PANEL: The GIQLP – Product Integrity’s Link to Acquisition Reform

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1. INTRODUCTION

The Government and Industry Quality Liaison Panel (GIQLP), made up of government agencies, industry associations, and professional societies is intimately involved in the vast changes being made in the government acquisition process. Members of this Hammer Award winning panel will discuss their latest “Roadmap for Quality in the 21st Century” efforts to reduce contractor operating costs, increase process efficiency, increase contractor accountability, and improve product quality. The panel begins with brief presentations on the origin, charter, and current thrusts of the GIQLP and is followed by government and industry perspectives from the co-chairs of this prestigious Panel and a real-life success story of industry application of the current initiatives.

2. GIQLP CHARTER AND ORGANIZATION

Historically, the federal government has acquired its goods and services through a tightly defined and controlled system of regulations and specifications placed on federal acquisitions to protect the public’s investment. Unfortunately, with the changing times and the global economy, the prescriptive methods of the government not only forced many government suppliers to operate inefficiently but also hampered U.S. suppliers from competing effectively in the international marketplace. The over-prescription of design requirements stifled suppliers’ creativity to produce more innovative products. This situation often resulted in delivered products costing more while having limited functionality, quality and reliability.

Recent directives from the Office of Management and Budget (OMB) strongly encouraged federal agencies to refocus on performance instead of design requirements, and to use voluntary national standards, wherever possible. During the same time frame application of the non-prescriptive ISO 9000 standards was spreading across the country. NASA and DoD began to converge towards using the ISO 9000 standards in lieu of the standards unique to each organization. This convergence established common ground between the two agencies in an opportunity to improve the federal acquisition process as well as to reduce supplier overhead operating costs.

The Government and Industry Quality Liaison Panel (GIQLP) was created during April 1994 when “quality” principals from NASA, DoD and three industry associations (Aerospace Industries Association (AIA), Electronic Industries Association (EIA), and National Security Industries Association (NSIA)) held an offsite meeting at Solomon’s Island, Maryland to discuss new quality acquisition opportunities. Numerous GIQLP goals were discussed that were considered essential to improving the federal acquisition process. After a series of meetings, the GIQLP goals were refined to:

1. Enable a single quality system at a contractor’s facility that would satisfy all government customers,
2. Promote Advanced Quality Practices, and
3. Streamline oversight techniques.

The first goal was broadened in scope and adopted by DoD as the “Single Process Initiative (SPI) Block Change.” NASA subsequently issued a policy letter that partnered with DoD in this initiative. To date, over 110 contractors have participated with 408 concept papers submitted for consideration affecting 479 internal processes.

The second and third goals are in various stages of implementation and will be discussed during the conference. An Internet website is being developed for the GIQLP that will make the output products, and agency/industry status more readily accessible. The address will be http://www.giqlp.org.

During the Vice President’s National Performance Review presentation of the Hammer Award to the GIQLP, it was noted that this was the first award presented to a joint government-industry group based on the “potential” for making the government work better and costing less. The GIQLP is demonstrating that government and industry can partner together to improve the acquisition process as a “win-win” proposition for both parties.

3. THE DoD PERSPECTIVE

The GIQLP evolved from a joint DoD, NASA, and industry initiative to implement commercial quality standards. This joint effort resulted in a DoD policy memorandum dated 2/14/94 which removed the barriers from ISO-9000 implementation and advocated flexibility in the application of contract quality standards and a single quality process in a contractor’s facility. The GIQLP goals evolved from an industry and government dialogue on how to best achieve these objectives.

In April 1995, a memorandum of understanding was signed by representatives of all participating agencies and three industry associations (AIA, NSIA, and EIA) to support the goals of the GIQLP. These goals included (1) a single quality process in a contractor’s facility, (2) sharing of information and utilization of advanced, prevention based engineering and manufacturing practices, and (3) streamlining of contractor oversight. A strategic plan and a list of panel guideline products were developed to facilitate implementation.

In December 1995, the DoD initiated implementation of the single process initiative which outlined the single process concept of the panel; however, it went beyond just quality.
appropriation encouraging broader implementation in other key processes as well. In May 1996, HQ NASA issued a similar memorandum. In June 1996, the System Engineering Steering Group, a senior level panel of executives (including DoD, NASA, and FAA) were briefed on the panel’s recommendations and, in return, asked for the panel to identify actions for immediate implementation.

The context for implementation of the panel’s recommendations is Integrated Product and Process Development (IPPD). The Deputy Director for Systems Engineering, has the DoD lead for IPPD policy implementation and also has the lead for implementation of the panel’s recommendations.

The panel’s products are currently under review within the DoD. The single process initiative has been accepted and is well underway. The Defense Logistics Agency’s Defense Contract Management Command (DCMC) has received over 400 concept papers outlining proposed process changes. Quality is the most frequently cited process in these papers. Guidance on single process facilities and advanced engineering and manufacturing practices have been included in DoD’s Acquisition Deskbook (Web Address: http://deskbook.osd.mil/deskbook.html). DoD’s Production Resources Functional Board which is responsible for DoD Quality training is reviewing the panel’s Quality training template. Further work is underway to assess the panel’s recommendations, joint audits, and mutual recognition of audit results. As this paper goes to press, the outlook for adoption of this concept looks promising.

In summary, DoD is thoroughly reviewing the G IQLP recommendations and has made significant progress in implementation. The panel recommendations support the Department’s effort for acquisition reform and its efforts to implement IPPD.

4. INDUSTRY STAKEHOLD

The end state for the efforts of the GIQLP is a fully deployed Quality System Model for use by government and industry. The model is designed to effectively implement the goals and objectives established by the panel. The GIQLP Federal Quality System Model includes the following unique features:

1. The model allows and encourages contractors to propose a single quality system that can satisfy all customers of a facility.

2. The contractor Quality system based on this model would be recognized and accepted by all government customers with products being designed, built and tested in that facility.

3. The contractor would be incentivized to choose and use product-specific advanced quality practices as well as develop a self-assessment, evaluation and reporting process.

4. Contractors are encouraged to reduce their oversight for deserving subcontractors and allow them to do the same for sub-tier suppliers.

The model was created by a true cross-functional team. The approach was one of re-engineering the accepted model for an ISO 9001 based quality management system with emphasis on the following: (1) focus on the targeted customer base, DOD and federal agencies vs domestic and international, (2) acquisition community guidelines vs RFP and contract language, (3) oversight-DCMC and cognizant buying command vs contractor perspective, (4) Government desire to have the cost saving advantages of new and advanced practices automatically applied at no cost to ongoing contracts vs industry desire for flexibility to unilaterally use industry best practices where applicable, and (5) training and dissemination of the new approach to all federal govt buying commands and industry. These questions, and others were addressed by teams consisting of government and industry representatives working together to fully understand the scope and impact of these issues from both perspectives.

In addition, extensive research on these five elements and related topics was undertaken. A set of 10 documents were developed and released for comments in the quality community. These are compiled in the “Findings of the Government & Industry Quality Liaison Panel”, which was released to the GIQLP chartering agencies for comment in February of 1996.

This comprehensive approach has produced a product with unique advantages for both government and industry. For the government, this model is specifically designed to encompass all members of the supply chain and incentivize continuous improvement of processes at each level. Additionally, the contractor maintains an effective, government-accessible, self evaluation and assessment function within a facility and provides objective evidence of the effectiveness of the processes chosen. These features combine to provide the federal acquisition function with a strong risk evaluation/mitigation tool.

For the contractor, using the elements of ISO 9001 as a baseline assures ready acceptance of the quality system by most domestic and international customers. The model allows for maximum flexibility and tailoring of processes to the product being produced. The contractor selects all processes and applications within a facility and is not required by the model to impose any non-value added activities.

For implementation and deployment, the government has chosen to disseminate the information into several areas in the federal acquisition process. The primary vehicles in DoD are the Acquisition Desk Book and training courses being developed by the Defense System Management College (DSMC). In addition there are policy letters advocating GIQLP goals issued from NASA and DCMC.

Industry is continuing to support deployment through seminars and tutorials concerning the GIQLP activities sponsored by all major associations. In addition an implementation guide tentatively titled “National Consensus Guidelines for Quality Management Systems” is under development by industry and government representatives of the panel. The document is planned as a joint publication by industry associations participating in the GIQLP.

5. INDUSTRY EXAMPLE

Motorola is pursuing initiatives that are compatible with the three goals established by the GIQLP. These goals are being pursued because they make sense in business. This is all enabled by the opening of the window of opportunity that Secretary of Defense Perry’s initiative has provided.

Motorola, in cooperation with DCMC-Phoenix, piloted a methodology for qualifying government contractor quality systems to the requirements of ISO 9000. This methodology facilitates the acceptance of ISO 9000 as the Motorola single
The above referenced methodology also resulted in the creation of risk assessment tools which have been used to assess the risks inherent in the contractor’s processes or in a particular development activity. Risk assessment has been used to focus the oversight/insight where the benefits reside ... the areas of risk. This focused oversight/insight has resulted in a reduction of the onsite DCMC staff.

The final goal addresses the use of tools and techniques that, when properly applied, result in the prevention of defects and improvements in the predictability of the business process. Three examples of these tools (process characterization, robust design, and concurrent engineering) will be briefly discussed in the panel session.

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Mr. Schneider is currently Senior Technical Advisor for Quality to the Associate Administrator for Safety And Mission Assurance (S&MA) at NASA Headquarters and is NASA co-chair of the GIQLP. His career at NASA HQ has included Division Director of Quality, Reliability and Maintainability, Manager of Space Shuttle Main Engine S&MA, and leader of numerous “return to flight” flight recertification studies at HQ following the Challenger accident. He also was Flight Assurance Manager at Goddard Space Flight Center for the International Solar Terrestrial Program. Prior to NASA Mr. Schneider spent 15 years with the Air Force Contract Management Division progressing to Chief of Quality for all government deliverables including Space Shuttle main rocket engines, communication spacecraft, and other space hardware at Rockwell International, Hughes Aircraft, and TRW. Prior to his government career he worked with Rockwell International Rocketdyne Division as a design and development engineer on the F-1 engines used on the Saturn V rocket. Mr Schneider holds a B.S. in Aerospace Engineering from the University of Alabama and an MS in Management Science from California State University

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Mr. Doherty is responsible for development of DoD’s policy and practices in the areas of quality and industrial productivity. For the past 14 years in the Office of the Secretary of Defense he spearheaded some of the more consequential initiatives designed to improve defense acquisition such as DoD’s implementation of IPPD, the DoD Single Process Initiative, Industrial Modernization Incentives Program (IMIP), Acquisition Streamlining, Value Engineering, and Total Quality Management. He is also the DoD co-chair of the GIQLP. Mr. Doherty has received the DOD Acquisition Streamlining Award, the Aerospace Industry Association’s Walt Whitmer Award, and the National Security Industries Association’s Achievement Award for his work in the area of quality. He has held previous positions as a Procuring Contracting Officer and Chief of the E-3A Procurement Office/ESD, Hanscom AFB and as Chief of the Contract Pricing and Financial Services Div. at HQ AFSC. Mr. Doherty holds a BS in Business Administration from Boston University, a MS in Industrial Engineering from the University of North Dakota, and is a graduate of the USAF Education with Industry Program and the Defense Systems Management College’s Program Manager’s Course.

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Mr. Ridgeway is currently Director of Quality Assurance for Rockwell International’s Collins Avionics and Communications Division (CADC). He also serves as Chairman of Rockwell’s Corporate Quality Council, and previously held quality and management positions at Harris Government Systems, Contel Federal Systems, and GTE Information Systems working on programs ranging from tactical missiles to strategic, tactical, and commercial communications. He is current chairman of the Quality Assurance Committee of EIA’s Government Division and co-chairs the GIQLP as leader of the industry coalition represented by EIA, AIA, NSIA, ASQC, and ANSI. He has been a featured panelist or speaker at the Defense Acquisition Reform Forum, The Fifth National Agility Conference, the Conference on Quality in the Space and Defense Industries and ASQC’s 50th Annual Quality Congress. In 1995 he lead Rockwell CADC through a successful registration audit to ISO 9001 by Det Norsk Veritas where CADC became the first of Rockwell’s military oriented businesses to achieve full third party certification. Mr Ridgeway holds a BS in Industrial Engineering from Auburn University and a professional certification in Quality Engineering from Virginia Tech.

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Mr. Norley is the Quality Manager of the Government Electronics Division of Motorola’s Government and Space Technology Group. This and prior assignments in Manufacturing and Quality have focused on the implementation of the “6 Sigma” culture in Motorola’s government businesses. Most recently Jerry has been involved in the Reinvention Laboratory endeavors associated with ISO 9000 qualification activities and the Software Engineering Institute (SEI) Software Capability Evaluation. He has also been actively involved with the GIQLP since its formation. He holds a BS and MS in Electrical Engineering from the University of Minnesota in and has also taken numerous graduate level business courses at the University of Arizona and Arizona State University.