
International Armaments Cooperation in the 1990s: MEADS and JSF

By

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During the height of the Cold War, the United States Department of Defense (DoD) had a focused acquisition effort to produce major weapon systems that would allow the US military to gain and maintain ground and air combat superiority. Some of these multi-billion dollar weapon systems include the F-14, F-15, F-16, F-18, and F-117. Each was developed as a single service acquisition effort, which significantly increased the overall expenditure of U.S. defense funds through the early 1990s. Sources reveal that U.S. military expenses from the early 1980s through 1990 swelled from \$206 billion to roughly \$314 billion—nearly six percent of the gross national product (13:10).

With the collapse of the Soviet Union came the end of the East-West arms race, and consequently, an end to the perceived need for a large U.S. weapons inventory. In 1997, the U.S. defense budget dropped to \$273 billion and continues to decrease, with procurement spending down 71 percent (7:5). However, although the Cold War has ended, the need to protect U.S. national interests at home and abroad remains strong (5:177). In a recent speech to Air Force members and defense contractors attending a national airpower symposium, former Secretary of the Air Force, Dr. Sheila E. Widnall, stated, "Because ours is a dynamic world with some harsh budget realities, we're working hard to focus our role as the world's premier air and space force" (33). For this reason there is a continued need for research and development (R&D) of advanced technology defense systems. But, alas, cost-effective funding of R&D requires large economies of scale, as the R&D phase of producing weapon systems can be expensive and precarious. The challenge, therefore, is to decrease defense spending, and yet remain vigilant in protecting U.S. national interests.

What alternative, then, will effectively enable the U.S. to meet reduced defense spending goals, yet maintain current national security levels? International cooperative development programs could be a solution to such a dilemma. By taking advantage of opportunities for arms cooperation, the DoD could see political, economic, and technological benefits. These benefits include improved international political relationships, shared research and development costs, and access to foreign technologies.

AN ANALYSIS OF ARMS COOPERATION AS A SOLUTION TO MAINTAINING NATIONAL SECURITY

Given the increased costs associated with keeping America free and the world safe for democracy, it is not surprising that the Department of Defense is exploring different avenues to reduce defense spending without compromising national security. This article describes the evolution of arms cooperation and discusses U.S. international cooperative development in the 1990s. Finally, it presents two models of success for developing weapons systems in a cooperative environment: the Medium Extended Air Defense System, or MEADS, and the Joint Strike Fighter, or JSF. Although both programs were developed cooperatively, the MEADS program was a cooperative project from cradle to grave, where the JSF program, on the other hand, started as an American endeavor and later phased in the mission requirements of cooperative partners. In either case, these programs lend support to the utilization of international armaments cooperation for developing U.S. defense systems in the future.

THE ROAD TO ARMS COOPERATION

A retrospective look at the evolution of international armaments cooperation reveals a progressive climb toward a collaborative association which is mutually beneficial to all cooperative partners. Each era represents incremental successes in a unique relationship that allowed the U.S. and its allies to experience the political, economic, technological, and defense-related advantages of arms cooperation.

In the post-World War II era, arms cooperation was in its infancy. Defense assistance programs represented early forms of cooperation, as the U.S.'s sole objective was to assist Europe in rebuilding its defense industrial capability. Weapon systems development occurred only on a national level in this era, as the ability of most countries to produce weapons was diminished due to weakened industrial capabilities.

As communist expansion became an increasing threat to democratic security, the need to oppose this threat strengthened in parallel. The U.S. and several European countries agreed that an allied force would be a more effective deterrent to communism. The North Atlantic Treaty Organization was formed to acknowledge and function as a coalition of democratic partners. The very existence of this coalition advanced the cause of arms cooperation, as an allied force required standardized and interoperable defense systems in order to effectively oppose the enemy. The U.S. increased its assistance to Europe during this period, indicating a stronger commitment to allied partners and laying the foundation for exploring more intense forms of arms cooperation in the coming decades.

From the 1950s to the 1970s there was an overall increase in arms cooperation as licensed production of U.S. weapon systems in foreign countries became more and more prevalent. While economic interests often foiled cooperative agendas, arms cooperation programs managed to thrive on smaller levels outside the bounds of rigid NATO requirements. Europe regained its defense industrial strength during this period and emerged as a strong competitor in the defense industry. As European defense exports increased, the U.S. experienced a significant loss in defense market shares abroad. Still, Europe did not have the same economies of scale for the research and development phases of arms production as the U.S., a fact that often produced second-rate technology in European weapon systems.

The U.S.'s waning lead in the defense market, coupled with an awareness that the goals of RSI (Rationalization, Standardization and Interoperability) and a strong allied force were far from realized, caused the U.S. to develop and implement policies that fostered greater arms cooperation. The 1980s ushered in a greater trend toward the internationalization of weapon systems among allies and it demonstrated a shift from government-controlled cooperation to a looser form of cooperation that was almost completely subject to competitive market forces.

As the 1980s came to a close and the Cold War ended, defense budgets began to plummet, yet the need for security remained constant. With the foundation for arms cooperation in place, large-scale collaboration efforts made better economic sense and the U.S. made attempts to ease international arms collaboration efforts by simplifying negotiation processes. Sharing high costs associated with researching and developing weapons systems with international cooperative partners became an increasingly attractive option in the early 1990s. While arms collaboration had occurred prior to the 1990s, full scale cooperation was not incorporated into the U.S.'s defense strategy until recently.

Economic factors caused the U.S. and its allies to recently develop handbooks for cooperation and explore models for implementing arms cooperation programs. Significantly reduced procurement budgets eliminated dollars for weapons but not the need for them. In addition, a coalition of forces seem to serve the purposes of present and future defense

objectives more effectively than any one conglomerate force. International arms cooperation has been a fluctuating priority of many nations since the end of World War II. Its significance was determined by economic cycles more often than political trends. Remarkably, arms cooperation has weathered these cycles and trends, evolving into a gainful option for continuing an allied tradition of producing the best weapon systems in the world.

THE 1990s AND THE END OF THE COLD WAR

For a half century following World War II, the U.S. and its European allies spent a great deal of time and money preparing for a possible war with the Soviet Union (18:105). This focus shaped U.S. and NATO foreign policy, drove defense budgets, spawned new technologies, and reinvigorated the defense industrial capabilities of Europe. In the final decade of the twentieth century, this focus has suddenly changed. With the whole world watching, the colossal Soviet Empire fragmented and fell—putting an end to the Cold War and, at least for now, removing the imminent threat of communist expansion.

In the present decade, U.S. policy makers have been busy identifying new threats and shaping defense objectives to be consistent with them. What are these threats? Unlike the past, where one aggressive empire succeeded another, the Soviet Union fell quietly with no one to assume the opposing superpower position. As one author described it, “There is apparently no aspirant to forceful global domination waiting in the wings, no aggrieved nation-state with sufficient power to threaten the balance at a global level” (9:39). While there may be no single power poised to dominate the globe, there are still requirements for a strong U.S. defense capability. Indeed, the absence of the former primary national security concern has not meant an absence of international security challenges. In fact, today, the U.S. faces more diverse and complex challenges than it has in the past. In a 1995 speech to students, one defense leader described the situation in these terms, “I would sum all this up in statistical terms by saying that the mean value of our single greatest threat is considerably reduced. But the irony of the situation is that the variance of the collective threat that we deal with, plan for, and counter, is up” (6:1).

According to the Office of Science and Technology Policy, these complex and diverse challenges consist of rising civil unrest around the world; the proliferation of advanced weapons by rogue nations, to include weapons of mass destruction; and finally, environmental and resource degradation due to demographic pressures (1:1). Meeting the challenges of such threats will require “an enduring commitment to diplomatic engagement, military readiness, and economic performance” (1:1). Although these strategies are quite broad in their approach, there are more specific strategies being targeted to meet defense objectives; one such strategy is international armaments cooperation.

Arms cooperation has gained increasing acceptance from the U.S. defense community over the past few years. Although, unlike Europe, the U.S. does not incorporate armaments cooperation into its defense strategy, international armaments cooperation programs are quickly becoming a visible method of developing and acquiring weapons systems in an era of reduced defense spending. In 1993, then Secretary of Defense, William Perry, established the Armaments Cooperation Steering Committee (ACSC). The organization’s mission was to “lead a renaissance in armaments cooperation” and would be responsible for oversight of the DoD’s armaments cooperation activities. These specific activities included ensuring its priority status among DoD operations; compliance with the U.S. national security policy; and coherence in all phases of cooperation, from R&D to production, procurement, licensing, and sales. This bold step appeared to favor the possibility of an increase in arms cooperation in the future.

The grounds for cooperation became more fertile for the U.S. as the Secretary of Defense pushed international armaments policy to the forefront of U.S. defense acquisition efforts. This

new approach toward armaments cooperation is apparent in the speeches of Dr. Paul G. Kaminski, former Undersecretary of Defense for Acquisition and Technology. In a January 1995 speech to students attending the Industrial College for the Armed Forces, Dr. Kaminski noted that U.S. allies will be important partners in mitigating regional conflicts (20:1). Many of the regional conflicts that will continue to plague nations all around the world will require some form of intervention. In the past the U.S. was often the only force to intervene in such conflicts. Now, however, it is widely believed that the U.S. will no longer be the only force to interrupt such conflicts.

One month later, Dr. Kaminski spoke at the Center for Strategic and International Studies Inaugural Conference in Washington. His talk focused on U.S. arms cooperation with allies. He referred to an increasing reliance on cooperation to meet U.S. and allied security requirements, as a “renaissance in cooperation.” He mentioned the mutual interest in exploiting cooperative partnerships, and further emphasized three reasons that he believed the United States seeks armaments cooperation opportunities:

- The first reason is political: These programs help strengthen the connective tissue—the military and industrial relationships—that bind our nations in a strong security relationship;
- The second reason is military: There is an increased likelihood of operations in a coalition environment where we need to deploy forces with interoperable equipment and rationalized logistics;
- And the third is economic: Our defense budgets and those of our allies are shrinking. What we cannot afford individually may be affordable with a common effort. (21:2)

The remaining points of Dr. Kaminski’s message are significant, insofar as they admit to a poor history of international cooperation, yet re-dedicate the U.S. to building a more accepting environment for arms cooperation in the future. The message targets some of the failed or unfinished cooperative projects, such as Mark XV IFF (Identification Friend or Foe) air-to-air identification system, and the ASRAAM (Advanced Short-Range Air-to-Air Missile) (21:3). In addition, Dr. Kaminski addresses the obstacles to cooperation, namely the “not-invented-here” syndrome; differing national requirements; perceptions that the U.S. is the lead, where Europe plays only a sub-contractor role; political divisions; who gets the jobs; and technology release problems. Finally, he touches upon the challenging and complex reality of international armaments cooperation, and completes his talk on a note of hope and vision for successful cooperation in the future (21:3).

Although such visions of hope abounded in the public addresses of U.S. defense leaders, progress was slow. For this reason, in 1996, the Office of the Undersecretary of Defense for Acquisition and Technology requested that a Defense Science Board Task Force convene to investigate international armaments cooperation issues. The cover letter which accompanied the August 1996 report was from the Chairman of the Defense Science Board, Mr. Craig Fields, to the Undersecretary of Defense for Acquisition and Technology. In the body of the letter, Mr. Fields wrote, “We believe that the recommendations of this Task Force are an important change in the way we go about doing international cooperative efforts and, if implemented, would significantly raise the probability of success on future selected programs—as well as increase the number of such efforts” (14:cover letter). In the introduction of the report, the Defense Science Board Task Force describes the significance of cooperation using the following words:

As defense budgets around the world continue to shrink, nations are faced with the difficulty of maintaining a viable defense industrial capability without eliminating the

presence of continuous competition and its concomitant advantages in both cost and performance. As a result, international armaments cooperation is increasingly being considered as a means for achieving coalition and broad security objectives in the post-Cold War era. (8:1)

After listing the benefits of armaments cooperation (reduced R&D costs, access to foreign technologies, interoperability, etc.) the task force reports that the U.S. has thus far shown very limited interest in cooperative endeavors (8:1). In a publication by the Aerospace Research Center in Washington, DC, one particular article suggests that the reason for only intermittent participation by the U.S. in arms collaboration projects is because the U.S. does not view cooperation as instrumental to building an effective defense capability. Further, the article charges that "lack of emphasis on defense trade, poor coordination of cooperative efforts, little support among the military services, and weak political support have worked against the success of international defense cooperative programs" (26:9).

There is little doubt that the increasingly competitive global arms market is causing the U.S. to re-evaluate its defense strategy. More recently, the added pressure of a shrinking defense budget is yet another force behind recent U.S. initiatives to streamline defense spending, such as acquisition reform and the Revolution in Business Affairs, described by the Quadrennial Defense Review (QDR) as an effort to reengineer DoD's business practices in order to afford an effective modernization program. Revolutionary efforts include a long list of better business practices, everything from reducing overhead to streamlining infrastructure. Among the list of better business practices was increasing cooperative development programs with allies (10:15). Cooperation is finally a part of DoD's defense strategy. Not only is this historically significant, but it also has future significance, as it encourages increased armaments cooperation between the U.S. and its allies.

International armaments cooperation is now receiving unprecedented support from senior DoD leaders. It is being incorporated into the fundamental building blocks of U.S. defense strategies, and is mandating full cooperation and support from DoD offices. Steering committees, handbooks, and policy letters have been created to facilitate, guide, and direct U.S. cooperation efforts.

On 28 March 1997, a few months before the QDR was published, Secretary of Defense Cohen signed a powerful policy memorandum which directed that international armaments cooperation be used to the maximum extent feasible, and suggested that, as a minimum, a greater emphasis be placed on "deployment and support of standardized, or at least interoperable, equipment with our potential coalition partners." (6:1) Secretary Cohen also laid out policy guidelines for funding, training, and R&D efforts in the memorandum. He named the Office of the Undersecretary of Defense for Acquisition and Technology as the office of primary responsibility for all international armaments cooperative actions and issues, and directed its coordination with any affected DoD components. In addition, this office was instructed to identify opportunities for cooperation. The policy was effective immediately (6:2).

Europe has been participating in cooperative projects for quite some time now, and has recently begun to express concerns about the incompatibility of cooperation and competition. Competition is considered, by both the U.S. and now by Europe, as the "best means for achieving value for money when buying new equipment" (3:4). But many Europeans complain that government intervention in procurement practices hinder a nation's ability for achieving that "best value". In Europe, for example, competition is reportedly impaired because of government policies, which ensure a fair economic and technical return on each partner's contribution to collaboration, and give countries with less developed defense industrial capabilities work that they would not win in open market conditions (3:5). The U.S. has experienced this on a global level with the "Buy American Act," but has recently taken steps

to remedy this situation with the McCain Amendment to the 1997 Defense Authorization Act. The amendment allowed the DoD to relax some "Buy American" provisions for those countries which have opened their markets to US companies. This measure fosters free and open competition among participating nations, a condition which is even more significant when global defense budgets are shrinking (16:3).

Competition and cooperation can coexist. Industries and governments may be forced to find more efficient methods of cooperation, but this can only be seen as a victory both politically and economically. In a recent speech entitled "International Armaments Cooperation for the New Millennium," Mr. Paul J. Hooper, Deputy Undersecretary of Defense, International and Commercial Programs, admits that "true cooperation is a complex and challenging business" (16). With NATO on the verge of expansion (31:8) and defense procurement down 71 percent, there appears to be an even greater urgency to team up with allies and exploit the benefits of armaments cooperation.

What began as a political gesture to assist our European allies in rebuilding their defense industries has matured to an alliance of mutual economic and political interests. The world is different now, and it will continue to change, and "when no one nation possesses all the best technologies, when no one nation has unlimited resources, and when nations will be coalition partners, the case for international armaments cooperation is compelling" (16:3).

INTERVIEW RESULTS

Recently, interviews were conducted with senior DoD officials and international program managers in Washington, D.C. and at Wright-Patterson Air Force Base, Dayton, Ohio, to gain insight into the future role of international armaments programs in the acquisition of weapon systems. The comments of the respondents reveal the difficulties that those involved in acquisition programs see in attempting international cooperation. Many concurred that the degree of involvement should be directly proportional to their level of resource infusion (12). To measure this, it is essential to come up with a mathematical formula to cost out each phase of the program as if the U.S. were doing it alone. The partnering nation's resource contribution as a percentage of input can be used to calculate the level of work share for that country. This works better in the tail end of the program because in the early stages of development it is difficult to place a monetary value on qualitative areas such as the initial requirements generation process.

A common view of supporters of international cooperative programs suggests that it costs more and it takes longer up-front to do an international cooperative program (12). Each partnering nation realizes the benefit of a cooperative program at the tail end. Most of the savings that will be recognized by developing a major weapon system cooperatively comes in Milestone I and Milestone II (29). The general consensus of the interviewees was that a cooperative program will cost approximately 120 percent of what the U.S. could build the same system for. However, while the overall costs of a cooperative program may be higher, the shared costs for each participating country is much lower (32).

The economic disadvantage was generally cited as the unequal capability of the partners to contribute financially and/or technologically to the program. As defense budgets around the globe continue to decline, there may be an even greater concern of unequal contributions. Levels of burden sharing in terms of R&D expenses during the Concept Exploration phase of the program need to be established in the initial stages of the program. For this reason, the U.S. should ensure that cooperative efforts address mission needs or operational requirements that are shared by allies (29).

Operational gains of improved logistics support are also offered as an advantage of international cooperation. As Secretary of Defense Cohen stated in his March 28, 1997 policy memorandum, "We [the U.S.] must achieve as a minimum deployment and support of standardized, or at least interoperable, equipment with our potential coalition partners." (6). Many interviewees stated that as the U.S. military changes its strategy to include a stronger use of coalition forces in future warfare scenarios, the DoD acquisition community must also change its strategy toward armaments cooperation as a response to ensuring the interoperability of U.S. forces with its allies (15:17:32).

Comments on the logistical considerations of an International Cooperative Program centered around initiatives to rely more heavily on private maintenance and supply support. Of particular importance was the use of limited Contractor Logistics Support (CLS). As DoD continues its efforts to reduce U.S. defense spending, the outsourcing of support activities, including some of the current organic maintenance capabilities, concerns some leaders who question the impact this might have on life-cycle support systems in the hands of our allies (34). In addition, current Air Force managerial schemes such as Integrated Weapon System management (IWSM), might suffer if employed in an international setting. IWSM will be complicated because the span of direct U.S. control during the acquisition process is significantly minimized when the program is directed through an international steering committee. In addition, many respondents expressed concern over the ability of the programs managers to communicate with regard to issues, ranging from planning to follow-on support of a weapon system. Thus, supporters of international armaments cooperation at the senior DoD level questioned the U.S.'s ability to effectively implement the "cradle-to-grave" philosophy of IWSM for a large-scale cooperative project, such as a major weapon system acquisition effort (2).

THE MEDIUM EXTENDED AIR DEFENSE SYSTEM

The MEADS is a mobile surface-to-air missile system currently in the Program Definition Phase that will be capable of providing 360 degrees of defense protection for troops and other assets against short-range ballistic missiles and cruise missiles (24:4). One of the most attractive characteristics of the MEADS from a coalition standpoint is its high degree of interoperability. In a battle zone, this characteristic means an enhanced allied defense capability (27:2).

MEADS is a cooperative partnership between the U.S., Germany, and Italy (France was initially involved in the project but withdrew because of a lack of funds) with a cost share of 60, 25, and 15 percent respectively for the program definition and validation phase (11). This partnership utilizes the concept of trans-Atlantic teaming, an international arrangement of primary contractors and sub-contractors that allows competition on an international level. The purpose of employing trans-Atlantic teaming arrangements is to ensure the benefits of international competition are present in the procurement effort, while at the same time maintaining strong political and military ties with European allies (32).

At a 1996 conference, former Under Secretary of Defense for Acquisition and Technology, Dr. Paul Kaminski, said "the theater missile defense area offers an excellent example of the renaissance in trans-Atlantic armaments cooperation" (22:5;23:5). The MEADS program stands out in this post-Cold War environment as an example of how the OUSD (A&T) would like to see future armaments cooperation initiatives developed. The reason that MEADS is such a good model is because it exemplifies how to maintain a "win-win" opportunity for the competitive industrial bases of the U.S. and its allies. There are two trans-Atlantic teams for the MEADS program which are scheduled to complete the Program Definition phase in late 1998, one led by a combined Hughes and Raytheon venture, and the other led by Lockheed Martin. Each team has a 50-50 arrangement with the European consortium named Euromeads

comprised of a group of well known defense companies, including Alenia Aerospazio, Daimler-Benz's LFK subsidiary, and Siemens. All members of the European consortium have equal shares in the overall development of the project. At the end of the Program Definition Phase, one of the teams will be selected to take the program into the design and development phase (28:53).

THE JOINT STRIKE FIGHTER

From its inception, the Joint Strike Fighter (JSF) program was structured to be a flagship for acquisition reform (30). In addition, the JSF program has been recognized as a potential model for international cooperative development programs. Unlike its predecessors, the JSF program has involved international partners in the early stages of the operational requirements identification process. The program uses the "common family of aircraft" approach to procurement. This is because it has a high degree of commonality among aircraft variants, which serves to satisfy the strike warfare requirements of the Navy, Air Force, Marine Corps, and international partners.

International cooperation in the JSF program is based on four program-unique levels of participation. According to Dr. Kaminski, these four levels allow a participating nation to either influence or watch how the JSF program is developing system requirements (25:55). The levels are described in the following paragraphs:

- 1) The highest level of involvement by U.S. allies cooperating in the JSF program is known as a "Collaborative Development Partner," or full partner. The United Kingdom signed a Memorandum of Understanding (MOU) in December 1995 and currently is the only nation participating at this level. British firms involved in this endeavor include Dowty Aerospace, Meesier-Dowty, Martin Baker, and Lucas Aerospace (14:16). The U.K. has committed to contributing \$200 million dollars to the Concept Demonstration Phase. As collaborative partners, the U.K. and the U.S. have equal influence over the development of the Short Take-Off and Vertical Landing (STOVL) version of the JSF. The objective of the both partners is to harmonize their unique operational requirements in order to field a superior weapon system to replace their aging Harrier fleets (4).
- 2) An "Associate Partner" in the JSF program again works under an MOU but has only limited participation and involvement in the decision-making process where requirements, technology, or other core processes are concerned. Multi-lateral Memoranda of Agreements (MOA) are currently being negotiated with Denmark, Norway, and The Netherlands. In the future, these countries may enter the JSF program as Associate Partners. This relationship gives these countries the opportunity, depending upon data disclosure access, to harmonize future operational requirements using their threat data in the simulation models of the JSF program. In addition, they have input, but not direct influence, regarding the requirements evolution of the conventional take-off and land version of the JSF (4). Through this exposure, associate partner countries are able to determine if the JSF is a valid replacement for their aging F-16 fleets.
- 3) The third level of involvement in the JSF program is the "Informed Customer". As the name reflects, this level of participation allows the country to be informed or have access to information on the JSF in order to evaluate the weapon system as a possible replacement for their current aircraft. This level does not afford the participant any level of influence in the programs processes. Currently, the U.S. is negotiating agreements with Canada for its entrance into the JSF program at the Informed Customer level (4).

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- 4) The last level of participation allows members of foreign industry to engage U.S. industry in future partnerships by subcontracting with the prime contractors of the US in subsequent phases of the program. Foreign industry firms from Russia, France, and Great Britain are currently involved at this level (19).

Both the MEADS and the JSF are celebrated accomplishments in international cooperative development in terms of program structure. To date, they are two of the best examples of designing highly interoperable defense systems which could significantly strengthen coalition forces in a war environment. In addition to their interoperable features, the MEADS and JSF programs exemplify considerable strides in acquisition reform. For the MEADS program, its keen use of trans-Atlantic teams to realize "best-value-for-the-money" practices in a competitive international industrial environment has been lauded by the international armaments cooperation community (11:2). JSF program partners are considering cost at the earliest stages of development, enabling them to realize full life-cycle savings from the outset. In addition, flexible manufacturing technology enables three variations of the aircraft to be produced on the same production lines, satisfying multiple customer requirements. The JSF has thus captured the international community's attention as an attractive replacement for F-16 fleets all around the globe. Affordability and flexibility make this fighter aircraft a model of international cooperative success.

THE COOPERATIVE ROAD AHEAD

In an era of declining defense budgets, international arms cooperation is a good business practice. Both the U.S. and its NATO allies will enjoy greater economies of scale, minimized risks, access to foreign technologies, and "best-value-for-the-money" products offered by an open and competitive market. However, lessons of the past should be fully understood by all cooperative partners before agreeing to any cooperative project. Defense authorities alike, from all NATO countries, agree that arms cooperation is an effective solution to weapons development and procurement challenges, but they also recognize that cooperation does not work in every case. It is up to the participating countries to overcome historical barriers to successful arms cooperation by following newer models for such endeavors. Every effort must be made by participating countries to act as an alliance from the early stages of a project through its completion. The objective, therefore, is not simply to achieve international arms cooperation; rather it is to strengthen a coalition of forces, by pursuing the same goals of RSI set forth by the pioneers of arms cooperation shortly after WWII. By allowing cooperative mission requirements to drive acquisition programs instead of nation-specific mission requirements, cooperative partners will truly learn the benefits of compromise in a finished defense product which is technologically superior and befitting the defense objectives of an allied force.

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