INTERNET DOCUMENT INFORMATION FORM

A. :Report Title: Institutionalizing Standards Reform

B. DATE Report Downloaded From the Internet _18 Mar 98

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): The Under Secretary of Defense for Acquisition and Technology

D. Currently Applicable Classification Level: Unclassified

E The foregoing information was compiled and provided by:
DTIC-OCA, Initials:___PM_____**Preparation Date**:18 Mar 98

DIST- A

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.

"Institutionalizing Standards Reform"

Keynote Address of

The Under Secretary of Defense for Acquisition and Technology

Dr. Paul G. Kaminski

to the

1996 Joint Conference on Standards Reform

Holiday Inn, Rosslyn Westpark Hotel, Arlington, VA

November 13, 1996

It's a great pleasure to be with you this morning. Today, I'd like to share some of my views on where I think the Department of Defense is headed in institutionalizing lasting standards reform. Standards have made a significant contribution to all facets of our economy and our modern day lives. Standards—open standards in particular—have promoted international commerce and competition; they have contributed to consumer safety; and, without them, our economy would be weak and stagnant.

Without question, there is just no substitute for continuous development, adoption and implementation of world class standards. More importantly, the right incentives must be in place to make the transition from familiar old practices to new ways of doing business.

Standards reform within the Department reminds me of the story of the fisherman and the game warden. . .

> **It begins with two friends, one was a fisherman and the other just happened to be a game warden. One Saturday morning, they both went out to fish together. . . When they got to the middle of the lake, the game warden baited his hook and threw his line out.**

Then his friend, the fisherman, reached into a tackle box, pulled out a stick of dynamite, lit it and threw it into the water. . . After the explosion, the fisherman took out his net and began retrieving the dead fish that were now floating on the surface of the lake.

By this time, the game warden couldn't believe what he was seeing. . . he composed himself and said: "You can't do that!"

The fisherman responded "Why can't I?"

The game warden replied "Because it's not the way you are supposed to fish. . . it's dangerous. . . and it's illegal!"

At this point, the fisherman pulled out another stick of dynamite, lit it, threw it in the game warden's lap and said: "Are you going to just talk, or are you going to fish?"

When it comes to meaningful standards reform, it has been my sense that it is easy to talk about why; harder to talk about how; and even harder to do. Secretary Perry and I are convinced that we're moving beyond the "just talking" stage. We're now starting to "fish"—thanks to the efforts of many of the people in this room.

I view standards reform as a means to two ends. First, by eliminating military-unique requirements that add cost without adding value, it will reduce the cost of the weapon systems that we buy. And second, by removing the barriers to the use of commercial processes and products, it gives us access to leading-edge technologies critical to fighting and winning on the 21st century battlefield.

We are witnessing breathtaking changes—driven by commercial markets—in the industrial base supporting our weapon systems and new military capabilities. No where is this more evident than in the fields of advanced processing, communications and information management.

From a Department of Defense perspective, we must be able to rapidly insert these leading-edge technologies into weapons systems at an affordable cost. Our focus is on taking commercial components, subsystems and systems, and adding the system engineering glue to create system-of-systems capabilities.

We have learned that we need to be able to buy off commercial production lines and adopt world class commercial buying practices and processes to get this job done. We have found, and much of industry has echoed, that our prior application of defense-unique requirements often presented

barriers to achieving these goals.

To help eliminate these barriers, we are pursuing a multi-pronged reform strategy. I would like to now share with you some of my thoughts about three of those prongs during the remainder of my talk this morning. They are:

One, we are committed to establishing a performance-based solicitation process.

Two, we are committed to improving the base of standardized requirements documents available to us.

And three, we are committed to reducing the number of government imposed processes in our supplier's facilities.

PERFORMANCE-BASED SOLICITATION

We have made some significant progress in converting to a performance-based solicitation process—largely because we put the right incentives in place. When Secretary of Defense Bill Perry launched the DoD-wide MILSPEC Reform initiative in June 1994, he turned—practically overnight—the entire system of incentives and rewards within DOD for using MILSPECs and MILSTDs on its head. Today, a program manager must first obtain a waiver and justify why the use of a MILSPEC or MILSTD is necessary. Two and a half years ago, the onus was on the program manager to justify the use of anything other than an approved MILSPEC or MILSTD.

Prior to June 1994, it was safe to go with an approved MILSPEC or MILSTD. And in those days, if you had advocated and received a waiver for a performance-based specification or a commercial standard, and if something went wrong, then you would be almost certainly second guessed and your decision would be subjected to intense scrutiny. In this environment, the incentives were all wrong—you put your career on the line every time you failed to specify or went with something other than an approved MILSPEC or MILSTD. As a result, we built a culture of automatic imposition of military specifications and standards.

As I said earlier, we broke this cycle by requiring that waivers must first be obtained in cases where military or federal specifications or standards are deemed to be necessary. And even in cases where military or federal specifications or standards are approved, the solicitation will typically contain language encouraging offerors to propose alternatives. From an incentives standpoint, the "shoe is on the other foot" each time we write a new contract.

In those cases when requirements are uniquely military and there is no comparable industry

standard, the Department is using, wherever it is possible, performance-based specifications rather than "build to" specifications. Performance-based specifications focus on what performance is expected, and do not describe how to accomplish the task. When written properly, these documents promote competition and enhance quality, reliability, and supportability by providing our suppliers with the greatest possible latitude for innovation.

We are beginning to see the benefits of these MILSPEC reforms. I am mindful that "Numbers are like people—torture them long enough and eventually they will tell you anything!" But I am beginning to see evidence that many programs are experiencing cost avoidances and savings in the $100s of millions—a few in the billions of dollars.

One example is our new precision guided Joint Direct Attack Munition, or JDAM, program. Several years ago, the Department set out to convert tens of thousands of "dumb" gravity bombs into "smart" bombs that can be accurately guided. The key to doing this was to build a kit—based upon commercial technologies—for each bomb so it could receive navigation signals from existing Global Positioning System satellites. We started the program the old way and estimated in 1993 that we could get the cost of each JDAM modification kit down to about $40,000 by the time we converted our 40,000th unit.

When we started, the old rules applied; we sent out a 137-page work statement containing 87 military specifications. We told contractors how to do the job, leaving no room for flexibility and new ideas.

Soon after we set out on this path, the US Congress passed the Federal Acquisition Streamlining Act of 1994 and designated JDAM as an "acquisition pilot program." This act granted relief—on a temporary basis for these pilot programs—from the statutory basis for many government unique requirements. At the same time, the Department implemented regulatory reforms to provide increased flexibility for procuring commercial items.

Last year, we sent out a new request for proposal. This time, we sent out a two-page performance specification—two pages about what we wanted the system to do, not how the contractor should go about doing it. And this time, we had no requirement for any military unique specifications or standards.

Early this year, we signed a contract with McDonnell Douglas in St. Louis for JDAM kits that cost $18,000 each—starting with the <u>first</u> unit, not the 40,000th. When you are buying over 80,000 such kits, that amounts to a major savings—approximately $2.9 billion or about 50 percent of the original program cost.

We're also seeing savings on thousands of small purchases of items like T-shirts and socks. By scrapping the military specification for T-shirts, the Defense Logistics Agency is now buying brand name commercial undershirts for base-level military clothing sales stores—offering

superior quality at a 10 percent discount.

By eliminating restrictive specifications, Anniston Army Depot reduced the cost of denim overalls by 31 percent. The elimination of military specifications, including a lengthy one on quality of workmanship, trict shrinkage requirements, specific fabric weight requirements, and loosened requirements for exact placement of pockets, zippers, etc., reduced the price of overalls from $23 to $16 per pair.

We have adjusted the training curricula of the schools in the Defense Acquisition University consortium to make sure the new policies are understood by our acquisition workforce, and put into action. We're emphasizing that all military specifications and standards are not being eliminated or being made impossible to use. We're stressing that careful thought needs to be given to using any type of requirements document in a solicitation.

IMPROVED REQUIREMENTS DOCUMENTS

This leads me to a second reform—improving our base of standardized requirements documents. It is one thing to jump away from an old way of doing business. It is quite another to be able to jump onto something new—it means we need to ensure replacement standards are available. Dr. Deming, recognizing this need, once said "Standards are so commonplace. . . we forget that they have to be created: they do not come into the world ready made and without effort."

The Department is working in partnership with industry to determine where Non-Government Standards supporting open systems architectures exist, or should be developed, to replace military specifications and standards. As I said earlier, our objective is to gain access to non-proprietary commercial technologies, processes and products. We are <u>not</u> in the business of transitioning from military documents to non-government standards for the sole purpose of eliminating government documents.

We recognize that some needed Non-Government Standards may never become available without the active participation and leadership of DOD personnel. Accordingly, DOD employees are encouraged to participate in appropriate standards-developing professional societies and industry associations, to include consensus standards organizations, such as the American Society for Testing and Materials, and the Society of Automotive Engineers.

The Defense Standards Improvement Council recently adopted a strategic plan for transitioning from reliance on military specifications and standards to non-Government standards. The plan, and accompanying list of military documents which, we believe, have potential for replacement by non-Government standards has been provided to the industry members of the council. Those members are acting as a key link between DOD and industry in identifying or developing non-Government standards.

In addition, every military specification and standard in the DoD Index of Specifications and Standards—over 30,000 documents—has been screened with a view towards cancellation, inactivation, or replacement with a performance specification, non-Government standard, or guidance handbook. Since July 1, 1994, over 4,400 military specifications and standards have been canceled. In addition, over 2600 documents have been inactivated for use in new weapon system designs.

Over the same period, we have significantly increased the number of non-military standards adopted by DOD—adding over 1700 non-governmental standards and over 360 simplified, performance oriented, commercial item descriptions. In all, we have adopted over 7,500 non-Government standards and over 5900 commercial item descriptions, comprising nearly one-fourth of all the specifications and standards listed in the DoD Index.

There are many who have expressed concerns about the rapid manner in which the Department has pursued MILSPEC reform. I'd like to stress that the Department is not operating unilaterally. Quite the contrary is true. We have been very careful to coordinate our actions with key elements of the private sector—both industry associations and non-Government standards bodies.

In cases where we intend to cancel documents, we notify interested parties of our plans by publishing lists of the documents proposed for cancellation in letters to industry associations; announcements in the Commerce Business Daily; and postings to the DOD MILSPEC Reform Home Page on the world wide web. By the way, during September 1996, the MILSPEC Reform Web site was accessed over 135,000 times.

We also use ad hoc government-industry groups as "sounding boards" to get early feedback on potential plans. A prime example is a group called Equal Partner Implementation Committee (EPIC). Chaired by a member of my staff, this committee is composed of private sector standards developers and federal agencies, which seek to foster greater use of non-Government standards in federal agencies.

Another example is the Aerospace Industries Association's (AIA) "Early Warning Project Group." The group is composed of standards and materials engineers who represent AIA member companies. This group provides industry views on proposed cancellations of government specifications and coordinates industry efforts to identify and adopt suitable replacements.

The American National Standards Institute is pursuing a project known as the National Standards System Network (NSSN). This effort promises to deliver a seamless interface from internal information networks to the standards of dozens of government and private sector organizations. I am a strong supporter of the NSSN because I believe that such a network has tremendous potential to save money and time by providing a full-text, searchable, electronic data base of specifications and standards.

If, as a result of our coordination efforts, we receive compelling rationale for not canceling a military document, we change our plans. We are looking forward to a day when the use of national and international, voluntary standards supporting open systems architectures will generally replace the use of unique internal standards and specifications.

SINGLE PROCESS INITIATIVE

The third reform I'd like to talk about is the Department's Single Process Initiative, launched by Secretary Perry and I in December of last year. Up until that point in time, most of our acquisition reforms affected only future contracts. We realized that to capture the full benefits of our reforms—we could not have an arrangement where new contracts required new processes to be established while at the same time, on-going contracts were executed using the old processes to manufacture similar product lines in the same facility.

In just one factory, a defense contractor was forced to use eight different soldering specifications—five for the government and three for commercial clients purchasing similar types of products.

This meant the workers had to be trained on all eight soldering and inspection techniques. It also meant that the contractor had to maintain eight different types of production documentation. This cost him more. In turn, he passed those costs on to us. That is fair, but it is expensive. It is expensive for the Department and the taxpayer.

With this single process initiative--starting on existing contracts--we will reduce the number of processes used. We are seeking to modify the contracts as a 'block', not simply contract by contract. Our objectives are: one, save money; two, obtain a better product; and three, foster a more competitive industry.

After nearly a year of SPI implementation, NASA has became a full partner with the DOD and the FAA is in the process of coordinating a draft policy memorandum—final guidance could be issued within a month. Over 100 contractors have proposed over 500 process changes. Once we have accepted a proposal, it has taken DOD an average of around 110 days to adopt the modification, and to date, we have already modified about 170 processes. As of October 15, 1996, only 53 proposed process changes—or about 10 percent of the total—involved some type of consideration request by the government.

The first block modification made under this initiative targeted the product assembly process at Texas Instruments Defense Systems and Electronics. Before the single process initiative, the assembly process was controlled by about 65 variations on 38 defense specifications; now, the process will be governed by eight specifications and standards. Moreover, all eight are performance-based, commonly-accepted commercial specifications and standards. That means

that Texas Instruments can use the same processes to make commercial and government products, and in turn, they have the flexibility to allow their suppliers to consolidate the number of their processes.

We learned an important lesson through our other block modification agreement with Texas Instruments: we not only can save time and reduce costs, we can make the workplace safer and cleaner. Texas Instruments and the Joint Logistics Commanders Group on Acquisition Pollution Prevention worked together to develop a block modification for a paint and primer facility. They found that by eliminating four military specifications, the facility would also eliminate thousands of pounds of volatile organic compounds and solvent and paint from their waste stream every year.

We signed what I call the "mother of all block change modifications" with Raytheon a little over six months ago. This single block change affects 16 separate Raytheon facilities and a total of 884 contracts in the areas of soldering procedures, engineering change approval, acceptance testing, configuration audits, annual test station certification, material review boards, cost data and performance reporting, calibration standardization, and component rescreening. The agreement is deceptively simple—the modification allows Raytheon to take advantage of industry-wide practices that meet the intent of military specifications and standards.

I am seeing evidence that this SPI effort is now taking root within a wide spectrum of our supplier base.

SUMMARY

In closing, my thoughts on institutionalizing standards reform can be summarized as follows:

- **We are committed to using world class non-Government standards and performance-based specifications on new contracts—MILSPECs and MILSTDS may be used if a waiver is obtained first;**

- **We are working with industry to ensure world class standards—whether they be military or non-Government—are available for our use on future contracts and support open systems architectures; and**

- **We have implemented a very successful single process initiative to change existing contracts—we are converting entire facilities to a fewer number of world class processes.**

We are witnessing the most dramatic changes to the Defense Standardization Program since it was established in 1952, and contrary to a popular myth, we are not discarding all specifications and standards in the Department of Defense—only the unnecessary ones.

The true measure of our success will be acceptance in the field—not policy pronouncements in Washington DC. Together we have an opportunity to not just talk about why; but to learn how and to do something for America's warfighters and the American taxpayer.

We are a team and you are the key players. I offer my personal support and commitment to you as we work together to implement these important initiatives—to fish, not just talk.

Thank you all.