Chapter

13

Systems Acquisition and International Armaments Cooperation

INTRODUCTION

This chapter introduces another term in the lexicon of international defense interactions– International Armaments Cooperation (IAC). IAC is defined as cooperative research, development, test, and evaluation of defense technologies, systems, or equipment; joint production and follow-on support of defense articles or equipment and procurement of foreign technology, equipment, systems or logistics support.

Within the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD [A&S]), the Office of the Executive Director for International Cooperation (IC) (<u>https://www.acq.osd.</u> <u>mil/ic/</u>) serves as the focal point for defense-related international research, development, production, and support activities involving cooperation between the U.S. Government (USG) and governments or industries of allied and friendly nations.

As discussed earlier in Chapter 1, the term security assistance (SA) refers primarily to a group of twelve major programs authorized by the Foreign Assistance Act (FAA) and the Arms Export Control Act (AECA). SA itself may be viewed as a portion of a broader area of Department of Defense (DOD) international interaction referred to as security cooperation (SC). IAC is not a SA program but is a parallel area of international defense engagement under the SC umbrella. While the FMS program predominately involves the sale of various defense systems that the DOD has already developed and deployed to its own forces, IAC predominantly focuses on interfacing with international partners during the research, development, test, and evaluation (RDT&E) and production phases of the U.S. systems acquisition process.

Like SA, IAC seeks to enhance U.S. national security but does so through different methods. It is important that SA personnel have some familiarity with IAC, because IAC activities often are concurrently underway with international partners in addition to SA activities. From the international partner's perspective, both areas involve a defense relationship with the U.S. The international partner may not recognize the different management structure the U.S. applies to IAC programs versus the management structure for SA programs.

The purpose of this chapter is to introduce IAC to the SC professional in order to promote awareness and enable individuals to be familiar with the fundamental principles of IAC in the event that a international partner raises IAC-related issues within the SA arena. Due to IAC's intertwined relationship with the U.S. systems acquisition process, this chapter first discusses the DOD systems acquisition process and international partner's potential involvement. Several key documents developed during the systems acquisition process are described due to their role in international program security. The balance of this chapter summarizes the different types of IAC programs and the key IAC organizations within the DOD.

This chapter provides a very abbreviated overview of the systems acquisition process with a focus on the international aspects of the process. For more in-depth DOD systems acquisition information,

visit the Defense Acquisition University website to review the many online resources, references, and acquisition courses available.

UNITED STATES SYSTEMS ACQUISITION PROCESS

Before considering how DOD conducts IAC, one must briefly review the way DOD creates military systems for itself. An additional reason to look at DOD's system development process is to recognize that technology transfer and system security factors must be evaluated prior to engaging in any future technology transfer and disclosures. These technology-transfer and system-security factors should be considered within the system development process itself. The DOD should not wait until an FMS letter of request (LOR) is submitted to begin evaluating the various technology-transfer, exportability, and releasability issues. DOD's system acquisition policy requires these issues to be examined concurrently with new system development. DODI 5000.02, Adaptive Acquisition Framework requires Program Managers to consider acquisition strategies that leverage international acquisition and supportability planning to improve economies of scale, strengthen the defense industrial base, and enhance coalition partner capabilities to prepare for joint operations.

Capability Requirements Determination

Prior to entering the systems acquisition process, the DOD must determine what capabilities it requires to accomplish national security goals in the future. The DOD's process for identifying, assessing, validating, and prioritizing its future capability requirements is called the Joint Capabilities Integration and Development System (JCIDS). In fact, it is common to refer to JCIDS as the requirements process. JCIDS plays a key role in identifying the capabilities required to support the National Security Strategy, the National Defense Strategy, and the National Military Strategy. The JCIDS process supports the acquisition process by identifying and assessing capability needs and desired system-performance criteria that will be used as the basis for the acquisition. In other words, JCIDS defines the capability requirement. The systems acquisition process then undertakes to identify or create the technology and then engineer this technology into an integrated system that delivers the required capabilities to the operational users. The JCIDS policy and process is described in CJCSI 5123.01H, *Charter of the Joint Requirements Oversight Council (JROC) and the Implementation of the Joint Capabilities Integration and Development System (JCIDS)*.

System Acquisition Policy

Validated capability requirements from the JCIDS process that require a materiel solution are managed to resolution through the Defense Acquisition System. The Defense Acquisition System is the management framework the DOD uses to develop, produce, and sustain weapon systems. The key system acquisition policy documents are:

- DOD Directive 5000.01, The Defense Acquisition System
- DOD Instruction 5000.02, Operation of The Adaptive Acquisition Framework

Both of these policy documents are publicly accessible. There have been significant recent additions to DOD Acquisition instructions that are transforming Acquisition Policies. DODI 5000.02 outlines the six pathways of the Adaptive Acquisition Framework. DODI 5000.02T was published in conjunction with DOD 5000.02 to cover functional policies that have not been released yet. There will be DOD Instructions for each Functional Area (e.g., Engineering, Test & Evaluation, etc.). D0DI 5000.02T will have enclosures canceled as functional policies are released. There will also be DOD Instructions for each Acquisition, Interim Software Acquisition, Defense Business Systems, and Acquisition of Services). All military departments (MILDEPs) and other DOD organizational entities are required to use the processes specified in these documents when applicable.

Defense Acquisition Oversight Structure

The acquisition oversight structure primarily depends on the scope and costs of the program. Each acquisition program will be assigned an acquisition category (ACAT). The ACAT specifies the corresponding management level for program review and decision that must be accomplished for the program to progress through the various acquisition milestones and decision points. The Defense Acquisition System divides acquisition programs into three (3) Acquisition Categories (ACAT): ACAT I, ACAT II, and ACAT III. The difference between each categories is dependent on the location of a program in the Acquisition Process, funding amount for Research, Development, Test and Evaluation (RDT&E), total procurement cost, Milestone Decision Authority (MDA) special interest and decision authority. See the DAU Acquisition Note at the following website for additional ACAT details and references: https://acqnotes.com/acqnote/acquisitions/acquisitions/acquisitions/acquisition-category.

The most complex and expensive acquisition programs must be reviewed and have decisions rendered by the Defense Acquisition Executive (DAE). The DAE is the Under Secretary of Defense for Acquisition and Sustainment [USD (A&S)]. The next tier of programs (ACAT II) is reviewed by the Component Acquisition Executive (CAE), which is the senior acquisition individual within each military service. The final tier of programs (ACAT III) will have decisions made by an individual designated by the CAE. This individual is often the Program Executive Officer (PEO). In the acquisition management structure, PEOs are individuals that typically have responsibility for overseeing one or more acquisition programs and report to the CAE.

An acquisition program manager (PM) is responsible for leading a multidisciplinary team to manage all aspects of an individual acquisition program and for guiding the program toward meeting all cost, schedule, and system performance goals. An acquisition program management team typically includes functional experts from program management, systems engineering, testing, finance, contracting, logistics, information technology, and manufacturing. Individual program managers report on program performance through the acquisition management structure applicable to the program's ACAT. This may include reporting to the PEO, CAE, and DAE.

Defense Adaptive Acquisition Framework

The tents of the Defense Acquisition Framework are to: (1) Simplify Acquisition Policy, (2) Tailor Acquisition Approaches, (3) Empower Program Managers, (4) Conduct Data Driven Analysis, (5) Actively Manage Risk, and (6) Emphasize Sustainment. Program Managers will develop an acquisition strategy for the Milestone Decision Authority (MDA) approval that matches the acquisition pathway (e.g., Urgent Capability Acquisition, Middle Tier of Acquisition, Major Capability Acquisition, Software Acquisition, Defense Business Systems, Acquisition of Services) processes, reviews, documents, and metrics to the character and risk of the capability being developed.

For the Major Capability Acquisition pathway (as depicted in Figure 13-1 below), FMS programs are typically generated during the last two phases (Production & Deployment, and Operations and Support) of the system-acquisition life cycle. Generally, the USG will only agree to sell those type of Major Capability systems through FMS that have completed operational test and evaluation (OT&E) and are approved for Full Rate Production. Therefore, the key acquisition event from an FMS perspective is OT&E completion, which precedes the Full Rate Production decision. If a foreign customer requests a letter of offer and acceptance (LOA) for a system that has not yet completed OT&E, a policy waiver is required. In this situation, the Defense Security Cooperation Agency (DSCA) will coordinate with the USD (A&S) before offering an LOA for the system. [SAMM C5.1.8.3]

The reason for this policy concerns future supportability and interoperability issues. Prior to completion of OT&E and a Full Rate Production decision, there is the risk that the U.S. may decide not to produce the system. This would present an undesirable situation if the U.S. has committed under an LOA to deliver a system to an FMS customer but decided not to deliver this same system to U.S.

forces. The FMS customer would encounter a nonstandard support environment to sustain the system and might lack interoperability with U.S. forces. If the waiver is approved, the LOA for the FMS program must include a special note identifying the risk that the USG may not place this system into production. This waiver policy is often referred to as an operational test and evaluation incomplete waiver. It is also known within the acquisition community as a "Yockey" waiver, named after a former Under Secretary of Defense for Acquisition.

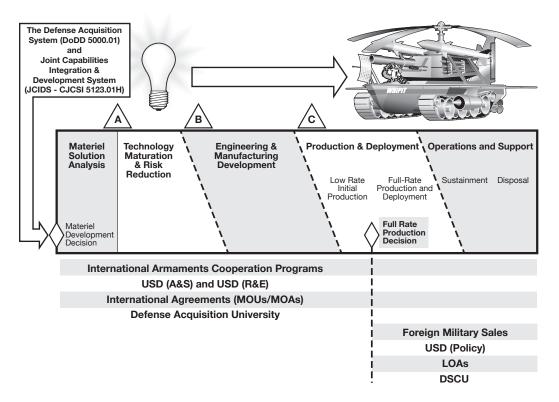


Figure 13-1 Major Capability Acquisition Pathway

The program manager is responsible for formulating the acquisition strategy and executing approved acquisition plans. The program manager typically performs these functions with the assistance of a multidisciplinary support team. Collectively, the program manager, with the respective support team, constitute the program office. Table 13-1 identifies some of the typical areas of functional expertise within a program office.

Table 13-1 Program Office Functional Areas

Program Management	Logistics
Engineering	Financial Management
Test and Evaluation	Production/Manufacturing
Contracting	Information Technology

With the support of the system program management office team, the program manager is responsible for leading the program through the remaining phases, decision reviews, and acquisition milestones of the defense acquisition system process. In addition, the program management office remains in place to manage all the technical and life-cycle sustainment aspects of the system after the system is delivered to U.S. forces. The program management office will also be responsible for acquiring any additional

quantities for the DOD as well as potentially developing improved or modified configurations.

If the U.S. agrees to sell the system through FMS, the FMS acquisition will be accomplished with support by the same program management office that is managing the system for the DOD. The system program management office may acquire the FMS requirements either as separate individual procurements or by consolidating the FMS requirements with DOD requirements on the same U.S. contract. More information on the contracting process for FMS is in Chapter 9 of this textbook.

The end of the acquisition life cycle concerns disposal. An integral part of the system development effort is to plan for eventual demilitarization and disposal. For the FMS customer, the DOD decision to curtail or end operations of a given system can impact sustainment support. The components of the system may transition from being standard to nonstandard items. The DOD policy (SAMM C4.4.3) is to take reasonable steps to support all systems sold through FMS for as long as the FMS customer chooses to operate the system. Many examples exist where the DOD currently supports systems operated by FMS customers that the DOD no longer actively retains in its inventory. More information on non-standard support is in Chapter 10 of this textbook.

INTERNATIONAL ARMAMENTS COOPERATION

The term International Armaments Cooperation (IAC) covers a multi-faceted area in which the U.S. cooperates with other countries and international organizations to research, develop, acquire, and sustain military systems. The U.S. may work with friends and allies across the entire system acquisition life cycle. Figure 13-1 (Major Capability Acquisition Pathway) illustrates that FMS normally (unless a policy exception is approved) occurs later in the life cycle after the system has already been fully developed and placed into production. IAC primarily represents opportunities to cooperatively work with other countries in the earlier developmental phases of a system's life cycle. Figure 13-2 illustrates the various types of IAC activities that may occur across the Major Capability Acquisition Pathway life cycle.

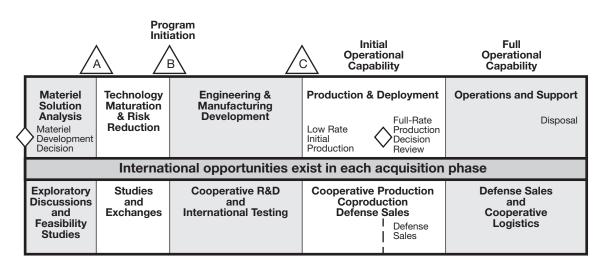


Figure 13-2 IAC In Major Capability Acquisition Pathway Life Cycle

IAC is generally conducted with nations that have solid political and economic ties with the U.S., similar military requirements, and a reasonably robust defense, science and technology base. Although some countries may be quite important from a political, economic, or military standpoint, if they have different military requirements or lack a substantial defense industrial base, there may be little potential for successful IAC activity.

International Armaments Cooperation Objectives

The core objectives of International Armaments Cooperation (IAC) typically include the following:

- Operational: increase military effectiveness through interoperability and partnership with allies and coalition partners
- Economic: reduce weapons acquisition cost by sharing costs, economies of scale and avoiding duplication of development efforts with our allies and friends
- Technical: access the best defense technology worldwide and help minimize the capabilities gap with allies and coalition partners
- Political: strengthen alliances and relationships with other friendly countries
- Industrial: bolster domestic and allied defense industrial bases

International Armaments Cooperation Programs

Per SAMM C2.1.7.2, the major individual programs and cooperation areas that comprise the overarching term IAC are listed below. Each of these programs will be presented in more detail later in this chapter:

- Information Exchange Program (IEP)
- Engineer and Scientist Exchange Program (ESEP)
- Test and Evaluation Program (TEP)
- Foreign Comparative Testing (FCT) Program
- Cooperative Research, Development, and Acquisition Programs
- Defense Trade
- Cooperative Logistics

Although these are separate IAC activities, there often is an evolutionary relationship between these activities. For example, basic discussions originating from one of the IAC meeting forums may lead to an initial basic cooperative program, which may eventually, in turn, lead to a future, more advanced, level of cooperation. This building-block relationship between IAC programs is illustrated in Figure 13-3.

International Armaments Cooperation Legislative Authority

Over the years, Congress has enacted a number of laws encouraging and enabling IC with U.S. allies in the acquisition of defense equipment. Most are codified in Title 10, *United States Code* (U.S.C.), Armed Forces, and Title 22, *Foreign Relations and Intercourse*. The laws, regulations, and policies that apply to armaments cooperation activities are complex. These IAC laws, regulations, and policies in most instances apply in addition to, not instead of, applicable domestic DOD acquisition laws and policies. Given this complexity, assistance in interpreting and applying IAC laws, regulations, and policies should be obtained from one of the DOD's IC organizations.

International Armaments Cooperation Oversight

DOD oversight for the military components of SA (such as FMS, FMFP, and IMET) is the responsibility of the Under Secretary of Defense for Policy [USD(P)]. IAC, on the other hand, has

a different chain of command. The USD(A&S) is responsible for all IAC activities. In this role, the USD(A&S) serves as the U.S. National Armaments Director (NAD). The USD(A&S) established the Office of International Cooperation (IC) to oversee IAC activities. The USD(P) has a supporting role in IC by reviewing international agreements for foreign policy considerations. Figure 13-4 illustrates the relationship of IAC oversight to security assistance oversight.

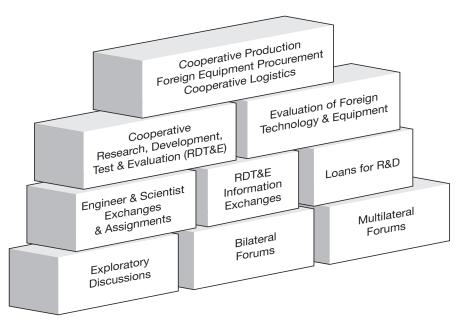
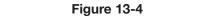


Figure 13-3

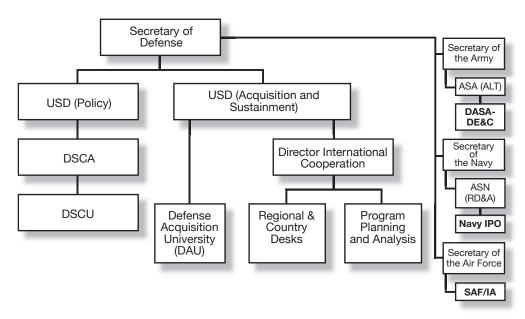
Building Blocks of International Armaments Cooperation

International Armaments Cooperation within Military Departments

Each military department has established an infrastructure to support armaments cooperation programs. Figure 13-4 illustrates these organizations.



Department of Defense International Programs Organization



The Office of the Deputy Assistant Secretary of the Army for Defense Exports and Cooperation [DASA(DE&C)] is the Army's lead for security assistance, international armaments cooperation, and export policy. The Army also has overseas International Technology Centers (ITCs). The goal of the ITCs is to promote interoperability and standardization with allies and coalition partners. To achieve this goal, ITCs seek to identify and facilitate international cooperation in technology, acquisition and logistics activities. ITCs are located in Argentina, Australia, Canada, Chile (covering South America), France, Germany, Japan, Singapore, and the United Kingdom (covering Europe). The Army's International Technology Centers (ITCs) are under the Combat Capabilities Development Command (CCDC), which is part of the U.S. Army's Futures Command.

The Army Research Laboratory maintains two overseas offices to identify and leverage science and technology opportunities for collaboration. These are the European Research Office in London and the Asian Research Office in Tokyo.

The Assistant Secretary of the Navy (ASN) for Research, Development, and Acquisition has delegated responsibility for IAC programs to the Navy International Programs Office (Navy IPO). Within the Navy IPO, the Directorate of Technology Security and Cooperative Programs is responsible for all IC activities. Under the Office of Naval Research (ONR), the Navy has overseas research and development liaison offices in Australia, Chile, Japan, Singapore, and the United Kingdom.

The Deputy Under Secretary of the Air Force for International Affairs (SAF/IA) has assigned oversight of Air Force IAC programs to the Armaments Cooperation Division (SAF/IAPQ). SAF/IA also has established a liaison office in Canberra, Australia. In addition, under the Air Force Office of Scientific Research (AFOSR), the Air Force has three overseas IAC offices:

- 1. The European Office of Aerospace Research and Development (EOARD) in London
- 2. The Asian Office of Aerospace Research and Development (AOARD) in Tokyo
- 3. The Southern Office of Aerospace Research and Development (SOARD) in Arlington, Virginia, which coordinates research activity in Central America and South America

Security Cooperation Organization Support for IAC

In addition to the military department sponsored IAC overseas offices, the DOD assigns dedicated IAC personnel within countries that conduct a significant volume of IAC activity with the U.S. These dedicated armaments cooperation personnel assigned overseas serve as the in-country liaison for the USD(A&S). They assist the host government obtain information on U.S. equipment and programs as well as help DOD acquisition organizations obtain information on host nation equipment, requirements and programs in support of IAC. This function extends to assisting industry in gaining access to the other nation's defense markets and in developing cooperative programs.

In-country personnel dedicated to IAC usually fall under the supervision and oversight of the SCO Chief (or defense attaché in the absence of a SCO). If there are no dedicated IAC personnel assigned to the country, the SCO Chief is responsible for IAC support functions to the degree that resources permit. In countries without a SCO, the armaments cooperation point of contact is usually the defense attaché.

International Agreements

IAC programs use international agreements as the official government-to-government document rather than Letters of Offer and Acceptance (LOAs). Under one or more of the IAC authorities, the U.S. and one or more countries are agreeing to cooperate in research, development, acquisition, or sustainment activity. The international agreement serves as the basis to define the extent and methods for the cooperative activity. Fundamentally, the participants must agree on how the work will be performed, how any costs will be shared and the extent of rights to utilize the results of the cooperative

activities. International agreements may be referred to as Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs). Unlike LOAs, international agreements constitute a binding commitment subject to international law. DOD Instruction 5530.03, *International Agreements*, governs the international agreements process.

Unlike LOAs, international agreements are developed through a process of negotiation. To assist in developing armaments cooperation international agreements, the DOD created the international agreements generator. This software permits draft agreements to be quickly developed while ensuring they conform to relevant U.S. law, regulations, and policies as well as the generally accepted international agreement formats and norms used by foreign nations. The Defense Acquisition University offers a resident course, ACQ-340 Advanced International Management Workshop, that covers the international agreement process.

The Case Act [1 U.S.C. 112b(a)] requires executive agencies to consult with the Secretary of State before signing an international agreement, as well as to provide copies of all agreements after they have been concluded. The DOD is also required to consider the effects of any agreement on the U.S. industrial base, and to consult with the Department of Commerce (DoC) about the commercial implications and potential effects on the international competitive position of U.S. industry.

INTERNATIONAL ARMAMENTS COOPERATION PROGRAMS

As previously discussed, there are seven primary programs or areas of cooperation that comprise IAC:

Information Exchange Program

Since the 1950s, DOD components have collaborated with the defense components of allied and friendly nations to exchange scientific and technical (S&T) information in areas of mutual interest. The IEP is conducted under the provisions of DOD Instruction 2015.4, *Defense Research, Development, Test and Evaluation Information Exchange Program.*

The objectives of the IEP are as follows:

- View different ways of approaching similar technical challenges
- Avoid duplication of research and development (R&D)
- Access technological advances
- Identify areas for further collaboration
- Promote interoperability

Through the IEP, the U.S. and other nations conduct RDT&E information exchanges under the authority of formal information exchange agreements. The term "information" under the IEP includes knowledge obtained in any manner by observation, investigation, or study and the ideas inferred such as that of a scientific, technical, business, financial, or programmatic nature. The term "information" includes a variety of source elements as identified in Table 13-2.

Table 13-2 IEP Information Sources			
Photographs	Reports	Technical Writings	
Manuals	Threat data	Sound recordings	
Experimental data	Designs	Magnetic media	
Specifications	Processes	Pictorial representations	

	Techniques	Drawings	Other graphical interpretations	
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Information Exchange Program Master Agreements

S&T information can be exchanged between the U.S. and a foreign nation using a situation-bysituation release process. However, such independent exchanges are cumbersome and may lack adequate legal protection for the information exchanged, particularly in the area of intellectual property rights. These releases of information must each undergo a separate review and approval by the cognizant foreign disclosure and international programs organizations.

The IEP replaces the situation-by-situation review process with an overarching master agreement structure with subsequent annexes. A master IEP agreement is the international agreement between the DOD and the foreign government that establishes a framework for the exchange of RDT&E information. It does not establish information exchange details; instead, it authorizes creation of separate annexes for specific information exchange projects. The master IEP agreement establishes the basic terms and conditions for all subsequent IEP annexes.

For example, the master IEP agreement will specify security procedures, the highest classification allowed for the information exchanges, IEP management structure, information use rights including third-party transfer, the process for clearance of visitors, and methods for resolving disputes. As a result, DOD components do not include such terms and conditions in subsequent individual IEP annexes.

Information-Exchange Program Annexes

IEP annexes establish defined information-exchange relationships in specific RDT&E subject areas. Annexes are the best information exchange mechanism because they provide adequate legal protection for the information while facilitating the exchange of the information.

The annex will identify the installations, agencies, and laboratories that will provide the information. Field-level scientists and engineers will be authorized to serve as Technical Project Officers (TPO). These TPOs are given the authority to manage information exchanges within the scope of the specific annex.

There is no limit to the number of IEP annexes that may be originated under the authority of a master IEP agreement. Annexes are considered DOD resources and their cross coordination and potential use by other DOD components is encouraged. IEPs may not be used to transfer material, equipment, technical data packages, production information, manufacturing information, price and availability information on U.S. production and/or operational systems, or funding.

Engineer and Scientist Exchange Program

The Engineer and Scientist Exchange Program (ESEP) itself is a component of the broader Defense Personnel Exchange Program (DPEP). The other personnel exchange programs under the DPEP umbrella include the Administrative and Professional Personnel Exchange Program (APEP), the Military Personnel Exchange Program (MPEP), and the Defense Intelligence Personnel Exchange Program (DIPEP). Among these DPEP programs, ESEP, in particular, is considered an IC tool. The FY 2017 NDAA combined the DPEP, the ESEP and the Non-Reciprocal Exchange of Defense Personnel programs into Section 311, Chap. 16, U.S.C. 10, under the title "Exchange of Defense Personnel Between United States and Friendly Foreign."

ESEP is a career-enhancement program that assigns foreign civilian and military engineers and scientists to DOD government RDT&E facilities and U.S. civilian and military engineers and scientists to foreign government and defense contractor RDT&E facilities.

The primary goals of ESEP are as follows:

- Broaden perspectives in research and development techniques and methods
- Form a cadre of internationally experienced professionals to enhance research and development programs
- Gain insight into foreign R&D methods, organizational structures, procedures, production, logistics, testing, and management systems
- Cultivate future international cooperative endeavors
- Avoid duplication of research efforts among allied nations

ESEP participants become an integral part of their host organizations, fully contributing to the project to which they are assigned. They are not sent to the host party or organization for training. Participants are to be already educated and proficient in their respective field of expertise and are expected to be capable of contributing to the host country's RDT&E activities. Because allied and friendly foreign countries use the ESEP experience as a career-enhancing program, foreign participants often rise to positions of influence and importance in their own defense organization. In this way, ESEP fosters long-term relationships between U.S. and foreign R&D communities.

ESEP international agreements specify that participants must have at least a bachelor's degree, preferably a master's, in a scientific or engineering discipline. Additionally, a corresponding DOD host organization must be willing to accept the proposed candidate. When a U.S. host center, laboratory, institute, or program office agrees to accept a foreign participant, the facility prepares a position description that describes the project the candidate will work and outlines the candidate's responsibilities and duties. The facility is also responsible for obtaining foreign disclosure guidance regarding the candidate's assignment from the cognizant foreign disclosure organization.

The foreign parent organization must also agree to pay their participant's salary, housing, and travel expenses for the assignment. The U.S. will generally be responsible for direct costs associated with hosting the individual at the U.S. host organization. Historically, the number of foreign participants in ESEP greatly exceeds the number of U.S. participants.

U.S. participants in ESEP are usually selected competitively from volunteers who meet the selection criteria. Military participants are typically Army or Air Force captains or Navy lieutenants. Civilian participants are typically GS-12s or GS-13s, or an equivalent level. DOD personnel interested in ESEP exchange opportunities are encouraged to discuss potential assignments with their DOD component international programs organization.

Selected U.S. candidates may be required to attend a DOD language course before going overseas. U.S. participants are expected to take their families to the host nation and live on the local civilian economy, even if there are opportunities to live in U.S. military housing. All ESEP participants are expected to be an integral part of the host organization.

Test and Evaluation Program

The Test and Evaluation Program (TEP) is a DOD-managed program implemented through TEP international agreements. The TEP international agreements establish the broad terms and conditions for cooperative and reciprocal test and evaluation (T&E) activities. TEP activities are carried out under two types of subordinate project arrangements: Cooperative Test and Evaluation project arrangements and Reciprocal Use of Test Facilities (RUTF) project agreements. TEP agreements may also enable information exchange, formation of working groups, project equipment transfers (loans), and familiarization visits.

In a cooperative TEP, the participants agree to equitably collaborate to improve and share results

regarding efficient and effective methods for conducting T&E. The TEP agreement brings the partners together to do the following:

- Assess materiel interoperability and determine solutions to identified problems
- Evaluate technical and operational concepts and to recommend improvements
- Increase coalition mission capability by using materiel quantitative data for analysis
- Validate developmental and/or operational testing methodologies
- Improve modeling and simulation validity and interoperability with field exercise data
- Provide feedback to the acquisition and coalition operations communities
- Improve coalition materiel tactics, techniques, and procedures

The TEP also enables U.S. and international partners to exchange use of test facilities through Reciprocal Use of Test Facilities (RUTF) agreements. The RUTF agreements describe a fee-for-service relationship in which testing services are provided at preferred rates. Testing under a RUTF agreement may be conducted for the purposes of developmental, operational, and live-fire T&E.

Foreign Comparative Testing

The Foreign Comparative Testing (FCT) program was established to consolidate the evaluation of foreign non-developmental items and technologies that demonstrate potential to satisfy U.S. military requirements. The FCT program funds U.S. test and evaluation (T&E) of defense items developed by allied and other friendly foreign countries to determine whether those items can satisfy DOD requirements.

The FCT program avoids redundant development, ensures standardization of equipment, and reduces acquisition lead times and costs. In the private sector, it also serves as a catalyst for industry teaming arrangements. Annual authorization and appropriations acts establish the level of DOD–wide FCT funding available in a given year. Each year, the military services and the Special Operations Command propose projects to the Office of the Secretary of Defense (OSD) for FCT funding consideration. The proposal is a comprehensive explanation of an FCT project that clearly describes the candidate item for which funding is requested, cost and schedule data for the T&E, and additional information needed by OSD to evaluate the merit of the project. The OSD evaluates proposals to ensure submitting components have the following:

- Strong user advocacy for the proposed non-developmental item
- Addressed valid military requirements
- Completed thorough market investigations
- Developed viable, funded acquisition strategies
- Clear intention to procure if testing is successful

The highest priority for FCT funding is for equipment in production or in the late stages of development, which demonstrates good potential to satisfy U.S. requirements with little or no modification and which the sponsor intends to procure after successful tests. The FCT program is not permitted to fund T&E of U.S. equipment nor purchase U.S. equipment for testing.

The Office of the Secretary of Defense Comparative Testing Office (CTO) provides oversight direction to the Foreign Comparative Testing (FCT) Program. Additional FCT information is available

in the DOD's Comparative Testing Office (CTO) Handbook which is available online at the website <u>https://apps.dtic.mil/dtic/tr/fulltext/u2/a487482.pdf.</u>

Cooperative Research, Development, and Acquisition Programs

DODI 5000.02 defines an International Cooperative Program (ICP) as any acquisition program or technology project that includes participation by the U.S. and one or more foreign nations, through an international agreement, during any phase of a system's life cycle. These programs range in scope from small bilateral agreements to multi-billion dollar, multi-national programs such as the Joint Strike Fighter (JSF) program. There are a number of types of agreements the U.S. and its partners use, and a variety of statutes that provide the legal basis for cooperating in defense acquisition. Table 13-3 summarizes cooperative program characteristics.

Are	Are Not
Shared cost	Contracts
Shared Risk	FMS buyer-seller relationships
Shared benefits	One-way transfers or grants
Jointly managed	Foreign aid
Government-to-government	Industry-only relationships

Table 13-3	
Cooperative Program Characteristics	

The DOD strongly encourages IAC as a key aspect of the DOD acquisition process. DODD 5000.01, which provides management principles and mandatory policies and procedures for managing all acquisition programs, states, "Program managers shall pursue international armaments cooperation to the maximum extent feasible, consistent with sound business practice and with the overall political, economic, technological, and national security goals of the U.S."

When the DOD has a requirement for a new or improved capability, DODD 5000.01, enclosure 1, prescribes an order of preference to be considered in acquisition. Table 13-4 lists this hierarchy. It is important to note that potential foreign sources are to be considered within the first three preferred alternatives. While FMS offers a method for foreign customers to purchase U.S. systems, by policy, the DOD examines the potential for purchasing foreign commercial and military items or to work cooperatively with other countries to develop new systems.

As stated earlier in the section titled "System Acquisition Documents Associated With Foreign Military Sales," the U.S. defense acquisition system process requires program managers to document within Section 10, International Involvement of the respective program's acquisition strategy that the feasibility of cooperative acquisition alternatives has been evaluated.

 Table 13-4

 Acquisition Order of Preference DOD Directive 5000.01

International Participation Potential		
1.	Commercial products or dual-use technology from domestic or international sources	
2.	Additional production or modification of already developed U.S. or Allied military equipment	
3.	Cooperative development program with one or more Allied nations	
DOD-Only Participation		
4.	New joint Service development	
5.	New Service-unique development	

Foreign Production

Foreign governments often seek to domestically produce part or all of a U.S. defense system to

satisfy their own domestic defense industry development goals. There are three distinct methods of authorizing foreign production of defense articles.

First, cooperative production is conducted with international partners under a cooperative international agreement and features an allocation of production responsibilities amongst the international partners. Individual international partners will be designated as the manufacturer of certain system components. The designated manufacturer will produce the respective components for the entire production quantity of the system. As such, the designated manufacturer will not only produce components for its own nation but also components for all international partners. Final assembly can be conducted by one or more of the partners. Most cooperative production programs naturally evolve from cooperative development phase partnerships. The F-35 JSF program is using cooperative production.

Second, FMS coproduction involves the use of FMS procedures and commercial licenses to provide a foreign nation the ability to produce U.S.-origin defense articles. Coproduction capabilities may be transferred solely through FMS LOAs, may involve a combination of FMS LOAs and associated munitions export licenses, or may require development of a coproduction international agreement. FMS coproduction agreements are discussed in SAMM C4.4.5.

Third, licensed coproduction involves use of commercial munitions export licenses issued by the Department of State (DOS). Licenses that authorize the export of manufacturing technical data are referred to as Manufacturing Licensing Agreements (MLAs). Licensed production enables U.S. companies to transfer to foreign governments or foreign companies the ability to produce U.S. origin defense articles. It should be noted that the U.S. defense articles proposed for licensed coproduction may not even be in DOD use, or may be a significantly modified version of DOD equipment. The Defense Technology Security Administration (DTSA), in concert with the other DOD components, agencies, and the OSD staff, plays a leading role in formulating the DOD's position with regard to U.S. industry-licensed coproduction proposals.

Defense Trade

Defense Trade is an overarching term that involves activities to facilitate acquisitions via a worldwide supplier base. Although most DOD equipment is acquired from domestic sources, the DOD recognizes the potential competitive cost advantages and technology access opportunities presented by the global defense industrial base. However, the DOD is somewhat constrained by laws and regulations that discriminate against the acquisition of non-U.S. products such as the Buy American Act and annual DOD appropriations act provisions that may restrict certain procurements to U.S. sources.

To overcome some of these limitations, the DOD has negotiated reciprocal procurement agreements with many allies to facilitate defense trade. These agreements establish reciprocity in the treatment of each other's vendors and enable the Secretary of Defense to waive the discriminatory provisions of the Buy American Act.

The Buy American Act favors U.S. suppliers by requiring a price differential to be applied to foreign goods in the evaluation process of competitive source selections. The Secretary of Defense is authorized to waive the provisions of the Buy American Act on the basis of reciprocity if the partner country reciprocally waives its similar buy national legislation for procurements from U.S. sources. The DOD has entered into defense reciprocal procurement agreements with many allied and friendly foreign nations. A list of countries with reciprocal procurement arrangements is contained in the *Defense Federal Acquisition Regulation Supplement* (DFARS) 225.872-1.

Foreign-developed products acquired by the DOD are often produced in the U.S. under license. Past examples of such products are the Rheinmetall 120mm tank gun used on the M1A1 main battle tank, the Beretta 9mm pistol, and the AV-8B Harrier aircraft.

In another aspect of defense trade, the DOD has entered into arrangements with several nations to ensure the mutual supply of defense goods and services. These bilateral Security of Supply arrangements allow the DOD to request priority delivery for DOD contracts, subcontracts, or orders from companies in these countries. Similarly, the arrangements allow the signatory nations to request priority delivery for their contracts and orders with U.S. firms.

Cooperative Logistics

Cooperative logistics refers to cooperation between the U.S. and allied or friendly nations or international organizations in the logistical support of defense systems and equipment. Cooperative logistics is part of the acquisition life-cycle process. However, because logistics is also a substantial part of military operations, much of the implementation for cooperative logistics involves the U.S. combatant commands (CCMDs). Each CCMD has an Acquisition and Cross-Servicing Agreements (ACSA) manager. U.S. personnel, particularly Security Cooperation Office personnel, should consult the CCMD ACSA manager regarding issues relative to the development, negotiation, use, and applicability of an ACSA with a specific country or international organization.

Acquisition-only Cooperative Logistics

10 U.S.C. 2341 authorizes the DOD to acquire logistic support, supplies, and services directly from NATO countries' governments, subsidiary NATO bodies, the United Nations (UN) organization, or other regional international organizations and other eligible countries for U.S. forces deployed in the supporting country's military region. It allows payment by either cash or replacement-in-kind of identical or substantially identical items. A non-NATO country must meet one or more of the following criteria:

- Has a defense alliance with the U.S.
- Permits stationing of members of the U.S. armed forces or the home porting of U.S. naval vessels in its territory
- Agreed to preposition U.S. materiel
- Serves as host country for U.S. armed forces during exercise
- Permits other U.S. military operations in its territory

Cross-Servicing Cooperative Logistics

10 U.S.C. 2342 authorizes the DOD to both acquire and provide logistics support, supplies, and services to a NATO nation, a NATO subsidiary body, a UN organization or any other regional international organization on a reciprocal basis. This authority cannot be used to procure any goods or services reasonably available from domestic commercial sources. The Secretary of Defense may designate non-NATO nations as eligible to participate in cross-servicing agreements after the following:

- Determining such action is in the interest of U.S. national security
- Consultation with the Department of State
- Expiration of a thirty-day waiting period after notifying Congress

Acquisition and Cross-servicing Agreements

Acquisition and Cross-Servicing Agreements (ACSAs) are used to transfer logistics support during wartime, combined exercises, training, deployments, contingency operations, humanitarian or foreign disaster relief operations, and certain peace operations under the UN Charter, or for unforeseen circumstances. ACSA authority is almost always exercised by the CCMD. Each CCMD has an ACSA manager that should be consulted regarding the creation, use, or applicability of an ACSA with a specific country or international organization.

The U.S. has ACSAs with many countries, including most NATO nations. DODD 2010.9, *Acquisition and Cross-Servicing Agreements*, provides complete details on responsibilities and procedures for acquiring and transferring logistics support, supplies, and services.

ACSAs may not be used to increase inventories, nor can the DOD use them when the desired materiel or service is reasonably available from U.S. commercial sources. ACSAs are not used as a routine source of supply for a foreign country. Routine foreign requests for desired U.S. defense articles and services should be addressed through FMS procedures in accordance with the SAMM.

Traditionally, ACSAs could not be used to provide items designated as significant military equipment (SME) on the U.S. Munitions List (USML). However, Congress approved legislation (Section 1202) to permit SME (and training) for personnel protection and survivability to be provided on a temporary basis (one year) under an ACSA to countries that have forces in Iraq or Afghanistan operations and for Peace Keeping Operations (PKOs).

Reimbursement for ACSA transactions will be by cash (within sixty days), Replacement-In-Kind (RIK) within one year, or Equal-Value-Exchange (EVE) within one year. RIK and EVE reimbursements not accomplished within the required time-frame shall be converted to a reimbursable cash transaction, and the resulting accounts receivable or accounts payable shall be liquidated within thirty days.

Refer to CJCSI 2120.01D for detailed information on ACSA authorities. The Joint Staff, J4, also has a reference portal (requires a DOD common access card) with more information on ACSAs at the Intellink Intellipedia website <u>https://intellipedia.intellink.gov/my.policy</u>. This website ACSA page (accessed by searching for "ACSA" on Intellipedia) lists active, expiring, and expired ACSA agreements and lists ACSA managers and points of contact.

Other Logistics Support

<u>Host Nation Support</u>. Host nation support (HNS) is civil and military assistance rendered in peace or war by a host nation to allied or friendly forces and organizations located on or in transit through its territory. HNS agreements are normally pursued by CCMDs under overall direction of the Joint Chiefs of Staff and the Director for International Cooperation. HNS assistance is provided in accordance with commitments made under alliances or bilateral or multilateral agreements, usually in the context of a broader cooperative logistics program. Areas normally addressed in HNS agreements are illustrated in Table 13-5.

Logistics lines of communication	Terminal transfer services
Collocated operating bases	Supplies
En route and transit support	Troop support services
Overflight rights	Facilities
Weapons systems cross-servicing	Materiel handling
Port services	Naval vessels' support
Equipment decontamination services	Intra-theater transportation
Medical services and equipment	Communication services and equipment
Labor	

Table 13-5Types of Host Nation Support

<u>Cooperative Military Airlift Agreements</u>. 10 U.S.C. 2350c authorizes the Secretary of Defense to enter into cooperative military airlift agreements with allied countries. These agreements cover transporting NATO and other allied nations' military personnel and cargo on aircraft operated by or for the U.S. Armed Forces, in return for reciprocal transportation of U.S. military personnel and cargo. The Secretary of Defense may also enter into non-reciprocal agreements with NATO subsidiary bodies for transportation of their personnel and cargoes on U.S. Armed Forces aircraft.

<u>War Reserve Stock for Allies</u>. The Foreign Assistance Act of 1961 established the war reserve stocks for allies (WRSA) program. WRSA allows the prepositioning of host-nation intended, but U.S.-owned, war reserve material in authorized countries during peacetime. U.S. policy requires allies to provide for their own sustainability to the maximum extent possible. Any action to supplement established allied war reserve requirements will be considered only on a case-by-case basis. The host nation through a bilateral agreement will normally fund storage, maintenance, in-country transit, and other WRSA-related costs.

Congress limits the value of assets transferred into WRSA stockpiles located in foreign countries in any fiscal year through authorizing legislation. The U.S. retains title to the WRSA stocks, though title must be subsequently transferred before the foreign country may use them.

Acceptance and Use of Real Property. 10 U.S.C. 2350g authorizes DOD components to accept real property, services, and supplies from a foreign country for support of any element of the U.S. Armed Forces in an area of that country. This includes real property or the use of real property and related services and supplies for use by the U.S. in accordance with a mutual defense agreement or an occupational arrangement and services furnished as reciprocal international courtesies customarily made available without charge.

INTERNATIONAL ACQUISITION CAREER PATH

The International Acquisition Career Path (IACP) creates a construct to develop and train international competencies within the DOD acquisition workforce. The origins of the IACP can be traced to the Defense Acquisition Workforce Improvement Act (DAWIA) of 1990. DAWIA initially identified eleven acquisition functional areas as containing acquisition related positions. DAWIA recognized international acquisition by citing "joint development and production with other government agencies and foreign countries" as one of the eleven functional areas.

Creating a standalone international acquisition functional area proved problematic. In practice, international acquisition is not an autonomous career field. International acquisition is typically performed within the context of other core acquisition functional areas such as program management, systems development, contracting, logistics, manufacturing, and financial management.

As a result, the Under Secretary of Defense for Acquisition & Sustainment directed the development of an international acquisition career path within the existing acquisition-related career fields. The IACP was initially associated with only the program management career field. The IACP was expanded in 2014 to all acquisition career fields that support international acquisition.

International Acquisition is defined by the Position Category Description (PCD) at the website <u>https://icatalog.dau.edu/pcds.aspx</u>. The PCD describes the types of positions that should be designated as International Acquisition (INTL). These positions fall into four broad categories of duties: International Cooperative Programs, Defense Sales and Transfers, Acquisition Strategy Development, and Technology Security and Foreign Disclosure.

Personnel in international acquisition (INTL) positions are required to complete DAU training courses as reflected in the International Acquisition Training Standards & Core Plus Development Guide which is posted at the DAU website <u>https://icatalog.dau.edu/onlinecatalog/careerLvIInt.</u>

aspx?lvl=1&cfld=18.

IACP Relation to FMS

The IACP is an important development not only to the acquisition community but also to the security cooperation community. Successful execution of security cooperation programs, in particular FMS, relies heavily on the DOD's acquisition manpower, processes, and infrastructure. The IACP will enable the acquisition workforce to become more knowledgeable of various international acquisition processes and international program considerations through improved education, training, and professional development.

Just as some members of the DOD Acquisition workforce are required to get trained and certified in International Acquisition (INTL), there will also be members of the DOD Security Cooperation (SC) workforce that will be required to get trained and certified in the SC Acquisition Management (SC ACQ) Area of Concentration. DAU and the Defense Security Cooperation University (DSCU) are coordinating those efforts as the majority of training courses for the SC ACQ are DAU courses. More information on the SC Acquisition Management courses are posted on the DSCU online course catalog which is posted at the <u>https://dscu.mil/pages/Academics/courses.aspx</u>. Additional SC Certification program information is also posted at the DSCU "SC Certification Program Overview" website at <u>https://dscu.mil/pages/resources/cert_program_info_and_fags.aspx</u>.

SUMMARY

The DOD has established a standard management framework to develop, produce, acquire, and sustain weapon systems. The policy for systems acquisition is contained in DOD's 5000 series documents. All MILDEPs are required to use the 5000 series acquisition management framework in developing and acquiring new weapon systems for the DOD. Some key information that supports USG decisions regarding which weapon systems and technologies are releasable to FMS customers is derived from documents (COD, PPP, DDL, and PSI) developed during the system acquisition process.

This chapter also provided an introduction to another form of security cooperation referred to as IAC. Like SA, IC seeks to enhance U.S. national security, but does so through different methods. The area of IAC uses international agreements as the official government-to-government document rather than an LOA. International agreements may also be referred to as MOUs or MOAs. Unlike LOAs, international agreements are subject to international law.

While FMS offers a method for foreign customers to purchase U.S. systems, IC examines the potential to work cooperatively with other countries through the seven primary IAC programs:

- 1. Information Exchange Program (IEP)
- 2. Engineer and Scientist Exchange Program (ESEP)
- 3. Test and Evaluation Program (TEP)
- 4. Foreign Comparative Testing (FCT) Program
- 5. Cooperative Research, Development, and Acquisition Programs
- 6. Defense Trade
- 7. Cooperative Logistics

IAC is generally conducted with nations that have solid political and economic ties with the U.S.; similar military requirements; and a reasonably robust defense, science, and technology base. The DOD encourages IAC as a key aspect of the DOD systems acquisition process. The USD (A&S)

is responsible for all IAC activities. While USD(A&S) provides oversight, each of the military departments has established an infrastructure to execute their respective International Armaments Cooperation (IAC) Program activities.

References

- CJCSI 2120.01D, Acquisition and Cross-Servicing Agreements.
- CJCSI 5123.01H, Charter of the Joint Requirements Oversight Council (JROC) and the Implementation of the Joint Capabilities Integration and Development System (JCIDS).

Defense Acquisition Guidebook https://www.dau.edu/tools/dag.

DODD 2010.9, Acquisition and Cross-Servicing Agreements.

DODD 5000.01, The Defense Acquisition System.

- DODD 5230.11, Disclosure of Classified Military Information to Foreign Governments and International Organizations.
- DODD 5530.3, International Agreements.
- DODI 2010.06, Materiel Interoperability and Standardization with Allies and Coalition Partners.
- DODI 2015.4, Defense Research, Development, Test and Evaluation Information Exchange Program.
- DODI 5000.02, Operation of the Defense Acquisition System.
- DODI 5200.39, Critical Program Information (CPI) Identification and Protection Within Research, Development, Test, and Evaluation (RDT&E).

DODM 5200.45, Instructions for Developing Security Classification Guides.

DSCA Manual 5105.38-M, Security Assistance Management Manual. http://www.samm.dsca.mil/.