

NDIA UWD Input to Top Issue Paper - 2011

14 July 2010

TO: Glenn Baer, Government Policy Advisory Division Chairman
FM: Richard A. Udicious, Chairman – Undersea Warfare Division
SUBJ: NDIA Top Issues for 2011

Dear Mr Baer,

The Undersea Warfare Division appreciates the opportunity to input and comment on the top issues to be addressed by NDIA. After a thorough review by our Executive Board and Advisory Committee, I propose grouping our concerns into five major issues listed below in descending order of priority:

1. Align Requirements, Priorities, and Budgets
2. Sustain a Competitive Defense Industrial Base
3. Ensure the Integrity of Defense Acquisition
4. Maintain Balance – Large, Small, Public, Private, Government, Academia
5. Revise the Export Regulations

The details of these issues are attached and have been derived from the following sources:

- Monthly issue papers posted on the NDIA web site
- “State of the Undersea Warfare Industrial Base” report submitted in 2009 to SECNAV
- Inputs from the Undersea Warfare Division leadership team

Understanding that you will compile inputs from a variety of sources, I have not condensed our discussion of the issues and expect you will exercise editorial prerogative. As such, the Undersea Warfare Division would also welcome the opportunity to review the overall NDIA top issues draft in advance of submittal to the board; you have my commitment that our comments would be turned in a timely manner.

Thanks again for the opportunity to add our voice to the overall NDIA opinion.

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Align Requirements, Priorities, and Budgets

The 2010 Quadrennial Defense Review and the fiscal year 2011 defense budget proposal seek to achieve some worthy goals, and echo Defense Secretary Robert Gates' main concern about the need to prevail in current conflicts. Missing, however, is an acknowledgement of disconnects between program priorities and existing spending plans. A case in point is shipbuilding, and there are also gaps between stated strategic priorities and actual programs, such as long-range strike.

The budget has four pillars: taking care of people, rebalancing the force, reforming how the Defense Department does business and supporting our troops in the field. These tenets all sound great, but there is a real possibility that the budget won't be enough. The 30,000-troop surge for Afghanistan already required a \$33 billion supplemental for fiscal year 2010. Future war expenditures will be hard to predict, and while the administration included an annual \$50 billion "placeholder" for war costs in the out-years, there is continuing pressure on operations, maintenance and personnel costs, ground forces' equipment recapitalization, and projected increases in military health care expenses.

The QDR tracks well with the 2011 budget, is consistent with program terminations in the 2010 budget, and has something for everyone, and most will find something to applaud. The QDR covers the waterfront of threats and strategic needs. It lays out six themes: security in complex environments, America's global role, defense objectives, rebalancing the force, taking care of people, strengthening relationships, reforming business and implementing the QDR. The focus is clearly on the current conflicts. There is much emphasis on boosting resources for unmanned aircraft and helicopters for the current fight. As one drills through the document, some things jump out. China is lumped with India as complexities in the environment, not as an emerging threat. Homeland defense gets prominent billing, with the Defense Department gaining a bigger role in supporting civilian authorities for domestic emergencies and disasters. And there is a departure from the traditional two major regional contingency construct for force sizing. The QDR recognizes the potential requirement to conduct multiple concurrent, large-scale operations in disparate theaters. But it breaks from this in adding the need to conduct a "wider" range of operations to include homeland defense, support to civil authorities, deterrence, current wars and "wars we may someday face." There is some uncertainty and wiggle room in this formulation.

There is much discussion of intelligence, reconnaissance, surveillance, electronic warfare, special operations, non-state actors, countering weapons of mass destruction and improving cyber security. Tactical aircraft are supported, and while long-range strike is mentioned as important, not much action is planned toward fielding an actual capability.

The discussion about threats is about right, with some exceptions such as China, Iran and the U.S. fiscal imbalance. While there is a valid focus on anticipated threats, the timing planned for new capabilities gambles that we won't have to confront a peer competitor. Although there is emphasis on special operations capabilities, there is no significant force structure adjustment. One sees aging in Navy and Air Force platforms and the implicit surrender to decreasing force structure in both services.

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Chairman of the Joint Chiefs of Staff Admiral Michael Mullen recently described as "unsustainable" the current rate of defense spending. "Money is not going to keep rolling in ... It's just not going to happen," Mullen said in a speech at the Naval War College. The key reason why defense spending at current levels cannot continue much longer is the dire state of the U.S. economy, Mullen said. "We're in a time of real economic challenge," said Mullen. The military's budget will be affected by these realities, he added. "It's unrealistic to expect this [recent growth trend] will continue," he said. Mullen said the 2011 budget and the QDR will seek to "balance" the capabilities of the Defense Department by shifting more funds to weapons systems that are relevant to "irregular" warfare and counterinsurgency. "But we are not walking away from conventional" capabilities, he said. He stressed that one portion of the budget that will not be shortchanged is the "people" programs (personnel, health care, benefits, family support). Sixty to 70 percent of the Pentagon's budget is committed to those programs. This is an issue of concern, obviously, because people and weapons accounts all come out of the same pot, so something has to give. Yet at several major conferences in 2010, other four stars have been quoted as saying that "people costs are killing them" and other administration officials have raised issues and questions which depart substantially from the QDR.

One can draw some conclusions by looking back to the program decisions that came along with the 2010 budget. We saw big program terminations, and the implication that there will be fewer new starts of big programs. As both Gates and Mullen have stated repeatedly, the fiscal emphasis has shifted to near-term challenges. Consider also pressures on the defense budget from burgeoning health-care costs and the continuing bill for combat operations (logistics primarily) and the capital equipment recapitalization bill that accompanies intense combat operations.

The concern expressed by Mullen — and largely overlooked in most analyses as the source of the "coming squeeze" — is the financial condition of the United States going forward. The average addition to our national debt will be \$1 trillion annually. Several studies have predicted growing pressure on the Treasury from Social Security and Medicare. Both trust funds are expected to be exhausted around 2017, when general revenues will then make up the program deficits directly. The unfunded liability of Medicare, Social Security and the drug prescription benefit Part D all run in the neighborhood of \$50 trillion dollars. Add all this to the federal budget deficit of \$1.4 trillion this year and greater than \$1 trillion going forward and one can see a train wreck coming. A recent article in Newsweek by Harvard professor Niall Ferguson was clear about the problem the nation faces. "As interest payments eat into the budget, something has to give — and that something is nearly always defense expenditure. By 2019, the interest on the debt is predicted to be around \$800 billion — much larger than the defense budget. By 2042, if not earlier, federal revenues are expected to cover only Medicare, Social Security and interest on the debt. According to the Congressional Budget Office, a significant decline in the relative share of national security in the federal budget is already baked into the cake. On the Pentagon's current plan, defense spending is set to fall from above 4 percent now to 3.2 percent of GDP in 2015 and to 2.6 percent of GDP by 2028."

Addressing these issues and challenges will require a different practice and discipline. For example, a two year budget would halve the review and approval time while doubling the program stability period. Congress could and still should review budgets for major programs at

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the various milestone points and for compliance with the legislation. The DOD budget should be inclusive of operations and therefore not expected to be adjusted by supplemental to balance the checkbook. Earmark reform should be immediate and consistent, the service chiefs and defense secretary should submit a comprehensive budget to meet the requirements established and agreed by the force commanders and national security leadership. Program review and approval at the initial phases should provide a need base and fiduciary assessment prior to authorization in the context that future cancellation or termination are not budget and program management tools. Similarly, requirements and fiscal assessments should be equally rigorous prior to any discretionary cancellation or termination. Once a program is authorized there should be no ability to increase the requirements or the threshold levels of any existing ones, and any downward adjustment should be reviewed at the same point as was done when they were established. The operational test verification approach should also be established prior to contract award such that the test and acceptance requirements are clearly known by the government program office and contractors.

Sustain a Competitive Defense Industrial Base

A recent Defense Science Board Report titled, "Creating a National Security Industrial Base for the 21st Century: An Action Plan to Address the Coming Crisis," concluded that Defense Department policies actually impede the transition to an affordable military force for the 21st century. Current policies don't facilitate development or deployment of affordable, innovative systems. Government acquisition policies, the study said, will not produce the required competitive, responsive, efficient and innovative industrial base. In a time of constrained defense budgets, it is important to consider how the United States will preserve critical industrial and engineering capabilities. The concern obviously is to make sure the nation does not lose access to skills and supplies for future conflicts. With the exception of the aviation industry, most major defense contractors only supply the military and have few, if any, commercial customers. If the government doesn't buy, the design and engineering capabilities eventually disappear. The reduced demand resulting from the collapse of the Soviet Union led to the fateful 1993 "last supper" when the Pentagon directed the downsizing and consolidation of the U.S. industrial base. This year's "first breakfast" message that the Secretary of Defense is expecting a \$100B cost reduction over the next five years could reduce contractor incentives, potentially shrinking the already tight investment budgets in defense unique technologies and in some cases reduce the competitive landscape. That contraction has continued to where we now have only one supplier for some major systems and numerous single sources (some overseas) for commodities. As competition is reduced, cost and quality suffer. This is almost axiomatic, but there is a real need, not only to maintain critical capabilities but to do so within the framework of a competitive environment. Maintaining competition when new starts are becoming fewer and further apart is becoming more difficult. But this, too, is fixable. One solution is to dual-source platforms and commodities. The response to this always seems to be that it costs too much. But many studies have documented that competition drives steeper learning curves and increases quality and responsiveness by contractors.

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A question often encountered is what to do when systems go out of production. How to keep design teams busy is the number one issue. There are various techniques to do this, but one way has been investigated by the Navy and documented in a Rand Corp. study, entitled "Sustaining U.S. Nuclear Submarine Design Capabilities." The challenge is to keep the teams employed between program starts. The study posits two methods of doing this. One is to sustain design teams in between programs. The basic requirement is to find something useful for them to do. Another method is to stretch out the design effort for the next submarine. The problem to be overcome here is to keep the design technologically relevant through the extended design cycle. The study concluded that this actually shortens the time for next program start and results in reduced costs overall. This technique could be applied to other systems and platforms. The two basic requirements for a healthy industrial base — ongoing programs and a competitive environment — can be achieved in a number of ways.

One way is to have plans to implement follow-on programs to replace existing capability when it begins to wear out or technology mandates newer, more capable systems. What will the new fighter or submarine look like, and when do we begin the design process? Every system at some point goes away and needs replacement. An orderly planning and development process demands this planning always be ongoing.

Utilizing technology insertion strategies at logical program life cycle intervals is another viable technique to extend the life of major capital platforms. The Navy's open architecture program has shown great examples in this area. By leveraging commercial electronic technologies, costs are reduced and schedules shortened while the design teams are able to sustain a critical mass of domain knowledge throughout the life cycle.

Another technique is to sustain programs in production until follow-on initiatives get under way. This keeps both design and manufacturing engineers in the game as systems are refined, modified, and upgraded throughout their operational lifetime. It also allows feedback to flow back to the designers for incorporation into current or follow-on designs.

Also of note is that, in the defense sector, if the government doesn't fund a particular system, industry will abandon the effort. Work force and resources will move on to other funded programs. The segment that is not funded will eventually wither and industry will lose that capability. One worrisome example is that for the first time in decades, the U.S. defense industry has no fighter plane design team in operation. How long will it take for the United States to lose the capability to produce "best in class" fighters?

A 2003 NDIA report on "The State of the Undersea Warfare Industrial Base" summarized the industry as:

- **Fighting for Survival:** Consolidating; migrating to commercial and foreign opportunities; continuing to evolve legacy systems to maintain production; COTS reduces production; trying to survive on R&D, integration and support; depending on Congressional plus-ups.
- **Losing Skill Base and Intellectual Capital:** Designers for non-COTS components (transducers, telemetry, spatial/spectral signal conditioning, etc.) are scarce; USW industry losing the best and brightest to better opportunities.

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- Reacting to a Downsized Market: Fewer platforms; fewer new systems; less R&D and focused investment.

By 2009 we realized further effects of these issues and their continuing negative trends are consistent with the findings of the July 2008 Defense Science Board (DSB) Task Force Report on the National Security Industrial Base. In August 2009 NDIA submitted a report to the Secretary of the Navy assessing the current state of the Undersea Warfare Industrial Base. The executive summary of this report is analogous across many warfare areas where we have seen a general atrophy of critical skills and technologies in areas where there is no leverage from commercial technology investment:

Industry capability has struggled to sustain the necessary resources to support this warfare area; however it has not been investing in breakthrough technology. Instead of a "step-function" increase in capability to open a wide margin against diesel submarines and modern mines, we have utilized spiral/incremental development programs to insert only that technology which will fit the budget constrained programs with the highest demand signal from the immediate threats. Much of the recent capability enhancement has been via the technology afforded from the telecommunication and computing industry. By using Open Architecture (OA) and Commercial-Off-The-Shelf (COTS) electronics, significant gains in signal and data processing have been achieved with only incremental investment. Although a major leverage at the national industry level, this business model has shifted the recurring production and sustainment of electronics from the defense industry to a generic industrial base which does not invest in national security domain expertise, sensors, or weapons. This has caused a migration of the industry away from some of the key enablers and into a modernization and sustainment role. Additionally, this trend has enabled the government agencies to encroach upon system engineering and integration work previously performed by industry. Spiral development became the antithesis of significant capability development. This incremental, often marginal improvement to legacy systems, does not address the challenges of the future.

The perception that we lack an imminent and credible peer threat has caused resource sponsors and program managers to focus on sustainment and incremental capability insertion. This also impacts the intellectual talent pool available to address technology and application. Without visible priorities and investments, key talent is drawn to the higher profile, better resourced programs. The concept of "pacing the threat" now has us "chasing the threat" and therefore lagging an acquisition cycle behind fielded and observed adversary capabilities. Meanwhile the enemy and competitive international industries have been focused on developing technology at a pace ahead of our counter abilities.

This has been exacerbated by the consolidation of the industrial base and reduction in basic force structure, each dependent upon the other. Without significant government investment, industry's R&D follows the profile of sales and profit which decline with platform volume. In parallel, the government has organizationally shifted to "capabilities based resourcing" making it more difficult for industry to find decision makers or stakeholders able to commit to the future. As a result of the business environment, industry is losing the capability to provide significant improvements, or in some cases, even to maintain competency on existing programs.

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In order to meet its requirements for leading-edge capabilities, the DOD must provide industry better access to requirements and also develop programs which include an adequate mix of work and funding to sustain a capable workforce and physical infrastructure. Industry has the capability to provide leading-edge technologies, system design and integration, and long-term support for systems. Available funding needs to be applied to maximize the delivery of products in a restricted budget environment through cost reductions including increasing the efficiency of the business process. Achieving this change will require a revitalized effort by government and industry.

From a manufacturing industrial base perspective, NDIA has identified several issues that demand attention:

The need to recognize that U.S. firms now have incentives to manufacture domestically and keep jobs at home. High U.S. productivity rates and improvements in advanced manufacturing technology — coupled with the increasing costs of transportation — provide strong arguments against offshore manufacturing.

The issue of inconsistent foreign and domestic environmental policies is addressed in an NDIA White Paper, “Maintaining a Viable Defense Industrial Base,” which lays out the dangers of global manufacturing standards, such as the elimination of lead-based solder and hexavalent chromium corrosion coatings. In the case of solder, the substitute process is much less reliable. Also, the United States is increasingly unable to obtain replacement materials and parts. The solution demands focused investment in the development of alternative materials that offer performance equal to or better than the ones replaced.

Unstable budgets impede industry’s ability to plan and budget. Uncertainty creates risks for contractors. The inability to see predictable, reliable funding streams prohibits business case analysis for investment decisions and work force stability. If funding projections are not predictable, industry will opt for lower risk approaches. Skill development and technology investment will suffer as a result.

The need for steady, long-term access to affordable raw materials was addressed by the Government Accountability Office, which concluded that the Defense Department lacks a consistent, department-wide framework to monitor its supplier base. This vulnerability is particularly salient in strategic materials such as titanium, cobalt and rare earth materials, which have major applications in advanced weapons systems such as smart bombs, night-vision goggles and radar. Today, China produces 97.3 percent of the world’s supply of rare earth minerals; Russia produces 1.6 percent, while the United States produces only 1.1 percent. Much work needs to be done on stockpile adjustments and establishing a federal-level working group.

Shortage of skilled labor is another well-known concern. The U.S. education system is failing to produce the technically skilled work force that is demanded by an advanced, world-class manufacturing industry. While a globalized defense industry is a reality, there is no excuse for not having the domestic skill base and technical ability to understand the application and operation of technologies we buy in the global marketplace. More federal leadership is needed in support of science and engineering education and scholarships.

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Recently we have heard pronouncements that the defense industry can surge to meet almost any need on an emergency basis. This ignores the reality of present day access to the special materials mentioned above as well as the complex nature of modern weapons systems and associated manufacturing processes.

Although there have been many studies of industrial matters, none has produced a comprehensive overview of defense manufacturing issues. Also, much of the reporting has been anecdotal, and no study has compiled a list of manufacturing and process vulnerabilities such as single-source suppliers. A cooperative study between government and industry needs to be done.

The industrial base requires active management. It can't be left on automatic pilot. And while cost is important, it can't be the overriding determinant in acquisition policy. The nation would be ill served, indeed, in a future crisis by a crippled industrial base that lacked the requisite skills base and capital standing to respond with alacrity to the demands that are placed upon it.

Ensure the Integrity of Defense Acquisition

After hundreds of reform studies and thousands of articles, we still haven't put many of those good suggestions into practice. The current performance of major defense acquisition programs would indicate we haven't hit the proper groove yet. Earlier studies go into detail about requirements discipline, accurate cost estimating, properly resourced and timely test plans, earned value management practices, use of management reserves, systems engineering practices, and on and on. All of these observations and recommendations are on the money, but they only constitute the tool set that provides a good foundation for acquisition excellence. The question is what high-level verities characterize an acquisition organization that uses these tools to best advantage. In a Harvard Business Review article by Dan Lovullo and Daniel Kahneman, titled, "Delusions of Success," the authors say, "In planning major initiatives, executives routinely exaggerate the benefits and discount the costs, setting themselves up for failure." This problem can be addressed by two factors: Highly experienced professional acquisition personnel and a disciplined approach to requirements.

The system requires trained acquisition professionals to lead military program offices — most importantly, the service acquisition executives. It seems counterintuitive that a key acquisition position would be filled by someone who is not an expert. Yet we all know it happens far more frequently than one cares to admit. On many occasions, waivers are provided to individuals who lack the requisite education or experience to hold a key acquisition position.

This does not happen in other sectors. Do we allow machinists on a manufacturing floor to come out of school and begin doing complicated milling or cutting jobs? The new employee is carefully trained on the job under close supervision, until a senior manager determines that the rookie can go it alone on certain tasks. An even better example is the medical profession. Graduation from medical school is only the first step in a long progression of closely supervised internships and residencies and progressively more difficult tasks until a physician is certified to go it alone.

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The problem is that we haven't treated acquisition as a profession. Managed properly, we would educate and train just as other professions. Examine any successful, large program from the past, and you will find highly experienced acquisition professionals at the helm. Look at current program failures and you will likely find acquisition leaders who don't measure up to the professional proficiency of their predecessors. We have seen some unqualified leaders "parachuted" into acquisition organizations at fairly high levels. And even some senior acquisition executives have been, sadly, unqualified for the position. Acquisition professionals don't come cheap or easy. It takes several years of schooling and training on the job. It has taken us many years to walk away from acquisition excellence, and it will take us some time to get back to it. Hiring twenty to thirty thousand government employees over a short period of time may "fill the bench" with players who are not fully ready to tackle the tough job of supplying a force at war from a shrinking investment base.

There is a healthy tension between the requiring operators and acquisition professionals. The operators need to forcefully advocate their war-fighting needs, but this pressure needs to be counterbalanced by a professional acquisition organization. The acquisition professional needs to articulate the exact impact of the operators' requirements in terms of cost, schedule and performance. The referee for this process needs to be the chief of the service. Additionally, industry should participate in the process with adequate legal and ethics guidelines and processes to prevent any bias in future competitive acquisitions. Some recent interpretations of the administration's revised policies on integrity, ethics, and conflicts of interest have created artificial barriers which impede collaboration between government and industry. The notion of closing the doors to discussion with any and all contractors when a program office "first thinks" they will have a competition is counter-productive to having a good competition and being good stewards of the taxpayers' dollars. The FAR states that all competitors are to be supplied with the same information, it does not say supply them all with no information, so put everything up on a web site and let those who want to access what is available from the beginning. Many "bad" competitions are the result of "closing the doors" far too early, providing little or no information on what the government wants – other than at Industry Day and in the formal solicitation. There are increasingly more competitions where there is no industry day, no draft RFP, and the technical specification is issued with the RFP giving the contractor only sixty days to design, estimate the cost and schedule, and write a proposal. This could lead to hundreds of unanswered questions upon which the contractor will make bid assumptions, and the government may spend valuable contract funds closing the gap while potentially slipping the schedule in the design phase of the program.

Some of the DOD guidance in the recent challenge to "Do More Without More" suggests that more competition and increased small business participation will lead to more affordable solutions. Developing the requisite data and bid packages for such acquisitions will require that we draw upon the knowledge base and system experience of the existing industrial base. The past few years of experience has seen major acquisitions face delays due to the workload of preparing solicitations which can withstand the test of a post award protest. NDIA can play a key role in establishing the new norms for a revised approach to acquisition and be a trusted partner to sustaining industry capability while maintaining a competitive landscape.

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When developing acquisition plans, key issues should be addressed up-front to determine the cost and value of competitive procurements:

- What is the time and expense to prepare the RFP, review by contracts and legal etc?
- What overhead expense will the government indirectly absorb from contractors who develop extensive proposals, and in many cases demonstration assets?
- Has the cost and time for the evaluation of the proposals, the questions, reviews, orals, etc been included in the budget and timeline?
- What is the likelihood and cost of a potential protest?
- Does the risk profile of the program allow sufficient time for an inexperienced company to perform at an unreasonably low bid price?
- What are the potential industrial base outcomes, e.g., will the competitors remain competitive after a major program is awarded?

To survive and succeed, we need a partnering approach to focus requirements, budgeting, research, development, and acquisition. NDIA could play a wider role to facilitate and coordinate industry input to form an enhanced, broadened Government/Industry collaboration toward a common goal. NDIA stands ready to enable partnerships which will sustain competition and fit within the government ethics and conflict of interest policies. Some of the recent legal interpretations of NDIA's role in assessments and studies have challenged our ability to collaborate toward a common objective; these policies must be quickly and timely reconciled in order to address the overall issue of a healthy and responsive industrial base.

Maintain Balance – Large, Small, Public, Private, Government, Academia

The Defense Department is now putting the final touches on its sweeping “in-sourcing” initiative that the administration launched in early 2009. The plan is to bring in-house 33,000 contractor jobs between 2011 and 2015. Of these, 10,000 will be acquisition workers. In addition, the Pentagon intends to create 10,000 new acquisition positions. Bottom line: the defense procurement work force will grow by 43,000 and the acquisition sector will expand by 20,000. This seems to be contradictory with the recent initiatives on cost reduction and productivity announced by DOD. Some growth in personnel seems necessary and prudent. Everyone agrees that shortfalls in the government acquisition work force — in both skills and numbers — must be fixed. Of particular concern is having sufficient expertise in key areas such as systems engineering, contracting and program management.

It is equally important that in-sourcing not have detrimental effects on the industrial base. The government should ensure that the justifications for in-sourcing are fair and do not unreasonably punish the private sector. Stan Soloway of the Professional Services Council points out that the administration is assuming a 30 to 40 percent savings from non-competitive in-sourcing, and that these savings don't reflect the government's true costs. He also concludes that some in-sourcing decisions are made arbitrarily, without careful study of what actual skills are required. One needs to keep in mind that the ultimate goal here is to increase efficiency in federal programs and to make the government a smart buyer. In-sourcing decisions should also include a “total cost analysis” to ensure that the long term outcome is the best value, just as the out-sourcing decisions and corporate make-buy alternatives are weighed. Also, in-sourcing decisions may have a lasting effect on the competitiveness of future choices. Along with all of this have been

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scattered industry complaints about the government “poaching” industry employees. Although defense officials deny the accusations, it must be acknowledged that the only place where government can recruit qualified acquisition workers is industry.

Unconnected to the in-sourcing program, but also worrisome, is the movement of government depots to bring in-house the workload that currently is performed by industry. The depots argue that under the rule that calls for a 50-50 split of the workload they need more work to keep their percentage up. As the services begin to retire equipment — especially aircraft — faster than it is being replaced, the result is less depot work. But industry is squeezed as well, since fewer platforms are being procured and industry volume begins to recede at the same time that depot work begins to dry up. Both sides want the work; the challenge is to sustain a balance.

In a recent report, “The Vanishing Arsenal of Airpower,” analyst Rebecca Grant concludes that industry’s best opportunities for increased business in the future are in maintenance, repair and overhaul work. This may give industry a chance to keep skills and expertise alive. As things stand now, she says, the United States may be down to only one producer of fighters and only one producer of fighter engines in just a few short years. Industry has a successful track record in supply chain management. Military logistics typically operates with a “just in case” mentality, while industry excels in “just in time.” Also industry is a source of first-rate engineering, production and innovation. The government doesn’t always compete in these arenas.

The defense industrial base has only one customer: the government. If the government doesn’t buy, the base will vanish. Most companies in the industrial base depend on these sales to survive. Only a few have commercial work, and much of that commercial work is not transferrable to defense products. Any business that wants to survive (if one market segment is declining) will look for other avenues to sell their products. Those products will be of a “dual-use” nature and of a “multiple customer base”. “Dual-use” allowing a defense and security variant that is sold to Government, Non-Government, Commercial, International and various “security” firms. Thereby, the government defense customer becomes less relevant in what industry uses as “requirements” to design an innovative system. The industry will then be reluctant to “customize” such a product and expose the result to export regulations unless the government chooses to fund the R&D necessary for transition from commercial to military application. The government must balance the choices of what technologies and investments are critical to national security and which can be expected to sustain under commercial free market situations. The emergence of an asymmetric or major threat is not a commercial market phenomenon.

One concludes that the government does need more expertise in acquisition in order to be a better buyer. But the push to improve capability and skills must be focused and not arbitrary. Also, budget estimates need to be realistic with respect to costs and savings, or else the war fighter ends up bearing the brunt. In-sourcing should not be viewed strictly as savings.

Achieving a balance between the levels of industry, academia and government involvement in the development, production and support of military systems is the key to sustaining defense superiority. The process requires active management to ensure that industry capability does not suffer a critical failure as the in-sourcing process and depot workload reallocation proceed. Clearly something must be done to manage this process. The Defense Department makes it a

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policy to rely on market forces to manage the industrial base, yet the department is somewhat managing the industrial base by beginning to pull workload. A way must be found to preserve both competition and industry capability as all this unfolds. A balance is needed, and smart management is required. Leaving it to market forces won't work.

Revise the Export Regulations

Current rules do not reflect the dramatic changes in the geopolitical and global economic realms that have occurred during the last 15 to 20 years. There are now less clear-cut distinctions between military and commercial technologies and increased availability of high-tech equipment and services from non-U.S. companies. Suppliers need greater speed and efficiency in meeting global market demands. The export control system is contributing to the erosion of the competitive position of U.S. companies in the global marketplace. Protection of our national security and technological edge in key capabilities must continue to be the principal focus of our export control laws. The war on terrorism has increased concerns about key technologies falling into the wrong hands. We should aim to build higher walls around fewer technologies. The scope and enforcement of export controls should address these legitimate concerns while also contributing to the strength of our defense industrial base by enabling opportunities for US companies to provide solutions for our allies security needs.

In recent years, a number of our closest allies have formally advised the U.S. government that its export control policies and procedures are a major impediment to defense cooperation. European contractors have even indicated their preference to exclude U.S. suppliers from competing for work. In their view, this is due to U.S. companies' difficulty in reliably meeting schedule and availability requirements, which are attributable to a cumbersome, slow-moving export control system. Indeed, in recent competitions, a major criterion has been the ability to demonstrate that export-licensing procedures will not impede a U.S. supplier's capacity to perform if chosen.

We must not lose sight of the security and economic benefits of a more targeted and efficient export control system that allows interoperability with our allies. The actions proposed by the National Export Initiative should enhance the ability of companies to comply with government requirements, improve interoperability with our closest allies while protecting national security and strengthening U.S. competitiveness in global markets. It also would help to preserve a cutting-edge industrial base, including a highly skilled work force. This initiative is intended to enhance national security by focusing on the enforcement of strict controls around the export of the most critical technologies and products. It also seeks to strengthen the competitiveness of key manufacturing industries in the United States by streamlining the regulation of exports. The president has tasked the secretary of defense to lay out these reform proposals as soon as possible. Some of the specifics of this new reform policy include reducing the delay of U.S. exports of encryption products, such as cell phone or network storage systems. Currently, makers of products with encryption capabilities need to apply for a Commerce Department technical review of the product before it can be exported. The review can take between 30 to 60 days. There are more than 3,300 such filings each year. This proposed rule is intended to replace the current review-and-wait process with a more efficient one-time notification-and-ship process, which may eliminate up to 85 percent of all the technical reviews of these products. Another proposed reform would be to eliminate obstacles to exporting to companies employing dual

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nationals. Currently, U.S. exporters and foreign customers of U.S. goods have to comply with two different, conflicting sets of standards. Under this reform effort, the administration will begin to eliminate about 2,000 munitions licenses a year, which should have a dramatic impact on the compliance programs of both U.S. exporters and foreign customers. It will touch on at least half of the more than 85,000 munitions licenses the United States issues each year.

National Security Advisor General James L. Jones recently announced several robust administration proposals for export control modernization which are consistent with NDIA's recommendations. In his keynote speech at the Senate Aerospace Caucus luncheon, Jones detailed administration plans to create a new, more effective and flexible regime for controlling the export of technology that differentiates between items commonly available commercially and more sensitive items that require greater oversight than possible under today's system. In addition, the revamped system will create a bright line between military and commercial technologies and will establish a tiered ranking of controls for military technologies. Higher sensitivity military technologies will receive greater scrutiny and tougher controls, while lower sensitivity military technologies will be expedited for transfer to our military allies and partners. Most importantly, General Jones announced the administration's end goal of a new, single and independent agency that will merge export licensing activities at the State and Commerce departments under a board of directors reporting to the president.

Many of the recently announced export reforms have been among NDIA's top policy concerns for a number of years. NDIA's International Division is actively engaged in reviewing and commenting on the new proposals and is committed to working with the administration in the successful implementation of the export control reforms.