

COOPERATIVE ACQUISITION PROJECTS IN THE PACIFIC RIM

Richard Kwatnoski

This is the third of three related research studies of cooperative acquisition projects conducted by DSMC. It describes the current reality of cooperative projects in the Pacific Rim, identifies barriers to and facilitators of cooperation, and examines similarities and differences between PACRIM and NATO-Europe projects.

In 1992 the Defense Systems Management College (DSMC) began a study of international cooperative defense acquisition projects between the United States and countries in the Pacific Rim (PACRIM). This was the third of three related research studies of cooperative acquisition projects conducted during the past ten years. The first and second were studies of U.S. and NATO-European projects (Farr, 1985; 1992). Responding to increasing student demand for information on PACRIM projects, DSMC took the lead for the third research study.

The research objectives were as follows:

- Describe the current reality of cooperative projects in the Pacific Rim.
- Determine the prescription for success by identifying barriers to and facilitators of cooperation.

- Examine similarities and differences between PACRIM and NATO-Europe Projects.

The PACRIM study progressed in four phases employing tailored questionnaires and methodology developed during the two previous studies. The four phases are shown in Table 1.

Phase I was conducted to identify the PACRIM countries and projects of interest. The scope of the study was then narrowed to Australia, Japan, and South Korea, as it is with these nations alone that the Department of Defense (DoD) has legal authority to enter into cooperative acquisitions. Cooperative acquisitions must be jointly managed and equitably (or equally) funded by the participating nations. They must also include an international Memorandum of Understanding or Agreement (MOU or MOA) setting forth the terms and conditions of the project. International

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 1995		2. REPORT TYPE		3. DATES COVERED 00-00-1995 to 00-00-1995	
4. TITLE AND SUBTITLE Cooperative Acquisition Projects in the Pacific Rim				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Defense Systems Management College ,9820 Belvoir Road,Fort Belvoir,VA,22060-5565				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Acquisition Review Quarterly, Summer 1995					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 16	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Table 1. Study Phases and Participating Organizations

STUDY PHASES	PARTICIPATING ORGANIZATIONS
I. Establish terms of reference notes on cooperation	Office of Secretary of Defense, Defense and Security Assistance Agency, and Service Staffs
II. Notes on cooperation	Allies - Embassies
III. International Acquisition Topics	U.S. Project Offices
IV. International Acquisition Topics	Allies Project Offices Topics and U.S. In-Country Personnel

projects with other PACRIM nations must use Foreign Military Sales (FMS) procedures. The projects identified for study are shown in Table 2.

Phases I and II of the study were combined to produce general and country-specific notes on cooperation. These are covered in the next section.

Phase III conducted during 1993 and Phase IV conducted during 1994 focused specifically on the PACRIM projects. Interviews were conducted with both U.S. and allied in-country representatives of each of the project offices. Because questionnaires provided to U.S. and allied project offices in PACRIM were identical, and because the questionnaires were similar to those of previous U.S. and NATO-Europe project studies, comparisons of U.S. and allied views on cooperative acquisition is possible, as are comparisons between PACRIM and NATO projects. The allied project offices visited

are shown at Table 3.

One of the great difficulties in a study of the prescription for project success is in determining the definition of success. Early on in the study a simple definition was developed. Success was defined as (a) completing a formal MOU, (b) obtaining funding provided from the participating nations, (c) initiating the project, and (d) encountering no withdrawal or termination due to unresolved problems. All the projects studied met this definition. Defining success in this way, as well as the nature of the projects available for study, led to a focus on the very preliminary stages of the acquisition process.

NOTES ON COOPERATION

General

First and foremost, it must be kept in

Mr. Kwatnoski is the Director of International Acquisition Courses at DSMC and manages the International Defense Educational Arrangement established between DSMC and its counterparts in France, Germany, and the United Kingdom. He is a senior member of the acquisition corps and has written extensively for defense acquisition publications, as well as having authored numerous DoD technical reports.

mind that there is no equivalent to NATO in the Pacific Rim. This means that there is none of the vast NATO-type infrastructure in place to support cooperative activities with Pacific Rim nations. Therefore, with few exceptions, our cooperative acquisition projects with Australia, Japan and South Korea are conducted bilaterally, and will remain so for the foreseeable future. The U.S. enjoys favorable defense trade balances with the three nations, and is pressured therefore to give generous terms in cooperation. Furthermore, one should not be fooled into stereotypical thinking. Each nation is different: Japan is not like Korea and Australia is different in many ways from the U.S. Between each nation there can be enormous cultural differences, management styles, and motivations for cooperative acquisition. One should also be aware of “European Strings” that may tie America’s hands in the Pacific Rim because of prior commitments made in European projects. Interestingly, there was a perception among the U.S. staff personnel interviewed that our system was the most prob-

lematic when it comes to cooperative acquisition. This was especially pronounced in our legal system (e.g., treatment of intellectual property rights) and acquisition system (e.g., competition policies).

Australia

Australia is geographically a Pacific Rim nation but is heavily populated with transplanted Europeans. For Americans, Australia is culturally the easiest nation to work with in the Pacific Rim, if not in the world. Further smoothing relations, Australia is not viewed as a competitor to the United States, whether economically or in the defense export market. The Australian defense budget is smaller than that of the U.S. but proportionately larger in its expenditure for research. Not surprisingly, Australia seeks more cooperative projects with the U.S. to develop outlets for its research technology and to attain rational production quantities. The Australian rationale for cooperation is to access foreign technology, promote its own technology, realize econo-

Table 2. The Projects Studied

PROJECT	MILITARY DEPARTMENT OR DEFENSE AGENCY	ALLIED NATION
Next Generation Support Fighter (aka FS-X)	Air Force	Japan
Ducted Rocket Engine	Army	Japan
Coastal Harbor Defense	Navy	South Korea
Ammunition Storage Technology	Army	South Korea
Digital Chart of the WorldAgency	Defense Mapping	Australia
Radar Activities	Air Force/Navy	Australia
MK-53 Off-Board Active Decoy (aka Nulka)	Navy	Australia

Table 3. Project Organizations Visited

PROJECT	U.S. ORGANIZATION	ALLIED ORGANIZATION
Coastal Harbor Def. Ammo Storage Tech	NRL, Washington, D.C. TCES, Savanna, IL Support: JUSMAG-K	ADD, Chinhae ADD, Taejon
FS-X Ducted Rocket Engine	F-16 SPO, WPAFB, OH MICOM, Huntsville, AL Support: MDAO	TRDI, Tokyo TRDI, Tokyo
Radar Activities Nulka Digital Chart of the World	ESC, Hanscom AFB, MA TAD PEO, Crystal City, VA DMA, Fairfax, VA Support: ODC	JORN PMO, Canberra Nulka PO, Canberra Dir. of Survey - Army, Canberra

mies of scale, promote interoperability, and encourage industrial participation that will result in a “residual” capability retained in Australia after project completion.

Australia explores cooperative project opportunities in a variety of ways. These include the structural process (attaches, exchange officers, etc.), multilateral forums (ABCA, TTCP, 5 Nations, etc.), senior national representative meetings, and project teams specially formed to examine the pros and cons of the cooperative project.

Australia cooperates with many nations besides the U.S. With New Zealand, efforts have been made to attain rational production quantities for many types of defense material; so, too, with the United Kingdom, primarily on naval projects. Australia also desires to strengthen ties with its other Pacific neighbors. There have been successes in joint exercises, logistics, and sales, but no armaments cooperation as of this writing.

Australians cite several difficulties in cooperating with the U.S. The release of technical information is often at issue. The complaint of being “ambushed by the many,” a reference to the large number of

players in the U.S. approval process, is heard. American commitment at the working level is acknowledged, but seems lacking at the staff level and within the financial community. The “NIS syndrome” was mentioned: This is an Australian perception that if the defense article is “not in service” in Australia, then the U.S. is not interested. Also mentioned as difficulties were the great distance between the two nations, the 12-hour time difference, differing national priorities, and the size mismatch on production rates and quantities.

From the U.S. perspective, a long history of military cooperation, a lack of economic competition, and a common motivation for armaments cooperation pose few problems. Access to software source codes remains an issue, however, though historically the U.S. has not released these to any nation. Australia is a natural candidate for expanded cooperation.

Japan

An understanding of the potential for cooperative acquisition projects with Japan

must begin with a review and understanding of Japanese policies regarding their defense relationship with the United States. These policies include the Japanese “No War” Constitution (post World War II), the Mutual Defense Assistance Agreement (1954), the Japan-U.S. Security Treaty (1960), the Three Principles on Arms Export (1967), Government Policy Guidelines on Arms Export (1976) and the Agreement on Technology Exchange (1983). Basically these policies preclude Japan from exporting armaments, and from sharing defense technology with any nation other than the U.S.

There is an anti-military sentiment within Japan, and to further confound cooperation there is an anti-Japanese military sentiment in neighboring Far Eastern nations. There are also deep cultural differences between us, and the economic difficulties between the U.S. and Japan are reported daily in the American press. In summary, many external factors hinder the formation of cooperative acquisition projects with Japan.

The Japanese Defense Agency (JDA) conducts little in-house research, yet cooperation in research remains feasible because, unlike DoD, the JDA does not purchase unlimited rights to intellectual property associated with defense articles. However, the Japanese do favor classified agreements, a preference that further complicates cooperation.

The Japanese examine the possibility of cooperation based upon four “merits” that ask whether it is likely to:

1. Prove appropriate for the Japanese environment.
2. Allow for improvements after procurement using Japanese technology.
3. Insure that long term logistics support is available.

4. Enhance the growth of the Japan’s defense industrial base and technology.

While Japan’s indigenous research and development is of paramount importance, the Japanese view some cooperation with the U.S. as necessary. Although Japan responds to U.S. initiatives in cooperation, it seldom if ever initiates cooperative acquisition projects itself.

Issues that may arise in cooperation with Japan include technology transfer and control (especially software), differing capabilities of the U.S. and Japan defense industrial bases, joint ownership of intellectual property rights, and technology flowback. The last has been a persistent issue involving disagreement about the meaning of *native Japanese technology*, which Japan is required to provide, or flow back, to the U.S.

Real cooperation is only possible with the United States. Japan favors the Data Exchange Agreements and the Systems & Technology Forum for identifying cooperative opportunities. The future of cooperative acquisition projects will be on a case-by-case basis, with clear and complementary motivations often lacking.

South Korea

Recent moves toward democracy in South Korea have reduced the influence of the military, but the nation’s defense industry still responds to government direction. High technology transfers to South Korea are considered in the context of a potential conflict (or, alternately, reunification) with North Korea. South Korea does little pure research, and therefore favors co-production. All cooperative projects must have a ready application.

There are cultural differences between Americans and Koreans: Koreans may seem overly attentive to detail at times and to put nearly everything in writing. Yet the cooperation of one’s Korean counterparts

can also depend on personal rapport: Anticipate changes to a project when changes in key people occur. Not surprisingly, Koreans place emphasis on social activities designed to build personal rapport among business acquaintances. Other helpful hints for Americans include pre-planning to provide administrative support, including Korean-English translation, and preparing oneself to truly adhere to schedules.

South Korean officials view cooperative projects with the U.S. as easy to start but difficult to continue. They also view the U.S. as reluctant to make cooperative projects with South Korea work, and speak of “turning our eyes,” a euphemism for a shift from Korea’s commitment to defense cooperation with America to cooperation with other nations, primarily France and Germany. However, Korea continues to seek cooperation with the U.S.

The issues that typically arise in U.S.-South Korean cooperative projects include technology transfer and control, third party sales, intellectual property rights, total project cost and Korean cost share, and the transfer of research work to a defined project. The Koreans favor Data Exchange Agreements and the Engineer Scientist Exchange Program for identifying cooperative projects.

INTERNATIONAL ACQUISITION TOPICS

The study yielded information on the following acquisition related topics, each of which is explored in detail in this section.

Project Profiles

All the projects in the PACRIM study were research and development projects, at least half of which also included significant test and evaluation. These were efforts of about \$10-\$15 million, with half of that having procurement potential. These were pri-

marily technology demonstration or insertion projects or, alternatively, technical data gathering projects. There were two exceptions: The Japanese Next Generation Support Fighter (FS-X) Project is a major acquisition program for Japan, although the U.S. effort consists primarily of monitoring the flow back of technology. The other exception is the U.S.-Australian Nulka project (or the MK-53 Off-Board Active Decoy, as it is now called). The intent is for this project to go through development and into production. Nearly all the projects are of moderate to high technical risk, as might be expected in early R&D. Commercial spin-off was viewed as a possibility in half the projects.

Project Office Profiles

Unlike NATO, PACRIM nations frequently utilize alternatives to fully integrated international program offices with oversight and guidance provided by an international steering group. The favored approach in over half the projects was a dual project office structure, where funds and technical effort were managed in each nation, with technology and results shared regularly during the life of the project. The lead nation approach was the next most favored, observed in nearly a third of the projects. There were no integrated international project management offices in any of the PACRIM projects. This could be attributed to any or all of the following: a lack of project maturity, the bilateral nature of the projects, and the stipulation attached to U.S. Cooperative Research and Development Funds (a.k.a. Nunn Amendment funds) that the U.S. portion be spent in the U.S. While there were no integrated international project offices, three approaches were employed to facilitate the international nature of the projects:

1. Liaison officer: This was used with the

Japanese FS-X project and the Australian Nulka project, the latter having an Australian liaison officer in the U.S. project office, with no reciprocity.

2. In-Country support: This method was favored in the Korean projects, with the support provided by the Joint U.S. Military Advisory Group.
3. Embassy Contact: This was the approach clearly favored with the Australian projects, where the embassy in Washington played an active role.

The use of an international steering group, so highly favored in NATO projects, was used in only half the PACRIM projects. While those who utilized a steering group believed this structure beneficial, the others believed that a steering group was not necessary.

Project Initiation

The study addressed the mechanism, rationale, barriers, and facilitators for program initiation, as well as an assessment of international partner potential. Regarding the mechanism for program initiation, the surprising finding was that there was no common approach or forum for this. As Table 4 illustrates, each project began differently. While only one project initiation was attributable to a data exchange agreement, half the project offices mentioned that an existing agreement greatly facilitated the project.

Program Rationale

Examination of the motivation of U.S. project personnel to enter into international acquisition projects could help to identify future candidates for cooperation. Not surprisingly, over half stated that a common threat or need was the motivation. While this is the expected answer, almost half had

Table 4. Program Initiation Mechanisms: All Are Different

- Defense Security Assistance Agency Initiative
- Bilateral Forum
- Office of Secretary of Defense Directed
(To solve technical problem)
- Data Exchange Agreement
- Senior Level Bilateral Meeting
- Multilateral Forum
 - 5 Nations Meeting
 - ABCA Forum

other motivations. One reason was to access cooperative R&D funds. Other rationales were political motivation, technical benefit, and standardization goals.

Barriers to Cooperation

The U.S. view on barriers was very clear. Nearly all the American project officers identified the cumbersome MOU-MOA process as a barrier to cooperation. Their specific problems or complaints took many forms: the difficulty of obtaining staff coordination of the MOU-MOA; the length of time associated with the process (almost always significantly underestimated); the difficulty associated in one case with a change in legal advisors, reopening an MOU to negotiation; and the use of a program MOU (for the entire R&D and production cycle) rather than an MOU for a single phase of acquisition. And one other barrier surfaced: In half the projects, objections from other agencies or departments were identified as a problem. Mentioned in order of frequency were the Defense Technology Security Administration (DTSA),

the Departments of Commerce and State, and finally other military departments.

The allied view identified cumbersome U.S. procedures as the major barrier to cooperation. While the MOU process was mentioned most frequently, the allies also encountered difficulties with American testing and technology release procedures. Surprisingly, almost half the PACRIM allies' project offices cited out of phase national budget processes as being a barrier, while U.S. project offices never mentioned this as a barrier. U.S. project personnel need to be more sensitive to the differing budget cycles of allied nations.

Facilitators of Cooperation

Not surprisingly, over half of the U.S. project office representatives focused on the project requirements as facilitators of cooperation. The term *requirements* could refer to a technical objective, operational requirement, specification, or number of production units, and was not defined. Nevertheless, clarity, stability and mutual understanding of project requirements were considered to be of paramount importance. Also cited with nearly the same frequency was the commitment and support at a high level received by the cooperative project. For example, it was thought that the Ducted Rocket Engine would have never moved forward without Office of the Secretary of Defense support. Other facilitators cited were a perception of equitability of benefits, having a liaison in the partner's country, and shared program objectives. Only one U.S. project office staff stated that they had no significant problems during the MOU process. They gave as a reason that they had engaged in two years of preplanning and technical discussion with their allied counterparts under an existing Data Exchange Annex (DEA) prior to entering the formal international negotiation process.

A comparison between U.S. and allied

views on what facilitates cooperation was most revealing. One of the two most common responses from allied project offices was having a common goal. Though similar to the U.S. view, the allies' perception seemed gauged to broader program goals, rather than the specifics of technical or operational requirements. Another frequent response was *trust*. This was a surprise in that it was the most frequent allied answer, yet was never mentioned by U.S. project office representatives. This same phenomenon occurred during studies of European projects (Farr, 1985; 1992), where the need for *commitment* was mentioned often, but exclusively by the Europeans. This suggests a profound cultural difference between the U.S. acquisition personnel and their allied counterparts regarding the value placed upon trust and commitment necessary in an international project. Two additional answers were mentioned: complementary skills and technology and prior meetings, neither appearing on the U.S. list. It is essential to understand these differences to attain success.

Potential Partners

Here again the differences between the U.S. and allied views are revealing. When asked about the desirable characteristics of a potential international partner, U.S. project office personnel found consensus on only one answer: mutual interest. No other answer appeared more than once, but the list also included: available funds, a win-win attitude, high level advocacy, technical capability, commitment, a signed royalty agreement, or a perception of urgency. One of the two most common allied responses was a common goal or need, similar to the most prevalent U.S. response. However, it came from less than a third of the project offices, and was mentioned with the same frequency as complementary skills and technology. The latter was never mentioned by U.S. representatives. Other responses re-

ferred to the existence of a political alliance, past experience, proven performance and reliability, interoperability of defense equipment, and an equal-partner mentality.

INTERNATIONAL CONCERNS

An assessment of five aspects of international projects and their impact upon Pacific Rim projects was conducted. Both the U.S. and allied views were considered.

Geographic Separation

Not surprisingly the U.S. project offices viewed geographic separation as a problem with all three of the nations considered. What was unexpected was that our Australian, Japanese and Korean counterparts minimized the importance of this aspect. They often cited modern technology easing this problem. First hand experience proves the necessity of a 24-hour fax machine for efficient communication.

Cultural Differences

The U.S. project office staffs cited cultural differences as a significant problem when working with their Japanese and Korean counterparts, but of minimal concern in working with the Australians. The Australians agreed with the U.S. view. The Japanese saw cultural differences as a problem, though not a significant one, and the Koreans said that cultural differences between themselves and the Americans were of minimal impact in international projects.

Language Differences

Not at all surprising was the agreement between the Americans and Australians that language differences have a minimal impact on their cooperation. The Americans agreed with their Japanese counterparts that language was not a significant problem. Americans reported that most of

the Japanese they dealt with in cooperative defense acquisition projects had been educated in the U.S. and could read English very well and speak it with some difficulty. Regarding their Korean counterparts, the Americans saw language as a significant barrier to cooperation, while the Koreans saw it as a lesser problem. This was expressed by one Korean project officer: "Language differences are not a great problem because we speak the common language of science." Many South Korean scientists also obtain part of their education in the U.S.

Technical Capability

The fourth international aspect examined was whether differences in technical capability between the U.S. and partner nations caused significant problems. There was a rough consensus between the U.S. and allied project offices that this was a problem, but not a significant one. Koreans did not believe this to be a problem at all. The U.S. project office staffs believed that this was not a problem with Japan at the technology level, but that the integration of technologies, components and subsystems into a major defense system could be a concern.

Managerial Differences

The fifth and final international aspect examined was managerial differences. There was clear consensus between U.S. and allied project offices that this was a problem area. Not a single nation indicated that this was of minimal impact. There were varying degrees of concern by country. The U.S. and Japanese project office staffs agreed that this was a significant problem area. The Americans believed this also was a significant problem for the Koreans, but the Koreans did not believe it to be significant. The U.S. and Australian project office staffs believed this to be a problem area

between them, though not as significant as that each had experienced with Japan. Unfortunately, the study did not get into the specifics of the managerial differences that caused problems, which will remain an area worthy of additional research.

In summary, managerial differences appear to be the greatest concern in international cooperative acquisition projects with PACRIM nations (especially with Japan). Differing technical capabilities also pose some concerns. Geographic separation, cultural differences, and language differences seem to be of lesser impact. In general, the U.S. project personnel viewed international concerns as posing more significant barriers than their allied counterparts. Most of our allies are accustomed to obtaining defense equipment from outside their own country, while the U.S. makes most of its purchases at home.

Requirements and Goals

An assessment of the project requirements and goals process was conducted. This covered technical requirements, operational requirements, or general project goals (or all three) agreed upon by the nations involved. Although this was the most troublesome aspect of the NATO-Europe projects, in the PACRIM projects the requirements and goals were jointly developed and specified at the onset of the project, user needs were apparent, and there were no significant problems. Perhaps lessons have been learned from the NATO-Europe projects, or perhaps it is just too early in the acquisition cycle to detect problems with the requirements and goals. It is also true that political pressure altered the goals in half of the programs, but only before the MOU was signed. After the exposure to the formal MOU process, requirements and goals stabilized. This points to a strong need for the acquisition manager to minimize the exposure time of the project to the formal MOU-MOA process.

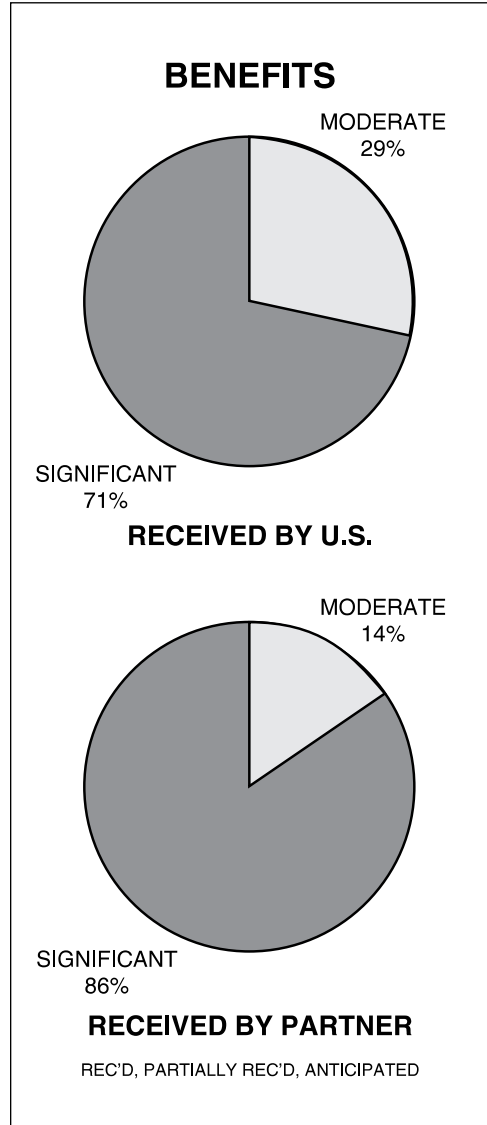


Figure 1. Equitability

Equitability

Because there is a statutory requirement that international cooperative programs be *equitable*, U.S. project office staffs were surveyed as to their opinions on the benefits received by the U.S., as well as their perceptions of the benefits received by allied partners in the project. As Figure 1. shows,

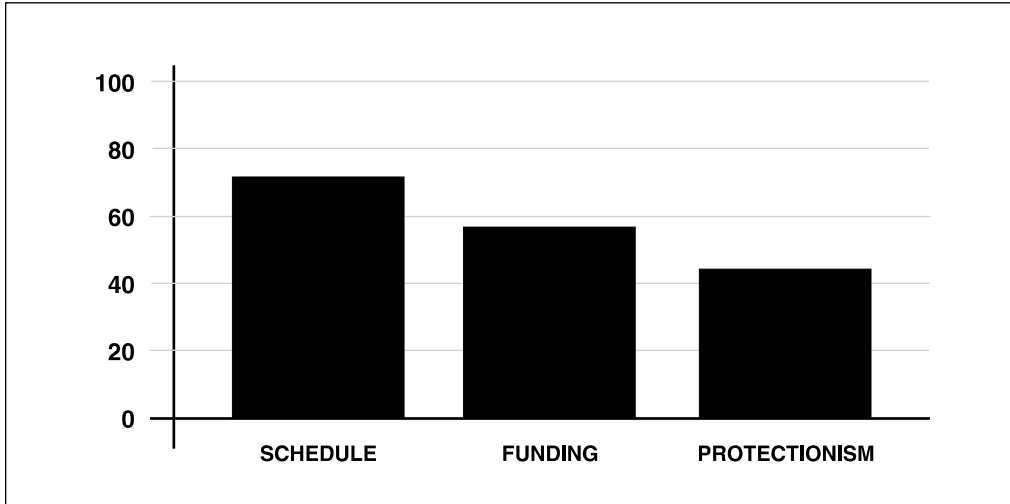


Figure 2. Acquisition Concerns

the benefits were perceived to be moderate to significant. Clearly the U.S. project office staffs perceived equitable benefits from the cooperation. Partner exploitation did not appear to be a problem to the Americans as about three quarters of U.S. project officers believed that neither partner was exploited, and the remainder said it was too early to tell.

Acquisition Concerns

A general assessment was conducted of the key areas of acquisition uncertainty associated with these international projects. This is shown in Figure 2. Especially pronounced were the high percentage of projects experiencing impacts on cost and schedule. The areas of uncertainty are clearly identifiable and appear significantly frequent. Regrettably, there is no comparable set of data for domestic acquisition projects that might show similar problems.

International Training

An assessment of the international training needs of the U.S. project offices was conducted. Fully two thirds said that it was

needed and would have helped the early stages of the project. The training topics most frequently mentioned were international agreements and intellectual property rights. Also mentioned were third party transfers beyond the nation participating in the project, cultural aspects, foreign policy, and Foreign Military Sales (FMS).

General Comparisons

Table 5 lists some general comparisons between the NATO-Europe projects from previous studies and the Pacific Rim projects examined under this study. The key point is that the cooperative projects from the two regions are considerably different. I conclude that anyone well versed in cooperative projects with European nations may need to relearn the business when working with the Pacific Rim nations.

FINAL THOUGHTS

PACRIM Cooperation Is Different

True cooperation in acquisition projects is in its infancy in the Pacific Rim. It is

Table 5. General Comparisons

NATO-EUROPE	PACIFIC RIM
Many Projects	Few Projects
Growth in 70's/80's; Recent Declines	Recently Emerging
Larger RDT&E \$	Smaller RDT&E \$
Cooperative Development and Production	Cooperative R&D
Expect & Desire Production	Production Intent Unknown or N/A
Many Multilateral	Almost Exclusively Bilateral
Intra-European Cooperation Common	No Intra-PACRIM Projects
Mixed Political Support	Less Political Support
Significant Cultural Differences	Enormous Cultural Differences
Complex Management Structures	Lean Management Structures
Traditional Program Manager	Technical Project Coordinator
International Program Management Offices	Key Individual In-Country or Coordination through Embassy
Collocation	No Collocation
More Use of Steering Committee	Less Use of Steering Committee
Commitment Important	Trust Important

twenty years behind our efforts with the NATO-Europe nations. Experience with NATO projects may be of little value in the Pacific Rim. Has the U.S. defense acquisition community learned the prescription for success in the Pacific Rim? On the one hand we seem less prone to canceling international projects, yet on the other hand the projects have degraded to rather simple, early R&D efforts.

Expectations for cooperative projects with PACRIM nations should be realistic. The key to future success will be to demonstrate commitment and build trust. I also believe that the bilateral approach now pursued by the U.S. may not provide sufficient synergy for continued cooperation. Is there no forum in which all the nations of the Pacific Rim could participate to increase cooperation in defense acquisition?

Anticipate Problems

There are key problem areas that the acquisition manager should anticipate when entering into a cooperative project in the Pacific Rim. These are the known unknowns; there are no clear solutions, but certain strategies can mitigate the impacts. First, anticipate significant problems during the formal international agreement (MOU-MOA) process. Anticipate this to result in changes to project objectives, in schedule delays and in funding problems. These agreements are normally approved at the highest level and seldom approved below the service secretary level. This visibility inevitably attracts many organizations with many conflicting agendas to the process. The acquisition manager's strategy is to minimize the time an MOU-MOA is exposed to the process. Some of these problems may be reduced with the recent streamlining policy promulgated by the Deputy Secretary of Defense (1994).

It is imperative to resolve as many issues as possible before starting to negotiate formally. Many technical points can be re-

solved under a DEA. The main restriction is that a draft MOU-MOA, or similar document cannot be tabled or even discussed (DoD Directive 5530.3, 1987). I advise all acquisition managers even contemplating an international cooperative project to get a DEA in place as quickly as possible and use it as a vehicle to resolve as many issues as possible prior to formal negotiation. In other words, minimize your exposure time to the highly political MOU-MOA process.

Second and nearly as troublesome, anticipate objections to your international project. These objections can come from virtually anywhere to include other military departments, other DoD agencies, and other government agencies (including State, Commerce, and possibly Treasury), as well as the Congress.

The international acquisition manager is a consensus builder dealing with a plethora of nay sayers far exceeding that found in domestic programs. Begin coordination early to build consensus. Advocacy is essential for your international project within the Office of the Secretary of Defense and the services' international programs staffs. With this it will be difficult; without this impossible.

A List of Do's

While international cooperative acquisition projects are fraught with pitfalls, they can be successful. In fact all the projects studied were considered successful, and most or all will successfully meet their original goals. Based upon this study, and the years of research preceding it, I proffer the following list of do's.

1. **Concentrate on mutual benefits and needs.** Always try to assess your allies' needs, and arrange for equitable benefits. While the equitability of the project from a strictly U.S. view will be determined by many sources, no one in the U.S. is responsible for looking at our

partner's needs. The acquisition manager is normally the one who must live with the agreement and execute the international project. He or she should strive for a win-win situation, if additional international activities are envisioned.

2. **Take fresh, creative approaches.** International projects add a layer of complexity to an already difficult acquisition process that does not readily accommodate international projects. Recent initiatives and innovations may smooth out some of the difficulties. Some examples are the recent streamlining of the international agreements process, the use of special types of agreements (such as the umbrella and chapeau agreements) a computer program to assist agreements negotiators, and the use of DEAs to resolve early issues. Surely, more creativity will be needed during the project execution phases, beyond just the approval of the MOU-MOA.
3. **Stabilize and clarify requirements.** While requirements did not appear as problematic as in the past studies of a NATO-European projects, it is too soon to tell whether this will become the show-stopper as some of the projects progress through the acquisition cycle. Nevertheless, even at these early stages, stable, clear requirements were well recognized as the primary facilitator of a cooperative project, especially by the U.S. project personnel.
4. **Prepare and coordinate up front and early.** Consensus and advocacy are essential elements in all acquisition projects, but the level and span for international projects is much greater and extends beyond just the DoD.
5. **Minimize exposure time to the MOU-MOA process.** Exposure to the political

levels during the formal negotiation process is likely to result in changes to project goals, as well as significant impacts on schedules and funding. The acquisition manager must exert every effort to shorten exposure time by building consensus and resolving issues before the process formally begins.

6. **Learn to be trustworthy.** This was the greatest cultural divide between Americans and our allies. Trust is of great importance to our Pacific Rim allies, but never mentioned by Americans as an essential element of cooperative acquisition projects. This seems to be further exhibited in the U.S. approach of addressing every possible contingency in the extraordinarily lengthy, detailed project agreements, for which we have resorted to computer programs to develop.
7. **Train and educate acquisition professionals before they start the international dialogue.** It was clear during the study that none of the U.S. project personnel had taken advantage of available international training. This deficiency has been noticed and documented before (Kwatnoski, 1992). International projects require PET: preparation, experience and training. The reality is that U.S. personnel often pull the proverbial "PET" rabbit out of the hat when it comes to international projects. On October 1, 1994, all of DSMC's three international acquisition courses were officially identified as "assignment-specific Defense Acquisition University courses" by the Under Secretary of Defense for Acquisition and Technology. It remains to be seen how this will be implemented within the acquisition workforce. The services have already expressed a desire to send nearly 10,000 acquisition workforce personnel to our international

courses. I believe this will bring about a grass roots revolution in our ability to engage in international projects. The ultimate solution will be to have certified

international acquisition corps personnel managing all of DoD's international projects and related activities.

REFERENCES

DoD Directive 5530.3 *International Agreements*, (1987).

Farr, C. M. (1985). *An Investigation of Issues Related to Success or Failure in the Management of International Cooperative Projects*. Unpublished doctoral dissertation, University of North Carolina, Chapel Hill.

Farr, C. M. (1992). Managing International Cooperative Projects: Rx for Success. In *Global Arms Production*. Lanham, Md: University Press of America, Inc.

Kwatnoski, R. (1992). Negotiation of International Cooperative Defense Acquisition Agreements: A Case Study. *Program Manager*.

Deputy Secretary of Defense (1994, September 14). *Streamlining the Development of International Research and Development (R&D) Agreements*. Memorandum.

LIST OF ACRONYMS

AABCA – American-British-Canadian-Australia (Refers the standardization agreement and organization comprised of these countries, with New Zealand as an observer.)

ADD – Agency for Defense Development (Refers to the South Korean Defense Agency responsible for development of defense equipment.)

AFB – Air Force Base

DAU – Defense Acquisition University

DEA – Data Exchange Annex (Refers to an annex on a particular technical area to a Master Data Exchange Agreement between the U.S. and another nation. Allows for the international exchange of scientific and technical information among scientists and engineers.)

DMA – Defense Mapping Agency

ESC – Electronic Systems Command, USAF, Hanscom Field, MA.

FS-X – Fighter Support-Experimental (Original designation of the next-generation Japanese tactical fighter. Now designated as the Next Generation Support Fighter.)

JDA – Japanese Defense Agency (Equivalent to the U.S. Department of Defense, but is not a cabinet level department.)

JORN – Jindalee Operational Radar Network (Refers to a large Australian project that included the U.S.-Australian Radar Activities, or Over-the-Horizon Radar, Project.

JUSMAG-K – Joint U.S. Military Advisory Group - Korea (See also MDAO and ODC as similar organizations in Japan and Australia.)

MDAO – Mutual Defense Assistance Office (See also ODC and JUSMAG-K as similar organizations in Australia and South Korea.)

MICOM – Missile Command, U.S. Army, Huntsville, AL.

NRL – Naval Research Laboratory, Washington, D.C.

ODC – Office of Defense Cooperation (See also MDAO and JUSMAG-K as similar organization in Japan and South Korea.)

PEO – Program Executive Officer

PM – Project Manager

PMO – Project Management Office

PO – Project Office or Officer

SPO – Systems Project Office

S&TF – Systems and Technology Forum (A bilateral U.S.-Japan forum for exchanging technical information and identifying potential cooperative projects.)

TAD – Theater Air Defense

TCES – Technical Center for Explosive Safety, U.S. Army, Savanna, IL.

TRDI – Technical Research & Development Institute, Tokyo, Japan (The research and development part of the Japanese Defense Agency.)

TTCP – The Technical Cooperation Program created to acquaint participating countries—see ABCA—with military R&D programs to promote international cooperation.)