board meeting and Global Quality Forum at Huawei campus.

#### 2015 Initiatives

- Build up QuEST Forum Shenzhen organization governance and structure.
- Build up local QuEST Forum data repository, working with The University of Texas at Dallas.
- Send delegates to QuEST Forum best practice conferences in Japan, Germany, and the United States.
- Hold executive-level QuEST Forum events in Shenzhen.
- Promote TL 9000 as a regional ICT industry standard.

# INDIA 2014 Accomplishments

- Conducted three leadership meetings and best practice conclaves; Indus towers office, Delhi, February 2014, Vodafone office, Mumbai, June 2014 and Infosys office, Bangalore, September 2014.
- Held APAC conference at Delhi, India, April 2014.
- Welcomed government organization TEMA as a new QuEST Forum member.
- Participated in international task forces on sustainability and TL 9000 barriers.
- Appointed BSI as training agency for TL 9000 lead assessors training; conducted one in-house certification program for HP India, October 2014.

#### 2015 Initiatives

- Demonstrate tangible benefits by internalizing TL 9000, with help of certified companies.
- Involve senior-level operational, professional, and government telecom standardization entities in QuEST Forum activity.
- · Enhance membership.
- Create an Eco System involving QuEST Forum India hub members; support global task forces, such as the tower initiative and sustainability group.
- · Train lead auditors.
- Involve an institution in TL 9000 training for students.

#### JAPAN 2014 Accomplishments

- Held four hub meetings.
- Held one hub meeting with QuEST Forum delegation.
- Held two successful TL 9000 seminars.

- Host the 2015 APAC Best Practices Conference in Tokyo, April 2015.
- Hold five hub meetings.
- Hold two TL 9000 seminars.

#### **OVERSIGHT WORK GROUP**

John Wronka Alcatel-Lucent Co-Chair

Karen Rawson The DESARA Group, Inc. Co-Chair

Christine Ferrara NOKIA Co-Secretary

Randy Kile Emerson Network Power Co-Secretary QuEST Forum's Oversight Work Group ensures the integrity of the TL 9000 certification program and the effectiveness of QuEST Forum operations, communications, and member services.

#### 2014 Accomplishments

- Completed requirements
   R5.5 Handbook sanctioned training course updates.
- Provided an analysis of membership dues to the board, creating a new rate structure to generate additional revenue in 2015.
- Conducted multilingual Member Value and TL 9000 surveys to guide 2015 strategic planning and improvement actions.
- Delivered nine Jumpstart presentations.
- Published eight multilingual alerts.
- Accreditation Body/ Certification Body sub-team:
  - Approved "Auditor Statistics with Supplemental Guidance" document
  - Worked to improve third-party process through auditor rotation, measurement handbook checklist pilot, auditor competency, validation audit program
- Strategic relationships:
  - Established a public
     QuEST Forum position
     that based on current
     information, it plans
     to incorporate ISO
     9001:2015 as a basis for
     TI 9000
  - Became member of USTAG Liaison Group and an A Liaison member of ISO CASCO

- Review and comment on ISO 9001:2015 FDIS.
- Present at the 23rd Annual ISO 9000 World Conference.
- Obtain approval to join ISO CASCO.
- Launch new QuEST Forum web site on new Word Press platform, implement publishing controls and policies, establish section ownership, review/refresh content.
- Develop and maintain training:
  - Develop an RFP for Requirements Handbook R6.0 Training course
  - Support training development and delivery requests from other groups (including webinars and strategic initiatives and QuEST Forum Academy)
  - Qualify Authorized Training Providers to support regional needs
- Continue to select and translate appropriate TL 9000 documents and web material including:
  - TL website public material and separate sites for other languages
  - Links from QF site to new sites
  - TL sites within the login such as RMS and data submission
  - Survey and marketing support
- Review and update the Bylaws as necessary.
- Oversee operation of QuEST Forum e-learning facility and plan for future changes.
- Plan and conduct surveys, implement improvement opportunities:
  - Quarterly TL 9000 Users Survey
  - Member Value Survey
  - Others as required
- Operate Individual Certification program.
- Monitor performance and contracts for:
  - UTD
  - Training Providers
  - Translators
  - Others as needed
- Accreditation Body/Certification Body sub-team:
  - Training change items, including annual CB training, quarterly webinars, recordings library, training efficacy
  - Code of Practice updates, as required
  - Follow-through on measurements checklist pilot

#### **IGQ WORK GROUP**

Mike Gaines AT&T, Inc. Co-Chair

Sheronda Jeffries Cisco Systems Co-Chair

Nancy Patterson Alcatel-Lucent Co-Secretary

William Jibby Pace Americas Co-Secretary

#### **Integrated Global Quality**

QuEST Forum's Integrated Global Quality Work Group works to harmonize global industry quality system requirements and measurements, ensuring that TL 9000 handbooks keep pace with changes in products, solutions, technology, services, and supply chain.

#### 2014 Accomplishments

- Mapped ISO 9001: 2015 Draft International Standard to Requirements Handbook 5.5.
   Published Product Category Tables R5.2, including review of tables by network planners from a major service provider; held webinar to review ISO 9001:2015 and TL 9000 Requirements Handbook 6.0 schedule.
- Continued partnership with TC-176 liaison sub-team to provide input to the new ISO 9001 draft; educated member companies on changes; helped plan future TL 9000 Requirements Handbook release.
- Surveyed service providers to learn why they are not TL 9000 certified, and if they require suppliers to be certified.
- Supported regional measurements initiatives, including Managed Services in APAC and EMEA KPI sub-team.
- Supported strategic initiatives, including marketing outreach, performance data reports improvement, network and service reliability, measurements for next-generation networks, and product development process.
- Elevated sustainability to a strategic level, developing a model with 10 sustainability measurements.

- Complete TL 9000 Requirements Handbook 6.0, including ISO 9001:2015 Final Draft International Standard.
- Develop a Quest Forum Academy seminar for service providers on the advantages of requiring suppliers to be TL 9000 certified.
- Complete new measurements from sub-teams per the new addendum process, for possible Measurements Handbook update.
- Drive the IGQ charter through sub-team, regional, and strategic initiative support.





#### **GBE WORK GROUP**

#### **Ashok Dandekar** Fujitsu Co-Chair

Vinny Arrigali Cisco Systems Co-Chair

**Bob Clancy** BIZPHYX, Inc. Co-Secretary

**Art Morrical**Alcatel-Lucent
Co-Secretary

#### **Global Business Excellence**

The Global Business Excellence Work Group facilitates the evolution of the QuEST Forum regions and hubs, and establishes QuEST Forum as the recognized global industry leader for business excellence and best practices information.

#### 2014 Accomplishments

- Supported Best Practice
   Conference planning with staff and region/hub leaders, and helped plan APAC 2015 Best Practices
   Conference in Tokyo.
- Facilitated executive visits to India, Japan, and China.
- Worked to execute China strategy and further establish TL 9000 in China, helping develop bylaws for the NGO in Shenzhen.
- Assisted Oversight Work Group with approval of TL 9000 Master Trainer in India.
- Made significant progress on initial process benchmarking survey targeted for 2014 deployment.
- Facilitated India hub's Managed Services KPI initiative with IGQ Work Group.

#### 2015 Initiatives

- Provide strategic pillar support; regional hub enablement; and engagement, facilitation, representation, training, sustaining, and communication for India, EMEA, and APAC Conference in Japan and China's QuEST Forum/ Shenzhen NGO.
- Establish best practice and business excellence industry leadership through process benchmarking, including deployment of Quality Management System value survey and TL 9000 and Agile software development benchmark activity.
- Support China's QF/Shenzhen NGO with infrastructure, bylaws, and startup assistance.
- Obtain regional input for measurements handbook.
- Identify regional TL 9000 value proposition.
- Obtain Executive Board support of expanded regional translations, training, and localizations.

#### **NSPRC WORK GROUP**

#### **Network Service Provider Reliability Council**

QuEST Forum's Network Service Provider Reliability Council identifies service performance and product quality concerns that can be addressed within the TL 9000 standard, helping to ensure reliable, cost-effective communications service for all end users. The NSPRC working committee provides a forum for active, voluntary participation in resolving common reliability and public safety problems in equipment operation and maintenance within the communications service provider network.

#### Ann Fletcher CenturyLink Vice Chair

Roger Werth

Cincinnati Bell

Chair

Mike Gaines AT&T, Inc. Secretary

#### 2014 Accomplishments

- Added four new members, including two with IP responsibility.
- Added one new IP supplier.
- Identified and cleared numerous technical issues with six major suppliers, improving network reliability.
- Improved understanding of QuEST Forum by attending three presentations on executive board initiatives.

- Continue to increase the focus on IP in both membership and vendor issues.
- Continue to seek new member companies and representatives.
- Continue to identify and work with suppliers on technical issues to improve network reliability.
- Bring in wireless representation.

#### 2014 STRATEGIC INITIATIVES

QuEST Forum's strategic initiatives use the skills and resources of the executive board to champion and guide projects designed to achieve the organization's strategic goals.

#### **Marketing Outreach**

The value of QuEST Forum and TL 9000 extends far beyond the ICT industry. By supporting communications and relationships with people and entities outside our membership, the marketing outreach strategic initiative aims to expand and disseminate knowledge of QuEST Forum and TL 9000 value beyond our traditional, core audiences and venues.



#### 2014 Accomplishments

- Published a brief "elevator speech" that anyone can use to quickly explain the benefits of QuEST Forum membership and TL 9000 certification.
- Planned relaunch of a member newsletter beginning in 2015, based on survey feedback about recipients' preferences for format and content.
- Maintained marketing material and process documents.
- Supported presentations, panels, and several external events, including TIA 2014, OSP Expo2014, NTCA, ISO CASCO Workshop, and NATE.

#### 2015 Objectives

- Market TL 9000 and QuEST Forum to specific segments, particularly all sizes of service providers around the world.
- Support existing strategic relationships with industry associations, governmental agencies, and NGOs, and developing new relationships in these sectors.
- Maintain and grow QuEST Forum's marketing material, including development of new public web site content.

#### **Network and Service Reliability Measurements**

The network and service reliability measurements strategic initiative improves awareness and understanding of the value of industry benchmarking, influencing more global service providers to participate. To continually improve the quality and performance of the network to end customers, the EB6 Work Group collaborates to develop and deploy common service provider metrics to measure the ongoing quality and services as managed by Network Operations Centers.

#### 2014 Accomplishments

- Involved regional service providers in the work group.
- Completed review and validation of benchmark calculation methods.

#### 2015 Objectives

- Increase work group membership.
- Improve member participation.
- Introduce regular best practice reviews to leverage benchmarking results.
- Propose process-oriented reliability measures (i.e. cable repair time).



#### **Performance Data Reports**

QuEST Forum's performance data reports initiative continually fine-tunes data reporting, capture, and categorization to improve member satisfaction with and confidence in performance data and performance data reports.

#### 2014 Accomplishments

- Published the eighth and ninth industry reports of an ongoing series: A retrospective of on-time delivery performance for a sample of product categories, and a separate study of 2G/3G/4G wireless performance.
- Proactively assessed registrants in product categories in which data anomalies were identified:
  - Sent investigation letters for fiber to identified anomalies.
  - Received a strong response, with corrected data submitted, resulting in more accurate and rational industry statistics.
  - Continued execution of the product category verification process.
- Gained approval to trial a new process and tool requiring forum SME review and approval of new product category selections.
- Building on work started in 2013, updated "advisor" algorithms to reduce false alarms –
  which could mask real data integrity problems
  – especially in the case of "small numbers" for
  outages.

- Conducted PDR workshops at all regional conferences.
- Updated the "How to Use TL 9000 PDRs" white paper in response to QuEST Forum member value survey feedback.
- Developed a TL 9000 Data Submission white paper to promote the use of templates, rather than data entry, to ease submission and improve accuracy.
- Continued to address low-participation product categories where PDRs are not available.

#### 2015 Objectives

- Improve PDR accuracy and value:
  - Proactive/reactive anomaly and product category verification.
  - Continue advisors and floor review, and update as required.
  - Define "similar" product categories for those categories with fewer than three participants.
  - Target potential registrants to expand market segment coverage in emerging product categories.
  - Investigate tools to help users interpret PDR data.

#### **Product Development Process**

QuEST Forum's product development process initiative develops and delivers complementary products and services that enable continued improvement and awareness of quality in the ICT industry, so that we can continue to build our reputation as the global force for ICT quality and reliability, along with our membership and revenue.

#### 2014 Accomplishments

- Through QuEST Forum Academy internship program, provided three students with laptops to perform real work assignments with member companies.
- Developed architecture and IT infrastructure toolbox to allow QuEST Forum to provide benchmarking services to non-members and TL 9000 certified organizations.

#### 2015 Objectives

- Work with QuEST Forum Academy to identify revenue potential for new course offerings.
- Restart review and evaluation of TL 9000
   Implementation Guide, and launch it as a QuEST
   Forum product. Evaluate marketing opportunities for this valuable support to organizations interested in TL 9000.
- Develop QuEST Forum Academy small business program course section.
- Develop TL 9000 registrant, a client-based tool that will allow comparison of a company's TL 9000 data with data from QuEST Forum-generated performance data reports.

#### **Network Function Virtualization**

QuEST Forum's Executive Board is pleased to announce a new strategic initiative in 2015: Network Function Virtualization, also known as NFV.

This initiative will clarify and prioritize the industry's current NFV quality and performance reliability issues, and will be led by a team of companies whose products and services are used in the development, deployment, and use of NFV.

The NFV strategic initiative will assess the needs and requirements of organizations developing and offering NFV services, encompassing reliability, performance, and security. The team will examine the possible impact on the TL 9000 standard and associated TL 9000 measurements. Based on the findings, the team will recommend future QuEST Forum activities to improve performance in these areas.

Anticipated outcomes include:

- Provide the industry with measurements of NFV quality of service provided to customers.
- Develop appropriate enhancements to TL 9000, and provide benchmarking opportunities.

QuEST Forum is seeking companies to participate on the NFV team driving this initiative. To learn more, contact us at www.questforum.org.

#### **Cost of Poor Quality**

A new initiative for 2015 is Cost of Poor Quality (CoPQ). Our goal is to create a clear, aligned definition and normalized reporting for agreed set of CoPQ elements. Therefore, we are soliciting member participation for a benchmarking exercise of agreed upon KPIs affecting CoPQ. Deepti Arora of Nokia has been appointed the Executive Board sponsor of this initiative.



#### **Cell Tower Quality and Reliability**

The innovation of the ICT industry is unlimited, but new ideas and technology can only be as successful as the wireless networks that support them. QuEST Forum's cell towers and site management initiative seeks industry leaders' input to clarify and prioritize current wireless site installation quality, safety, and performance reliability issues. The findings will drive recommendations for future QuEST Forum initiatives to improve wireless sites.

This initiative provides the industry with predictive indicators of quality of service provided to customers, appropriate measurements for TL 9000, as well as benchmarking and reporting on these indicators and the best practices that drive them.

In 2014, the initiative focused on developing safety, quality, and reliability requirements and metrics for a new tower construction product category. The team includes more than 30 QuEST Forum member and non-member service providers, installation contractors, architecture and engineering firms, OEM suppliers, and other industry organizations.

#### 2014 Accomplishments

- Conducted a benchmark study for wireless installation services, using current installation product category metrics. The benchmark study led to a new product category, tower construction, which will be included in the new, 5.2 release of the TL 9000 Measurements Handbook.
- Formed a safety sub-team that includes representatives from the National Association of Tower Erectors as well as other tower safety organizations and EHS. This group focused on improving safety in construction of wireless sites, developing safety metrics and certification programs for companies and individuals performing wireless construction and installation services.
- Identified top installation issues experienced on wireless sites, detailing the most common and critical technical and safety issues through an anonymous survey.

#### 2015 Objectives

- Continue to improve the quality and reliability of wireless installations by identifying effective metrics and best practices.
- Clarify QuEST Forum's role in improving safety in the tower construction industry, engage additional participants from EMEA and APAC, and maintain active participation from both member and non-member companies as well as other industry organizations.

#### **Wireless Handsets**

Effective benchmarking begins with standardized measurement. The wireless handsets strategic initiative standardizes the measurements used to monitor wireless handset performance, providing the basis for benchmarking quality improvements. By creating standard definitions for performance terms such as "dead on arrival (DOA)," "buyer's remorse exchange (BRE)," "warranty defect rate (WDR)," "bounce rate (BOU)," and "no trouble found (NTF)," this initiative lays the foundation for reliable industrywide benchmarking of handset performance.

#### 2014 Accomplishments

- Defined "dead on arrival," "buyer's remorse exchange," "warranty defect rate," and "bounce rate."
- Began DOA benchmark study by submitting sample data to the University of Texas TL 9000 repository.
- Formed a new sub-committee team in May 2014 to define device testing criteria during triage process. Team members include Verizon, Pantech, AT&T, HTC, and LG.

#### 2015 Objectives

- Define the "no trouble found" category and submit the definition for approval.
- Expand the benchmark study to include BRE,
   WDR and BOU data for the University of Texas
   TL 9000 repository.
- Ensure all documents are properly submitted to the QuEST Form database for handset metrics.
- Secure additional members to participate in benchmark data submission activities.

#### **QuEST Forum Academy**

The QuEST Forum Academy (QFA) was launched in 2014 to attract new QuEST Forum members and to provide knowledge, training, and education on hot topics in information and communication technologies.

Led by industry experts from around the world, the Academy's programs deliver timely information about current needs and future trends in various areas, such as standards, measurements, risk management, and sustainability.



#### 2014 Accomplishments

- Developed infrastructure to host webinars.
- Held five webinars that were successful in attracting both members and non-members.
   At least two non-member webinar participants ultimately joined QuEST Forum.
- Created a post-webinar survey to capture feedback from individuals participating both live and via recording.
- Created an online project submittal form to capture ideas for future webinar topics, and an evaluation system for these ideas that uses defined ranking criteria and scales.

#### 2015 Objectives

- Continue to deliver webinars (free and feebased) in support of TL 9000 and QuEST Forum initiatives.
- Expand webinars to support the Small Business Technology initiative, Validation Audit Project, TL 9000 measurements, and other topics submitted to QFA.
- Complete definition and process mapping for QFA sub-teams and processes.
- Create agreements for e-Learning, VILT, and live classroom training to be offered by QuEST Forum Academy.



#### **Sustainable Development**

We live on a planet where we all must share finite resources. Using them wisely can help ensure that those resources will be available to us now and in the future, and can create harmony between our planet's inhabitants and its natural systems and the environment. Companies worldwide have embraced the need for social, economic and environmental responsibility, integrating sustainability into their quality management systems and lifecycle models. To support their efforts, in 2014, QuEST Forum has elevated sustainability to one of its top strategic priorities.

At the heart of this initiative is a measurement model focusing on 10 key sustainability measurements, introduced by British Telecom with epi Consulting.

Our overarching goal is to establish the QuEST Forum TL 9000 benchmarking model as the industry standard for assessing the effectiveness and maturity of a company's sustainability programs.

QuEST Forum invites you to join us in creating a sustainable future for the ICT industry. To learn more, please contact Stephen Bernard, stephen.bernard@att.com, or Jef Mindrup, jm@antecapere.com.

By 2017, through the use of this model, we intend to:

- Raise the holistic understanding and practice of sustainability in the ICT sector using quantifiable measurements.
- Increase the adoption and common use of industry standards.
- Share best practices throughout the industry.
- Establish a level playing field and common language for sustainability.



# TL9000

# 2014 TL 9000 CERTIFICATIONS

Congratulations to all of the organizations that obtained TL 9000 certification in 2014! QuEST Forum would like to recognize the respective Certification Body that helped these companies establish quality management systems in their organizations. Thank you also the University of Texas at Dallas for serving as the Systems Administrator for TL 9000.

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Company	Location	Certification Body
ALOM Technologies Corporation	United States	TUV SUD America, Inc.
Asociar	United States	ABS Quality Evaluations, Inc.
Axcent Networks, Inc.	United States	BSI Group
Cal-Comp Electronics de Mexico Co SA de CV	Mexico	DNV GL
Dura-line Inc.	United States	SAI Global Certification Services Pty Ltd.
JDSU	Mexico City	NQA (National Quality Assurance)
JDSU	Milpitas	NQA (National Quality Assurance)
JDSU	Guadalajara	NQA (National Quality Assurance)
JDSU	Atlanta	NQA (National Quality Assurance)
JDSU	Bothell	NQA (National Quality Assurance)
JDSU	Vancouver	NQA (National Quality Assurance)
JDSU	Indy	UL DQS, Inc.
JDSU	Salem	NQA (National Quality Assurance)
JDSU	Ottawa	NQA (National Quality Assurance)
JDSU	Colorado Springs	NQA (National Quality Assurance)
JDSU	Richardson	NQA (National Quality Assurance)
JDSU	São Paulo	NQA (National Quality Assurance)
JDSU	Morrisville	NQA (National Quality Assurance)

JDSU	Rio de Janeiro	NQA (National Quality Assurance)
Martin Enterprises	United States	Perry Johnson Registrars Inc.
Midwest Com-Tel, Inc.	United States	Orion Registrar, Inc.
mophie L.L.C.	United States	ABS Quality Evaluations, Inc.
RR Donnelley GTS	United States	NQA (National Quality Assurance)
SPC	United States	NQA (National Quality Assurance)
Trilogy Communications, Inc.	United States	BSI Group
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### **APAC**

AIAO		
Company	Location	Certification Body
BROWAVE Corporation	Taiwan	TUV Rheinland of North America, Inc.
DAESUNG INFOTECH	South Korea	Korea Quality Leader
Digital Multimedia Technology Co.,Ltd.	South Korea	Korea Quality Assurance (KQA)
Dongguan Samkwang Sc SCIENCE & TECHNOLOGYCO., LTD.	China	SAI Global Certification Services Pty Ltd.
e-Tech System	South Korea	Korea Quality Leader
Ensky Technology (Shenzhen) Co., Ltd.	China	DNV GL
Huawei Technologies Co., Ltd.	China	BSI Group
Hyukwang Electronics Telecommunication, Co., Ltd.	South Korea	Small and Medium Business Corporation Registrar(SBCR)
JDSU	Shenzhen	NQA (National Quality Assurance)
JDSU	Singapore	NQA (National Quality Assurance)
JDSU	Shanghai	NQA (National Quality Assurance)
JDSU	Seoul	NQA (National Quality Assurance)



**KYOCERA** Corporation

**KYOCERA** Corporation

Nanjing Gean Information

(Dongguan) Ltd.

System Co., Ltd.

(Yantai) Co., Ltd.

LITE-ON Network Communication

Merry Eictonics (ShenZhen) Co., Ltd.

PCT Broadband Communication

Samsung Electronics Hainan

Fiberoptics Co., Ltd. (SEHF)

Seoul Cyber University

Yokohama

Daito

China

China

China

China

China

South Korea

Japan Quality Assurance Organization - JQA

Japan Quality Assurance Organization - JQA

WIT Assessment Co., Ltd.

WIT Assessment Co., Ltd.

International Standard

Certification Co. Ltd.

DNV GL

BSI Group.

BSI Group





JDSU	Beijing	NQA (National Quality Assurance)	Sify Technologies Limited	India	UL DQS Inc.
JDSU	Tokyo	NQA (National Quality	Sterlite Technologies Limited	India	DNV GL
3500	TORYO	Assurance)	Tech Mahindra Limited	India	UL DQS Inc.
JDSU	Chatswood	NQA (National Quality Assurance)	Top Engineering Co., Ltd.	South Korea	Korea Quality Leader
JDSU	Guragon	NQA (National Quality	Union of Masters	South Korea	Korea Quality Leader
		Assurance)	Shenzhen Wayos Technology Co., Ltd. Services	China	Universal Certification Co., Ltd. (UCS)
JDSU	JDSU India	NQA (National Quality Assurance)	Velocis Systems (P) Ltd.	India	BSI Group
Zhongtian technology industrial wire	China	CEPREI Certification Body	(M) Sdn. Bhd.		
& cable system Co., Ltd.			Wistron NeWeb Corporation	Taiwan	TUV Rheinland of North America, Inc.
Zhongtian broadband technology Co.,Lto	d. China	CEPREI Certification Body	WNC (Kunshan) Corp.	Taiwan	TUV Rheinland of North
Jiangsu Zhongtian Technology Co.,Ltd. Optics Co., Ltd.	China	CEPREI Certification Body	wive (iturishan) corp.	Taiwaii	America, Inc.
Zhongtian Technology Fibre Optics Co., Ltd.	China	CEPREI Certification Body	ZhongTian Technology Fibre Optics Co.,Ltd.	China	CEPREI Certification Body
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Zhongtian Hitachi Radio Frequency Cable Co., Ltd.	China	CEPREI Certification Body	EMEA		
KAONMEDIA Co., Ltd.	South Korea	Korea Quality Leader Assurance)	Company	Location	Certification Body
KunShan Kaisipiteng Electronic Co., Ltd.	China	WIT Assessment Co., Ltd.	arcutronix	Germany	QA - Quality Austria

CIVICA		
Company	Location	Certification Body
arcutronix	Germany	QA - Quality Austria
JDSU	Edinburgh Park	NQA (National Quality Assurance)
JDSU	Basingstoke	NQA (National Quality Assurance)
JDSU	Madrid	NQA (National Quality Assurance)
JDSU	Eningen	NQA (National Quality Assurance)
JDSU	Plaisir	NQA (National Quality Assurance)
JDSU	St. Etienne	NQA (National Quality Assurance)
ml&s GmbH & Co. KG	Germany	QA - Quality Austria

# What members are saying



#### 2014 EMEA Regional Conference

"I was impressed with how well the speakers prepared! I came away from the conference with new and meaningful ideas that I can apply at my company."

Jennifer Schoenhofer,
 President, Axis Technologies

"Outstanding panel discussions! The speakers depth of knowledge and candid answers were refreshing."

- Dr. Glenn Edwards, Head of Governance & Supplier Excellence, BT

#### **2014 Americas Best Practices Conference**

"2014's Americas Best Practices Conference was the best yet -- excellent speakers and topics, great networking opportunities, fabulous setting!"

> – Richard Hill, QMS Consultant, Auditor & Trainer

#### **2014 APAC Best Practices Conference**

"Brilliantly run event at a venue that was comfortable and a remarkable value! I can't wait to attend next year!"

Yasser Nafei,
 Senior Vice President, LG Electronics

#### **QuEST Forum Membership**

"I benefit each day from my QuEST Forum membership. It has provided me access to an established network that values our commitment to continuous improvement in support of TL 9000 quality standards. The leadership is excellent and the content of the lecture series is well thought out and professionally presented."

Lisa Dolan,
 Vice President, Supply Chain Strategy at ALOM

#### **Jump Start**

"I wish your Jump Start Mentor Program had been around when I began looking into obtaining UNDC's TL9000 certification! It certainly could have streamlined the process for us."

Cindy Kazee,
 President, Universal Network Development Corp

#### **Small Business**

"ARTEMIA's association with the QuEST Forum small business group affords us a unique insight into the ICT industry meaning we are far better placed to support our clients. The supportive network, inspired leadership and opportunity for continued learning through the excellent lecture series are all invaluable."

- Barbara I. Wichmann, CEO, ARTÉMIA Communications, Inc.



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MasTec Network Solutions

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Verizon Wireless

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