



Career Development for the Department of Defense Security Cooperation Workforce

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Preface

Security cooperation workforce reform has become an increasingly important issue for the Department of Defense (DoD) and Congress in the past several years. Security cooperation, which consists of all actions undertaken with foreign partners to further U.S. security objectives, has grown in importance in U.S. national strategy. U.S. declaratory strategy has increasingly postulated that by working by, with, and through partners, the United States can mitigate the risks of international and regional instability, avoid costly unilateral interventions in foreign states, and reduce the cost and increase the effectiveness of such actions if they are necessary.

As security cooperation's salience to U.S. national strategy has increased, Congress and other stakeholders have grown concerned that DoD has paid inadequate attention to developing its security cooperation workforce. Consequently, the 2017 National Defense Authorization Act directed the Secretary of Defense to create and the director of the Defense Security Cooperation Agency (DSCA) to manage a security cooperation workforce development program. The assignment of this responsibility to DSCA is consistent with its mission of "[leading] the security cooperation community in developing and executing innovative security cooperation solutions that support mutual U.S. and partner interests" (DSCA, undated). In anticipation of this requirement, DSCA commissioned this study to inform the development of career models for the DoD security cooperation workforce. One of DSCA's principal concerns is ensuring that the workforce has the required competencies and experience to support U.S. security cooperation efforts over the long run.

DSCA faces challenges in developing policy for the workforce because most of that workforce is employed by other DoD components. DSCA employs only a few hundred of a workforce that approaches 12,000 military service members and civilians in strength. Most of the security cooperation workforce is employed by other entities, only some of which have security cooperation as a primary function. Much of the workforce, in fact, is embedded within organizations with some other primary function, such as acquisition or training. Describing the size, composition, and distribution of the workforce is therefore a primary challenge, and it will probably continue to be so for the foreseeable future.

This research was sponsored by the DSCA and conducted within the Forces and Resources Policy Center of the RAND National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the unified combatant commands, the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community. This research should be of interest to DoD officials responsible for managing the security cooperation workforce, Congress, and other stakeholders in security cooperation workforce reform.

For more information on the RAND Forces and Resources Policy Center, see www.rand.org/nsrd/ndri/centers/frp.html or contact the director (contact information is provided on the webpage).

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Summary

Reforming the security cooperation workforce has been a significant issue for many years. Efforts to develop effective security forces in Iraq and Afghanistan highlighted security cooperation's salience. Meanwhile, other authorities for conducting security cooperation under Title 10 of the U.S. Code have proliferated. The Department of Defense's (DoD's) Security Cooperation Reform Task Force highlighted the need for better and more effective development in its 2011 report. The U.S. Government Accountability Office (GAO) has conducted several studies that touched on the issue, focused mostly on training and education for individuals assigned to security cooperation organizations. Most recently, the Fiscal Year (FY) 2017 National Defense Authorization Act directed DoD to establish a security cooperation workforce development program. In sum, security cooperation's strategic salience and complexity have increased steadily to the point that stakeholders recognize the need for workforce professionalization.

Amid this evolving background, the Defense Security Cooperation Agency (DSCA) established workforce reform as a major objective in its ongoing internal transformation. DSCA's mission is to "lead the security cooperation community in developing and executing innovative security cooperation solutions that support mutual U.S. and partner interests" (DSCA, undated). DSCA's primary focus is coordinating the provision of security assistance—the provision of defense articles and services—to foreign partners. It also administers a number of security cooperation programs authorized under Title 10. In this role, it leads other implementing organizations throughout DoD's different components, such as the services, although it lacks directive authority

over their activities. The implementing organizations actually acquire the equipment, provide the training, and deliver the defense articles and services to foreign partners. DSCA's primary role is coordination, not implementation. To carry out this role, it is organized into several different directorates; the ones most directly concerned with security cooperation are Security Assistance Business Operations, Strategy, and Building Partner Capacity. Four Integrated Regional Teams coordinate and integrate these directorates' support of geographic combatant commands.

DSCA commissioned this study to inform the development of career models and certifications for the DoD security cooperation workforce. Career models describe the combinations of education, training, and experience individuals require at various points in order to attain an appropriate level of expertise in a particular function. They include competency models, which describe the kinds of things incumbents are supposed to be able to do, and career pathways (the routes by which incumbents attain the necessary degree of expertise with respect to different competencies). One job function of particular interest was acquisition, due to the prominent role that acquisition plays in the security assistance process. DSCA requested that this study focus on identifying competencies, developing job families, and assessing how much experience might be required at various stages of career development in the workforce.

Policymakers need to understand the current state of the workforce in order to manage it. They need to understand at least its approximate size and the distribution of the competencies currently required; how those competencies cluster into different career fields that allow for efficient management; and the degree of experience workforce members require at different stages in their career to function effectively in their jobs. Career models can be useful in cataloguing this information. This study addresses these issues.

The study describes the current state of the workforce through analysis of available personnel databases and data sets compiled for this study and for other purposes. The personnel databases include military personnel databases maintained by the armed services to track service-members' training and assignments; the Defense Civilian Personnel

Data System (DCPDS), used for similar purposes for civilian personnel; and the Security Cooperation Workforce Database (SCWD), used to track security cooperation workforce training throughout the security cooperation workforce. We also used a partial data set compiled by DSCA for the purpose of providing more specific detail—such as job descriptions, grade, and occupation—for selected positions within the workforce, as well as a data set the research team compiled itself for similar purposes. This study analyzes interview and position description data found in the latter data sets. It describes required workforce competencies and identifies potential job families. It also uses a simulation model to explore how much experience could be required at various levels of responsibility within the military and civilian components of the DoD security cooperation workforce. This study constitutes an initial, exploratory analysis of some of the key issues involved with professionalizing the security cooperation workforce. None of these databases provides a comprehensive picture of the security cooperation workforce—its size, composition, and competencies—mostly because they were designed for other purposes. Indeed, the absence of such comprehensive data was a primary motivating factor for this study. For that reason, the findings and recommendations reported here should be considered preliminary in nature.

Key Security Cooperation Terms

As with any investigation, it is useful to start by defining key terms, but is particularly important with regard to security cooperation. The terms “security assistance” and “security cooperation” are sometimes mistakenly used interchangeably to describe efforts that train and equip foreign military and other security forces. Moreover, the relationship between security cooperation, security assistance, and building partnership capacity is often misunderstood. Security cooperation subsumes security assistance and a number of other activities, including but not limited to building partner capacity (BPC), foreign military sales, and joint and combined exercises, just to name a few. Six key terms include:

- **Security cooperation:** all DoD interactions with foreign defense establishments to build defense relationships that promote specific U.S. security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide U.S. forces with peacetime and contingency access to a host nation (Joint Chiefs of Staff, 2016, p. 212). Security cooperation includes activities authorized under Title 10, which is dedicated to the armed forces, as well as DoD-administered activities authorized under Title 22.
- **Security assistance:** a group of programs authorized by the Foreign Assistance Act of 1961, as amended, and the Arms Export Control Act of 1976, as amended, under Title 22, or other related statutes by which the United States provides defense articles, military training, and other defense-related services by grant, loan, credit, or cash sales in furtherance of national policies and objectives. Nearly all security assistance programs are directed by the Department of State and administered by the DSCA. Security assistance is therefore considered to be a subset of security cooperation (Joint Chiefs of Staff, 2016, p. 212).
- **Security cooperation enterprise:** the network of entities engaged in any element of security cooperation programs, either as providers or as beneficiaries. This includes U.S. government agencies, the U.S. Congress, foreign partners, and industry (DoD, 2016, p. 9).
- **Security cooperation community:** a subset of U.S. government executive branch entities within the security cooperation enterprise directly responsible for managing or executing security cooperation programs or the policies that affect those programs (DoD, 2016, p. 9).
- **Security cooperation workforce:** employees of U.S. government agencies within the security cooperation community (DoD, 2016, p. 9). Depending on the focus, the security cooperation workforce can be very large indeed and includes more than just individuals for whom security cooperation is their primary function. For the purposes of this report, we focus on the portion of the workforce for which security cooperation is a full-time job.

- **BPC** is becoming a term of art used to describe the activities whose objects are similar to those of security assistance but are both directed and administered by DoD under a variety of statutes and authorities included in Title 10 of the U.S. Code. The 2006 Quadrennial Defense Review first coined the phrase to focus on large-scale efforts to improve partners' ability to defend themselves against terrorism, insurgency, and instability (DoD, 2006; Rand and Tankel, 2015; MacInnis and Lucas, 2015).

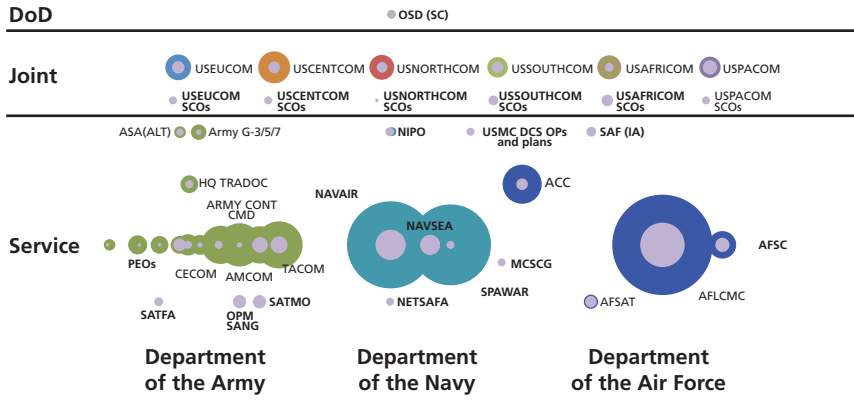
Major Findings

The security cooperation community is large and complex, with strategically important and evolving responsibilities. To date, however, there have been relatively few efforts to manage and develop the security cooperation community as a coherent whole. Our key finding is that the available data are currently inadequate for managing the security cooperation workforce. Other findings assess the level of security cooperation experience within the workforce, identify key competencies required and potential job families, and assess the level of experience that it might be possible to require of incumbents at various stages in their careers.

The Security Cooperation Community Is Complex

As Figure S.1 demonstrates, the security cooperation community consists of many different actors, each of which responds to different institutional imperatives and often reports to different management hierarchies. The figure depicts the distribution of over 11,000 security cooperation personnel—indicated by the mauve bubbles—among various DoD, joint, and service organizations, with Army organizations in green, Department of the Navy organizations in turquoise, and Air Force organizations in blue. As the figure indicates, a few organizations, such as the U.S. Army Security Assistance Command, have security cooperation as their primary focus. Most of the workforce, however, is embedded within other, larger organizations that have some other focus. For instance, the security assistance management direc-

Figure S.1
Distribution of the Security Cooperation Workforce Across the Defense Enterprise



SOURCE: DSCA, 2016; GAO, 2015.

NOTES: Colored circle sizes represent the sizes of the workforce associated with different organizations relative to one another. For example, as represented in this figure, the U.S. Navy’s Naval Air Systems Command (NAVAIR) is significantly larger than TACOM. Gray circles represent the security cooperation workforce; within colored circles, these circles represent the security cooperation workforce embedded in a larger organization.

OSD (SC) = Office of the Secretary of Defense (Security Cooperation); USEUCOM = U.S. European Command; USCENTCOM = U.S. Central Command; USNORTHCOM = U.S. Northern Command; USSOUTHCOM = U.S. Southern Command; USAFRICOM = U.S. Africa Command; ASA (ALT) = Assistant Secretary of the Army for Acquisition, Logistics and Technology; NIPO = Navy International Programs Office; USMC DCS Ops and Plans = U.S. Marine Corps, Deputy Executive Offices; CECOM = U.S. Army Communications–Electronics Command; ACC = U.S. Army Contracting Command; AMCOM = U.S. Army Aviation and Missile Command; NAVSEA = U.S. Navy Naval Sea Systems Command; ACC = Air Combat Command; AFLCMC = Air Force Life Cycle Management Command; SATFA = U.S. Army Security Assistance Training Field Activity; OPM-SANG = Office of the Program Manager–Saudi Arabia National Guard; SATMO = U.S. Army Security Assistance Training Management Organization; NETSAFA = U.S. Navy Naval Education and Training Security Assistance Field Activity; AFSAT = U.S. Air Force Security Assistance Training Squadron; AFSC = U.S. Air Force Sustainment Center.

torate within the Army's Tank-Automotive and Armaments Command (TACOM) helps leverage the capabilities TACOM employs on behalf of the U.S. Army to support security cooperation activities. Figure S.1 does not fully capture the organizational complexity—or the entirety—of the workforce, but it does provide some idea of the degree to which the security cooperation workforce is embedded throughout the rest of DoD.

The relationships among the different organizations are complex, and they are contingent upon the security cooperation activity being undertaken. A typical security cooperation activity might involve officials from a partner nation, a U.S. security cooperation organization in that country, the staff at the appropriate combatant command, DSCA itself, and an implementing agency back in the United States. At the most basic level, partner nations may not share U.S. objectives, and they definitely do not answer to U.S. officials. This context and the complexity of the relationships involved therefore implies a need for managers in the core security cooperation workforce who can collaborate effectively across organizational and often national boundaries to accomplish shared objectives. The context also implies a need for some DoD managers who are not part of the core security cooperation workforce to have at least rudimentary understanding of the objectives and conduct of security cooperation.

Available Data on the Security Cooperation Workforce Are Inadequate

In order to establish and adapt policy for the security cooperation workforce, policymakers need to understand the current state of the workforce. In particular, they need to know the security cooperation competencies required for different security cooperation jobs and the ability of the workforce to provide workers with those desired competencies. The data currently available to DoD managers are inadequate for this purpose. Existing databases provide insight into different aspects of the workforce, but none provides a comprehensive view.

- The SCWD contains information about the current size of the workforce, its distribution among the different organizations that make up the security cooperation community, the training

requirements associated with different positions, and individuals' training history. It omits key information, however, such as grade and occupation. Because it came into existence only recently, it has limited utility in terms of assessing incumbents' level of experience in the security cooperation workforce. Beyond information on training requirements, the SCWD provides no information from which competencies associated with different positions can be identified. It also provides no basis for assessing incumbents' experience with regard to other DoD functions.

- DCPDS includes comprehensive data on individuals' current jobs, their grades, occupations, and a host of other data relating to employment and pay. Like the SCWD, it does not include position description data that allow the identification of particular competencies. Analysts can use DCPDS to track individuals' assignment history, but only at the organizational level. In other words, it is possible to determine that incumbents worked for a certain organization, but not the function they performed within that organization. It is possible to identify individuals who work for organizations focused on security cooperation as members of the security cooperation workforce and to assess their level of security cooperation experience by tracing their work history with such organizations. It is not possible, however, to identify members of the security cooperation workforce embedded in organizations that perform a broader range of functions or to assess the security cooperation experience individuals accrue in such positions. This can be a particular problem because DCPDS identifies organizations at a high level of aggregation. For example, the entire Air Force Materiel Command—consisting of about 80,000 airmen and civilians—constitutes one organization for DCPDS purposes.
- Service personnel and pay files include similar data to DCPDS. Like DCPDS, they do not provide information from which competencies can be identified. In contrast to DCPDS, they often provide assignment information at the suborganization level. For example, where DCPDS might indicate only that a civil servant was assigned to a service headquarters, the relevant military personnel database might be able to identify that he or she was

assigned to the staff section responsible for oversight of service security cooperation efforts.

There is thus no single database that provides a comprehensive view of the security cooperation workforce or includes the information necessary to identify the competencies associated with particular jobs. Existing databases omit key information, such as grade, occupation, and—most importantly—the duties and responsibilities associated with particular jobs. Inadequacies exist in both civilian and military personnel databases. Understanding the competencies that the workforce has is central to workforce management, so these shortcomings represent a serious obstacle to effective management.

Security Cooperation Experience Levels in the Workforce Vary Substantially

Given the aforementioned shortcomings with regard to data, it is not possible to derive *definitive* conclusions about current levels of experience in the security cooperation workforce. On the other hand, analysis of the available data does suggest *tentative* conclusions about security cooperation experience levels. Stakeholders can reevaluate these conclusions as better data become available.

The portion of the civilian component of the security cooperation workforce that we can observe tends to have depth with regard to security cooperation but lacks breadth with regard to the different job families—to be described shortly—within the security cooperation community. With this in mind, we find that the civilian workforce averages around six years or better of security cooperation experience, but such experience varies significantly. Even at higher levels of responsibility, a significant proportion of the workforce seems to be in its first year of security cooperation work, while another large group seems to have acquired over a decade of such work. Our description of the civilian workforce is incomplete, however, as it is based on data describing the workforce of Army and DoD organizations whose primary mission is focused on security cooperation, such as DSCA itself. The civilian security cooperation workforce in the Departments of the Navy

and Air Force may follow different patterns, although interviews with stakeholders in these communities do not indicate different patterns.

In contrast, the military portion of the workforce tends to have breadth of experience across the DoD enterprise but to lack depth with regard to security cooperation. For that matter, the military workforce also lacks breadth across the security cooperation job families. Military personnel average just over two years of experience in security cooperation, and most appear to be in their first assignment in this capacity. O-6s—whom we considered to be senior personnel—average almost three years of security cooperation experience, however, and a significant minority exceeds that average. Because military personnel databases track service members with much higher fidelity, it is possible to provide a considerably more complete description at a higher level of resolution.

Neither the military nor the civilian workforce appears to have accumulated much in terms of acquisition experience. Average experience levels are somewhat less than a year, indicating that only a few members of the security cooperation workforce have any experience at all, and even these members have relatively little. Acquisition experience is important to assess because key stakeholders attribute shortcomings in security assistance performance to a lack of understanding of DoD's acquisition processes.

This analysis cannot establish what the level of experience in the security cooperation workforce *should* be at various levels of responsibility. Doing so would have required assessing effectiveness and correlating it with experience, an effort beyond this study's scope. This analysis allows senior leaders in the security cooperation workforce to compare the state of experience in the workforce with what their professional judgment tells them it ought to be. Together with the modeling described later in this report, it also provides an empirical basis for assessing the feasibility of any experiential requirements they are considering.

Five Competencies Are Prevalent in the Security Cooperation Workforce

The research team reviewed security cooperation policy guidance and instructional materials and analyzed interviews with key members of

the security cooperation workforce and a significant number of position descriptions provided by DSCA or other sources. This analysis identified 21 security cooperation competencies that can be used to define work in the security cooperation workforce in combination with more general competencies applicable to DoD (see Appendix B). Five competencies were particularly important:

- **Security cooperation strategy** concerns the employment of the full range of security cooperation activities to attain national objectives in a given context.
- **Cultural awareness/international affairs** denotes an understanding of the general and particular context in which a given range of security cooperation activities takes place.
- **Security cooperation analysis** involves understanding the local and regional context in which security cooperation activities take place, developing requirements for such activities and other support, and assessing programs' effectiveness in meeting those requirements.
- **Security assistance case management** includes the knowledge, skills, abilities, and other characteristics (KSAOs) necessary to develop, implement, and execute a security assistance case, not only for providing materiel capabilities to foreign partners under Title 22 but also for providing other capabilities under other authorities.
- **Global perspective** is the ability to operate across formal organizational boundaries and may be particularly important given the complexity of the security cooperation community. It is also sometimes known as *interagency coordination*.

These and the remaining 16 competencies are primarily backward-looking, however. Policymakers will want to consider the future direction of the security cooperation enterprise in refining these.

Despite the preliminary nature of these results, the competencies identified through this analysis represent a useful list for further socialization and refinement. The five key competencies identified—security cooperation strategy, security cooperation analysis, cultural awareness/international affairs, security assistance (case) management, and global perspective (interagency coordination)—are likely to remain core com-

petencies for the security cooperation workforce going forward. They also represent a starting point from which a more refined competency model can evolve.

At Least Four Job Families May Exist Within the Security Cooperation Workforce

Based on the limited sample of position descriptions and interviews across the security cooperation workforce, the research team was able to identify four job families:

- *International affairs* includes military personnel who are part of the services' foreign area officer programs and the affiliated civilian occupations. The jobs constituting this potential family require understanding of the local and regional context and the ability to synchronize and integrate different kinds of security cooperation activities to achieve strategic ends.
- *Security assistance implementation management* involves identifying partners' requirements and then organizing the efforts of U.S. defense institutions to meet those requirements within fiscal and temporal constraints. This job family subsumes BPC case management, which relies on a different set of legal and policy authorities but employs similar methods to accomplish similar ends. We could identify relatively few positions devoted primarily to BPC case management. It is primarily focused on the transfer of defense articles under both Title 10 and Title 22.
- *International training management* is a subset of security assistance implementation management but focuses on the management of training programs that support foreign partners. Such a high proportion of the security cooperation workforce focused on training that it merited its own job family.
- *Financial management* is incidental to almost everything that happens in the security cooperation enterprise, and there are quite a few positions devoted to this function. At the highest levels—DSCA—financial management requires understanding not only U.S. financial management authorities and policies, but also those of the partner nations who are financing the case.

There Is Also a Need for Broadening Experience

Job families provide a useful basis for developing competencies to perform a particular function. The security cooperation community is large, diverse, and complex. It includes several essentially autonomous operating units, the integrated functioning of which is essential for the effective and efficient execution of security cooperation processes. In this context, senior managers not only require some depth of expertise in their own domain, but some exposure to other domains or job families with which they must collaborate.

Civilian Members of the Security Cooperation Workforce Can Probably Acquire Up to Nine Years of Security Cooperation Workforce Experience Before Acceding to Senior (GS14–GS15) Positions

One of the study's key research questions was the amount of experience DoD could feasibly require of incumbents as a prerequisite for advancement to greater levels of responsibility. Experience plays an important role in developing expertise. Many career models—including those for the acquisition workforce and various military career fields—specify that incumbents accrue a certain amount of experience before advancing. Ideally, the study would have established how much experience incumbents *should* have before moving on to positions of greater responsibility. Determining the appropriate amount of experience—if any—to be required would have required relating incumbents' prior security cooperation experience to their performance in various jobs. Lacking data on performance, however, the study team instead assessed how much experience DoD *could* require—law and policy permitting—as a prerequisite for advancement, leaving it to stakeholders to determine how much—if any—should be required.

As analysis of even the partial data available to the study revealed that experience levels varied widely within the workforce. To understand how different levels of requirement would affect the supply of candidates for positions at different levels, the team simulated the flow of incumbents through the security cooperation workforce. For the purposes of this effort, we divided the workforce into broad categories based on interviews conducted over the course of this study. During

interviews and in the course of other interactions, stakeholders indicated that there were three major stages to a civilian career in the security cooperation workforce:

- the period from initial accession into the workforce through GS-11, during which incumbents come to understand their organization's function and perhaps rise to their first significant position of responsibility
- a mid-level period, during which incumbents function as expert staff, usually at the grades of GS-12 and GS-13
- a senior level, at which incumbents exercise broad supervisory responsibilities over security cooperation programs and activities, usually at the grades of GS-14 and GS-15.

The research team thus divided the civilian workforce into these three broad levels for the purposes of simulation. As noted earlier in this summary, we used a simulation to assess how much experience it would be feasible to require workforce members to accrue before moving on to positions of greater responsibility. Given the current force structure, our modeling indicates it would be possible to require civilian members of the security cooperation workforce to acquire up to two years of security cooperation experience to advance from entry-level to mid-level assignments and up to nine years of security cooperation experience to advance from mid-level to senior positions. It is probably not advisable to require that much experience for advancement to senior levels of responsibility, at least initially. The benefits would be uncertain, but insisting on nine years of prior security cooperation experience could severely limit the size of the applicant pool.

Acquisition workforce certification levels provide a rough point of comparison that policymakers can use to assess how much experience it might be reasonable to demand. There are three acquisition certification levels. Each defines a combination of education, training, and experience deemed necessary to perform a certain set of jobs within a particular career field. Individuals in the acquisition workforce must generally accumulate three years of experience within the acquisition career field in order to achieve Level 2 certification. Level 2 certifica-

tion is associated with positions between GS-9 and GS-12. Level 3 certification, associated with jobs above GS-12, generally requires four years of acquisition experience. Importantly, members of the acquisition workforce can accrue experience needed for certification while in the job that requires it. Though the categories we used for our analysis do not align precisely with acquisition certification levels and the GS grades typically associated with them, our analysis using our simulation indicates that it would be feasible to require experience levels as high or higher than those required of the acquisition workforce. We cannot stress enough, however, that this analysis cannot establish how much experience should be required for certification in the security cooperation workforce.

DoD Could Probably Require O-6s to Have Three Years of Prior Security Cooperation Experience

The research team assessed the degree to which the current structure of the workforce would permit incumbents to acquire specified amounts of experience. We divided the military workforce into three groups: O-1s through O-4s, O-5s, and O-6s. Our analysis indicates that it would not be feasible to require officers filling O-4 positions to have prior experience in security cooperation. It might be possible to require that a significant number of key O-5 billets be filled with individuals with prior security cooperation experience. The analysis also indicated that it would be feasible to require three years of prior security cooperation experience to fill an O-6 security cooperation billet. By “feasible,” we mean that there are sufficient positions at lower grades to allow enough officers to acquire the desired amount of security cooperation experience before assuming positions at higher grades within the security cooperation workforce. It is important to note that we did not assess the degree to which acquiring that experience might conflict with other personnel management goals, either within the security cooperation workforce or outside of it.

As with the civilian workforce, precise comparison with the acquisition workforce is difficult. The simulation indicates that it would probably be possible to establish certification requirements that are similar to those in the acquisition workforce for selected O-5 and senior-level positions.

Recommendations

Because the data on which the foregoing findings rest are at best incomplete and perhaps also unrepresentative, the research team recommends caution in designing and implementing workforce reform. The following recommendations represent low-regret options. That is, these recommendations are initiatives that will either improve DoD's ability to manage the security cooperation workforce in almost any case or incur relatively little risk should they prove inappropriate. Our foremost recommendation is to improve the quality of the data available to senior security cooperation workforce managers.

Improve Quality and Quantity of Data Describing the Security Cooperation Workforce

Probably the single most important initiative to improve management of the security cooperation workforce would be to improve the quality of data available to policymakers. As observed, current data sources do not contain the information necessary to manage the security cooperation workforce effectively and to develop career models. In general, effective workforce management requires information about workforce size, composition, and competencies. Developing career models requires further information about general patterns of education, training, and experience associated with different positions in the security cooperation workforce. The key data shortfall concerns the competencies—or even the information from which competencies might be inferred—associated with security cooperation positions. In the short term, the best way to obtain such information is through a survey of the potential workforce. Over the longer term, DoD can modify its data collection and databases to acquire the information necessary to manage the security cooperation workforce. DSCA should consider expanding the SCWD to capture standard personnel management information about positions and incumbents, to include grade, occupation, and position descriptions. Position descriptions especially would help workforce managers better understand the prevalence of different competencies throughout the workforce.

Refine Security Cooperation Competency Framework in Collaboration with Stakeholders

As noted, the competency model—which describes the range of competencies that individuals in the security cooperation workforce might need—developed in the course of this study reflects current practice. Competency models should reflect what the community needs to do going forward, not what it has always done in the past. To align the security cooperation workforce competency model with security cooperation enterprise strategy, the security cooperation community should

- identify the strategic objectives of the security cooperation enterprise and its subordinate organizations
- further develop competencies to ensure sufficient specificity and proficiency levels are defined
- collect additional data about each competency; this step generally requires conducting a survey of the workforce to identify the relative importance of each competency for performing their job duties
- conduct job classification analyses.

While this study has articulated a competency model based on bottom-up analysis of what the workforce is currently doing, a best practice in competency modeling is to start from the top down. Competency models enable firms and industries to define what is needed from the future workforce, not just the workforce as it exists today. Therefore, a competency framework for the security cooperation workforce must enable the enterprise to pursue strategic objectives, such as operating with a broader range of partners and providing broader ranges of capabilities with a different set of tools. Indeed, understanding the future direction of the enterprise is often the first step in workforce development, from which workforce managers can then derive directions for the security cooperation workforce (Campion, Fink, and Ruggenberg, 2011; Vernez et al., 2007). Based on that analysis, they should review the list of competencies developed from the bottom up—either those defined in Appendix B of this report or a list refined through the

survey methodology described previously—and ensure that the list is sufficient to guide workforce development in the years to come.

Focus Efforts to Develop Career Fields on Security Assistance Implementation Management, International Training Management, and Financial Management

Ideally, DoD could defer workforce management decisions until more and better data are available, including those related to the establishment of career fields. For the sake of expediency, however, DoD might begin by focusing efforts on developing three of the four job families identified earlier. Such efforts would focus on identifying the full range of jobs associated with the career fields; refining the competencies associated with those jobs; and defining the levels of education, training, and experience that are appropriate at various stages within the field. The international affairs job family is relatively mature and requires little additional development in the short term.

Allow Opportunities for Broadening

Job families or career fields are typically used to restrict professional experience to one particular domain to facilitate the development of functional expertise. As we have observed, however, senior managers in the security cooperation workforce require a broader range of competencies to enable the integrated functioning of security cooperation processes in the absence of centralized authority. To this end, security cooperation career development models should accord credit for experience in other security cooperation job families.

Impose at Most Limited Requirements for Prior Security Cooperation Experience as Prerequisites for Advancement in the Security Cooperation Workforce

Our analysis indicates that it is feasible to require some degree of prior security cooperation experience for advancement to some higher levels of the security cooperation workforce. For example, we found that it would be feasible to require that civilians in the security cooperation workforce accrue two years of experience in entry-level positions for advancement into mid-level positions. It is also feasible to require

civilians to accrue up to nine years of experience for advancement to senior-level security cooperation positions. With regard to the military workforce, we found that it would be possible to require that O-6s in the security cooperation workforce have three years of prior security cooperation experience.

Our analysis does not indicate whether it would be a good idea to require that much experience as a prerequisite for advancement to the senior-level positions, however. Senior officials should rely on their professional judgment to establish a senior-level experience requirement, and the research team recommends that workforce managers proceed cautiously in this regard. If officials choose to require a certain amount of experience to fill senior positions in the civilian workforce, for instance, we would advise that they not require the full nine years our analysis indicated was feasible. For another example, we would suggest that prior experience be required only of O-6s filling key positions, such as SCOs with priority partners.

Conclusion

Workforce development and reform is a long, complicated, and iterative process. Getting it right depends on a clear vision of the future, an accurate picture of present conditions, and feedback mechanisms to assess the success of various reform initiatives. Because existing data are incomplete and perhaps unrepresentative, DoD should proceed cautiously in implementing reforms. Career models and workforce development in general constitute only one part of lifecycle human resource management, which also includes structure, personnel acquisition, compensation, distribution (or allocation), sustainment, and transition. Going forward, DoD should address all of these components in parallel. Analysis—like that described in this report—is the first step in this process. Concrete steps toward reform, however small, can generate feedback and can inform further analysis and improve workforce management.

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Abbreviations

AFLCMC	Air Force Life Cycle Management Command
AFSAC	Air Force Security Assistance and Cooperation Center
AFSAT	Air Force Security Assistance Training Squadron
AOR	area of responsibility
BPC	Building Partner Capacity
CCMDs	combatant commands
CRG	Contingency Response Group
DAOs	Defense Attaché Organizations
DASA (DE&C)	Deputy Assistant Secretary of the Army (Defense Exports and Cooperation)
DATT	defense attaché
DCPDS	Defense Civilian Personnel Data System
DIA	Defense Intelligence Agency
DISAM	Defense Institute for Security Assistance Management
DISCS	Defense Institute of Security Cooperation Studies

DLA	Defense Logistics Agency
DMDC	Defense Manpower Data Center
DoD	U.S. Department of Defense
DSCA	Defense Security Cooperation Agency
DTRA	Defense Threat Reduction Agency
EUM	End Use Monitoring
FASCLASS	Fully Automated System for Classification (Army)
FAO	foreign area officer
FMF	foreign military financing
FMS	foreign military sales
GAO	U.S. Government Accountability Office
HDM	Humanitarian Affairs, Disaster Relief and Mine Action
HQ	headquarters
ICP	International Cooperative Program
IMET	international military education and training
KSAOs	knowledge, skills, abilities, and other requirements
LCMC	Life Cycle Management Command
MAAG	Military Assistance Advisory Group
NAVAIR	Naval Air Systems Command
NAVSEA	Naval Sea Systems Command
NDAA	National Defense Authorization Act

NETSAFA	Naval Education and Training Security Assistance Field Activity
NGB	National Guard Bureau
NIPO	Navy International Programs Office
ODC	Office of Defense Cooperation
OMB	Office of Management and Budget
OPM	Office of Personnel Management
OSC	Office of Security Cooperation
OSD	Office of the Secretary of Defense
PD	position description
PEO	program executive office
SAF/IA	Office of the Deputy Under Secretary of the Air Force, International Affairs
SASC	Senate Armed Services Committee
SATFA	U.S. Army Security Assistance Training Field Activity
SATMO	U.S. Army Security Assistance Training Management Organization
SCWD	Security Cooperation Workforce Database
SDO	senior defense official
TRADOC	Training and Doctrine Command
TSFD	Technology Security & Foreign Disclosure
UIC	unit identification codes
USASAC	U.S. Army Security Assistance Command
USN	U.S. Navy

USMC

U.S. Marine Corps

YOS

years of service

Introduction

Background

In the October 2016 update to *Vision 2020*, Vice Admiral Joseph Rixey, former director of the Defense Security Cooperation Agency (DSCA), highlighted the critical role the security cooperation workforce plays in supporting U.S. national security and foreign policy objectives. He noted that “the workforce, our greatest asset, must evolve to be fully trained, certified and resourced to carry out the critical Security Cooperation mission” (U.S. Department of Defense [DoD], 2016). His statement echoes the sentiment in numerous high-level reports, documents, and statements by security cooperation officials that recognize that the rapidly changing security environment requires a well-trained, educated, and experienced security cooperation workforce as dynamic as the expanding set of missions they must execute.

Improving the quality and performance of the security cooperation enterprise has consistently drawn attention at the highest levels of the U.S. government. In 2010, the Deputy Secretary of Defense listed enhancing the security cooperation workforce—the employees of U.S. executive branch entities responsible for security cooperation policy, strategy, program management, and execution (DoD, 2016)—among his top ten Office of Management and Budget (OMB) high-priority performance goals for 2010 and 2011. This would require ensuring that at least 95 percent of the workforce who needed training in the field attained it (OMB, 2011). The 2011 Security Cooperation Reform Task Force illustrated the reason for this emphasis, highlighting multiple shortcomings in security cooperation–related training and education

programs and finding that “personnel selected to fill security cooperation positions . . . lack the experience, skills, and training necessary to carry out their responsibilities most effectively” (DoD, 2011, p. C-1). The report further recommended a far more deliberate approach to developing a robust security cooperation workforce by systematically identifying and tracking personnel to make sure their career trajectories aligned appropriately with their subsequent assignments (DoD, 2011).

More recently, the 2017 National Defense Authorization Act recognized the unique skills and talents required to implement the vast array of security cooperation programs. The Senate report on the bill notes, however, that

as the [DoD] has increased its emphasis on security cooperation programs and activities in furtherance of its strategic objectives, the Department has not devoted sufficient attention and resources to the development, management and sustainment of the Department’s security cooperation workforce . . . increased attention must be focused on the recruitment, training, certification, assignment, and career development of the security cooperation workforce (U.S. Senate, 2016, p. 320).

The law calls for the Secretary of Defense to remedy this by creating a more consistent and coherent approach to develop and manage its workforce (U.S. Senate, 2016; 10 U.S.C. 384).

U.S. Government Accountability Office (GAO) reports have also suggested that personnel assigned to security cooperation organizations (SCOs) have shortfalls in security cooperation competencies that can exacerbate an already complex security cooperation process. One such report in 2012 described personnel in SCOs who do not possess the competencies necessary to identify equipment to match the partner country’s requirements. In practice, this has limited the SCOs’ ability to develop assistance requests, build relationships with partner-nation officials, and track assistance agreements through to delivery (GAO, 2012). Another GAO report found that budget personnel at Combined Joint Task Force–Horn of Africa faced a “steep learning curve” with respect to digesting the unwieldy set of funding requirements attached to mul-

multiple security assistance programs. This sometimes led to delays while staff familiarized themselves with a cumbersome authorizations process.

The same report observed that inadequately trained embassy liaison staff had difficulty navigating the interagency process and sometimes stepped outside standard procedures when interacting with partner-nation officials. Ultimately, embassy staff resorted to training incoming security cooperation personnel themselves to facilitate coordination and prevent insufficiently trained security cooperation personnel from committing additional procedural errors. The report further attributed poor outcomes to inadequate cultural awareness and regional expertise, citing personnel with “limited understanding of cultural issues, such as the time required to conduct activities in African villages or local religious customs” (GAO, 2010).

DoD’s Security Cooperation Reform task force noted that shortfalls with regard to security cooperation competencies extend across the force. The task force report noted that many personnel are tasked with “security cooperation functions not directly related to the delivery of defense articles and services, such as those dealing with military exercises or scientific exchanges.” The report raised concerns that “these personnel are far more likely to be under- or untrained than core personnel” (DoD, 2011, p. C-1). For example, military planners at the combatant commands (CCMDs) do not necessarily undertake security training at the Defense Institute of Security Cooperation Studies (DISCS); their professional military education may not provide adequate and consistent guidance regarding the strategic employment of security cooperation programs and processes. Yet while the GAO reports and the Security Cooperation Reform Task Force report explicitly reference training and education, not competencies, the concern is obviously with the competencies themselves.

It is important to note that some of the obstacles facing the security cooperation workforce go beyond training and education issues. A 2014 Congressional Research Service report noted that “systemic processing problems at DSCA and at the military services contracting offices” slow down the delivery of services through the Section 1206 program (Serafino, 2014, p. 15). Several RAND studies have shown that security cooperation personnel may not have the right tools (resources,

authorities, programs, processes, and organizational relationships) to do the job (Thaler et al., 2016). The security cooperation workload is increasing exponentially, while DoD's ability to increase staff through standard civilian hiring processes and the standard military assignment cycle struggles to keep pace. Even as workload increases, the nature of the problem is inherently complex and difficult. Partner nations often do not share U.S. objectives for U.S. security cooperation initiatives. Systems for assessing partners' needs for different U.S. security cooperation activities remain immature and are unsystematic. Similarly, U.S. processes for monitoring the conduct and evaluating the effectiveness of security cooperation activities have yet to be fully developed (Paul et al., 2015; Moroney and Thaler, 2013; Osburg et al., 2014; McNerney, 2016; GAO, 2016). It is not this study's purpose to address all of these challenges, but their existence illustrates that improving the security cooperation enterprise's performance probably requires more than simply improving training and education.

Despite these shortcomings, the security cooperation community has made some progress in developing the workforce. For example, DoD reportedly achieved its high-priority performance goal of having the workforce trained by 2012 (DoD, 2012).¹ According to stakeholders, however, that training associated with that goal was limited and focused on meeting the needs of a particular point in time. Moreover, the training was not sustained. Thus, there remains much to do, and improving the development of the security cooperation workforce remains one of the key goals in DSCA's *Vision 2020*:

Our workforce fundamentally enables our success. The past year has seen a renewed recognition of the criticality of a prop-

¹ According to staff at DISCS, DoD achieved this 95-percent goal through a combination of increased resources, increased management attention, and a dramatic revision of the curriculum. Prior to the establishment of this goal, DISCS—at the time, the Defense Institute for Security Assistance Management (DISAM)—provided principally resident instruction, which imposed strict limits on the number of staff who could be trained in a given year. Realizing that DISAM lacked the space, faculty, money, and time to provide the necessary volume of instruction in person, faculty created web-based courses for entry-level requirements, allowing them to dramatically expand the student population and focus resident instruction on personnel at higher levels of responsibility.

erly trained workforce. DSCA is leading efforts to revise how we conduct training across the Security Cooperation community—addressing required competencies and skills across positions and organizational elements, training and education options to deliver those competencies and skills, and certification levels and requirements. In addition, DSCA will implement overarching governance changes to better manage and execute this program (DoD, 2016, p. 6).

Study Purpose

As security cooperation has grown in importance in U.S. national strategy, stakeholders have recognized that DoD needs to devote more effort to developing the security cooperation workforce. Against this background, DSCA commissioned this study to inform the development of career management policies for the security cooperation workforce. Potential career management policies of particular interest include development of career models and certifications for the DoD security cooperation workforce. Career models describe the combinations of education, training, and experience individuals require at various points in order to attain an appropriate level of expertise in a particular function. They include competency models, which describe the kinds of things incumbents are supposed to be able to do and describe career pathways by which incumbents attain the necessary degree of expertise with respect to different competencies. One job function of particular interest was acquisition, due to the prominent role that acquisition plays in the security assistance process. Because DISCS already has a process for adapting security cooperation education and training, DSCA requested that this study focus on identifying competencies, developing job families, and assessing how much experience might be required at various stages of career development in the workforce.

The acquisition workforce provides one example of how DoD might manage a workforce focused on a particular function. The acquisition workforce includes 14 different career fields. Each career field defines certain required competencies and prescribes different

combinations of formal education, training, and professional experience to attain one of three levels of certification. Acquisition certification is a condition of employment in the acquisition workforce and a prerequisite for promotion.

However, before DoD can adopt the acquisition paradigm—or any other—for the security cooperation workforce, policymakers need to understand the current state of the workforce. They need to understand at least its approximate size and distribution across the community; the competencies currently required; how those competencies cluster into different career fields that allow for efficient management; and the degree of experience workforce members require at different stages in their careers in order to function effectively in their jobs. Career models can be useful in cataloguing this information. This study addresses these issues.

Research Approach

Career models describe the competencies required to perform certain related jobs; the levels of proficiency in those competencies desired at various stages of a career; and the combination of education, training, and experience necessary to attain the desired levels of proficiency. This study therefore focused on three issues: identifying competencies required in the security cooperation workforce, identifying different job families within that workforce, and assessing the degree of experience that might be feasible to require of incumbents at various stages of a career in the security cooperation workforce.

Intuitively, one of the first steps in managing a workforce is understanding what it is supposed to do. In academic terms, that means defining a competency model. As defined by the Office of Personnel Management (OPM), “[a] competency is a measurable pattern of knowledge, skills, and abilities, behaviors, and other characteristics that an individual needs to perform work roles or occupational functions successfully” (OPM, undated-a). Clearly defined competencies provide the information needed to develop and conduct a wide range of workforce assessments and human resource programs.

The relationship between experience and proficiency was particularly important in this study. Proficiency in a given domain, such as security cooperation, is a function of formal education, training, and professional experience. But, according to researchers on the subject of expertise, proficiency is built primarily through experience.² The “10-year” and “10,000-hour” rules are frequently cited heuristics that refer to the amount of experience in a given domain presumed to be necessary to attain expertise. We should note that a degree of supervision and mentorship is also necessary for the efficient development of expertise (Norman et al., 2006; Ericsson, Krampe, and Tesch-Römer, 1993).

For that reason, this study sought to ascertain both the amount of experience already prevalent throughout the security cooperation workforce and the amount of experience that would be desirable and feasible for workforce members to have obtained at various stages in their careers. Effective management also requires an understanding of the competencies in which proficiency is to be developed. The study therefore consisted of four related research tasks:

1. **Describe the security cooperation workforce.** The research team analyzed DoD military and civilian personnel databases to assess the degree of security cooperation experience prevalent throughout the workforce relative to experience in other relevant contexts (e.g., operating force units, service headquarters, and military institutions). The team also gathered data on distribution by grade, military and civilian occupations, and length of government service.
2. **Identify required security cooperation competencies.** The research team analyzed data from a number of different sources in order to identify and define competencies required in the security cooperation workforce. Data included reference material on the conduct of security cooperation; general descriptions in those references of the responsibilities for some security coop-

² The term “expertise” denotes the research field devoted to understanding the processes by which individuals attain mastery within a given area of practice. It is also used to denote the highest levels of proficiency in a given field. We use the term “proficiency” to denote individuals’ varying ability to perform their functions, usually at some level short of expertise.

eration positions; interviews with key personnel from DSCA, implementing agencies, security cooperation offices, and other components of the security cooperation community; as well as representative position descriptions provided by DSCA.³

3. **Identify potential career management fields.** In the process of identifying and defining competencies, the research team was able to identify key terms and phrases associated with those competencies. We leveraged those key terms and phrases to analyze a larger subset of the workforce—311 position descriptions culled from over 3,800 descriptions found in the Army’s Fully Automated System for Classification (FASCLASS)—in order to identify the competencies required in each position. The research team then performed a cluster analysis to identify groups of jobs that required similar competencies.
4. **Assess feasibility of different levels of experience.** It was impossible to determine what the “right” level of experience is at different levels of responsibility without data that would have allowed the research team to correlate individuals’ performance with their amount of security cooperation experience. Policymakers can make better decisions about the level of experience that might be required for certification if they are aware of both the degree of security cooperation experience that typically prevails among different segments of the workforce and the amount of such experience that might be feasibly required of them. To assess how much experience it might be feasible to require of employees at various levels, the research team analyzed the flow of incumbents through a simplified model of the security cooperation workforce.

Data Limitations and Caveats

Currently, there exists no single database that defines and describes the entire security cooperation workforce, nor is it possible to compile one

³ RAND’s Human Subjects Protection Committee, its institutional review board, determined that this project did not constitute research in the sense envisioned by regulations governing research on human subjects.

easily from existing databases. Thus the data on which our analysis of the workforce rests were incomplete and perhaps unrepresentative. In particular, personnel records describing the civilian security cooperation workforces of the Departments of the Navy and Air Force were sparse.

The study team thus relied on different data sources to inform our analysis of different aspects of the research problem. To the maximum extent possible, we relied on databases of record, such as the Defense Civilian Personnel Data System (DCPDS) and service personnel databases, to provide authoritative, if limited, information on identifiable subpopulations within the security cooperation workforce. We also analyzed other data sets collected on a one-time basis to answer specific questions.⁴

We feel that a partial view is still useful as a starting point for further analysis, however. Moreover, the data on military personnel are reasonably—though not completely—comprehensive. Finally, the study includes other forms of analysis, notably simulation, in an effort to compensate for data shortcomings. The simulation used what the available data *could* tell us—such as the approximate size of the workforce (from the SCWD), as well as its distribution by grade and incumbents' likelihood of continuing in the workforce from year to year (derived from analysis of the DCPDS sample)—to project what the data could not tell us by itself: the amount of experience that incumbents could accrue at various levels of responsibility, given the structure of the workforce. Yet while the research team took care to mitigate the risks of incomplete data, we could not eliminate them entirely. This analysis should therefore be viewed as exploratory rather than dispositive. Readers should bear these caveats in mind while reviewing the rest of this report.

Organization of the Report

The results of the research team's analysis are contained in the remainder of this report:

⁴ Throughout the report we will use the term *database* to refer to existing systems of record, like the DCPDS or the Security Cooperation Workforce Database (SCWD). We will use the term *data set* to refer to data collected on a one-time basis.

- Chapter Two describes the state of the workforce. It explains the analytic method used for this task in greater detail, describes the data sources and their limitations, describes key features of the security cooperation community, and provides data and analysis on key aspects of the security cooperation workforce (with a focus on experience).
- Chapter Three explains the process by which the research team developed a competency model for the security cooperation workforce. It explains a process of how competency models are developed and their uses in developing and managing a workforce. The chapter describes how the research team gathered and analyzed the data and summarizes the results.
- Chapter Four describes potential career fields for the security cooperation workforce. It explains cluster analysis, the analytic technique used to identify groups of jobs that could describe career fields in the security cooperation workforce.
- Chapter Five explains models we developed to assess the degree of experience that might be required at different levels of responsibility.
- Chapter Six summarizes our major findings and presents our recommendations.

Several appendixes expand on the study's findings and methods:

- Appendix A describes the security cooperation community in greater detail.
- Appendix B defines the competencies identified in the course of this investigation.
- Appendix C is the research team's interview protocol.
- Appendix D explains the research team's approach to using automation in order to associate competencies with particular jobs based on text in position descriptions.
- Appendix E describes the data sets used to identify potential job families.
- Appendix F explains why Building Partner Capacity (BPC) Management may not—at this point—constitute a separate career field.

- Appendix G describes the simulation used to estimate the feasible degree of experience that might be required of officials in the security cooperation workforce and provides a wider range of results.
- Appendix H, provided at the sponsor's request, explains key roles and functions for workforce management.

The Security Cooperation Workforce: What We Know

Responsibility for planning, managing, and integrating U.S. security cooperation activities is dispersed across the U.S. government. For example, the Department of State funds and directs nearly all security assistance programs, while the Department of Defense administers most of them. DoD provides the forces, training facilities, materiel acquisition, and so forth required for the conduct of security cooperation and assistance. Commands, agencies, offices, and organizations with significant security cooperation responsibilities are found throughout the DoD. They are found at the strategic, operational, and tactical levels of the national security bureaucracy. As a result, the management of security cooperation planning, resourcing, and execution differs depending on the activity. Successful security cooperation activities require coordination among multiple stakeholders with different responsibilities, at different echelons, who respond to different chains of authority. This is the context in which the security cooperation workforce must execute its responsibilities.

Intuitively, describing the workforce as it currently exists is a critical step in developing career models for that workforce. As noted in the introduction, career models specify the education, training, and experience incumbents are to have acquired at various stages in their careers. The research team therefore focused on the distribution of experience throughout the security cooperation workforce. Policymakers can use the resulting analysis to determine whether they want to focus their efforts on increasing the required level of training and experience or simply reducing the degree of variation with regard to prevailing aver-

ages. In more concrete terms, this kind of analysis can help policymakers determine whether everyone in some part of the workforce—or just some workforce members—needs more training or experience.

This chapter presents an analysis of the current state of the security cooperation workforce. It defines the security cooperation workforce and places it within the larger context of the security cooperation community. The chapter also describes the workforce's size and distribution by grade and occupation across the security cooperation community to the extent permitted by available data. The resulting analysis provides inputs needed for workforce modeling (as described later in the report) and can inform the development of career models for the security cooperation workforce.

Research Approach and Data Sources

The research team assessed the general level of experience prevalent in the security cooperation workforce through analysis of several personnel and training databases. To assess the level of security cooperation experience prevailing in the security cooperation workforce relative to incumbents' experience in other domains, we first identified the organizations comprising the security cooperation community over time. As a reminder, the security cooperation community is a “subset of U.S government Executive Branch entities within the security cooperation enterprise directly responsible for managing or executing security cooperation programs or the policies that affect those programs” (DoD, 2016, p. 9). Table 2.1 depicts an illustrative but not exhaustive list of DoD entities that are part of the security cooperation community. Several organizations play important roles that are embedded in larger organizations. For instance, most Army program managers have a foreign military sales (FMS) directorate. To the extent that we could identify distinct organizations with a primary focus on security cooperation, we did so.

Next, the team measured the amount of time those incumbents had spent in security cooperation and other types of DoD organizations since fiscal year (FY) 2000, the earliest point to which we could “track” individuals currently in the security cooperation workforce using the

Table 2.1
Illustrative List of DoD Entities Included in the Security Cooperation Community

DoD	Deputy Assistant Secretary of Defense (Security Cooperation) Defense Security Cooperation Agency		
Joint	Security Cooperation Organizations		
Service	Department of the Army	Department of the Air Force	Department of the Navy
	<ul style="list-style-type: none"> • Deputy Assistant Secretary of the Army (Defense Exports and Cooperation) [DASA (DE&C)] • U.S. Army Security Assistance Command (USASAC) • Security Assistance Training Management Office (SATMO) • Security Assistance Training Field Activity (SATFA) • Office of Program Manager—Saudi Arabian National Guard 	<ul style="list-style-type: none"> • Deputy Under Secretary of the Air Force for International Affairs (SAF/IA) • Air Force Security Assistance and Cooperation Directorate (AFSAC) • Air Force Security Assistance Training Squadron (AFSAT) 	<ul style="list-style-type: none"> • Navy International Programs Office (NIPO) • Naval Education and Training Security Assistance Field Activity (NETSAFA) • U.S. Marine Corps Systems Command (International Programs)

SOURCE: DoD, 2016.

data available. The assessment of experience covered the period from FY 2000 through FY 2015 using data from two sources: the DCPDS and military personnel files collated using pay data.

Data Sources

It was necessary to synthesize data from a number of sources in order to describe the workforce. Existing databases are incomplete and difficult to cross-reference with one another. In this section, we describe the major data sources on which the study relied, the purposes for which we employed them, and their limitations.

Security Cooperation Workforce Database

In theory, the SCWD includes every individual position in the security cooperation workforce. DSCA established the SCWD in 2010 to track progress toward attaining the Deputy Secretary of Defense's High Priority Performance Goal of having 95 percent of the workforce trained for their duties in security cooperation (Reynolds, 2010). Organizations with billets funded through foreign military sales are required to identify those positions—and other positions requiring security cooperation training and education—to DSCA and provide data describing the security cooperation training required and completed by individuals in those billets. The SCWD lists the position title, the organization to which that position is assigned, the security cooperation training and education required for that position, and the training and education completed by the incumbent holding that position for both military and civilian workforce members (DSCA, 2015). We used these data to assess the security cooperation workforce's approximate size and distribution.

The SCWD's content and structure reflect its original purpose, tracking the degree to which the security cooperation workforce meets the high-priority performance goals of having 95 percent of the workforce trained appropriately (OMB, 2011). The SCWD provides a means of comparing requirements with compliance with regard to security cooperation training. DSCA, through DISCS, populates the database by surveying stakeholder organizations. Those organizations are asked to identify specific positions devoted to security cooperation, the incumbent filling those positions, the security cooperation education and training the stakeholder organization believes are necessary to perform the associated duties successfully, and the security cooperation education and training courses that incumbents have completed throughout their careers.¹ Other data are required as well (DSCA, 2015). Currently, DISCS uses the SCWD mostly to anticipate its training load, an estimate derived from the number of incumbents requiring training at any given time.

¹ It should be noted that, aside from DISCS training, all course completions are self-reported. We are less concerned about individuals incorrectly indicating that they have completed courses than about individuals not reporting the courses that they have completed.

The SCWD's data are insufficiently comprehensive to analyze the workforce. The data do not include key fields needed to analyze the workforce, notably the occupation and grade associated with the position, nor do they describe the position's duties. While the organizations to which positions are assigned are identified, organizations' unit identification codes (UIC)—the unique identifier associated with most DoD organizations—are not, making it difficult but not impossible to identify these elements of the security cooperation community in other databases.

Stakeholders—including analysts in stakeholder organizations involved with providing the data and those compiling it at DSCA—were concerned about the accuracy of the data that are available, as well. According to those analysts, the establishment of the 95-percent goal for security cooperation training and education established perverse incentives for contributing organizations to identify only positions for which the incumbent was already properly trained or those positions in which the incumbent would shortly attend training. Stakeholders also noted that they refreshed the data intermittently, so that the current data might not reflect the workforce with total accuracy at any particular point in time. Neither the research team nor DISCS can independently assess the accuracy of SCWD data, and few mechanisms exist to verify the data contained therein.

Despite its shortcomings, the SCWD data are the best available for assessing the security cooperation workforce's approximate size and distribution. Because of the aforementioned limitations and incentives, the resulting analyses approximate the lower bound of the estimate of the size and distribution of the security cooperation workforce by organization and function. Certainly there are few, if any, incentives for any service or activity to exaggerate the size of its security cooperation workforce.

DCPDS

The DCPDS contains records on the current employment status and all personnel transactions for civilians employed by most DoD components. Data elements include assigned organization, position title, and grade and step associated with the position, as well as transactions like hiring, promotion, and separation. Using these data, it is possible to

track individuals' career histories and assess the amount of time they have been employed by various DoD organizations.

The research team used DCPDS to assess the amount of security cooperation experience attained by civilian members of the security cooperation workforce relative to other major DoD functions. For a subset of the workforce assigned to organizations whose primary function was security cooperation, it was possible to compare the time they had spent in similar organizations with the time they had spent in other DoD organizations with a different focus.

DCPDS data has some important limitations with regard to this study. DCPDS data indicate only the organization to which individuals are assigned and provide no information describing the duties they perform there. Ergo, for organizations that perform many functions—including but not limited to security cooperation—it is functionally impossible to distinguish individuals with security cooperation responsibilities from other employees of those organizations. This poses a particular problem with regard to security cooperation personnel in the Departments of the Navy and Air Force, most of which are embedded within larger acquisition organizations, and for civilian personnel assigned to CCMDs.

Finally, while DCPDS provides UICs to identify organizations, several DoD components do not rely on UICs to identify organizations with a specific focus. AFSAC is, for example, included under the Air Force's Life Cycle Management Command (AFLCMC), a much larger entity. In short, it is impossible to use DCPDS to identify the entire security cooperation workforce within DCPDS or even the greater portion thereof. The sample of DCPDS data to which the research team had access reaches back only as far as FY 2000.

Work Experience Files

The services maintain reasonably complete databases that describe the current status of their military personnel. The Defense Manpower Data Center (DMDC) compiles this information into the *Work Experience File*. As with analysis of DCPDS data, it is possible to analyze these data longitudinally to determine the different organizations to which service members have been assigned throughout their careers.

In contrast to DCPDS, however, every organization to which a service member is or could be assigned is indicated by a UIC—often a derivative UIC that is associated with a more specific function. It is thus possible to obtain a reasonably complete picture of the workforce. Assessment of service members' security cooperation experience relative to other kinds of experience can be reasonably comprehensive. As with the DCPDS data we used, the available military personnel data stretch back only as far as FY 2000.

Categorizing Incumbents' Experience

Using the information contained in these databases, we then categorized incumbents' experience according to the primary functions of the organizations to which they were assigned. Sometimes, such functions overlap. For example, an official in the office of DASA (DE&C) simultaneously performs security cooperation, planning and programming, and infrastructure functions. For the purposes of this analysis, however, we categorized the organizations' *primary* purpose—and thus the nature of experience individuals accrued while assigned to those organizations—according to these business rules:

- **Security cooperation:** all organizations with a primary focus on security cooperation. Includes security cooperation organizations, implementing agencies, DSCA, and other similar organizations. If an organization's primary function was security cooperation—such as AFSAT or USASAC—we characterized experience gained with that organization as security cooperation, even though the organization might also fall into other categories like infrastructure or planning and programming. Note that organizations perform different roles within the security cooperation community. We discuss those roles in further detail in a later section.
- **Internationally focused:** organizations oriented toward executing U.S. policy in the international environment. Includes CCMDs, service component commands, or defense agencies—such as the Defense Threat Reduction Agency (DTRA) or Defense Intelligence Agency (DIA)—focused on the international security environment. While the primary focus of such organizations may not

be security cooperation per se, experience in such organizations may improve understanding of the regional and strategic context in which security cooperation efforts take place. As with security cooperation organizations, we classified organizations as “internationally focused” if they were not security cooperation organizations and their primary purpose was oriented on the international environment, even if they might also fall into other categories, e.g., operating forces.

- **Planning/programming:** defense, joint, and service headquarters focused on the allocation of resources among competing imperatives to develop and sustain DoD capabilities that can be used to attain strategic ends. Experience in such organizations might provide perspective on how security cooperation efforts are integrated with other DoD initiatives.
- **Acquisition:** a subset of the “infrastructure” category devoted to the procurement of goods and services in compliance with DoD policy, the Federal Acquisition Regulation, Defense Federal Acquisition Regulation Supplement, and statute. This category includes organizations like program executive offices (PEOs) across all services, Army and Air Force life cycle management commands (LCMCs) and Navy systems commands. It is of special interest because much of security assistance concerns the acquisition of goods and services within the context of DoD and federal systems. Some stakeholders hypothesized that improving performance with respect to security assistance would require improving the general level of proficiency with regard to acquisition within the security cooperation workforce. Organizations were classified as “acquisition” if they were part of the infrastructure but not planning and programming, internationally focused, or security cooperation organizations.
- **Infrastructure:** those organizations of the military departments and defense agencies responsible for creating and sustaining military forces (e.g., organizations that support development and procurement of new weapons or recruiting, training, and assigning new personnel) (Porten et al., 2002). Examples in this category include the U.S. Army’s Training and Doctrine Command

(TRADOC) or service organizations devoted to research, development, test and evaluation. This category was of interest because much of security cooperation is concerned with the creation and sustainment of partners' military capabilities and may draw upon U.S. infrastructure capabilities to assist in those endeavors. This category omits any organization whose primary purpose is security cooperation, internationally focused, planning and programming, or acquisition.

- **Operating forces:** those forces whose primary missions are to participate in combat and the integral supporting elements thereof (Joint Chiefs of Staff, 2007).² It omits those organizations that fall into the “internationally focused” category, such as CCMD headquarters. Examples include Army brigades, naval fleets, and Air Force fighter or transport wings.

The Security Cooperation Community

The U.S. government's security cooperation community is sprawling and not clearly demarcated in terms of organizational roles, functions, and workforce membership, which has important implications for our study. There is still a lack of consensus within DoD and outside of it, for instance, on what constitutes security cooperation. That lack of consensus makes it difficult to determine which organizations are involved in security cooperation. It is possible, however, to identify a number of organizations that are definitely and unequivocally involved in the management and implementation of security cooperation activities. There are other organizations that are heavily—albeit partially—involved with security cooperation, while still others are involved on a sporadic basis. Using the tools and data at our disposal, it is thus possible to identify a sizable population that is part of the security cooperation workforce. The core workforce—those individuals whose primary

² The current *Department of Defense Dictionary of Military and Associated Terms* (Joint Chiefs of Staff, 2015) no longer defines “operating forces,” though several other definitions use the term. In this case we thought it was a useful term for distinguishing organizations whose primary purpose is the conduct of operations from the infrastructure.

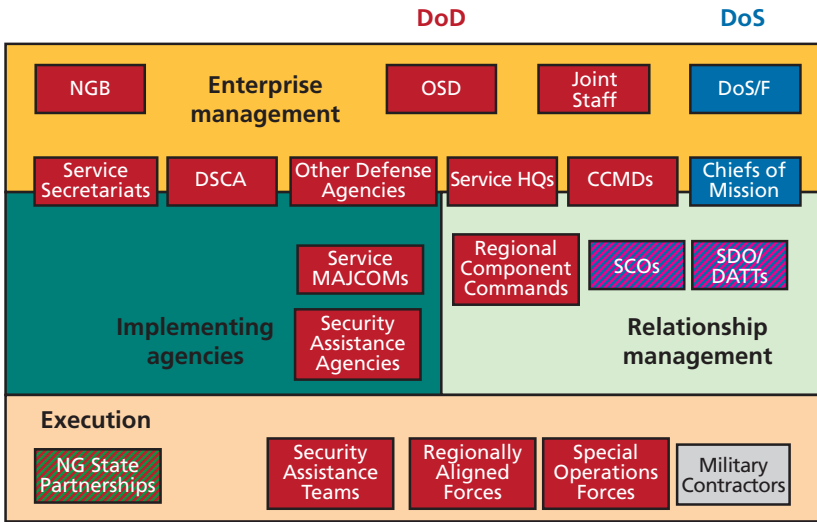
focus is security cooperation—is probably somewhat larger, but it is difficult to determine how much larger it might be.

Understanding the personnel make-up of those DoD organizations and activities responsible for managing Title 22 Security Assistance programs, such as FMS and International Military Education and Training (IMET), is relatively straightforward. However, for those organizations where security cooperation is not a primary organizational role, identifying security cooperation personnel is more challenging. Such organizations—like CCMD planning (J-5) staffs and service training organizations—may be responsible for managing DoD-funded (Title 10) security cooperation activities among many other responsibilities, but the personnel implementing those programs may be doing so only on an ad hoc or part-time basis. As to the members of the workforce, we know more about those who perform security cooperation on a full-time basis—such as joint and service security cooperation and security assistance programs and case managers and members of overseas security cooperation organizations—than we do those who plan or execute security cooperation activities and events on a part-time basis, such as service component planners, functional specialists, and operators.

No single U.S. government organization is responsible for managing and executing the full scope of security assistance and/or security cooperation programs and activities. Commands, agencies, offices, and units with significant security assistance and/or security cooperation responsibilities and interests are found inside and outside DoD, within joint and service organizations, within active and reserve components, and at the strategic, operational, and tactical levels of the national security bureaucracy. As a result, the management of security cooperation planning, resourcing, and execution varies depending on the program or activity and often requires coordination among multiple stakeholders. The planning, execution, and oversight of security cooperation activities necessarily requires members of the workforce to collaborate with organizations with different responsibilities, at different echelons, who respond to different chains of authority.

The security cooperation community's inherent level of complexity is illustrated to a certain degree in Figure 2.1. To simplify our

Figure 2.1
Roles and Responsibilities in the Security Cooperation Community



NOTES: Red boxes denote DoD organizations; blue boxes denote Department of State–led organizations; red and blue cross-hatched boxes denote organizations that report to DoD and Department of State officials; the red and green cross-hatched box indicates organizations that report to DoD and state government officials; the gray box denotes nongovernmental organizations.

NGB = National Guard Bureau; OSD = Office of the Secretary of Defense; DoS/F = Office of U.S. Foreign Assistance Resources; HQs = headquarters; MAJCOMs = major commands; DAOs = Defense Attaché Organizations; NG = National Guard.

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description of the security cooperation community, we have created four broad categories into which security cooperation organizations fit: enterprise management, implementing agencies, relationship management, and execution. These four categories further subdivide the broad category of security cooperation, one of the six categories of DoD functions we created for our analysis. These four categories of security cooperation functions—and their relationships to one another—are defined as follows:³

³ Note that these four categories all fit within the single organizational category “security cooperation” described in the section on “Categorizing Incumbents’ Experience.” “Security

- **Enterprise management** (yellow box) organizations provide strategy and policy guidance and oversight to multiple security cooperation programs; they are responsible for integrating efforts from different U.S. and foreign stakeholders to achieve U.S. strategic goals.
- **Implementing agencies** (dark green box) ensure that individual programs are properly resourced and executed in accordance with policy guidance.
- **Relationship management** (light green box) organizations are responsible for translating strategy into action in specific countries and regions. They help initiate, plan, and facilitate security cooperation program activities involving U.S. and partner-nation officials. It should be noted that these organizations also have a profound role in the development of strategy with respect to the country or region with which they are associated.
- **Execution** (light brown box) elements carry out program activities with partner nation counterparts at the behest of higher-level components of the community. For the most part, execution elements are not dedicated security cooperation assets but are operating force units or elements from organizations in the DoD infrastructure employed in support of security cooperation activities.

Many of the major security cooperation organizations contain offices, divisions, and branches whose personnel are responsible for more than one basic function. This is why in Figure 2.1, certain organizations (e.g., DSCA) are represented in between the functional realms of enterprise management and implementing agencies. However, the boundaries between functions are even more permeable than can be

cooperation” was one of six broad categories describing the range of organizational purposes that exist within DoD. As we noted in that section, those categories can overlap. They can overlap to an even greater degree with the categories indicated earlier. For example, DASA (DE&C) is simultaneously a planning and programming organization and an organization focused on security cooperation within the overall DoD context, and an enterprise management organization within the context of security cooperation organizations. An Army school may be part of the infrastructure in the overall DoD context and an execution organization with regard to security cooperation. Most operating forces can also function as execution organizations in a specific time and place.

easily depicted in a diagram. For example, the OSD directly manages certain security cooperation programs, such as the Defense Institution Reform Initiative; security cooperation organization personnel shape strategy and help implement security assistance cases in addition to managing the relationship with their host nations; and desk officers and senior officials in OSD, the Joint Staff, the service secretariats, and DSCA build and maintain relationships with partners.

Appendix A provides more information on the kinds of organizations constituting the security cooperation community, not all of which even fall within DoD. Those that do tend to have divergent responsibilities and respond to different chains of authority. These organizations often exist within larger organizations whose primary responsibility is not security cooperation.

The nature of relationships within the security cooperation community indicates a need for frequent, effective collaboration. While the chain of authority of most organizations concerned with security cooperation ultimately leads to the Secretary of Defense, most such organizations respond to different officials, e.g., such as the commanders of major activities or the service secretaries. Effective collaboration is thus unlikely to result from these diverse organizations merely responding to the directives of some central authority. Instead, effective collaboration depends on managers who can routinely operate across organizational boundaries.

Workforce Size and Distribution

Analysis of SWCD data at the beginning of FY 2016 indicated that the core security cooperation workforce consisted of 11,979 U.S. civilians, locally hired civilians, military service members, and contractors distributed among DoD's major components, as indicated in Table 2.2. The joint category in particular subsumes many disparate organizations, foremost among them SCOs around the world and security cooperation planners and integrators on CCMD staffs. On balance, most of the military security cooperation workforce resides in joint organizations, primarily CCMDs and the SCOs that respond to them.

Table 2.2
Distribution of Military and Civilian Security Cooperation Workforce by Organization

	DoD	Joint (including SCOs)	Army	Air Force	Navy/ Marine Corps	Total
Civilian	523	265	2,078	3,336	2,015	8,217
Local national	1	337	15	0	2	355
Military	100	1,237	403	313	259	2,312
Contractor	70	22	115	369	506	1,082
Total	694	1,874	2,611	4,018	2,782	11,979

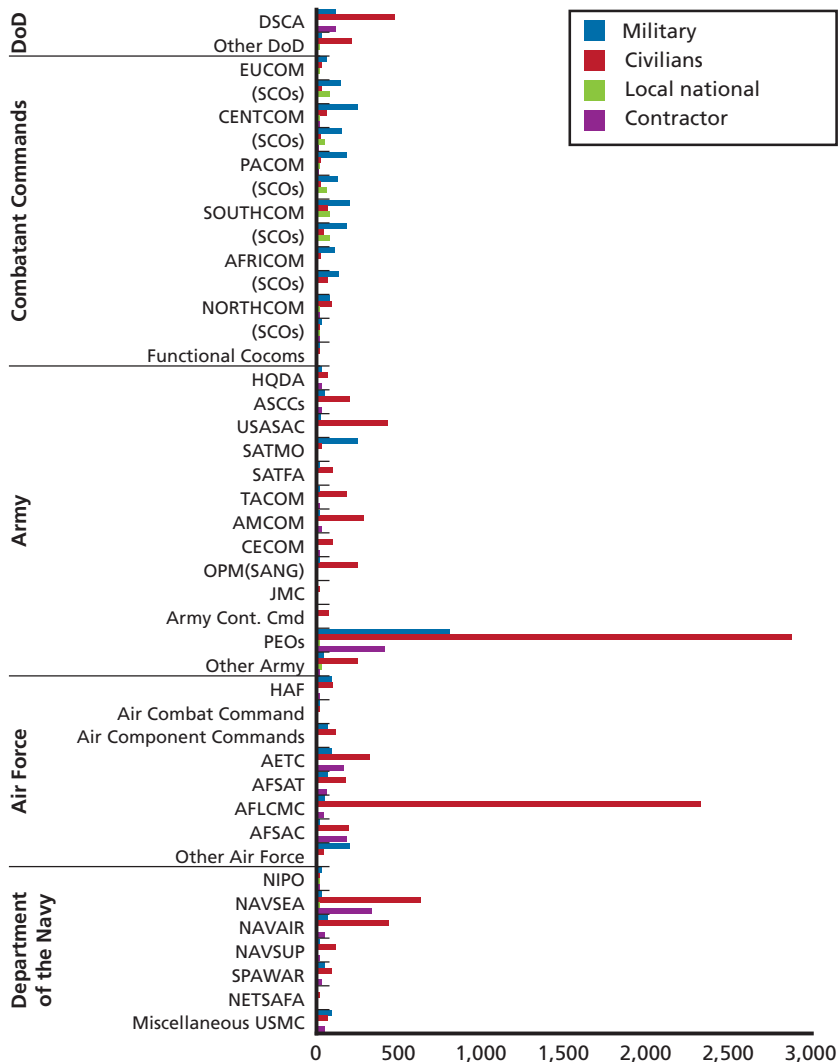
SOURCE: DSCA, 2016.

Most of the locally hired civilians are employed by the SCOs and thus by the CCMDs as well. Implementing agencies in DoD and the services, however, are overwhelmingly civilian.

The totals indicated in the figure may well underestimate the size of the security cooperation workforce. As noted previously, organizations and individuals in the security cooperation community fall into several overlapping categories. Reporting officials have had little incentive to exaggerate the number of individuals in their security cooperation workforce.

Figure 2.2 depicts the distribution of military, civilian, locally employed civilian, and contractor positions reported in the 2015 SCWD among some of the major organizations constituting the security cooperation community. The chart is meant to be neither exhaustive nor precise. It is meant instead to indicate the number of organizations making up the security cooperation community and those organizations' relative share of the military, civilian, locally employed civilian, and contractor populations. It confirms the aforementioned trends, in which the CCMDs and the SCOs they oversee control the bulk of the military workforce, while implementing agencies at DoD and the services control the bulk of the civilian workforce. Note also that the bulk of the civilians in the implementing agencies are embed-

Figure 2.2
Distribution of Military, Civilian, Locally Employed Civilian and Contractor Positions Among the Security Cooperation Community



SOURCE: DSCA, 2016.

NOTE: HQDA = Headquarters, Department of the Army; ASCC = Army Service Component Commands; OPM(SANG) = Office of Program Manager–Saudi Arabian National Guard; JMC = Joint Munitions Command; AETC = Air Education and Training Command; NAVSUP = Naval Supply Systems Command; SPAWAR = Space and Naval Warfare Systems Command; USMC = U.S. Marine Corps.

ded in acquisition organizations, such as Army PEOs; AFLCMC; and Navy system commands, such as NAVAIR and NAVSEA. The number of individuals employed in organizations whose primary focus is security cooperation—like SATFA, SATMO, USASAC, AFSAC, AFSAT and NIPO—is relatively small compared with the number embedded in acquisition organizations.

Finally, it is useful to understand the security cooperation workforce's grade structure for both its military and civilian parts. This study's primary interest in that distribution is the degree to which there are enough positions at lower levels to enable incumbents to accrue security cooperation experience needed at higher levels. Since the SCWD does not include grade, we relied on the sample of the civilian workforce drawn from DCPDS and the population representing the military workforce drawn from the military personnel databases. Table 2.3 indicates the distribution of that workforce by military and civilian grades. We only depict the distribution of officers because we have concentrated on their development in this study.

Workforce Experience

Military Workforce

As indicated previously, the data on the military workforce are substantially more comprehensive than the data describing the civilian security cooperation workforce. For example, it was possible to identify 2,676 members of the security cooperation workforce in the work experience files. By way of comparison, the FY 2015 SCWD identified 2,692 military members of the security cooperation workforce. Ergo, the samples we analyzed are approximately equal in size to the population for their grade. We cannot be certain, however, that they are identical.

Thus we are reasonably confident that this analysis more or less approximates the actual distribution of experience in the military security cooperation workforce. If anything, it may slightly underestimate the amount of security cooperation experience, because we cannot capture experience in security cooperation jobs embedded in organiza-

Table 2.3
Distribution of Military and Civilian Security Cooperation Workforces by Grade

Civilian Grade	Percentage of Civilian Workforce	Military Grade	Percentage of Military Workforce
GS-15	6%	O-6	12%
GS-14	15%		
GS-13	25%	O-5	28%
GS-12	22%		
GS-7 and Under	33%	O-4 and under	60%

SOURCE: DCPDS, 2000–2016.

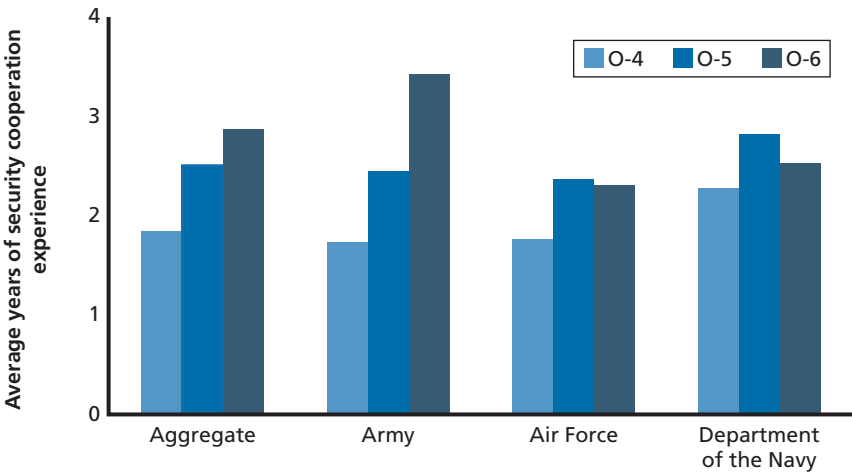
tions with a different primary purpose, e.g., CCMDs. Spread across the entire population, however, those errors are probably small.

This analysis of military personnel data indicates that most military members of the security cooperation workforce have little experience in security cooperation relative to their experience in operating forces and the rest of the infrastructure, as well as in comparison with their civilian colleagues. There are significant differences in levels of security cooperation experience—and in other types of relevant experience—by service and by grade, however, as depicted in Figure 2.2. Army colonels (O-6s) have the most experience, averaging over 3.4 years of security cooperation experience of the 16 years we were able to track from FY 2000–2015. This is relatively unsurprising, in that Army officers working in security cooperation tend to be members of the foreign area officer (FAO) functional area. As the name suggests, officers in this functional area tend to fill consecutive assignments concerned with international affairs. Ironically, Army majors (O-4s)—who also tend to be members of the FAO community—tend to have less security cooperation experience than their counterparts, averaging just over 1.7 years over that same period, though there is far less variation between the services than there is for O-6s. That, too, is less surprising than it might be at first glance, since most Army FAOs enter the field as majors.

Given that most military assignments last between two and three years, the experience levels depicted in Figure 2.3 suggest that most members of the military security cooperation workforce are on their first such assignment, regardless of grade. Figure 2.4, which indicates the distribution of experience for each grade, makes that even clearer. As might be expected, almost all O-4s are in their first or second year of service in the security cooperation workforce. The same is true for O-5s, though there are a significant number in their fifth year or more of service, indicating that there is a significant minority with prior experience. A similar pattern holds for O-6s.

The data indicate that career patterns differ markedly between the services as well. Table 2.4 displays the average time O-6s in the Army, Air Force, and Navy spent in each of the six categories of organization described earlier in this chapter. Because of the high degree of variation between individuals, the averages do not sum to the full 16 years of data covered by our analysis. Moreover, because the data cover only the most recent 16 years, the data probably understate some other

Figure 2.3
Average Amount of Security Cooperation Experience Accrued by Army, Air Force, and Navy O-4s Through O-6s, FY 2000–2015



SOURCE: DCPDS, 2000–2016.

Figure 2.4
Distribution of Security Cooperation Experience: Army, Air Force, and Navy
O-4s, O-5s, and O-6s Currently in the Security Cooperation Workforce

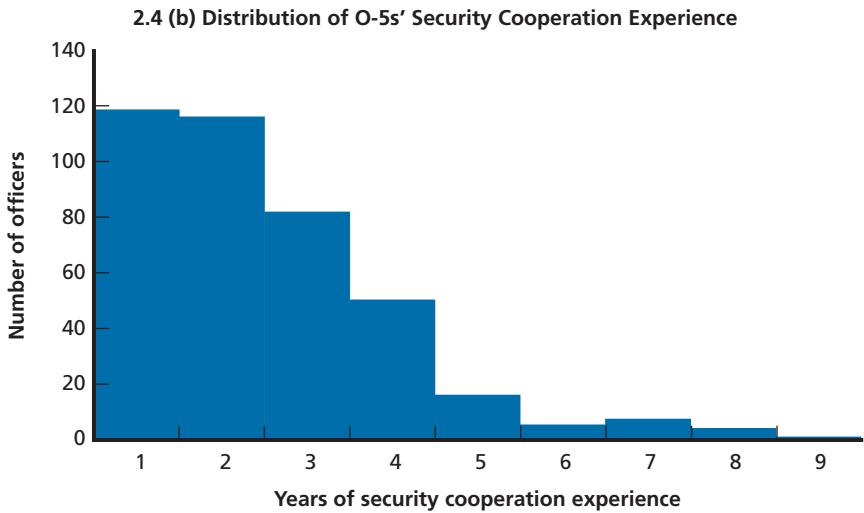
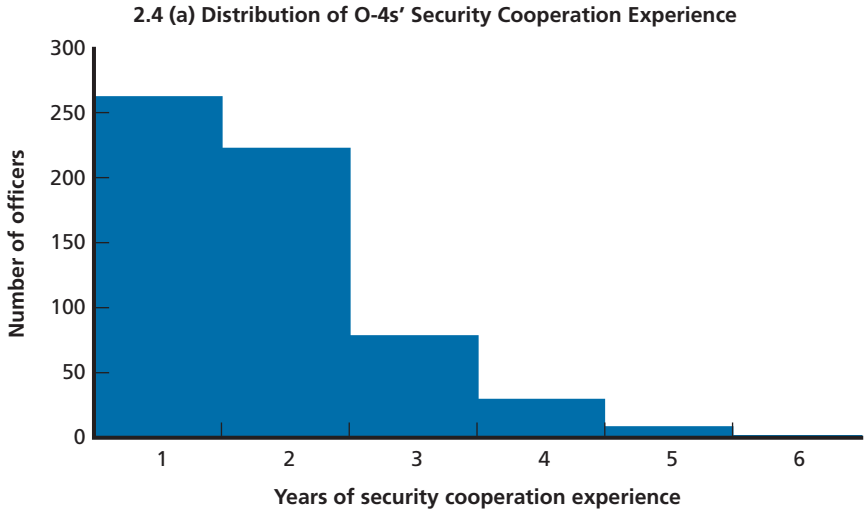


Figure 2.4—continued



SOURCE: DCPDS, 2000–2016.

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forms of experience, especially time spent as junior officers in operating forces. As observed, Army O-6s have significantly greater experience in security cooperation organizations than their counterparts in the Air Force and Navy. These statistics indicate that most incumbents have had two or more assignments in the DoD infrastructure, whether in their individual service or in a defense agency. A significant minority in the Army and Air Force has worked in internationally focused organizations, like CCMDs, DTRA, or DIA. Relatively few have worked in a planning and programming organization like a service staff, at least one that is distinct from the security cooperation function at headquarters. Air Force O-6s, on the other hand, have spent considerably more time in operating forces than Army O-6s, at least after their initial assignments there; the data set truncates careers that probably stretch at least 20 years long, and probably longer. In all probability, the statistics underestimate the amount of experience incumbents have in operating forces.

This analysis suggests two things. First, outside of whatever exposure they might have had in the context of their security cooperation

Table 2.4
Security Cooperation Workforce O-6s:
Average Years of Service in Major DoD Functions, FY 2000–2015

Category	Aggregate N=172	Army N=82	Air Force N=60	Navy N=30
Security cooperation	2.9	3.4	2.3	2.5
Infrastructure	4.6	4.7	3.6	6.2
Internationally focused	2.3	2.7	2.0	0.1
Planning/ programming	0.8	0.8	1.2	0.1
Operating forces	3.3	1.2	5.1	3.3
Acquisition	0.1	0.1	0	0.1

SOURCE: DCPDS, 2000–2016.

jobs, military members of the workforce have little experience with acquisition relative to their experience in other areas. To the extent that improving performance with respect to security cooperation requires significantly increasing incumbents' level of proficiency with respect to acquisition, it will require substantial effort and trade-offs with respect to other kinds of experience. Second, it may be difficult to increase incumbents' level of security cooperation experience. Doing so requires that they have less exposure to another function among those listed in the table, though all are related to security cooperation in some way. Many military personnel need to maintain currency with regard to their operational competencies. Since their proficiency with regard to these competencies is also important to their ability to perform their security cooperation duties, it is not clear that it would be possible to improve performance overall by reducing operational experience in favor of more time spent in the security cooperation community. Thus, it is not immediately apparent which kinds of experience should be increased and which should be decreased. Making that determination requires an understanding of the degree to which each kind of experi-

ence contributes to success in security cooperation activities. Doing so analytically would, in turn, require systematic assessment of the outcomes of security cooperation activities, so that developmental patterns can be correlated with outcomes.

Civilian Workforce

It is much more difficult to describe the civilian security cooperation workforce with the same level of fidelity as the military workforce. As noted, much of the civilian security cooperation workforce is embedded in larger organizations for which security cooperation is an ancillary function. We were able to identify 2,030 individuals assigned to organizations with security cooperation as their primary focus. To do so, we first identified the UICs of such organizations—e.g., USASAC—or, in the case of DSCA itself, the bureau code. As noted, it was difficult to associate organizations focused on security cooperation with UICs in the Air Force or the Department of the Navy. In the former, for example, the Air Force Materiel Command—of which the Air Force Security Assistance and Cooperation Directorate is just one small part—is associated with just one UIC in DCPDS. In the latter, almost all billets are embedded in the different Navy systems commands. In both those cases, it is virtually impossible to distinguish individuals focused on security cooperation from individuals with other responsibilities in the DCPDS data. Consequently, most of those we were able to associate with security cooperation responsibilities were either in Army organizations (1,125) or DoD (619).

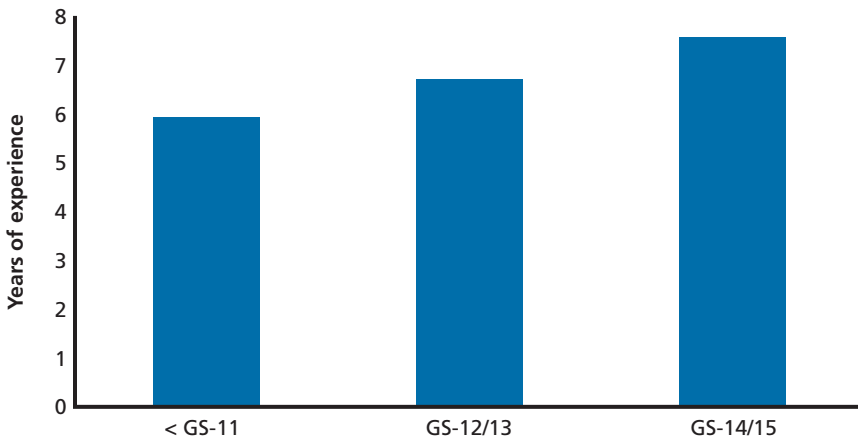
We know, therefore, that this sample is probably unrepresentative. First, there is the service issue. This analysis largely omits the civilian workforce in the Departments of the Navy and the Air Force. Second, there is the issue of sheer size. The FY 2015 SCWD, in contrast, identifies over 8,500 civilian positions. Because the SCWD is populated at the individual billet level, it includes Air Force and Navy personnel who cannot otherwise be distinguished from others with a different focus in the DCPDS data. Unfortunately, the SCWD has existed for only a few years. Ergo, it cannot be used to track incumbents' level of experience with regard to security cooperation. What the SCWD's size mostly indicates is that there are far more people in the security

cooperation workforce than we can identify in the DCPDS data. The degree to which the individuals in this sample are representative of the larger population is thus unclear.

But even this limited sample gives some insights. In contrast to the military workforce, which tends to maintain an average of less than three years of security cooperation experience, the civilian workforce has relatively high *average* levels of security cooperation experience, as Figure 2.5 indicates. Civilians average just less than six years of experiences at the lowest pay grade levels and approach almost eight at the higher levels. As with military officers, however, there is considerable variation within those averages, as seen in Figure 2.6. In all cases, while the mean clearly hovers around six years of experience, a considerable number of individuals have no more than one year of experience in the workforce, even senior officials.

Career patterns unsurprisingly indicate a much greater level of experience in security cooperation relative to other functions, as shown in Table 2.5. The vast majority of current incumbents' time in the DoD workforce has been in support of security cooperation functions. This

Figure 2.5
Average Years of Service in Security Cooperation Organizations



SOURCE: DCPDS, 2000–2016.

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Figure 2.6
Distribution of Security Cooperation Experience for Civilians GS-7 through GS-15 Currently Serving in the Security Cooperation Workforce

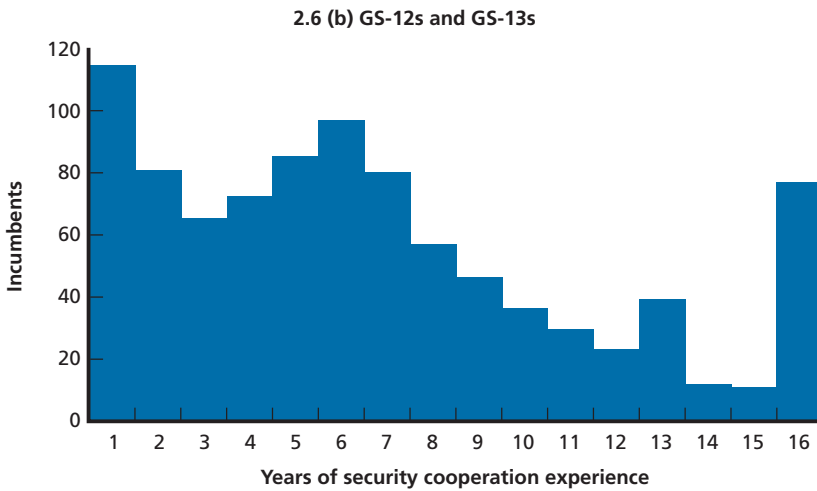
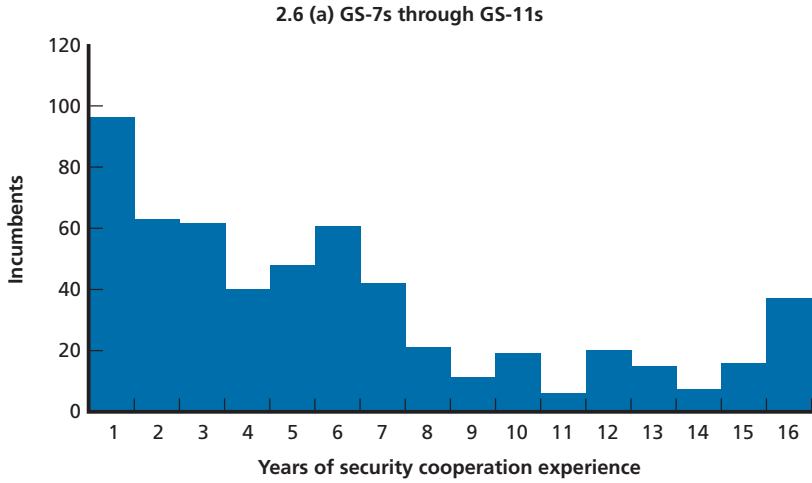
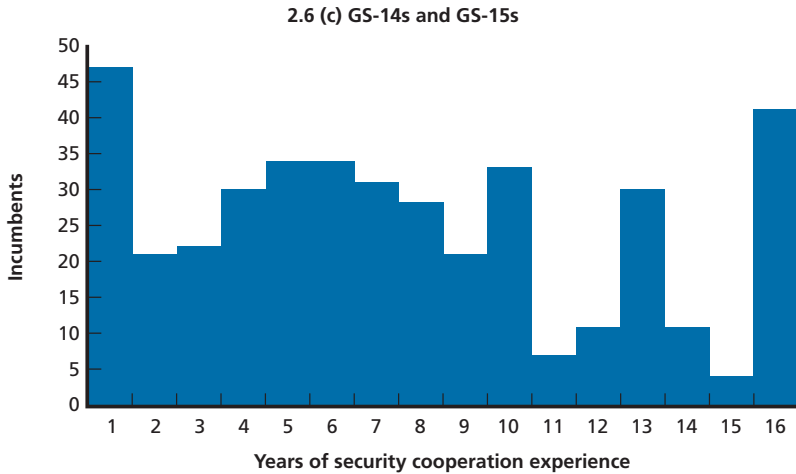


Figure 2.6—continued



SOURCE: DCPDS, 2000–2016.

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is consistent with interviews we conducted, during which incumbents indicated that individuals tend to remain within the security workforce once they join it.

The average numbers also indicate that relatively few have acquired acquisition experience, but that result should be viewed with some caution. Remember that many members of the security cooperation workforce are embedded within other organizations, several of which are part of the larger DoD acquisition community. Because such organizations are not primarily oriented on security cooperation, their experience would not be reflected in the totals preceding. As of April 2016, there were 2,916 individuals certified in the International Acquisition Career Program, which overlaps with the security cooperation workforce (Malley, 2016).

A small number have had prior military experience (an average of 0.7 years per incumbent). Many of the officials we interviewed—mostly at DSCA—had retired from the military before assuming their current responsibilities. On the other hand, with less than a year of

Table 2.5
Current Army, Air Force, and Navy Security Cooperation Workforce: GS-14s and GS-15s' Average Years of Service in Major DoD Functions, FYs 2000–2015

Category	Average Years of Experience
Security cooperation	7.6
Infrastructure	2.6
Internationally focused	0.1
Planning/programming	0.2
Operating forces	0.1
Acquisition	0.1

SOURCE: DCPDS, 2000–2016; N = 405.

military experience on average as a group, few of the GS-14s and 15s in our sample had extensive military experience.

Conclusions

Currently available data on the security cooperation workforce are not sufficiently robust to form the sole analytic basis for policy decisions. However, they can provide a useful complement to policymakers' experience and professional judgment. The SCWD provides the most comprehensive description of the workforce, but it is at best a partial one. It lacks key data elements, such as incumbents' occupations, grade, and—most importantly—a description of their security cooperation duties and responsibilities. The last is critical for workforce development; unless DoD knows which competencies are required, it cannot develop employees to fill those jobs. Moreover, there is no process for validating the data therein, and stakeholders have expressed concerns about its completeness and reliability. The SCWD does not provide sufficient information for making specific resource allocation or personnel management decisions. As this analysis has demonstrated, other data sources have only limited utility in supplementing the SCWD. Taken

together, however, these data can provide an approximate description of the minimum size and experience distribution of the workforce.

As for the civilian workforce, DCPDS does not maintain data at the level of resolution needed to identify members of the security cooperation workforce comprehensively. It is possible to track individuals only as members of organizations. It is not possible, for instance, to distinguish personnel with security cooperation responsibilities from personnel with other responsibilities, especially in organizations whose primary mission is not security cooperation. Moreover, DCPDS omits several organizations that are very important to the conduct of security cooperation, notably CCMDs and the civilians in security cooperation organizations assigned to them. In contrast, military personnel databases do at least identify most organizations that are primarily concerned with security cooperation, even if those organizations are part of larger ones. It is similarly difficult, however, to discern what individuals' responsibilities actually are within their organizations even in the military personnel databases. In short, while it is possible to use military personnel databases to discern a reasonably representative picture of the military portion of the security cooperation workforce, the picture of the civilian workforce that emerges from analysis of DCPDS is likely to be incomplete.

However imperfect the data, it is clear from examining them that the security cooperation enterprise is extremely complex. Achieving strategic objectives through security cooperation requires the effective collaboration of many actors, responding to separate chains of authority, according to divergent and sometimes conflicting institutional imperatives. Even within DoD, the SCOs that help the partner assess security cooperation needs, the implementing agencies that fill those needs, and the intermediary organizations that help facilitate their interactions respond to no common authority below the level of the Secretary of Defense. That does not mean that these organizations do not collaborate effectively. It simply means that such collaboration is basically voluntary, not commanded. This organizational complexity implies a need for a workforce that can collaborate effectively across organizational boundaries in support of common objectives.

With regard to the workforce itself, a few things emerge from the data available to this study. The military and civilian portions of the workforce differ significantly from one another in many respects. The military workforce brings a diverse range of experiences and presumably expertise to bear. The careers of service members often combine a background in military operations and tactics with experience in defense institutions. As a result, they may have little experience in the security cooperation workforce; most are in their first assignment to an organization primarily oriented on security cooperation. Very few have significant levels of acquisition experience, at least that can be discerned from the data. Many more might have some experience, at least, in overseeing the execution of particular contracts or serving as a contracting officer's representative. To the extent that DoD feels it necessary to increase the level of acquisition expertise within the security cooperation workforce, doing so will require creative thinking and perhaps some difficult trade-offs. Increasing the level of security cooperation experience in the military workforce necessarily implies decreasing levels of experience with regard to other functions.

The civilian workforce, in contrast, has comparatively high levels of experience with regard to security cooperation but less experience in other aspects of the defense enterprise. Individuals' levels of experience are highly variable, however. Even in higher grades, a significant number have one year or less of security cooperation experience. The wide variation in experience levels increases the probability that some individual in the long chain that constitutes the security cooperation process will lack the expertise needed for a particular case to succeed without shortfalls with regard to cost, schedule, or performance.

This chapter has dealt with the general question of experience in the security cooperation workforce. In order to manage the workforce effectively, DoD needs to understand not only the organizations in which people work but also the competencies they employ in those jobs. The next chapter explains how the research team developed a competency framework for the security cooperation workforce.

Toward a Security Cooperation Workforce Competency Model

This chapter provides an overview of competency modeling and job analysis, provides the methodology used to identify competencies for the security cooperation community, and describes key competencies within the overall competency model (the full list is provided in Appendix B). We also note several limitations of these preliminary results and suggest a more systematic framework for developing security cooperation competencies. The analyses presented in this chapter and the resulting competency model thus provide a point of departure from which the security cooperation community can develop a forward-looking competency model based on DoD's strategy for the security cooperation enterprise.

Competencies Defined

As defined by the Office of Personnel Management (OPM), “[a] competency is a measurable pattern of knowledge, skills, and abilities, behaviors, and other characteristics that an individual needs to perform work roles or occupational functions successfully” (OPM, undated-a). Clearly defined competencies provide the information needed to develop and conduct a wide range of workforce assessments and human resource programs, which include the following:

- managing assignments and hiring programs
- establishing on-the-job training programs to address position-specific knowledge required for effective performance

- establishing training and career development programs to develop the workforce
- providing performance feedback
- identifying competencies that support organizational and strategic objectives.

Competencies range in level of specificity. General competencies tend to be broad and apply to jobs in many functional areas. For example, oral communication—the verbal expression of information—is a competency that applies to broad range of jobs. General competencies may be important in developing a comprehensive competency model for the security cooperation community but will provide less value than more specifically defined technical competencies that differentiate security cooperation jobs from those outside the security cooperation community. As competencies are more tailored to specific jobs, there is increased value in understanding what knowledge, skills, abilities, and other characteristics (KSAOs) are needed to perform that specific job effectively. Consequently, specific technical competencies are useful in designing career development programs, which require the identification and differentiation of competencies within an organization or enterprise. Table 3.1 lists examples of general and technical competencies from OPM’s Cybersecurity Competency Model (OPM, 2016).

Developing Competency Models

Although the use of competencies is commonplace in organizations (Levenson, 2006), there is no single, best approach for developing competency models. Nonetheless, previous research and guidance from federal agencies such as OPM suggest several factors to consider when developing competency models (Campion, Fink, and Ruggeberg, 2011; OPM, undated-a; Sanchez and Levine, 2009). First, competencies focus on the strategic capabilities of an organization and are typically developed by starting at top-level leadership rather than from bottom-up using job incumbents. Second, competencies are often described using different proficiency levels (e.g., entry, mid-level, senior) and

Table 3.1
Example Competencies from OPM's Cybersecurity Competency Model

Level	Competency	Definition
General	Interpersonal skills	Shows understanding, friendliness, courtesy, tact, empathy, concern, and politeness to others; develops and maintains effective relationships with others; may include effectively dealing with individuals who are difficult, hostile, or distressed; relates well to people from varied backgrounds and different situations; is sensitive to cultural diversity, race, gender, disabilities, and other individual differences
General	Leadership	Influences, motivates, and challenges others; adapts leadership styles to a variety of situations
General	Oral communication	Expresses information (for example, ideas or facts) to individuals or groups effectively, taking into account the audience and nature of the information (for example, technical, sensitive, controversial); makes clear and convincing oral presentations; listens to others, attends to nonverbal cues, and responds appropriately
Technical	Accessibility	Knowledge of tools, equipment, and technologies used to help individuals with disabilities use computer equipment and software
Technical	Business process reengineering	Knowledge of methods, metrics, tools, and techniques of business process reengineering
Technical	Communications security management	Knowledge of the principles, policies, and procedures involved in ensuring the security of communications services and data, and in maintaining the communications environment on which it resides
Technical	Compliance	Knowledge of procedures for assessing, evaluating, and monitoring programs or projects for compliance with federal laws, regulations, and guidance

SOURCE: OPM, 2016.

emphasize KSAOs that differentiate among employees performing at different levels of effectiveness. In other words, competencies are developed to focus on those KSAOs that truly matter to the performance of an organization. Finally, competencies can be expanded to consider future requirements or the strategic direction of an organization. That is, a competency model is often forward-looking, taking into account not only current competencies but also those that may be required in five to ten years. These factors, among others, are captured in Campion, Fink, and Ruggeberg (2011), with a list of 20 competency modeling best practices.

While an effective competency model should be forward-looking, it is also useful to understand the competencies currently in use within an organization or enterprise as a point of departure. The research team therefore focused on providing a point of departure for efforts within the security cooperation community to develop a forward-looking competency model. Given that competencies tend to incorporate a mix of KSAOs (Stevens, 2013), more traditional job analytic methods are often needed to identify the specific KSAOs that enable a particular competency (Lievens, Sanchez, and DeCorte, 2004). Traditional job analysis methods provide detailed analyses of each job within an organization using systematic data collection, which may include document review (e.g., prior job analyses), interviews, observations, focus groups, and surveys with job incumbents and supervisors. A typical job analysis defines specific job tasks performed and the KSAOs needed to perform those job tasks. A more thorough discussion of how job analysis methods can be used to inform career development programs for the security cooperation community will be discussed in the final section of this chapter.

Preliminary Identification of Security Cooperation Workforce Competencies

The research team undertook a layered approach in order to identify security cooperation competencies as currently practiced. We reviewed policy guidance, instructional materials, and other analyses; inter-

viewed incumbents; and analyzed position descriptions provided by DSCA and from other sources. At each step, we refined our competency model further.

References reviewed included DSCA's publications on the management of security cooperation, as well as policy guidance on career management for service members and civilians in the FAO and international affairs community from DoD and the different services (DoD, 2008, 2012, 2015, 2016; U.S. Army, 2013, 2014, undated; U.S. Air Force, undated; U.S. Navy, 2013, 2015, 2016). From this review of the literature, we were able to derive general understanding of roles and responsibilities in different parts of the security cooperation workforce, with particular focus on the competencies required of officials assigned to security cooperation offices and select positions in implementing agencies. It was necessary, however, to refine this broad understanding with interviews of incumbents in specific jobs, as well as an extensive review of position descriptions described hereafter.

The research team conducted 57 individual and group interviews with 82 civilians and military service members. Respondents occupied key positions in their organizations. At DSCA, the Directorate of Administration and Management identified these key individuals. Officials in workforce management positions identified select incumbents at service implementing agencies. Key positions were defined as those positions that met the following criteria:

- have a direct and significant impact on the success of a security cooperation organization's mission
- require the application of competencies unique to the domain of security cooperation, in addition to other functional expertise
- tend to have responsibilities integrating the efforts of one security cooperation organization or domain
- require prior experience in one or more security cooperation domains to attain the degree of expertise needed to perform the position.

Table 3.2 provides the number of respondents by DoD component. It also identifies whether the respondents were currently mem-

bers of the uniformed military and—for former military—whether they had prior security cooperation experience while they had been on active service. Given the relatively low number of active-duty respondents, the perspectives of former military were invaluable. Unless otherwise identified, the respondents were civil servants. Most were in the grades of GS-13 through GS-15, though we did interview several members of the senior executive service. Relatively few were members of OPM’s 0131 occupational series (international affairs); most were either in the 0300 (General Administrative, Clerical, And Office Services) or 1100 (Business and Industry) occupational groups. As the distribution in Table 3.2 indicates, respondents covered the gamut of organizational types described in the last chapter. Almost half of the interviews took place with incumbents employed by DSCA or DISCS, which is directly subordinate to DSCA.

Table 3.2
Count of Respondents by DoD Component

Row Labels	Total Interviewed	Active-Duty Military Respondents	Former Military with Prior Security Cooperation Experience
OSD	1		
DSCA	21	3	6
DISCS	20		1
Defense Acquisition University	3		1
DLA	1		1
CCMD	10	2	4
Joint	2		1
Army	13	2	5
Air Force	8	1	4
Navy	3		1
Grand Total	82	8	24

Respondents were asked to identify their position, grade, and occupation (or its military equivalent) and to describe the duties and responsibilities associated with that position. A complete list of questions is provided at Appendix C. Respondents also described responsibilities associated with past jobs and jobs of key subordinates; 125 different jobs were identified and analyzed. We also reviewed 57 position descriptions for key positions provided by DSCA. Position descriptions—as their name suggests—describe the duties and responsibilities associated with a given position. We analyzed these descriptions of duties and responsibilities to identify key workplace behaviors and the combinations of KSAOs, or competencies, associated with those behaviors. The research team identified 18 distinct competencies from this empirical analysis.

As explained previously, competency frameworks should reflect an enterprise's strategy as well as its current practice (Campion, Fink, and Rugeberg, 2011). Thus the research team took cognizance of other recent RAND work highlighting the importance of security cooperation assessment and security cooperation monitoring and evaluation (Marquis et al., 2016) and modified the definition of security cooperation analysis to include assessment, monitoring, and evaluation. In this vein, we also added a competency about military operations and capabilities, one of the major competencies supplied by the military workforce (U.S. Army, 2014; U.S. Air Force, 2006; U.S. Navy, 2016; DoD, 2007).

The research team reviewed the resulting list of competencies and their definitions with the sponsor. At the study sponsor's request, the team reconciled the list with the International Acquisition Competency Model (Office of the Under Secretary of Defense [Acquisition, Technology, and Logistics], 2016). After reviewing this list, the team added the technology security and foreign disclosure competency and added fidelity to the definitions of cultural awareness/international affairs, security assistance case management, and defense acquisition. The synthesis of information derived from interviews and position descriptions, literature reviews, and reconciliation with the International Acquisition Competency Model led to the identification of 21 competencies of interest to the security cooperation workforce, listed in Table 3.3 and defined at greater length in Appendix B. We have organized the list into those that appear to be more

prevalent among the wider security cooperation workforce, and those that appear to be less prevalent.

Key Security Cooperation Competencies

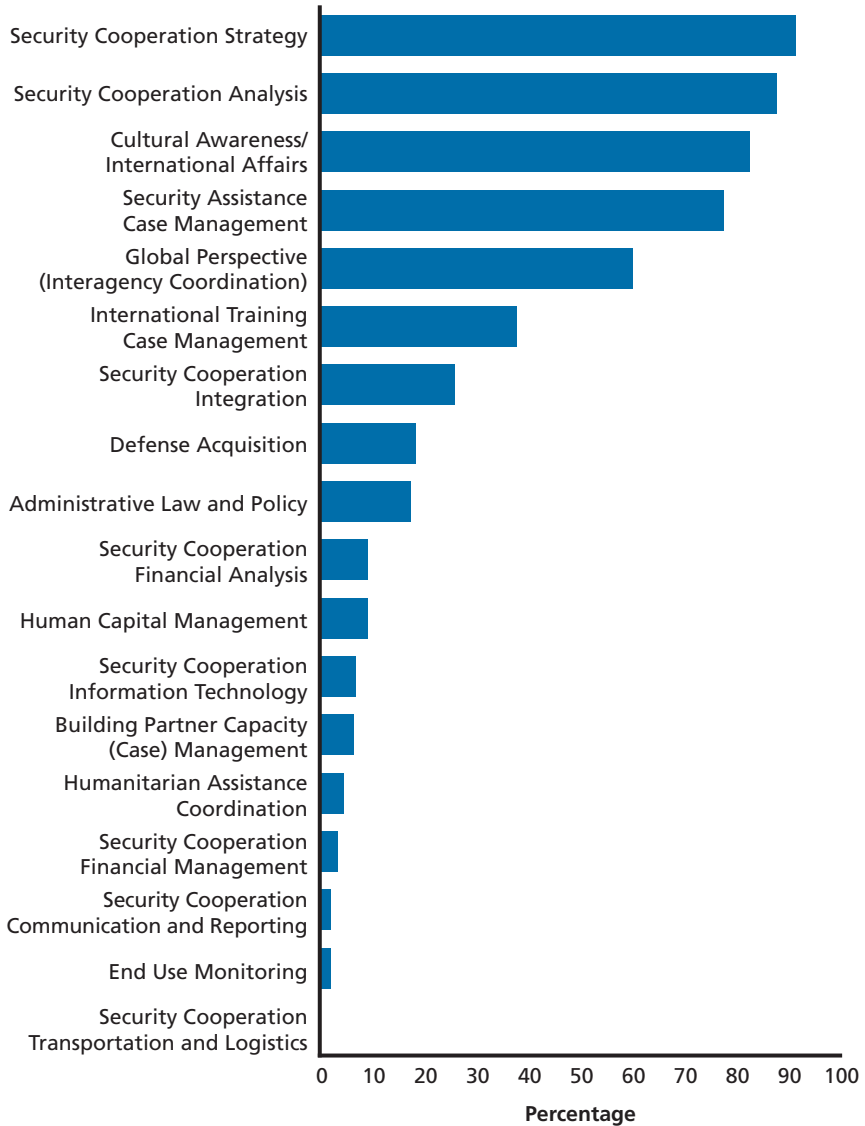
Certain competencies seem to be generally prevalent across most or all security cooperation jobs. After identifying the competencies listed in Table 3.3, we assessed their prevalence in a larger sample of 311 jobs described in data obtained from the Army’s FASCLASS system. Five competencies appeared in over 50 percent of the job descriptions: security cooperation strategy, security cooperation analysis, cultural awareness/international affairs, security assistance case management, and global perspective (interagency coordination), as indicated by Figure 3.1.¹ Those competen-

Table 3.3
Draft Security Cooperation Workforce Competency Model

More Prevalent	Less Prevalent
<ul style="list-style-type: none"> • Security Cooperation Strategy • Cultural Awareness/International Affairs • Security Cooperation Analysis • Security Assistance Case Management • Global Perspective (Interagency Cooperation) • International Training Case Management • Security Cooperation Integration • BPC (Case) Management • Military Operations and Capabilities 	<ul style="list-style-type: none"> • Security Cooperation Communication and Reporting • End Use Monitoring • Security Cooperation Financial Analysis • Security Cooperation Financial Management • Human Capital Management • Humanitarian Assistance Coordination • Security Cooperation Information Technology • Technology Security and Foreign Disclosure • Security Cooperation Transportation and Logistics • Security Cooperation Program Management • Defense Acquisition • Administrative Law and Policy

¹ Note that the competencies depicted are for the civilian workforce. Hence the requirement to understand military operations and capabilities—a competency expected from the military workforce—is absent. Also absent are competencies identified subsequently through other interviews or in consultation with the sponsor, e.g., technology security and foreign disclosure, as well as security cooperation program management.

Figure 3.1
Percentage of Jobs Requiring Each Competency



cies currently form the core for most security cooperation jobs. We next discuss each in turn.

Security Cooperation Strategy

Whether they participate in the development of strategy or not, most stakeholders need an understanding of U.S. regional and national strategies for security cooperation and how their efforts fit into those strategies. As its name suggests, security cooperation strategy involves the development of security cooperation strategies and plans and includes the following elements.

- Understand partners' context, conditions, and capabilities prior to the application of security cooperation plans, programs, and activities anticipated in support of U.S. government and partner nation objectives.
- Understand principles and best practices in security cooperation planning.
- Collaborate with subject-matter experts and stakeholders on the development of global security cooperation strategies, theater security cooperation plans, and country security cooperation plans.

Security Cooperation Analysis

In order to develop strategy, security cooperation professionals must analyze the context in which security cooperation activities are to take place, and how their efforts fit into that context. Security cooperation analysis has three components:

- Analyze regional and country environments in order to identify opportunities and challenges for potential security cooperation activities.
- Develop partners' requirements for security cooperation activities and support.
- Assess programs' and organizations' effectiveness in meeting objectives for specific security cooperation activities and global objectives for the security cooperation community.

Cultural Awareness/International Affairs

Defined briefly, this competency involves the application of regional knowledge and expertise to security cooperation planning and implementation. Obviously, this combination of knowledge, skills, and abilities is valuable for those members of the security cooperation workforce assigned to security cooperation organizations (SCOs). In our interviews we discovered that individuals throughout the security cooperation community—even those outside of SCOs—frequently interact directly with officials from partner nations. Intuitively, it is also important for those developing strategy to have this kind of understanding even if they seldom actually interact with partners, in order to facilitate the development of strategy appropriate to its context. This competency involves the following elements:

- Understand partner nations' histories, cultures, political/economic systems, social practices/norms, and military organizations.
- Participate in security cooperation planning and assessment.²
- Facilitate engagement with partner nation officials.
- Communicate with partner nation officials in local language(s).

Security Assistance Case Management

This competency concerns the development and management of security assistance cases and programs. As a reminder, security assistance specifically includes the provision of defense articles and services under the terms of the Foreign Assistance Act, authorized under Title 22 of the U.S. Code. This competency includes the following elements:

- Evaluate and negotiate FMS letters of offer and acceptance.
- Develop directive for implementing FMS cases and report case execution performance to partner nation client.

² Several competencies involve some aspect of planning or assessment. In this case, the cultural awareness/international affairs competency requires an understanding of planning sufficient to participate effectively in a process governed by security cooperation strategy, e.g., understanding how partners' historical, cultural, political, economic, and social context should shape planning. It does not require mastery of the entire planning process.

- Coordinate the financial reconciliation and closure of FMS cases.
- Coordinate with stakeholders in defense acquisition enterprise in order to plan and execute effective security assistance cases or programs.
- Understand and apply the statutory, policy, and strategic guidance under which security assistance cases are developed, implemented, and closed.
- Identify partner requirements for security assistance.
- Understand and integrate parent agency's roles and activities with those of other potential stakeholders across all phases of a security assistance case or program.
- Identify and resolve security assistance case/program management issues with partner nations and U.S. government stakeholders.

Even though security cooperation encompasses a range of programs beyond security assistance, security assistance cases still compose a substantial component of DoD's security cooperation activities. Moreover, other security cooperation activities still should be integrated with the architecture of existing security assistance cases. For example, joint training exercises with partners should help them integrate capabilities provided through U.S. security assistance efforts. Finally, even though efforts to build partners' capacity rely on authorities included in Title 10 U.S. Code, many of these initiatives rely on the basic structure of security assistance cases and involve the same set of actors on the U.S. side, according to various officials.³ This includes BPC programs that are administered like FMS cases under what has been called a "pseudo-FMS" process. (BPC is described as a separate competency later.)

Global Perspective (Interagency Coordination)

In our interviews and review of position descriptions, respondents continually stressed the need to work across organizational bound-

³ BPC (Case) Management constitutes a separate competency, mostly because it concerns a substantially different set of authorities under Title 10 U.S. Code. See Appendix B for the definitions of those competencies.

aries—including those in partner nations—in order to achieve both organizational and national objectives. This requirement arises from the very structure of the security cooperation community, in which successful planning and execution require the collaboration of organizations with different institutional imperatives, responding to different chains of authority. DoD calls this competency “global perspective” (Office of the Under Secretary of Defense for Personnel and Readiness, 2009), but many respondents also used the term “interagency coordination.” For many incumbents, interagency coordination may be the only aspect of global perspective that is relevant to their current jobs. It involves collaboration with government agencies across the security cooperation community to:

- effectively communicate the organization’s commitment to the joint mission and lead staff to exert influence and execute solutions across the enterprise
- work collaboratively with other national security agencies to achieve U.S. goals and objectives
- foster supportive partnerships across organizational lines and within the international community to drive integration and translate long-term goals into action.⁴

Other Competencies May Also Be Important

The foregoing five competencies emerged as the most prevalent in our analysis of various position descriptions. But that does not mean that the other 17 competencies we identified are unimportant; they are just under-represented in our particular sample. For example, while receiving a sizeable number of mentions in both interviews and our review of position descriptions, international training (case) management—defined as developing and managing international training and edu-

⁴ Like the cultural awareness/international affairs competency, this competency implies participation in the security cooperation strategy and planning process. In the former case, understanding of foreign partners’ local context needs to inform strategy and planning. In this case, an understanding of other U.S. and allied government agencies’ context should inform planning, along with the ability to actually reach across organizational boundaries to implement plans.

cation cases and programs—was more prevalent in the interviews we conducted with security cooperation subject-matter experts than it was in the civilian position descriptions provided by DSCA.

Refining the Competency Model

The competency model described in this chapter and in Appendix B represents a beginning. Because we cannot be certain that we have identified all the individuals that make up the security cooperation workforce, we cannot be certain that we have identified all the competencies that workforce requires. We are reasonably confident, however, that the competencies we identified are currently in use in the workforce. The competency model should thus continue to evolve with changes in strategy and improved information. The effort required to develop a competency model takes considerable time, resources, and leadership support. The following steps represent best practices in employing these resources to refine and maintain useful competency models. In particular, career development programs should focus on competencies that have distinct value or strategic importance to security cooperation. For example, competency modeling can help to identify competencies that are needed to achieve security cooperation objectives. Ergo, more rigorous and detailed job analysis methods should be used to further refine the competencies described in this report in order to identify the specific KSAOs required to enable each competency. These KSAOs will provide the necessary level of detail required to conduct effective manpower assessments and career development programs, and they will establish hiring criteria that support security cooperation objectives.

The following framework provides a guide, not a set of strict rules that must be followed. The purpose of the framework is to highlight the type of data that workforce managers might want to collect and recommend some guidelines for collecting and analyzing that data.

Identify the Strategic Objectives

It is common in competency modeling to emphasize a top-down strategy for identifying important competencies. There are several differ-

ent ways to gather the information for this step. Although scheduling may be difficult, a panel workshop with senior leaders from within the security cooperation community would be one way to efficiently identify the strategic objectives for the security cooperation enterprise and potential competencies needed to support stated objectives. Depending on the diversity of organizations represented, multiple days may be required to gather sufficient information for the following steps. The competencies identified in this chapter may serve as a starting point for these panel discussions.

Further Develop Specificity And Proficiency Levels

To ensure the level of specificity captures the KSAOs needed to fully define each competency, analysts typically conduct a series of interviews and focus groups with incumbents and supervisors from target positions. The purpose of the interviews is to further specify what is needed within each job. For example, “security cooperation analysis” was indicated as a potential competency for many jobs in our review. However, the specific KSAOs required for this competency may vary considerably within a job (i.e., same job title) and between jobs. Once the KSAOs are clearly defined, additional interviews and focus groups may be needed to describe the different proficiency levels of each competency. The proficiency levels provide useful information in determining how much prior knowledge or training or may be required to successfully perform a job.

Collect Additional Data About Each Competency

This step generally requires conducting a survey of the workforce to identify the relative importance of each competency for performing their job duties. There are a number of methods to consider when designing such a survey. We highlight two: Use multiple sources and design and field a survey.

Use Multiple Sources

Incumbents can be a useful source of information, but they can be susceptible to inflated ratings. Therefore, collecting information from other knowledgeable sources such as supervisors should be considered

to increase the confidence in the relative importance of each competency. For all sources, the minimum level of experience should be established to ensure information is collected from only those who would be considered subject-matter experts. Research suggests that naïve or inexperienced raters may not provide reliable or accurate judgments (Lievens, Sanchez, and DeCorte, 2004).

A sufficient number of raters is needed to ensure reliability. General rules of thumb suggest approximately 10 to 20 percent of workers within a position would be needed to complete the survey (Zedeck et al., 1990). The specific number required will depend on the variability within a specific job. For example, if the tasks performed vary considerably across locations or organizations, a more-specific sampling plan should be developed to ensure ratings are representative of the job requirements. Inadequate representation can also affect the validity of job classification, since some job requirements may be either underrepresented or not represented at all.

Design and Field a Survey

At a minimum, respondents should be asked about the relative importance and proficiency level required for each job. Research has indicated that asking these questions for specific job tasks may improve the reliability of responses (Lievens, Sanchez, and DeCorte, 2004) as compared with making global ratings about the importance of a competency to a job. In other words, information about job tasks should be made available to raters who make judgments about the relative importance of competencies.

One common approach borrowed from traditional job analysis is the use of a job task by competency matrix (Table 3.4). In each cell, subject-matter experts would provide a rating for how important (e.g., using a 1–5 importance scale) each competency is for performing a task. For example, a military officer working in a security cooperation organization might consider “cultural awareness/international affairs” very important to his job and rate it a “5.” That same individual might feel that “human capital management”—in the sense of managing the workforce for a large organization—is less important to his day-to-day existence. In addition to the critical questions about each competency,

Table 3.4
Example of Task by Competency Matrix

Task	Accessibility	Business Process Reengineering	Communications Security Management	Compliance
Task 1				
Task 2				
Task 3				
Task 4				

general background information should be gathered about each rater, such as years of experience, sex, race, job title, department, and location. Data from these background questions help to uncover potential patterns as well as ensure respondents are representative of the broader workforce.

Conclusion: Further Review Is Needed

This chapter identified the potential security cooperation workforce competencies that emerged from our analysis of job position duties and responsibilities. But the analysis presented is preliminary. Because it rests on an incomplete sample of the security cooperation workforce highly concentrated on DSCA itself, the degree to which this sample is representative of the larger population cannot be ascertained. Thus, the list of competencies presented needs to be validated through widespread review by the diverse stakeholders in the security cooperation community. In addition, policymakers and personnel managers must identify those competencies that may be needed in the future but are not yet resident in the workforce. Moreover, in order to fully develop a competency framework, it is necessary to understand competencies' relative importance, at least with respect to particular jobs.

Despite the preliminary nature of these results, the competencies identified through this analysis represent a useful list for further socialization and refinement. The five key competencies identified—security

cooperation strategy, security cooperation analysis, cultural awareness/international affairs, security assistance (case) management, and global perspective (interagency coordination)—are likely to remain core competencies for the security cooperation workforce going forward. They also represent a starting point from which a more refined competency model can evolve.

Identifying Career Fields for the Security Cooperation Workforce

Having preliminarily identified competencies required for jobs in the security cooperation workforce, our next logical step is to consider how those jobs might be grouped into career fields, also known as job families. Such classification is a common function in developing human resource systems. Job classification is useful, since personnel decisions can be made more efficiently by targeting all employees within a job family. For example, career development programs can be organized around jobs that have similar training needs. There are a number of classification techniques for determining job families, including inferential and descriptive methods (Colihan and Burger, 1995).

Inferential methods can be used to test when a group of jobs is statistically different from other groups of jobs. This approach requires that existing classification structures or hypothesized groups of jobs already exist to be compared against each other. For inferential methods to work, analysts require a considerable amount of data, usually including not only the competencies associated with particular jobs but also their relative importance to each job. The research team attempted an inferential analysis, but not enough data were available to conduct this analysis.

The research team thus relied on descriptive methods. In the early stages of defining a classification structure for an entire community, such as security cooperation, existing classification structures do not exist. Therefore, descriptive methods, such as cluster analysis, are used to uncover potential classification structures. The assumptions underlying these methods are that (1) there is indeed an underlying structure (i.e., job families) to be found, and (2) the data collected about the

target jobs are sufficient for describing this structure. We inferred jobs' primary purposes and the relative importance of various competencies to those jobs qualitatively from the text in position descriptions. To conduct this analysis, the research team analyzed three data sets: a data set provided by DSCA that describes jobs in several different organizations within the security cooperation community, one we obtained derived from FASCLASS, and position title information from the SCWD. We relied primarily on the first of these data sets, since it provided the richest level of detail on positions and the duties associated with them. Further details on the data sets are provided in Appendix E, Data Sources.

Our analysis identified four potential job families:

- **International Affairs**, comprising the services' separate foreign area officer (FAO) and related civilian career fields
- **Security Assistance Implementation Management**, concerned primarily with the transfer of defense articles to foreign partners under both Titles 10 and 22
- **International Training Management**, concerning the provision of training under either Title 22 or both Title 22 and Title 10 authorities
- **Financial Management**, focused on the management of funds provided through various security cooperation authorities.

The study team considered and rejected a fifth potential career field, BPC Management, oriented on the provision of defense articles and services under Title 10 authorities. Our analysis of position descriptions indicated that many officials with responsibilities for BPC management also had responsibilities for either security assistance implementation management or international training management. Moreover, there seemed to be relatively few positions with an exclusive focus on BPC.

Identifying Job Families

After considering alternate approaches to identifying job families, the research team determined that the most appropriate approach, given the

available data, was to rely on qualitative analysis to identify potential job families. A preliminary analysis indicated that available data were insufficient to permit a valid cluster analysis using inferential techniques.¹ Qualitatively identifying job families required synthesizing analysis from a number of sources, including process description and definition from the Security Assistance Management Manual, our review of interview results and position descriptions, and documentation on existing job families in the military services, e.g., the Air Force's Regional Affairs Specialists or the Army's Career Program 60—International Affairs. Note that the former category denotes positions that uniformed Air Force officers may hold at some point during a career largely concerned with another specialty, while the latter comprises a complete civilian job family with its own career plan. In conjunction with the study sponsor, the research team developed categories that could encompass a significant number of related jobs in both the military and civilian security cooperation workforces and were consistent with existing job families, such as the aforementioned Career Program 60.

As a result of this analysis, we hypothesized that five potential job families might exist across DoD, none of which are formally organized now:

- International Affairs
- Security Assistance Implementation Management

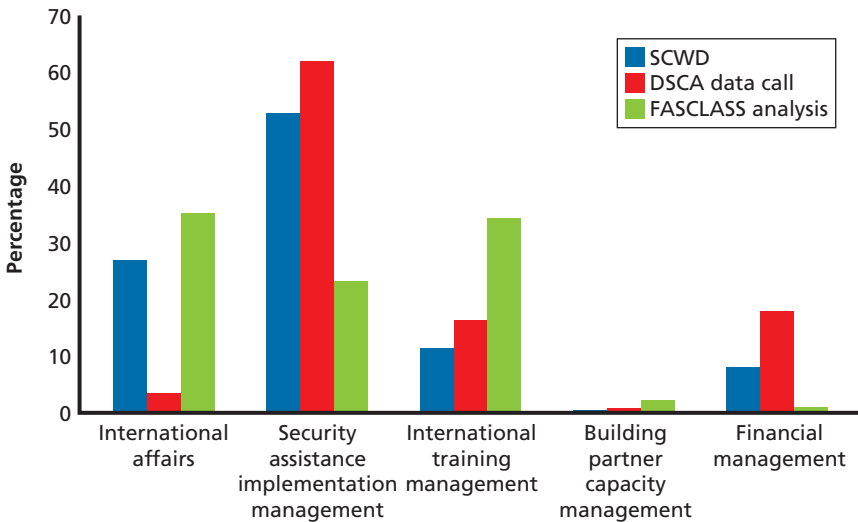
¹ This approach would have been preferable but was not feasible. Following our initial review of the competencies indicated for each job description, we attempted to cluster the job descriptions using inferential techniques. Cluster analysis provides one approach to grouping jobs that have similar characteristics; in this case, we attempted to identify whether the competencies could be used to group similar jobs. We used hierarchical clustering, which treats each position independently and then finds the next closest match (in terms of competencies) as the clusters are built hierarchically until there is only one cluster that includes all positions. Unfortunately, none of the cluster solutions produced meaningful job categories. That is, several jobs with similar, if not identical, job titles and similar job descriptions were classified into different job families. This may not be too surprising given the limited variability in how the competencies were evaluated for each job description. We were restricted to dichotomous data for each competency by job pairing (i.e., 1 = competency indicated versus 0 = competency not indicated). If additional data were available (e.g., subject-matter expert ratings on the relative importance of a competency), the cluster analyses might have uncovered more meaningful job families.

- International Training Management
- Financial Management
- BPC Management.

Lacking comprehensive data on the workforce—especially descriptions of the myriad different positions composing it—we could not validate any of these potential job families. What we could do was count how many positions might fall into one of these categories based on either analysis of the available position description or—in the case of the SCWD—the position title.²

Figure 4.1 depicts the results of this analysis. It indicates the prevalence of jobs associated with the candidate job families in the three data sets used for this analysis. The degree of precision should not be

Figure 4.1
Relative Prevalence of Military and Civilian Positions in Potential Job Families



SOURCE: DSCA, 2016; U.S. Army, 2016.

RAND RR1846-4.1

² Because of the exploratory nature of the analysis, we did not attempt to validate the coding of these positions.

overestimated. Only the SCWD can be considered in any way representative, but analysis of that database is prone to error because billets' association with particular job families must be inferred primarily from the position title, without other information. What the analysis really shows is which potential job families are likely to be relatively large, and which are not. The potential job families that appear to emerge from this analysis include International Affairs, Security Assistance Implementation Management, International Training Management, and Financial Management.

BPC is clearly an increasingly important function within the broader field of security cooperation. DSCA has even created a separate major directorate focused on that function. The question for workforce management is whether there will be enough jobs with BPC as their primary focus to warrant its establishment as a separate job family, or if it will instead create a new dimension for jobs that are part of other job families. If the leaders of the security cooperation community envision substantial growth in the number of jobs with a primary BPC focus, they would be entirely justified in establishing a job family to manage them. As of the completion of this study, however, there appear to have been very few jobs created with BPC management as their primary focus. As a result, we restrict our analytic attention to the first four families.

The following sections describe these four major job families in greater detail, identify key competencies, and list representative job titles. Our analysis of BPC Management as a prospective job family may be found in Appendix F. On a conceptual level, the Security Assistance Implementation Management, International Training Management, and Financial Management job families are all deeply intertwined, focused on some aspect of providing defense articles and services, including training, to partners and allies. What distinguishes them from one another is their day-to-day focus.

International Affairs

Most of the military workforce resides in SCOs and higher-echelon staffs at the CCMDs and departmental headquarters, supplemented by a growing civilian workforce. Originally, we had hypothesized that two separate job families might exist related to this area, one focused

on SCOs (relationship management) and one focused on CCMD, DoD, and service headquarters (strategy, policy, and integration). As the study progressed, it became apparent that service career development programs consider these to be on the same continuum, one we chose to name “international affairs.”

International affairs positions are responsible for developing, integrating, and implementing security cooperation strategy at the country, regional, and national levels. At the country level, SCOs help partners identify potential requirements, shape other security cooperation objectives, organize security cooperation activities of many different types under many different authorities to achieve those objectives, and oversee and coordinate the execution of these activities. In the future, SCOs will play an important role in assessment, monitoring, and evaluation of security cooperation activities. SCOs are assigned to CCMDs, whose responsibility it is to integrate country-level efforts into wider security cooperation strategies (DoD, 2012).³ Our analysis of SCWD data indicates that there are around 1,000 officers and enlisted personnel and just short of 500 civilians in this component of the workforce.

DoD components’ policies prescribe that security cooperation officer positions be filled with individuals in the services’ foreign area officer (FAO) specialties and civilian positions with individuals in the foreign affairs (OPM series 0130) and international relations (0131) series. There are generally more military positions to be filled than there are FAOs to fill them, however. The Army has grouped civilians in the foreign affairs and international relations series with others to form its Career Program 60 – Foreign Affairs and Strategic Planning, while the Air Force aggregates them into its International Affairs Career Program (U.S. Army, undated; U.S. Air Force, 2006). Officers and civilians in these specialties are not solely committed to security cooperation positions; many FAOs fill attaché positions as well (U.S. Army, 2014; U.S. Navy, 2015, 2016; Sarnoski, 2005). DSCA has defined certification requirements for individuals in these career fields and related occupations as part of its “International Affairs Certification Program” (DoD, 2012).

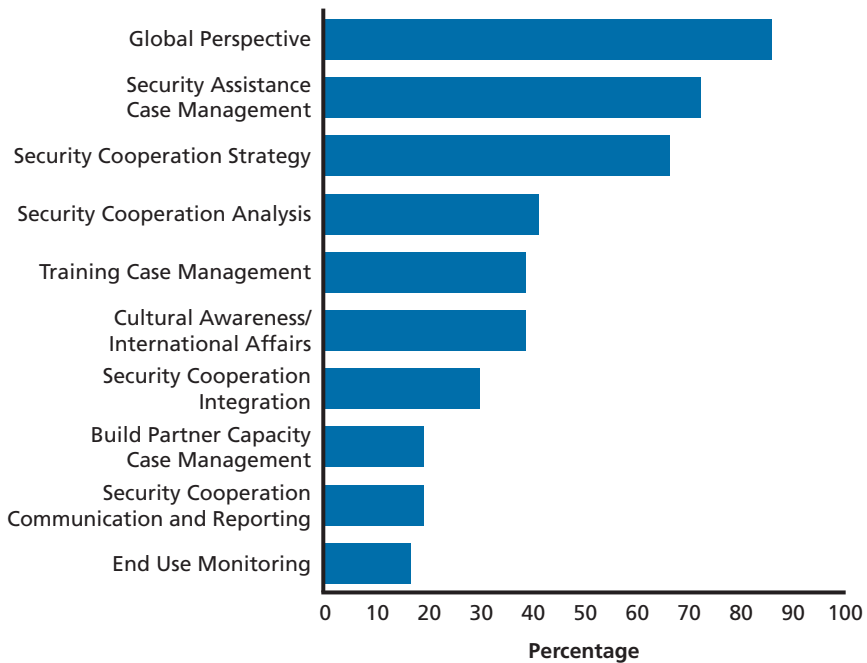
³ SCOs are also subject to the authority of the ambassador.

DoD and the services have already defined these job families, along with associated competencies and development patterns. While these occupations do not exclusively focus on security cooperation, security cooperation is a critical element of the different kinds of positions that members of these different occupations are expected to fill.

Key Competencies

Figure 4.2 depicts the relative prevalence of competencies within this potential job family. We measured prevalence in terms of the percentage of positions we coded as being part of this job family that included the listed competency. For example, 86 percent of the position descrip-

Figure 4.2
Prevalence of Top Ten Security Cooperation Competencies in the International Affairs Job Family



SOURCE: DSCA, 2016.

RAND RR1846-4.2

tions in our data set coded as part of this potential job family included some indication that the job required “global perspective.” Integration, broadly considered, is important, as indicated by the high prevalence of both global perspective and security cooperation strategy. Security assistance case management is fairly prevalent in this potential job family, as well.⁴

Representative Jobs

Jobs in this potential job family tend to be concentrated in SCOs and in CCMD headquarters, as shown in Table 4.1.

Security Assistance Implementation Management

This job family is primarily oriented on the transfer of defense articles to foreign partners, primarily under the aegis of the Foreign Assistance Act

Table 4.1
Representative Jobs in the International Affairs Job Family

Organization Type	Job Title
Security Cooperation Organization	Office of Defense Cooperation Program Manager Joint Exercises and Training Coordinator Special Advisor to the Senior Defense Official (SDO)/ Defense Attaché (DATT)
CCMD	Chief, Security Cooperation Programs Division Desk Officer International Program Manager Security Cooperation Policy Analyst Theater Security Cooperation Strategy Manager
Component Command	Chief, Security Cooperation Division Director, Security Cooperation International Military Affairs Operations Officer
Implementing Agency	Security Cooperation Specialist Chief, International Programs International Affairs Senior Specialist Security Assistance Policy Analyst
Service Headquarters	Security Cooperation Staff Officer Supervisory International Affairs Specialist

SOURCE: DSCA, 2016; U.S. Army, 2016.

⁴ SCOs are supported by the FMS Trust Fund.

but also under selected programs authorized by Title 10. Transfers authorized by Title 22 are known as FMS cases. The *case* is the fundamental vehicle for managing the provision of defense articles and services to a foreign partner in order to improve its capabilities. Loosely, it defines a partner's specific requirements for a particular capability; identifies the materiel, training, and other components that constitute a "total package" for providing the required capability; identifies the funding sources for providing that capability; and indicates who is primarily responsible for managing the case. The term *pseudo-case* refers to such transfers under Title 10. The case management framework applies predominantly to foreign military sales of materiel systems conducted under the aegis of Title 22 but also includes the provision of logistics and training services. The case management framework also applies to defense articles and services provided under the aegis of various authorities for building partners' capacity in Title 10 (DoD, 2012). Because our analysis indicates that BPC Management does not constitute a job family, jobs that focus on the transfer of defense articles under Title 10 authorities also are part of the Security Assistance Implementation Management job family. Even though training theoretically is provided either as an FMS case in and of itself or as part of a case, we have chosen to treat international training management as a separate career field because of the number of individuals whose near-exclusive focus is the provision of training to foreign partners. Some overlap remains in cases in which the provision of a particular course of instruction is the primary focus of the case.

Jobs in this family include those with responsibility for developing and implementing these security cooperation cases. According to our categorization of billets recorded in the FY 2015 SCWD, there are approximately 6,300 civilians and 110 military officers involved in case management activities.

Key Competencies

Figure 4.3 indicates the prevalence of the top ten security cooperation competencies associated with jobs in the Security Assistance Implementation Management job family. Security assistance case management is obviously the top competency and appears in all the position descriptions for jobs classified in this job family. Defense acquisition is

Figure 4.3
Prevalence of Top Ten Security Cooperation Competencies in the Security Assistance Implementation Management Job Family



SOURCE: DSCA, 2016.

RAND RR1846-4.3

also important, appearing in a little over half of all such jobs. Global perspective is also important, appearing in just over 40 percent of positions. The position descriptions frequently indicate a requirement for external collaboration, something confirmed in our interviews as well. Security cooperation analysis is an important but not predominant competency, its presence indicated in only about a third of jobs.

Representative Jobs

Table 4.2 indicates the representative jobs to be found in the potential Security Assistance Implementation Management job cluster, and the type of organizations in which such jobs are to be found. Most of these jobs are found in implementing agencies, such as AFSAC and USASAC.

Table 4.2
Representative Jobs in the Security Assistance Implementation
Management Job Family

Organization Type	Job Title
Implementing Agency	Acquisition Management Systems Specialist
	Supervisory International Program Management Specialist
	Logistics Management Specialist
	Supervisory International Program Management Specialist
	Country Program Assistant
	Country Program Manager
	Country Case Manager
	Contracting Specialist
	Deputy Director Regional Operations
	International Program Manager
	Foreign Military Sales Coordinator
	Case Manager
	Service Headquarters
International Affairs Specialist	
International Partnership Specialist	
Security Cooperation Organization	FMS Manager
	Military Equipment Specialist
	Security Assistance Program Manager
	Foreign Military Finance (FMF) Manager
CCMD	Division Chief
	Security Assistance Program Manager
	Security Assistance Analyst

SOURCE: DSCA, 2016; U.S. Army, 2016.

International Training Management

This job family is primarily focused on managing the actual provision of institutional training to students from foreign partners, whether under the aegis of Title 22 or of Title 10. Officials with jobs in the security assistance implementation management career field might prepare the case that produces the requirement for training foreign students. Officials in international training management focus on tasks like assessing U.S. service schools' capacity to absorb foreign students, identifying specific training opportunities, and providing support and oversight for foreign students in U.S. service schools for training.

Training is one of the more important defense services provided under the aegis of Title 22. Many security assistance cases are in fact training cases. Training is also provided under several different Title 10 authorities, as well. Several service organizations, such as SATFA of the Army's Training and Doctrine Command (TRADOC), the Army Materiel Command's SATMO, AFSAT, and NETSAFA exist to provide training to students from partner nations, regardless of the authority under which such training is provided (U.S. Army, undated-a; U.S. Army, undated-b; U.S. Air Force, 2014; U.S. Navy, 2015). Security cooperation training management activities can also include large-scale operations like the U.S. Military Training Mission to Saudi Arabia. Regardless of the authority under which training is provided, training case management is a job field oriented on providing specific skills and capabilities to partner security forces, either in U.S. service schools or as part of a program conducted in partner nations. Providing this training involves identifying training requirements, identifying partner nations' candidates, helping with students' administrative processing so that either they can come to the United States or U.S. trainers can travel to partner nations, and facilitating students' attendance at training. The SCWD indicates that there were 522 civilians and 700 military service members—including enlisted soldiers—engaged in some form of training management during FY 2015.

Key Competencies

Figure 4.4 indicates the key competencies in this potential job family. Not surprisingly, the most common competency in the jobs coded as

Figure 4.4
Prevalence of Top Ten Security Cooperation Competencies in the International Training Management Job Family



SOURCE: DSCA, 2016.

RAND RR1846-4.4

being part of the International Training Management job family is International Training (Case) Management. Global Perspective is the second most common competency, appearing in almost 60 percent of position descriptions. BPC Case Management is also fairly common; many of the jobs in the data set combine both Title 22 and Title 10 cases under the management of training. For example, a “Security Cooperation Program Management Specialist” at U.S. Africa Command is responsible for serving “as a team leader engaged in providing the full range [IMET] program and Combating Terrorism Fellowship Program” (U.S. Army, 2016). Note that the Combating Terrorism Fellowship Program is a Title 10 authority falling under the general rubric of BPC.

Representative Jobs

Training management positions are found at all command echelons, including SCOs, CCMD and component command headquarters, and implementing headquarters. International Military Student Officers constitute at least a plurality of the workforce. They are responsible for maintaining oversight of partner nation students attending training at U.S. schools. Table 4.3 lists representative job titles in the potential security cooperation training management job family.

Financial Management

Considering the complexity of funding security cooperation activities, which draw on a variety of U.S. and partner nation sources, it is no surprise that financial management is one of the larger career fields in the security cooperation workforce. According to the SCWD, there were 874 positions that could fall into this job family, of which 31 were military and the remainder civilian. At the most basic level, financial man-

Table 4.3
Representative Jobs in the Security Cooperation Training Management Job Family

Organization Type	Job Title
Security Cooperation Organization	IMET Program Manager Combined Training and Education Program Manager Foreign Military Sales Training Manager Military Training Programs Assistant
CCMD	International Military Education and Training Program Manager Security Cooperation Program Analyst
Component Command	Security Assistance Training Program Staff Officer
Implementing Activity	Training Requirements Analyst Country Program Manager/Foreign Affairs Analyst International Military Student Analyst International Military Student Officer Assistant Information Program Coordinator International Military Student Officer International Affairs Program Analyst International Military Student Analyst

SOURCES: DSCA, 2016; U.S. Army, 2016.

agers in the security cooperation workforce do much the same thing as financial managers supporting any other DoD activity. They help identify requirements for funding from various sources, authorize and track obligations and disbursements, and otherwise account for the use of funds from various sources. Like all other funding sources, there are various constraints on the use of funds of which financial managers must be aware.

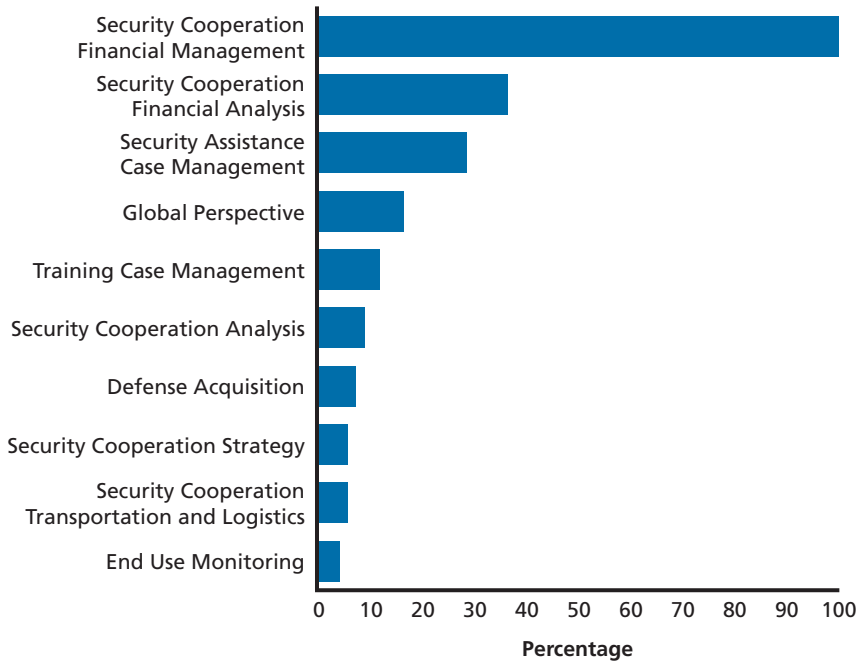
At DSCA, however, country financial directors play a key role in the development and structure of FMS cases. They have a fiduciary responsibility to the partner nation, meaning that payments are scheduled for maximum efficiency. For instance, because customers frequently borrow to finance acquisition, country financial directors are responsible for ensuring that the payment schedule pays only for work that the U.S. government and private contractors can actually achieve on that schedule. DSCA country financial directors must also understand partners' statutory and regulatory requirements for the obligation and disbursal of funds (DSCA Financial Management Officials, 2016). DSCA financial directors also play a role in structuring of BPC cases and are closely involved in the tracking and allocation of funds through a pseudo-FMS process.

Key Competencies

Figure 4.5 depicts the top ten competencies associated with financial management. Following the pattern established, the key competency for the potential Financial Management job family is financial management. That competency, which focuses on the actual management of allocated funds, includes the following elements, synthesized from various sources:

- manage security cooperation funds according to fiduciary responsibilities either to partner nations or, in the case of initiatives to build partners' capacity executed under Title 10, to the United States
- understand U.S. and partner laws, rules, and regulations governing the handling of funds

Figure 4.5
Prevalence of Top Ten Security Cooperation Competencies in the Financial Management Job Family



SOURCE: DSCA, 2016.

RAND RR1846-4.5

- conduct reviews and implement financial management controls to ensure proper acquisition and timely distribution of security cooperation funds
- maintain records, accounts for funds, and reports in accordance with rules and regulations governing cases, pseudo-cases, and other relevant activities as appropriate
- understand and comply with appropriate federal processes for financial management.

Only a few jobs had responsibilities for financial analysis. Not surprisingly, there is also a minor focus on security assistance case management.

Representative Jobs

For the most part, positions associated with this potential job family are concerned with the management of funds allocated to the activity to which the position is authorized. Table 4.4 lists potential job titles associated with this potential job family.

Balancing Imperatives: Breadth and Depth

The preceding discussion of job families tends to emphasize the development of functional expertise. Functional expertise is certainly important for the efficient functioning of the different organizations making up the security cooperation community. As noted in Chapter Two, however, the security cooperation community's complexity places an implicit premium on key managers' ability to collaborate effectively across organizational and even national boundaries.

Requirements definition provides a good example of this imperative for integration and collaboration. In the course of our investigation, several stakeholders—some of them fairly senior—traced delays

Table 4.4
Representative Jobs in the Financial Management Training Job Family

Organization Type	Job Title
Security Cooperation Organization	Budget Analyst Budget Officer
CCMD	Management and Program Analyst Financial Program Analyst Financial Program Manager
DSCA	Country Financial Director
Implementing Agency	Budget Analyst FMS Specialist Financial Management Analyst Cost Analyst FMS Budget Analyst Business Manager
Service Headquarters	Budget Analyst

SOURCES: DSCA, 2016; U.S. Army, 2016.

in delivery and other performance shortfalls to inadequately defined requirements. Briefly summarized, the argument they made is that those developing security cooperation cases—formally embodied in a letter of offer and acceptance—would frequently define requirements that the acquisition community had difficulty meeting, either because the requirements were not defined in sufficient detail or because the requirements as defined exceeded the acquisition system’s ability to meet them under the specified schedule and resource constraints. It was not completely clear whether the problem with requirements stemmed from a lack of expertise at the level of SCOs and those responsible for writing cases, or from the inherent difficulty of providing important operational capabilities under time and resource constraints. In any case, it is the sort of problem that could result if managers of one part of the process lacked familiarity with the requirements of another part of the process for which they were not directly responsible.

This problem occurs in industry as well, in large corporations with highly autonomous operating units. The concept of the “t-shaped” professional has emerged to deal with this issue. T-shaped professionals have functional expertise within their business unit, but also have some competence and potentially experience in other disciplines, combined with the ability to communicate and work across organizational boundaries. Organizations like BP-Amoco and IBM, which must combine the efforts of diverse business units in order to achieve organizational outcomes and create value for clients, have invested in this concept (Hansen and Oetinger, 2001; Barile and Saviano, 2013).

DSCA has addressed the need for integration with an organizational solution, the Integrated Regional Teams (IRTs). IRTs combine expertise from several different disciplines, including security assistance, building partnership capacity, and finance, in order to facilitate the development and management of complex security cooperation cases. IRTs seek to ensure that security assistance cases are integrated with the range of other DoD security cooperation activities in order to achieve U.S. objectives in a given region. IRTs have a team lead and a team advisor at the O-6 and GS-15 level (DoD, 2015). Advisors in particular are to have expertise in the full range of security cooperation activities. The ones with whom we spoke had an extensive background

in security cooperation, usually touching on at least two of the job families described previously.

There is obviously a need to develop and sustain expertise within the job families that the security cooperation community eventually adopts. There is also a requirement to ensure that managers and the organizations they lead can operate effectively across organizational and conceptual boundaries.

Refining Job Families Through Job Classification Analyses

The study team's preliminary analysis suggests that job families for security cooperation are discernable and could be further refined as more and better data become available. Depending on the quality and quantity of data collected, it might be possible to use descriptive and inferential techniques to determine job families that are meaningful to the security cooperation community. Both approaches will require careful review and input from senior leaders. Because cluster analyses often provide multiple solutions, such as the number and type of jobs within each job family, senior leaders would need to review potential job classifications to identify the most appropriate solutions for the security cooperation community.

After finalizing the job classification structure, efforts to create or update career development programs can be initiated. A well-designed job classification structure based on competencies should provide the information necessary to develop potential employees for future assignments. Furthermore, the classification system could also be used to support other human resource systems, including the development of hiring criteria, promotion criteria, and training and development.

Conclusion

This analysis identified four potential job families within the larger security cooperation workforce: international affairs, security assistance implementation management, international training manage-

ment, and financial management. Others may exist, such as particularly BPC management, though the data available to us indicated that relatively few people had an exclusive or even a primary focus in this particular area. Furthermore, many jobs subsume BPC responsibilities within the larger context of training management and, to a lesser extent, security assistance implementation management. Therefore, we believe that the security cooperation community would benefit most from pursuing the four job families highlighted in this analysis.

Taking into consideration the limitations of the data described previously, no statistical tests were conducted to determine whether these job families were significantly different from each other. Therefore, these tentative job families should be interpreted as a first step for further review, analysis, and discussion. Further analysis may reveal other classification structures for grouping jobs that are more meaningful and beneficial for information career development programs. Moreover, data about positions, competencies, and their prevalence across the workforce were insufficient for cluster analysis to identify meaningful job groupings, which would have allowed the research team to identify job families with confidence.

While identifying job families is an important element of workforce management, the security cooperation enterprise is very complex and creates demands that senior managers have an understanding of the enterprise that extends beyond the competencies required for a single job family. Effective managers, especially at senior levels, need to understand not only the responsibilities and functioning of their own organization, but also something of the functions of other organizations with which they must collaborate.

Assessing Potential Requirements for Professional Experience

The previous chapter identified potential job families within the broader security cooperation workforce. Job families group functionally similar jobs and thereby simplify management of the workforce. In order to develop career models, it is also necessary to specify the level of experience incumbents should have at various levels within the workforce. This study could not, however, determine the level of experience that was appropriate for certification at various levels of responsibility. Making that determination would have required extensive data on individuals' performance, their previous security cooperation experience, and other potentially relevant experience and other characteristics. The necessary data to support such an analysis were not available. Instead, the study aimed to assess the amount of experience that might be obtained at various levels of responsibility, given the current structure of the workforce.

Research Method: The Security Cooperation Workforce Simulation

To assess the level of security cooperation experience that it might be feasible to require of members of the security cooperation workforce at various levels of responsibility in their careers, the research team developed the Security Cooperation Workforce Simulation (SCWS). SCWS models the flow of incumbents through the various stages of the workforce over a 50-year period, the duration being sufficiently

long to allow the system to achieve equilibrium.¹ Given inputs about the structure and dynamics of the workforce—e.g., incumbents’ propensity to leave the workforce for various reasons at different points in time—SCWS analyzes the impact of various policy requirements on the amount of experience required to advance from one level to the next on average security cooperation experience levels and on the number of vacancies that must be filled from outside the workforce. In effect, this analysis determines whether the workforce structure—its size and distribution by level—will support the requirement in question. We summarize here. Appendix G describes SCWS and the analysis it produced in greater length.

In general, we modeled the workforce based on the characteristics observed as part of the analysis described in Chapter Two. Relevant characteristics included dynamics like the probability that a worker would advance in grade at any point in his or her career, his or her likelihood of leaving the security cooperation workforce, and other factors that described the dynamics of movement throughout the security cooperation workforce.

The key input is the workforce’s structure. We assumed that the workforce was more or less the same size as that indicated by the FY 2015 SCWD extract and distributed in the same proportions as that observed in the DCPDS data and work experience files. To simplify description of the workforce, the research team broke the workforce down into three groups—entry-level, mid-level, and senior—as shown in Table 5.1. The grades that matched these three categories were based on discussions with the sponsor. Note that the middle group for civilians is much larger than either the entry-level or senior group.

For both the military and civilian workforces, we considered whether it was feasible to require either two or three years of security cooperation experience to move from entry-level positions to mid-

¹ Any length of time can be chosen as long as enough time is provided for the system to reach equilibrium. The research team selected 50 years because this allowed the system enough time at the outset to stabilize and provided a sufficient duration of time for those individuals who may remain in the workforce for an extended period of time. That is, we allow for a stabilization period and essentially cover an entire “career period” of 30 to 40 years.

Table 5.1
Security Cooperation Workforce, by Level of Responsibility

Type	Grade Range	Rank Name	Number of Jobs	Percentage of Military/Civilian Workforce
Civilian	GS 07–11	Entry-level	1,736	20.9
Civilian	GS 12–13	Mid-level	5,264	63.3
Civilian	GS 14–15	Senior	1,312	15.8
Military	O-1–O-4		1,055	53.1
Military	O-5		643	32.3
Military	O-6		291	14.7

SOURCE: DSCA, 2016; DCPDS, 2000–2016.

level positions, and also whether it was feasible to require three, six, or nine years of experience to advance from mid-level to senior positions. Tables 5.2 and 5.3 depict the summary results of this analysis.

We should note that our simulation simplifies the civilian personnel system's workings. Instead of being promoted to fill vacancies, as is the case with the military personnel management system, civil service employees apply to fill vacancies in billets for which they meet the minimum requirements. Typically, experiential requirements do not exceed one year of relevant experience at the next lower grade. Other technical experience might also be required in some cases. That having been acknowledged, the acquisition career fields can and do require varying levels of acquisition experience, as will be shown later in the chapter.

Civilian Results

Table 5.2 shows the results for civilian members of the security cooperation workforce. The entries in the first two columns of the table describe the potential requirements for experience being modeled, while the entries in the remaining columns indicate the results of that policy decision. For example, the first row depicts the results of an analysis in which two years of security cooperation experience were required to advance from entry-level to mid-level, and no further secu-

Table 5.2
Average Steady-State Civilian Workforce Security Cooperation Experience Levels and Vacancies Under Alternative Experiential Prerequisites

Security Cooperation Exp. to Advance to Mid-Grade	Security Cooperation Exp. to Advance to Senior	Avg. Security Cooperation YOS (Entry Level)	Avg. Security Cooperation YOS (Mid-Level)	Mid-Level Vacancies	Avg. Security Cooperation YOS (Senior)	Senior-Level Vacancies
2	0	1.7	7.0	0	12.9	0
3	0	2.2	6.4	2,475	13.1	0
0	3	2.0	7.0	0	13.0	0
0	6	2.0	6.7	0	14.3	0
0	9	2.0	6.4	0	16.3	0
2	3	1.7	7.1	0	12.7	0
2	6	1.7	6.7	0	14.5	0
2	9	1.7	6.5	0	16.3	0

NOTE: YOS = years of service.

rity cooperation experience was required to advance from mid-level to senior. The resulting average years of security cooperation experience—once the simulation had reached steady state—was 1.7 years for individuals in entry-level positions, seven years for those in mid-level positions, and 12.9 for those in senior level positions. This policy resulted in no vacancies at either the mid or senior level. In contrast, requiring three years of security cooperation experience to move from entry- to mid-level resulted in 2,475 mid-level vacancies—though no senior-level vacancies—once the model reached steady state.

This analysis indicates that requiring two years of experience in entry-level positions is feasible, but requiring three years is not. That is because mid-level employees leave the workforce at a faster rate than the significantly fewer entry-level positions can produce replacements, at least if individuals must accrue three years in a position before advancing into the middle grades. On the other hand, requiring three, six, or nine years of experience in security cooperation to advance to

senior-level positions appears to be feasible and creates no vacancies at the senior level.

By way of comparison, our analysis indicated that the average levels of experience acquired by civilian members of the security cooperation workforce were just under six years for entry-level, just under seven for mid-level, and just under eight years for senior-level employees. There was considerable variation in terms of experience in these different groups, with many members of the workforce having one year or less of security cooperation experience, even at senior levels.

Military Results

According to our simulation, which does not fully account for the practical realities of promotion and transfers in the armed services, it is technically feasible to require that officers acquire up to two years of security cooperation experience before advancing to an O-5 security cooperation position, as Table 5.3 indicates. In practical terms, that may not be feasible because the nominal length of a military tour is three years. There is considerable variation in practice, however, with many assignments being shorter. The analysis thus suggests that it might be possible to fill a significant number of key O-5 billets with officers who had served previously in a security cooperation billet. That is, if only 57 to 78 positions must be filled from external sources if a three-year requirement is imposed, then that means several hundred positions can be filled by those with three years of prior security cooperation experience as an O-4. Imposing this requirement could still have a substantial impact on military career management, however. For example, the Air Force and the Army identify FAOs at the mid-career point (nominally ten years of service, typically coinciding with selection to major). Promotion to O-5 normally occurs at the 16-year point, meaning that a typical officer will have a window of about five or six years to gain the two or three years' of experience that might be required. This is also the time frame in which many officers will be selected to attend their service's staff college, or position themselves for a command tour. Requiring that officers for most O-5 security cooperation billets have three years of prior security cooperation experience would foreclose opportunities, like command billets, that the

Table 5.3
Average Steady-State Military Workforce Security Cooperation Experience Levels and Vacancies Under Alternative Experiential Prerequisites

Security Cooperation Exp. to Advance to Mid-Grade	Security Cooperation Exp. to Advance to Senior	Avg. Security Cooperation YOS (Entry-Level)	Avg. Security Cooperation YOS (Mid-Level)	Mid-Level Vacancies	Avg. Security Cooperation YOS (Senior)	Senior-Level Vacancies
2	0	2.2	4.4	0	8.1	0
3	0	2.1	4.9	216	8.1	0
0	3	2.3	4.1	0	7.6	0
0	6	2.4	3.9	0	9.5	78
2	3	2.2	4.6	0	8.1	0
2	6	2.2	4.2	0	9.4	57

most promising officers would seek. Thus, if DoD were to require three years of prior security cooperation experience to fill most O-5 security cooperation billets, it might be necessary to waive that requirement frequently to attract the most promising field grade officers to serve in those billets. In any case, it is technically infeasible to require three years of prior security cooperation experience to fill every O-5 security cooperation billet. It is feasible to require three years of prior security cooperation experience to fill an O-6 billet in the security cooperation workforce. Requiring six years of prior security cooperation experience would be infeasible in this case, however.

The results are basically consistent with our analysis of the current population described in Chapter Two. Currently, O-4s average just over 1.5 years of experience in security cooperation, with O-5s approaching 2.5 average years of experience and O-6s approaching an average of three years of security cooperation experience. There is considerable variation behind these averages, though, and in all three cases most incumbents have two years or less of security cooperation experience, indicating that these incumbents are probably in their first security cooperation assignment. About 46 percent of O-6s have three or more years of security cooperation experience, however, and some have

far more. The simulation confirms that it will be difficult to improve upon these results for O-4s and O-5s, but that there are probably enough O-4 and O-5 security cooperation billets to allow DoD to require O-6s to have a prior assignment in the field.

What this analysis cannot tell us is whether the gains of requiring certain levels of security cooperation experience outweigh the costs. As indicated by the analysis in Chapter Two, the military workforce brings a breadth of experience across the DoD's major functions to the security cooperation workforce. Establishing prerequisites for security cooperation experience would reduce experience with regard to some other key DoD functions. That does not mean such requirements should not be established, but simply that DoD leaders will have to balance the trade-offs. As noted, requiring a substantial amount of experience may deter promising officers from seeking assignments in the security cooperation workforce.

Acquisition Certification Requirements: A Point of Comparison

Our data do not permit us to determine how much security cooperation experience *should* be required for certification at various levels. Making that determination would have required the collection of performance data on a representative sample of the security cooperation workforce to be correlated with a reasonably comprehensive and diverse set of individual characteristics describing that sample. Such data were unavailable, though interviews indicated that prior experience contributed substantially to effective performance at higher levels of responsibility.

In the absence of such analysis, certification requirements for the acquisition workforce provide a point of comparison and may inform the development of certification requirements for the security cooperation workforce. Table 5.4 depicts the results of this analysis, showing the experience required for certification in the acquisition workforce. Experience is not the only requirement for certification; there are also educational and training requirements. Each job in the acquisition workforce is associated with a certification level. While certification levels are associated with particular jobs and the associated duties and responsibilities, they generally follow the grade ranges shown in

Table 5.4 (U.S. Army, undated-a). These grade patterns do not match precisely with those believed to exist in the security cooperation workforce but follow the same pattern of increasing responsibility and proficiency over time.

Employees need not be certified to be hired for a particular job, but they must meet the certification requirements within two years of being hired in order to keep their jobs. For example, if an employee is hired as a GS-11 in a position requiring Level 2 certification, he or she must acquire two years of acquisition experience in his field, along with completing education and training associated with that level, in order to attain certification and keep the job (Defense Acquisition University, undated). We should note here that certification requirements apply equally to military and civilian members of the acquisition workforce. Implicitly, the only certification levels that require prior experience are the ones requiring more than two years' experience, e.g., Level 2 certifications for the Business-Cost Estimating career field.

If the template described by Table 5.4 were to be applied to the three-level framework we have used for modeling the security cooperation workforce, it would imply that only jobs at senior levels, GS-14 and GS-15, would require somewhere between one and five years of prior security cooperation experience.

Conclusions

This chapter assessed the feasibility of requiring different levels of experience for certification at different levels of responsibility within the security cooperation workforce. The answers differ for the military and civilian portions of the workforce. Other criteria for education, training, and related experiences—e.g., overseas assignments—can remain in effect. With regard to the civilian workforce, our simulation indicates that up to two years of security cooperation experience can be required for advancement from entry-level positions (GS-07 through GS-11) to mid-level (GS-12 and GS-13), and at least nine years of security cooperation experience can be required for advancement from mid-level to senior-level (GS-14 and GS-15) positions.

Table 5.4
Years of Experience Required for Certification in Different Acquisition Career Fields

Career Field	Levels		
	1 (GS 5–8)	2 (GS 9–12)	3 (GS 13–15)
Auditing	1	2	3
Business-Cost Estimating	2	4	7
Business-Financial Management	2	4	6
Contracting	1	2	4
Engineering	1	2	4
Facilities Engineering	1	2	4
Industrial/ Contract Property Management	1	2	4
Information Technology	1	2	4
Life Cycle Logistics	1	2	4
Production Quality and Manufacturing	1	2	4
Program Management	1	2	4
Purchasing	1	2	—
Science and Technology Management	1	2	4

SOURCE: Defense Acquisition University, undated.

For the military workforce, DoD could require that many, perhaps even a majority, of O-5 security cooperation positions be filled by individuals with prior security cooperation experience. It could not, however, require that officers with prior security cooperation experience fill *all* O-5 positions. It could also require that all O-6 security

cooperation positions be filled with officers who have up to three years of prior security cooperation experience. The research team could not determine whether it would be wise to do so. As a rough comparison, the acquisition workforce as a whole tends to require between one and five years of prior experience for such transitions; most acquisition career fields, however, require only two. We have no empirical basis for determining how much experience in the middle grades is actually appropriate for advancement into the senior grades. Senior managers can then use their professional judgment to select the option they believe to be most appropriate for promotion.

A Way Ahead for Security Cooperation Workforce Development

The analyses in the previous chapters offer preliminary insights into the characteristics of the security cooperation workforce and its potential to support requirements for experience. The civilian workforce appears to have relatively deep reservoirs of security cooperation experience, though individuals' levels of experience may vary greatly. Modeling indicates that it is possible to increase the general level of security cooperation experience throughout the workforce, though for the military workforce doing so could reduce incumbents' level of expertise with regard to other important DoD functions.

The workforce can be broken down into job families that share a common core of five competencies: security cooperation strategy, security cooperation analysis, cultural awareness/international affairs, security assistance case management, and global perspective. To the extent that future competency models continue to reflect the importance and prevalence of these competencies, they should continue to form the core education, training and development efforts for the security cooperation workforce.

Given the imperfect data available from which to conduct this analysis, the research team recommends caution in designing and implementing change in the workforce based on our results. Stated differently, stakeholders do not know enough about the workforce to plan and implement bold, substantial changes. Instead, an evolutionary approach is warranted. Our findings should be viewed as a starting point for further investigation. Thus, we focus, in our recommendations, on the need for improved data about the workforce and the competencies its mem-

bers require to function effectively. While improved data should facilitate the accurate identification of job families, workforce managers should facilitate broadening opportunities—jobs in other security cooperation career fields—within the overall field of security cooperation in order to improve collaboration within the community. Moreover, workforce managers need to ensure there are enough lower-level positions within the workforce to produce incumbents with the experience desired in higher-level positions, allowing for attrition and other factors.

Review of Major Findings

Before outlining the study's principal recommendations, it will be useful to review the major findings upon which those recommendations rest. Overall, we find that the security cooperation community is complex and far-reaching, with the potential to involve almost every part of DoD at some point or another. Our major findings are as follows:

- **The security cooperation community is complex.** Any particular security cooperation activity requires the collaboration of several different actors, few of whom report to the same authority. The complexity of this context implies a need for managers who understand the enterprise and can collaborate effectively across organizational boundaries.
- **Available data on the security cooperation workforce are inadequate.** In order to establish and adapt policy for the security cooperation workforce, policymakers need to understand the current state of the workforce. In particular, they need to know the security cooperation competencies required for different security cooperation jobs, and the ability of the workforce to provide workers with those desired competencies. Such data are currently unavailable. Existing databases lack critical data and/or cover only a portion of the workforce. The data available to decisionmakers is currently not of sufficient quality or quantity to inform security cooperation workforce management decisions.

- **Security cooperation experience levels in the workforce vary substantially.** Given the aforementioned shortcomings with regard to data, it appears that the military and civilian components of the workforce differ significantly with regard to their levels of security cooperation and other relevant experience. In general, the civilian component of the security cooperation workforce tends to have greater security cooperation experience but lacks breadth with regard to the different job families within the security cooperation community, and with regard to the larger functions of the DoD enterprise. In contrast, the military component tends to have breadth of experience across the DoD enterprise but to lack depth with regard to security cooperation and breadth across the security cooperation job families.
- **Five competencies are prevalent in the security cooperation workforce.** The research team identified 21 security cooperation competencies that can be used to define work in the security cooperation workforce in combination with more general competencies applicable to DoD (see Appendix B). The five most prevalent were security cooperation strategy, security cooperation analysis, cultural awareness/international affairs, security assistance case management—primarily focused on the transfer of defense articles under both Titles 10 and 22—and global perspective. These competencies form the foundation for the different security cooperation workforce job families.
- **At least four job families may exist within the security cooperation workforce:** international affairs, security assistance implementation management, international training management, and financial management. Job families provide a useful basis for developing competencies to perform a particular function. However, given the complexity of the security cooperation community, senior managers require not only some depth of expertise in their own domain but also some exposure to other domains or job families with which they must collaborate.
- **Civilian members of the security cooperation workforce can probably acquire up to nine years of security cooperation experience before acceding to senior (GS-14–GS-15) positions.** Our

modeling suggests it is possible to require up to two years of security cooperation experience to advance from entry-level to mid-level assignments, and at least nine years of security cooperation experience for advancement from mid-level to senior. For the military workforce, DoD could require that many, but not all, O-5 positions be filled by individuals with prior security cooperation experience, and it would be feasible to require three years of prior security cooperation experience to fill an O-6 security cooperation position.

Recommendations

The most important of these findings is that the data describing the security cooperation workforce are incomplete and—in the case of the SCWD—of uncertain reliability. If these data may be said to constitute a map for policymaking, then that map is, at best, indistinct. Consequently, findings derived from those data should be considered preliminary, although they are generally consistent with what we learned through interviews and other interactions with stakeholders in the security cooperation community.

Therefore, we urge that the security cooperation community proceed cautiously with regard to establishing policy for the security cooperation workforce. Policymakers should focus on those initiatives that do not require high-quality data and analysis to succeed, or are unlikely to have substantial consequences if they go awry. For example, improving the quality and quantity of management information is likely to be useful under any circumstances. So, too, will continuing to rest training and education on the foundations comprising the five core competencies identified. On the other hand, establishing several highly differentiated career fields with strict certification requirements on the basis of imperfect information risks getting them wrong. It might be better to start by establishing a few broad career fields initially, and break them down later as better data become available.

Improve Quality and Quantity of Data Describing the Security Cooperation Workforce

Probably the single most important initiative to improve management of the security cooperation workforce would be to improve the quality of data available to policymakers. As observed, current data sources do not contain the information necessary to manage the security cooperation workforce effectively, and especially to develop career models for the workforce. In general, effective workforce management requires information about workforce size, composition, and competencies (Vernez et al., 2007). Developing career models requires further information about general patterns of education, training, and experience associated with different positions in the security cooperation workforce. The key data shortfall concerns the competencies—or even information from which competencies might be inferred—associated with security cooperation positions. In the short term, the best way to obtain such information is through a survey of the potential workforce. Over the longer term, DoD can modify its data collection and databases to acquire the information necessary to manage the security cooperation workforce.

Currently, none of the databases available to DSCA—the SCWD, DCPDS, or service personnel databases—provides all of that information. None of them provides information on competencies, or even information—such as position descriptions—from which competencies might be inferred through analysis. The SCWD—DSCA’s primary database for managing the workforce—currently provides rudimentary information about size and composition. Organizations within the stakeholder community are supposed to identify positions whose primary focus is security cooperation, the level and type of security cooperation training required to carry out those functions, and the level and type of security cooperation training that incumbents have completed. As noted, both the users and providers of the data doubt its reliability, noting that providers have little incentive to maintain the data accurately. DCPDS cannot be used to validate SCWD data because of the large number of security cooperation positions—often contained in separate offices, directorates, or divisions—that are embedded in larger organizations. It is, in fact, difficult to reconcile SCWD data with other databases because the SCWD does not iden-

tify organizations by UIC, DoD's primary means of identifying organizations' various databases. SCWD's training materials provide limited information about security cooperation competencies. To a limited extent, the SCWD thus provides some information about the security cooperation competencies associated with a particular position, at least as those competencies might be inferred from the required security cooperation training. It does not provide other data that can indicate other competencies or the level of proficiency required, such as occupation and grade. Data from the SCWD could be merged with data from DCPDS and service personnel databases to provide the missing information about positions' grade and occupation. The resulting, merged database would still lack information about workforce competencies, however. Moreover, it would not provide any means of tracing incumbents' developmental paths in order to discern patterns.

In the short term, the most effective approach to gathering the required data would be to conduct a survey. DSCA could survey the workforce in all organizations with a security cooperation focus. Besides collecting standard demographic information, like grade, occupation, time in this job and time in the federal workforce, such a survey would ask respondents to identify the competencies associated with their job using a refined competency model (see the next recommendation, "Refine Security Cooperation Competency Framework in Collaboration with Stakeholders") and assess those competencies' importance to their job. Respondents should also be asked to assess how important the competencies associated with their occupation are to the performance of the job at hand. Respondents would also be asked to detail their career history and assess each previous job or educational assignment's importance in preparing them for their current security cooperation position.

Over the longer term, there are additional measures that DoD could take to ensure redundancy in its security cooperation workforce management information. First, it could expand the SCWD by including data fields for UIC, grade, occupation, and the position description. The position description is particularly important. Analysts can abstract information about competencies from that field with increasing accuracy as position descriptions begin to reflect the refined com-

petency framework. Second, DoD could require that all security cooperation workforce positions be coded in DCPDS and service personnel databases, just as it does for acquisition positions (AT&L Workforce Management Group, 2006). That would at least provide a way of validating the workforce's size and composition as reported to the SCWD. Third, DoD could direct organizations to designate entities that are primarily focused on security cooperation with either a separate UIC or derivative UIC, which would allow analysts to use DCPDS and service personnel databases to assess the amount of security cooperation experience individuals at various levels accrue over time.

The foregoing suggestions outline possible approaches to the problem of improving management information about the security cooperation workforce. Modifying existing databases of record or creating new ones is a complicated undertaking. Improving data on the security cooperation workforce will require changes not only to DoD's capabilities and policies, but also those of the several DoD components. Determining the specific approach to be used to improve the quality and quantity of data describing the security cooperation workforce is worthy of separate study in and of itself.

Refine Security Cooperation Competency Framework in Collaboration With Stakeholders

This study provides a point of departure for defining and managing careers within the broader security cooperation workforce. It focused on identifying competencies currently practiced within the workforce and identifying job families based on logical relationships. In order to improve workforce management, stakeholders will need to refine and improve the competency framework described in this report, implementing the best practices described in Chapters Three and Four. The framework described in those two chapters highlights the type of data to collect and includes guidelines for collecting and analyzing that data. The primary steps include

- identifying the strategic objectives of the security cooperation enterprise and its subordinate organizations

- further developing competencies to ensure sufficient specificity and proficiency levels are defined
- collecting additional data about each competency; this step generally requires conducting a survey of the workforce to identify the relative importance of each competency for performing their job duties
- conducting job classification analyses to improve definition of job families.

If Necessary, Focus Efforts to Develop Career Fields on Security Assistance Implementation Management, International Training Management, and Financial Management

Ideally, workforce development decisions could be deferred until more data is available. Better data would provide a firmer analytic basis for defining job families and identifying potential developmental options. However, the security cooperation community is under pressure to act—as indicated by the 2017 National Defense Authorization Act’s guidance on improving DoD’s security cooperation workforce—and stakeholders can rely on their own pooled professional experience as the basis on which to make decisions about the future of the workforce.

Given these exogenous circumstances, we recommend that efforts focus on refining security assistance implementation management, international training management, and financial management job families. Such refinement could take the form of developing a more comprehensive list of jobs associated with these job families, aligning competencies from a revised and improved competency model with these career models, and defining the kinds and amount of experience that incumbents should acquire at ascending levels of responsibility. These areas are broadly consistent with major areas of instruction at DISCS, which in turn reflect major practice areas for the workforce that have been refined over time. We cannot be certain that these are the only “right” job families, but it seems unlikely that they are wrong. To the extent that further refinement may be required, it will probably result in further decomposition of these job families. For example, as better data become available, it may emerge that there are enough posi-

tions focused on BPC case management for that group to constitute its own job family.

Although the international affairs job family is important in the security cooperation workforce, it is already a very mature job family. Many different DoD agencies have put considerable effort into defining this job family and developing career models for it. Thus, while security cooperation workforce managers should monitor developments within this job family closely, they can focus their efforts elsewhere.

Allow Opportunities for Broadening

Job families or career fields are typically used to facilitate the development of functional expertise within a particular domain. As we have observed, however, senior managers in the security cooperation workforce require a broader range of competencies to enable the integrated functioning of security cooperation processes in the absence of centralized authority. In junior and mid-level jobs, incumbents require proficiency mostly within their own career field. As individuals rise in their level of responsibility, the need for competencies in—or at least understanding of—other job families increases. To this end, security cooperation career development models should accord credit for experience in other security cooperation job families.

Impose at Most Limited Requirements for Prior Security Cooperation Experience as Prerequisites for Advancement in the Security Cooperation Workforce

Our modeling indicates that it is feasible to require limited amounts of prior experience for advancement from one tier to the next within the security cooperation workforce, with one major exception. It would not be feasible to require three years of experience in security cooperation as a prerequisite for filling an O-5 billet. Determining that such a requirement would be feasible is not the same thing as recommending that it be implemented. The study did not, and could not, determine how much—if any—prior experience was required to serve effectively in any particular capacity. For now, that decision must rest on the professional judgment of leaders in the security cooperation community. If those leaders decide to require prior security cooperation experience,

the research team recommends that they do so cautiously. On the civilian side, no more than two years of experience should be required to advance from entry-level positions (GS-7 through GS-11) to mid-level (GS-12 and GS-13), and no more than three years of experience at mid-level positions should be required for advancement to senior positions (GS-14 and GS-15). While this is considerably less than is feasible—our analysis indicated that it would be possible to require as much as nine years of security cooperation experience as a prerequisite for advancement to senior grades—at least with regard to senior positions, it is probably worth assessing the impact of such a requirement before adding to it.

For the military workforce, stakeholders could consider designating some—but not all—O-5 positions for fill by candidates with prior security cooperation experience. Similarly, DoD could conceivably require all candidates for O-6 positions to have prior security cooperation experience. Our analysis could not determine, however, how such a policy might affect services' other priorities for developing officers, or assess the relative costs and benefits of such a policy.

We are not recommending that DoD impose such requirements; we lack the data and analysis to justify such a recommendation. Rather, the research team recommends that if security cooperation workforce managers decide to require incumbents to have prior security cooperation experience, they limit the amount of prior experience they require, probably to three years or less, and only for senior positions. If time permits, DoD could commission a study to establish how much security cooperation experience—and other forms of experience, education, and training—might be desirable at various levels of responsibility.

Conclusion

Given the data limitations discussed previously, the overriding tone of our recommendations is one of caution, with the most urgent imperative being to improve the quality of data—and thus analysis—on which decisions must eventually rest. However, these limitations do not mean that the research team recommends paralysis and inactivity. In general, policymakers seem to have a good intuitive grasp of the workforce and

its dynamics. Therefore, policymakers will be able to rely on their personal experience and professional judgment to supplement the analysis provided by this study, even as they seek to improve the quality of the data on which future decisions must rest. They should proceed cautiously and incrementally, taking time to assess the impact of any change before moving on to the next.

In the short term, policymakers should probably focus less on specific policies and decisions and more on establishing processes and structures for workforce management. Appendix H summarizes common workforce management functions that any enterprise should undertake. Its overriding theme, however, is collaboration. Because the security cooperation community is very complex, and because management information is incomplete, officials charged with workforce management at all levels will need to solicit advice and feedback frequently from the communities and organizations subject to their decisions. In particular, officials need to establish formal objectives for the security cooperation enterprise as a whole. Doing so will enable the refinement of the competency framework proposed in this report, which in turn can enable the further development of career fields in the security cooperation workforce.

Workforce development is only one aspect of lifecycle personnel management, however. It is inextricably connected with other aspects, which include establishing structure, acquiring personnel, compensation, distribution, sustainment, and transition (U.S. Army, 2015). As the security cooperation community continues to evolve its approach to workforce management, it should also address these other aspects of the problem. Most importantly, DoD's approach to managing the security cooperation workforce should continue to evolve with its strategy for the security cooperation enterprise. Presumably, that strategy will articulate concrete objectives for the security cooperation enterprise and explain how changes to the security cooperation workforce can contribute to the attainment of those objectives. As those objectives become clearer, and as the authorities and processes of security cooperation evolve, the security cooperation community should revise its competency model and career fields to accommodate those changes.

The Security Cooperation Community

This appendix describes some of the significant organizations within the security cooperation community and explains their responsibilities with regard to security cooperation. It supplements the description of the security cooperation community in Chapter Two but is still only a partial rendering of those organizations that at various times contribute to the DoD's conduct of security cooperation. Understanding organizations' general roles and functions within the community is important for understanding the competencies members require in order to perform their functions. To recapitulate, the security cooperation community is

a subset of U.S government Executive Branch entities within the security cooperation enterprise directly responsible for managing or executing security cooperation programs or the policies that affect those programs (DoD, 2016, p. 9).

Overall, the goals of security cooperation community are

to build defense relationships that promote specific US security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide US forces with peacetime and contingency access to a host nation (Joint Chiefs of Staff, 2016, p. 9).

No single organization has primary responsibility for attaining these objectives or concentrates exclusively on one aspect of security cooperation. Rather, security cooperation is a capability that combatant commanders and U.S. embassies employ to further other U.S.

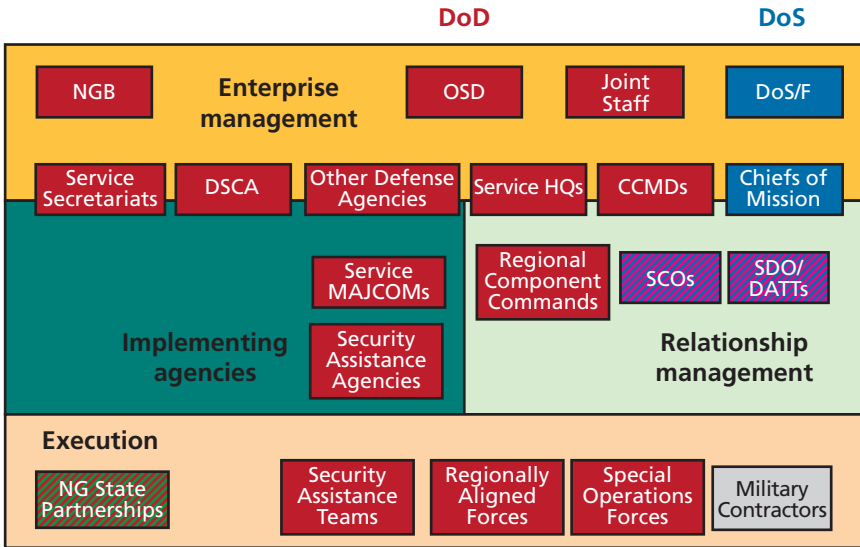
objectives, and is supported by capabilities in DoD components developed primarily to support the development and maintenance of U.S. military capabilities and capacity. To the extent that organizations and capabilities devoted primarily to security cooperation exist, they are constituted primarily to facilitate the leveraging of other U.S. military capabilities.

Within that general framework, organizations in the security cooperation community fall into one of four broad categories described briefly below and in greater detail in succeeding sections (see Figure A.1):

- **Enterprise management** (in the yellow box) organizations provide strategy and policy guidance and oversight to multiple security cooperation programs; they are responsible for integrating efforts from different U.S. and foreign stakeholders to achieve U.S. strategic goals.
- **Implementing agencies** (in the dark green box) ensure that individual programs are properly resourced and executed in accordance with policy guidance.
- **Relationship management** (in the light green box) organizations are responsible for translating strategy into action in specific countries and regions. They help initiate, plan, and facilitate security cooperation program activities involving U.S. and partner-nation officials. It should be noted that these organizations also have a profound role in the development of strategy with respect to the country or region with which they are associated.
- **Execution** (in the light brown box) elements carry out program activities with partner-nation counterparts at the behest of higher-level components of the community. For the most part, execution elements are not dedicated security cooperation assets but are operating force units or elements from organizations in the DoD infrastructure employed in support of security cooperation activities.

Yet while organizations may fall primarily into one of these four categories, members of their workforce do not align exclusively with these functions. For example, security cooperation offices have individuals with primary responsibility for international training manage-

Figure A.1
Roles and Responsibilities Within the Security Cooperation Community



NOTES: Red boxes denote DoD organizations; blue boxes denote Department of State-led organizations; red and blue cross-hatched boxes denote organizations that report to DoD and Department of State officials; the red and green cross-hatched box indicates organizations that report to DoD and state government officials; gray boxes denote nongovernmental organizations.

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ment and finance. Officials in implementing agencies maintain direct lines of contact with customers in partner nations, as do officials in organizations with a primary focus on enterprise management.

The major salient characteristic of the security cooperation community is that it is complex, with diffuse authorities and responsibilities. Its success depends on the ability of officials to work across organizational and functional boundaries to achieve the larger goals of U.S. strategy.

Enterprise Management Organizations

In accordance with the Foreign Assistance Act and the Arms Export Control Act, under Title 22, the Department of State is responsible for

the “continuous supervision and general direction” of military assistance, military education and training, and foreign military sales and export programs.¹ With respect to security assistance, this involves determining whether there shall be a security assistance program, sale, lease, or financing for a country or a cooperative project with a country, as well as ensuring that security assistance programs are effectively integrated with other U.S. activities and that U.S. foreign policy is being served by them (DoD, 2017). In U.S. embassy missions, the ambassador—who reports to the President through the Secretary of State—heads the country team, which may include an SDO/DATT, DAO, and chief of the security cooperation organization.

DoD, in its turn, is responsible for administering most security cooperation programs and activities. It also has primary responsibility for managing programs authorized under Title 10. The following paragraphs describe the security cooperation responsibilities of various organizations within DoD.

Within the Office of the Secretary of Defense, there are several major offices with security cooperation responsibilities. Most importantly, the Under Secretary of Defense for Policy [USD (P)] exercises overall direction, authority, and control over security cooperation matters through various assistant secretaries of defense, including the Assistant Secretary for Special Operations/Low Intensity Conflict, [ASD (SO/LIC)], who has policy responsibility for BPC, humanitarian and disaster relief programs, and security force assistance (SFA), among other things. Reporting to the ASD (SO/LIC), the Deputy Assistant Secretary of Defense for Security Cooperation is responsible for prioritizing DoD bilateral and multilateral security cooperation activities and aligning security cooperation resources to defense strategy. In

¹ Besides the Department of State and Department of Defense, other departments within the federal government with security sector assistance responsibilities include Homeland Security, Justice, Treasury, and Commerce. Security sector assistance refers to the policies, programs, and activities the United States uses to engage with foreign partners and help shape their policies and actions in the security sector; to help foreign partners build and sustain the capacity and effectiveness of legitimate institutions to provide security, safety, and justice for their people; and to enable foreign partners to contribute to efforts that address common security challenges (The White House, 2013).

another part of OSD, the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD [AT&L]) coordinates all international defense cooperative issues, including cooperative research, development, production, acquisition, and logistics support programs. Within the OSD Comptroller's office, the Defense Finance and Accounting Service is responsible for establishing procedures for the management of security assistance finances; one of its directorates oversees DoD's centralized FMS billing, collecting, and trust fund accounting system (DoD, 2017).

As the immediate military staff of the Secretary of Defense, the Joint Staff participates in security assistance program development and review process; coordinates security cooperation with U.S. military plans and programs, and provides the Secretary of Defense with military advice concerning security cooperation programs, actions, and activities, including recommendations on the provision of defense articles to partner countries and manpower requirements for SCOs (DoD, 2017). It also serves as the conduit for communications between OSD and CCMDs.

Within the National Guard Bureau Joint Staff J-5, the International Affairs Division is responsible for integrating National Guard capabilities into the Secretary of Defense Security Cooperation Plan, Combatant Commanders' Theater Security Cooperation Plan, and Ambassadors' Mission Performance Plan. It also administers the National Guard State Partnership program with foreign nations (described later), which is executed by Guard units under the command of the state adjutants general (DoD, 2017).

Under the direction of OSD Policy, the DSCA coordinates, plans, and administers security assistance and selected security cooperation programs and develops and promulgates security assistance procedures. It also conducts international logistics and sales negotiations with foreign countries; serves as the DoD focal point for liaison with U.S. industry with regard to security assistance activities; and makes determinations with respect to the allocation of FMS administrative funds (DoD, 2017). Other defense agencies with security cooperation responsibilities include DLA and DTRA, both of which fall under the Under Secretary of Defense for Acquisition, Technology and Logistics. DLA provides assigned materiel commodities and items of supply,

logistics services, and other support services to its customers (DoD, 2017). DTRA supports countering weapons of mass destruction activities of the U.S. government and its allies (DoD, 2017).

The CCMDs have important regional and functional security assistance and security cooperation responsibilities. The six geographic CCMDs (U.S. European Command, U.S. Africa Command, U.S. Southern Command, U.S. Pacific Command, U.S. Northern Command, and U.S. Central Command) oversee the conduct of security cooperation programs within their respective geographical regions. Among other things, they coordinate and assist with the programmatic activities of DoD components; provide guidance and technical/administrative support to SCOs; and evaluate the efficiency and effectiveness of DoD overseas security cooperation organizations (DoD, 2017). Through the provision of special operations forces, the Special Operations Command provides a critical capability to build and develop partner nation security forces (Joint Chiefs of Staff, 2014). Air Force, Navy, and Army components of the Transportation Command transport defense materials to foreign customers unable to make their own delivery arrangements (DoD, 2017).

Within the Army, Navy, and Air Force, the **service secretariats** manage, resource, and direct policy and strategy for the conduct of select elements of their departments' security cooperation activities. These activities include foreign military sales, foreign military and foreign national training and education, and armaments cooperation. The Air Force secretariat's key security cooperation organization is SAF/IA; within the Army, it is DASA (DE&C) under the Assistant Secretary of the Army (Acquisition, Logistics and Technology), and within the Navy, it is NIPO, under the Assistant Secretary of the Navy for Research, Development, and Acquisition. As part of their oversight and facilitation responsibilities, these organizations provide data pertaining to price, source, availability, and lead time for use in developing and reviewing security assistance programs, as well as technical information as to weapon systems, tactics and doctrine, training, and logistic support; coordinate and establish delivery schedules and necessary internal procedures for the implementation of approved programs; and recommend and provide qualified military personnel to carry out

security cooperation assignments. They also assist OSD Policy and DSCA in government-to-government negotiations involving security assistance and international armaments cooperation. Finally, they have tasking authority over the service security assistance implementation agencies described subsequently in the program management subsection (DoD, 2017).

Staff elements within each **service headquarters** share the responsibility for enterprise management with the secretariat, particularly in the area of DoD-funded security cooperation. For example, the Deputy Chief of Staff of the Army, G-3/5/7, maintains Army policy as it applies to security cooperation; develops, coordinates, and publishes the Army Campaign Support Plan that describes service support to the CCMDs, theater campaign plans; and oversees the integration of the Army Campaign Support Plan into the Army's budget process (U.S. Army, 2013). Subject to the overall direction of the Secretary of the Navy, the Office of the Chief of Naval Operations and Headquarters, Marine Corps—in concert with Headquarters, Coast Guard—develops, refines, and promulgates specific policies and processes to achieve greater coordination and integration of maritime security cooperation efforts and advocate for the appropriate resourcing of validated CCMD security cooperation requirements. It also coordinates with regional components and makes recommendations on country engagement priorities (U.S. Navy, U.S. Marine Corps, and U.S. Coast Guard, 2013). Within the Air Force headquarters staff, the AF/A5/8 is the office of primary responsibility for policy and guidance for security cooperation planning, execution, and assessment conducted by Air Force components in support of the CCMDs. It also produces the service's Campaign Support Plan in coordination with SAF/IA and conducts partner nation capability roles, gaps, and requirements analysis (U.S. Air Force, 2015).

Implementing Agencies

Operating under the authority of their respective secretariats, major commands within the Army, Navy, and Air Force—and **subordinate security assistance agencies**—are responsible for the detailed man-

agement of security cooperation programs. Although each of the commands and agencies is organized somewhat differently, they fall into two major categories: (1) organizations that are responsible for providing materiel assistance (weapons and military equipment and logistical support) to foreign nations, and (2) organizations that are responsible for providing military training and education to foreign students. While FMS and IMET are the primary vehicles for providing equipment and training to foreign partners, there is a range of programs for those purposes. For example, within the Army, the Army Materiel Command is the principal executive agent for the provision of defense articles and services, to include total lifecycle management. The Army Materiel Command delegates its security assistance managerial responsibilities to the Army Security Assistance Command, which is separated into several operational components, including regional operations, international logistics, and SATMO, which manages overseas training teams. The Army Training and Doctrine Command is the executive agent for institutional security assistance training. Its subordinate, the Security Assistance Training Field Activity, brokers and manages U.S. Army–managed institutional training solutions for international military students (DoD, 2017).

Management of the Department of the Navy security cooperation materiel and training programs occurs at the systems commands and at the Naval Education and Training Security Assistance Field Activity (NETSAFA), respectively. These organizations operate under the oversight of the Navy International Programs Office (NIPO). Within each system's command and in NETSAFA, a security cooperation coordination office oversees and monitors the command's security cooperation business. The program management office or school that manages the U.S. Navy acquisition program or program of instruction will be tasked with the execution of the security cooperation requirement for its product, for example. Also under the direction of the Navy IPO, the U.S. Marine Corps Systems Command executes all FMS for systems and logistics, international procurement matters, international armaments programs, and the facilitation of all exercises involving international forces operating with the USMC or utilizing USMC facilities. The U.S. Marine Corps Security Cooperation Group coordinates,

manages, and implements all security cooperation education and training for the USMC (DoD, 2017).

Within the Air Force Materiel Command, AFSAC prepares, processes, and oversees the performance of the FMS cases. Within an FMS case, Air Force directs the management of its FMS business on a line-by-line basis. SAF/IA or AFSAC assigns line management responsibility to the functionally appropriate major command and a Security Assistance Program Manager to oversee the development and execution of major partner system acquisitions. The Air Force Security Assistance Training Squadron, a component of the Air Education and Training Command, is responsible for the management of most Air Force security cooperation training cases (DoD, 2017).

Relationship Management Organizations

A part of the U.S. embassy country team, the **security cooperation organization** has the primary responsibility for interfacing with the host nation on security assistance and security cooperation programs (DoD, 2017).² With respect to security assistance, the security cooperation organization performs a range of functions, including FMS case management, training management, program monitoring, and evaluation and planning of the host government's military capabilities and requirements. In addition, the security cooperation organization must be able to discern which of potentially dozens of security cooperation programs might be usefully applied to challenges or opportunities in partner countries, as well as understand the modalities for doing so (DoD, 2017). The security cooperation organization must also develop and maintain professional working relationships with many security cooperation stakeholders, including other members of the embassy country team, the partner nation, the Department of State,

² Although generally known as Security Cooperation Organizations, SCOs are called by different names depending on their location, e.g., Office of Defense Cooperation, Military Assistance Advisory Group, Office of Security Cooperation.

the CCMDs, the military service component commands, OSD, and U.S. defense industry (DoD, 2017).

The **SDO/DATT** has authority over the DAO and the security cooperation organization. He or she serves as the main point of contact for planning, coordinating, supporting, and executing U.S. defense activities in the host nation, including the theater security cooperation programs under the oversight of the CCMD, as well as the principal embassy liaison with host-nation defense establishments and avenue for ensuring the compatibility of Department of State and DoD policies and maximizing their combined resources (DoD, 2017).

Under the authority of both the CCMD and the service headquarters, Army, Navy, Air Force, and Marine Corps **service component commands** play an important role in planning, coordinating, and executing security cooperation activities. First, they act as conduits between CCMDs and service organizations that will implement security cooperation activities. They ensure CCMDs are aware of the capabilities that their parent services can provide, while providing command, control, and supervision of the actions of their units in the area of operations. Regional component commands execute and coordinate security cooperation in support of CCMD campaign objectives and institutional service objectives using assigned or requested forces. They also play a role in the planning process by contributing to the development of security cooperation priorities contained in the CCMD's integrated requirement priority list and security cooperation resource requirements that support service and joint budgetary and force management processes (U.S. Army, 2013). In addition, service components identify regional and partner nation capability roles, gaps, and requirements for CCMD, service headquarters, and major command staffs; contribute to the development of CCMD country security cooperation plans; and establish theater entry, training, and equipment requirements for units, teams, and individuals conducting security cooperation activities (U.S. Air Force, 2015). Navy and Marine Corps regional components are responsible for developing and incorporating a coordinated maritime security cooperation annex into the CCMD theater campaign plans and for synchronizing the planning and execution of

Navy, Marine Corps, and Coast Guard security cooperation activities (U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, 2013).

Execution Organizations

At execution level, security cooperation is usually one of many functions that the organizations perform. Most organizations—whether in operating forces or the infrastructure—will support the security cooperation mission in some form at various times. There are several types of organizations that are commonly employed for carrying out security cooperation activities as an ancillary mission. **Mobile Training Teams** consist of DoD military and civilian personnel on temporary duty to train international personnel. Teams are generally formed on an ad hoc basis and are tailored to mission requirements. Personnel are selected on the basis of their expertise; they may or may not come from service implementing organizations. A single service generally staffs the team, though there is no theoretical reason why such teams cannot be joint. The team members may be from the contiguous United States or overseas units/organizations, and the training may be conducted in the contiguous United States or overseas using equipment owned by or allocated for delivery to the purchaser and recipient country. Teams are authorized for specific in-country training requirements, training associated with equipment transfer, or to conduct surveys and assessments of training requirements (DoD, 2017).

A much larger reservoir of forces available to carry out a wider range of security cooperation activities, when authorized, are regionally aligned forces supplied by the Army, Navy, Marine Corps, and Air Force. The Army defines such forces as (1) those units assigned or allocated to CCMDs, and (2) those service-retained, CCMD-aligned forces prepared by the Army for regional missions. They are drawn from the service's active and reserve components and consist of organizations and capabilities that are forward stationed, operating in a CCMD area of responsibility, and supporting (or ready to support) CCMDs through reach-back capabilities from outside the area of responsibility. They can conduct operational missions, bilateral and

multilateral military exercises, and theater security cooperation activities (Cantwell et al., 2015). They are also scalable and tailorable to meet combatant commanders' requirements, such as the teams derived from regionally allocated brigades that undertake security cooperation missions at the behest of the Africa Command (GAO, 2015).

Like the Army, the Navy and Marine Corps are also seeking to be more responsive to CCMDs' increasing demand for mission-tailored force packages. Although Marines will continue to be employed as air-ground task forces operating from amphibious ships to conduct a variety of missions, such as power projection, they are also being employed as detachments aboard a wider variety of ships for maritime security missions. Other examples of adaptive force packaging include sailors, Marines, and Coast Guardsmen, teamed in security forces, mobile training teams, construction battalions, health services, law enforcement, and civil affairs units, to conduct security cooperation and humanitarian assistance missions (U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, 2013).

In addition to its dedicated security cooperation workforce, the Air Force is organized to support CCMD security cooperation efforts through the use of expeditionary forces of small teams or individuals either deployed or on short-duration temporary duty, as well as a small number of standing advisory units. The latter, which have a security cooperation-related mission in their unit's document statement, include the 571st Mobility Support Advisory Squadron, dedicated to Southern Command's area of responsibility (AOR); the 818th Mobility Support Advisory Squadron, dedicated to Africa Command's AOR; and the 435th Contingency Response Group (CRG) Air Advisor Branch, dedicated to the European Command AOR. The 438th Air Expeditionary Wing is aligned under the North Atlantic Treaty Organization to conduct aviation foreign internal defense with Air Force and nonstandard fixed-wing aircraft in Afghanistan (Rolleston et al., 2014).

As mentioned earlier, the National Guard has established state partnerships with 68 countries that take advantage of its "unique civil military nature" to interact with both civil and defense personnel to support CCMD and U.S. embassy objectives. As an example, in 2015,

there were more than 100 state partnership events conducted in Africa, with eight U.S. states engaged in long-term training missions (DoD, 2016).

Finally, as is the case with most of the activities that DoD performs, private defense contractors play an important role in executing security cooperation functions at various levels of the security cooperation community. The U.S. defense industry is the primary supplier of defense articles and services purchased by foreign governments, making it a critical partner to security assistance program managers in joint and service implementation agencies. In addition, private contractors carry out the bulk of the overseas training of foreign security forces that is funded by security assistance programs, such as the Global Peace Operations Initiative (DoD, 2016).³

³ By the end of 2014, GPOI had facilitated the training of 288,000 security forces from 39 countries; almost 200,000 were deployed to 29 peacekeeping operations, mostly in Africa.

Security Cooperation Competencies

This appendix presents a list of professional competencies and associated elements that pertain to DoD's security cooperation workforce based on the research team's analysis of security cooperation policy guidance and civilian position descriptions as well as discussions with officials and subject-matter experts throughout the security cooperation community. The first section lists the ten competencies that were mentioned most often in position descriptions and interviews as being relevant to the functional responsibilities carried out by members of the security cooperation workforce. Although they differed in the extent of their prevalence, most of these competencies were referred to relatively frequently in both interviews and position descriptions.¹ In the second section of the appendix, we list other potential security cooperation competencies that were revealed through our documentary research and/or conversations with security cooperation experts. While not as prevalent as the first group, this latter group of competencies is important for certain subgroups within the security cooperation community, and these competencies are thus important enablers of achieving U.S. security cooperation objectives.

The research team synthesized the competencies described in this appendix from multiple sources, including interviews, official position descriptions, and from data submitted in response to a DSCA query.

¹ BPC was mentioned relatively often in interviews but not in the descriptions of civilian security cooperation positions provided to us. Conversely, security cooperation integration was featured more prominently in the position descriptions than in the interviews.

Ten Prevalent Security Cooperation Competencies

As indicated previously, the following list contains the ten competencies most commonly mentioned by our interview and position description data sources, along with some of the basic components of these competencies.

Security Cooperation Strategy: Develop Security Cooperation Strategies and Plans

- Understand partners' context, conditions, and capabilities prior to the application of security cooperation plans, programs, and activities anticipated in support of U.S. government and partner nation objectives.
- Understand principles and best practices in security cooperation planning.
- Collaborate with subject-matter experts and stakeholders on the development of global security cooperation strategies, theater security cooperation plans, and country security cooperation plans.

Security Cooperation Analysis

In order to develop strategy, security cooperation professionals must analyze the context in which security cooperation activities are to take place and how their efforts fit into that context. Security cooperation analysis has three components:

- analyze regional and country environments in order to identify opportunities and challenges for potential security cooperation activities
- develop partners' requirements for security cooperation activities and support
- assess programs' and organizations' effectiveness in meeting objectives for specific security cooperation activities and global objectives for the security cooperation enterprise.

Cultural Awareness/International Affairs: Apply Regional Knowledge and Expertise to Security Cooperation Planning and Implementation

- Understand partner nations' histories, cultures, political/economic systems, social practices/norms, and military organizations.
- Participate in security cooperation planning and assessment.
- Facilitate engagement with partner-nation officials.
- Communicate with partner-nation officials in local language(s).

Security Assistance Case Management: Develop and Manage Security Assistance Acquisition Cases and Programs

- Evaluate and negotiate FMS letters of offer and acceptance.
- Develop directive for implementing FMS cases and report case execution performance to partner-nation client.
- Coordinate the financial reconciliation and closure of FMS cases.
- Coordinate with stakeholders in defense acquisition enterprise in order to plan and execute effective security assistance cases or programs.
- Understand and apply the statutory, policy, and strategic guidance under which security assistance cases are developed, implemented, and closed.
- Identify partner requirements for security assistance.
- Understand and integrate parent agency's roles and activities with those of other potential stakeholders across all phases of a security assistance case or program.
- Identify and resolve security assistance case/program management issues with partner nations and USG stakeholders.
- Meet Congressional data collection and reporting requirements.

Global Perspective (Interagency Coordination): Collaborate with Government Agencies Across the Security Cooperation Community

- Effectively communicate the organization's commitment to the joint mission and leads staff to exert influence and execute solutions across the security cooperation community.

- Work collaboratively with other national security agencies to achieve U.S. goals and objectives.
- Foster supportive partnerships across organizational lines and within the international community to drive integration and translate long-term goals into action.

International Training Case Management: Develop and Manage International Training and Education Cases and Programs

- Develop combined education and training plan for partner nations.
- Coordinate training requests with training providers.
- Select foreign students and make arrangements for them to participate in training.
- Meet Congressional data collection and reporting requirements.
- Understand and apply statutory, policy, and strategic guidance regarding international training, education, and professional development opportunities offered to international military students financed by security assistance and DoD-funded programs.
- Understand the roles and responsibilities of service and joint organizations in the training, education, and professional development of international students.
- Participate in the formulation of policy related to international training, education, and professional development.

Security Cooperation Integration: Manage a Portfolio of Security Assistance and DoD-Funded Security Cooperation Programs

- Integrate the planning, programming, and assessment of the full range of security cooperation activities—including, but not limited to, foreign military sales cases, BPC efforts, and IMET—to achieve theater and national objectives in a particular region or country.
- Coordinate across agencies internal and external to the Department of Defense to facilitate global, regional, and country goals with respect to security cooperation and resolve issues with respect to security cooperation program execution.

- Understand regional security threats, capabilities, and needs as well the range of available capabilities and assets that could contribute to security cooperation activities, to include their potential impact, cost, and required time lines, as well as the constraints and limitations imposed by statute and policy.
- Meet Congressional data collection and reporting requirements.

Defense Acquisition: Apply Knowledge of U.S. Defense Acquisition Policies, Procedures, and Organizations to Security Cooperation

- Understand and apply statute and DoD policy and procedures for acquiring defense articles and services, in particular export and technology-transfer limitations under the Arms Control Export Act.
- Understand capabilities of military departments' acquisition organizations and navigate service acquisition organizations' systems and processes in order to facilitate case development, implementation, and execution.
- Help partners develop requirements to facilitate acquisition through the defense acquisition enterprise.
- Understand foreign customers' deadlines, unique payment schedule requirements, and DoD policy with regard to offsets that partners may try to require of U.S. vendors.
- Analyze ongoing security cooperation activities in order to identify potential obstacles to effective case implementation.
- Coordinate with stakeholders in defense acquisition enterprise in order to plan and execute effective security cooperation cases.
- Meet Congressional data collection and reporting requirements.

BPC Management: Develop and Manage DoD-Funded Security Cooperation Activities and Programs

- Develop a memorandum of request that identifies partner requirements for DoD-funded services and equipment, as well as the BPC legal authority for the program or pseudo-case being developed.

- Collaborate with the partner nation in developing ways to improve operational and institutional capacity as well as interoperability with the United States.
- Coordinate BPC program funding with approving authorities.
- Understand and apply the statutory, policy, and strategic guidance governing security cooperation activities conducted under Title 10, and the USC mechanisms required by different security cooperation programs with multiple sources of funding.
- Understand different agencies' roles and relationships in the planning, education, and assessment of activities, projects, lines of effort, and pseudo-cases conducted under Title 10 and other security cooperation activities.
- Represent parent agency in planning, preparing, implementing, and closing pseudo-cases and other Title 10 BPC activities.
- Participate in the BPC policy development and revision process.

Military Operations and Capabilities: Apply Knowledge of and Experience with U.S. Military Operations, Capabilities, and Organizations to Security Cooperation Planning and Programming

- Understand general range of U.S. military capabilities and how they are employed operationally.
- Use U.S. military expertise to analyze ways to improve partnership capacity building plans, programs, and activities.
- Understand the organization and functions of the DoD and of its components.

Other Potential Security Cooperation Competencies

The list that follows presents other potential security cooperation competencies and their components that the research team has uncovered. These competencies are listed in alphabetical order with no attempt made to suggest their relative importance to or prevalence within the security cooperation community.

Administrative Laws and Policy: Apply Administrative and Military Laws and Policies to Security Cooperation

- Understand DoD policy governing security cooperation and security assistance, as well as general law and policy, including but not limited to Title 22, Title 10, the Federal Acquisition Regulation, and its affiliated DoD regulations.
- Advise security cooperation officials on the policy and legal implications of proposed and ongoing security cooperation activities and programs.

Communication and Reporting: Provide Reports on Security Cooperation to Officials Inside and Outside DoD

- Provide reports on security cooperation matters, e.g., congressional notifications, annual reports, and congressional testimony, as required by DoD and national policy, as well as legislation.
- Engage and maintain close contact with stakeholders in the Department of Defense, to include CCMDs, military departments and others, the Department of State, and other government agencies.
- Keep relevant stakeholders informed as to progress with respect to security cooperation objectives and other issues.

End Use Monitoring: Understand and Apply Policy and Statutory Requirements for End Use Monitoring

- Design, implement, and report verification and compliance with End Use Monitoring (EUM) requirements.
- Participate in the EUM policy development process.
- Ensure Congress is notified of EUM compliance under provisions of the Arms Export Control Act.

Financial Analysis: Analyze the Financial Aspects of Security Assistance/Cooperation Cases and Programs

- Conduct financial analysis of security cooperation activities undertaken under Title 22 (e.g., FMS and FMF) and Title 10 (e.g., BPC).

- Analyze the political, legal, and statutory context in which U.S. security cooperation activities in support of partners are being funded to derive fiduciary responsibilities to particular clients in order to identify optimum financing approach to both clients and the U.S. government.

Financial Management: Manage Security Assistance and DoD-Funded Security Cooperation Funds

- Manage security cooperation funds according to fiduciary responsibilities to either partner nations or, in the case of initiatives to build partners' capacity executed under Title 10, to the United States.
- Understand U.S. and partner laws, rules, and regulations governing the handling of funds.
- Conduct reviews and implement financial management controls to ensure proper acquisition and timely distribution of security cooperation funds.
- Maintain records, accounts for funds, and reports in accordance with rules and regulations governing cases, pseudo-cases, and other relevant activities as appropriate.
- Understand and comply with appropriate federal processes for financial management.

Human Capital Management: Manage and Train Personnel Within the Security Cooperation Community

- Build and manage security cooperation workforce based on organizational goals, budget considerations, and staffing needs.
- Ensure that employees of security cooperation organizations are appropriately recruited, selected, appraised, and rewarded; take action to address performance-based deficiencies.
- Manage a multisector security cooperation workforce and a variety of work situations.
- Apply knowledge of the security cooperation enterprise to the development of training and education courses and programs for security cooperation professionals.
- Manage and teach security cooperation courses using a variety of methods, including online instruction and practical exercises.

Humanitarian Assistance and Coordination: Coordinate DoD's Involvement in Humanitarian Assistance Activities

- Understand statutes and policy governing DoD approach to humanitarian affairs, disaster relief, and mine action. Understand other stakeholders' roles, responsibilities, capabilities, and limitations with respect to humanitarian affairs, disaster relief, and mine action.
- Coordinate DoD humanitarian affairs, disaster relief, and mine action response to specific situations. Assess responses' effectiveness and identify potential requirements for further action.

Security Cooperation Information Technology: Develop, Monitor, and Manage Information Technology in Support of Security Cooperation Planning and Implementation

- Understand the capabilities and requirements of the range of current and planned security assistance and cooperation information systems.
- Employ relevant systems to develop, monitor, track, and manage various security cooperation activities.
- Identify requirements and gaps in systems' capabilities in order to contribute effectively to the security cooperation enterprise's information technology investment process.

Security Cooperation Program Management

- Manage a portfolio of related security cooperation activities in order to support security cooperation goals established by U.S. strategy.
- Understand the capabilities, constraints, and limitations established by legislation and policy that authorize the program.
- Manage process by which program requirements are identified, validated, prioritized, and resourced.
- Deconflict or integrate program activities with those of other programs contributing to similar objectives.
- Facilitate collaboration among stakeholders to ensure that issues are identified and resolved in order to optimize outcomes across the entire portfolio of activities.

- International cooperative programs: assess, plan, and execute cooperative defense acquisition programs with foreign partner nations.
- Assess the advantages and disadvantages of establishing an International Cooperative Program (ICP) in various stages of the acquisition life cycle and whether an ICP would be successful.
- Support negotiation of an ICP international agreement with foreign partners.
- Execute ICPs in accordance with the applicable international agreement and good acquisition practice.

Technology Security and Foreign Disclosure: Comply with Requirements in Executing International Acquisition Programs

- Understand foreign disclosure approval process to release classified or controlled unclassified information.
- Implement information security and technology security and foreign disclosure policies and procedures (including foreign visit requests/coordination).

Security Cooperation Transportation and Logistics: Develop and Manage the Execution of Transportation and Logistics Plans in Support of Security Assistance Cases and Programs

- Apply policies with respect to transportation of defense articles to partners and other logistical support of security cooperation activities.
- Understand constraints and limitations imposed by law and policy on the logistical support that may be provided to partners in support of security cooperation activities.
- Understand roles and capabilities of different stakeholders, including those inside the DoD, other government agencies, commercial shippers, and partner nations.
- Develop and oversee execution of transportation and logistics plans.

Interview Protocol

The research team developed the following protocol for use in our interviews with security cooperation officials, primarily at DSCA. We adapted it for interviews with officials in other agencies as appropriate.

1. What is your current position?
2. What are your primary job responsibilities?
3. To whom do you report? Who reports to you?
4. Briefly describe your employment and academic background.
5. What aspects of your employment/academic background best prepared you for your current position? In what way?
6. What education/training or experience opportunities do you wish you had had that would have better prepared you for your current position? In what way?
7. How would you define the security cooperation workforce? What are its major components (in terms of organizations or functions)?
8. Identify the key security cooperation positions in your organization? (NOTE: a key position is one in which the incumbent's performance will have a direct and significant effect on the probability and/or degree of success in some aspect of the organization's core function.)
9. Explain the criteria you used to identify those key positions.
10. Describe the important competencies associated with those positions.

11. Describe the combination of education, training and experience needed to prepare individuals to perform adequately in those positions.
12. What are the costs and benefits (i.e., career advancement opportunities) associated with acquiring the education, training and experience needed to adequately perform in those positions?
13. For selected officials within the Defense Institute for Security Assistance Management (DISAM): Explain your processes for estimating your manpower and other resource requirements. Identify any relevant policy guidance.
14. Describe some of the challenges, if any, you face filling these positions with the appropriate candidates.

Using Position Descriptions to Identify Competencies

One of the ways to identify competencies in a group of jobs is to examine the way those jobs are described in formal documentation, such as vacancy announcements, descriptions of duties in personnel evaluations, or an organizational job database. Table D.1 lists key benefits and limitations of using these types of sources. Like any approach, this one has its strengths and weaknesses and is best used as a complement to other methods of identifying and developing competencies.

Our project obtained position descriptions (1) internal to DSCA itself, (2) in a range of DoD organizations with security cooperation responsibilities, and (3) from FASCLASS. We obtained the first two collections of position descriptions (PDs) through the sponsor. DSCA initially provided 62 PDs for its own workforce and then gathered another 528 PDs from other DoD organizations, including CCMDs, service staffs, and program offices. Neither collection includes military positions, and some DoD organizations that one would expect to have a number of security cooperation positions are either underrepresented or missing altogether from the DoD PDs.

Table D.1
Benefits and Limitations of Position Description Analyses

Benefits	Limitations
There is no imposition on people in the occupation(s) or organization(s) being studied if the documentation already exists.	The importance and frequency of competencies may be unclear.
Data collection scales well if the documentation is contained in accessible databases.	Information may not be current.

Each of the organizations that provided data identified security cooperation positions differently. Some organizations provided information for only a few key positions, while others listed every position down to clerks and administrative assistants. The RAND research team pulled information from FASCLASS by conducting keyword searches for the phrases “security assistance” and “security cooperation.” This yielded about 3,800 results, excluding duplicates. After examining the results we determined that most of these positions, while having security cooperation responsibilities, were not security cooperation jobs per se. So we limited our analysis of the FASCLASS positions to those that had “security cooperation,” “security assistance,” or “international” in the position title. Like the other PD data, this data set includes information for civilian positions only. Another drawback, particularly for older PDs, is that the duty descriptions provided may not accurately reflect the current work requirements. Based on the limited data available, our analysis of security cooperation PDs should be considered exploratory, although we can draw some tentative conclusions.

Competency Terms

To identify security cooperation competencies required in the various positions, we created a list of terms and phrases linked to each competency. The complete list is in Table D.2. We searched each position description for these terms to identify the competencies required of the positions.¹ We did this separately for each of the three data sets. Table D.3 lists the relative prevalence of each competency in the different data sets.

One obvious difference across the data sets is that the DoD PDs have far fewer security cooperation competencies than the DSCA or FASCLASS PDs. This is due largely to the length of the position descriptions; the typical FASCLASS or DSCA PD was 15 to 20 times longer than the DoD PDs. This was likely due to the source of the data: The FASCLASS and DSCA PDs were drawn from a jobs database, whereas the DoD position descriptions were the product of a data call by DSCA to a host of agencies. As a result, over half of the DoD PDs had no terms

¹ The term search included various forms of a given term. For example, a search for the term *analysis* would include also include *analyses*, *analyze*, and *analyzes*.

Table D.2
List of Competency Search Terms

Primary Search Term	Secondary Term	Tertiary Term	Competency
legal	advice		Administrative and Military Law and Policy
special defense acquisition fund			Building Partnership Capacity Case Management
security force assistance			Building Partnership Capacity Case Management
section 1206			Building Partnership Capacity Case Management
SDAF			Building Partnership Capacity Case Management
MODA_			Building Partnership Capacity Case Management
ministry of defense advisory program			Building Partnership Capacity Case Management
institution building			Building Partnership Capacity Case Management
HDM management			Building Partnership Capacity Case Management
global train and equip			Building Partnership Capacity Case Management
global peace operations initiative			Building Partnership Capacity Case Management
defense institution building			Building Partnership Capacity Case Management
combating terrorism fellowship program			Building Partnership Capacity Case Management
building partnership capacity			Building Partnership Capacity Case Management
1206 train			Building Partnership Capacity Case Management
international political			Cultural Awareness/International Affairs

Table D.2—continued

Primary Search Term	Secondary Term	Tertiary Term	Competency
international military			Cultural Awareness/International Affairs
international environment			Cultural Awareness/International Affairs
foreign military			Cultural Awareness/International Affairs
foreign militaries			Cultural Awareness/International Affairs
foreign governments			Cultural Awareness/International Affairs
foreign countries			Cultural Awareness/International Affairs
cultural mores			Cultural Awareness/International Affairs
cross-cultural			Cultural Awareness/International Affairs
procurement			Defense Acquisition
DoD procurement			Defense Acquisition
golden sentry			End Use Monitoring
end use monitoring			End Use Monitoring
end use			End Use Monitoring
EUM			End Use Monitoring
PSSM			Humanitarian Assistance Coordination
OHDACA			Humanitarian Assistance Coordination
mine action			Humanitarian Assistance Coordination
humanitarian assistance			Humanitarian Assistance Coordination
HDM			Humanitarian Assistance Coordination

Table D.2—continued

Primary Search Term	Secondary Term	Tertiary Term	Competency
explosive remnants of war			Humanitarian Assistance Coordination
disaster relief			Humanitarian Assistance Coordination
disaster			Humanitarian Assistance Coordination
denton program			Humanitarian Assistance Coordination
other federal government agencies			Interagency Coordination
military departments			Interagency Coordination
international organizations			Interagency Coordination
interagency			Interagency Coordination
inter-departmental			Interagency Coordination
department of state			Interagency Coordination
technology transfer			Security Assistance Case Management
security sector assistance			Security Assistance Case Management
security assistance			Security Assistance Case Management
Javits report			Security Assistance Case Management
international weapons			Security Assistance Case Management
foreign military financing			Security Assistance Case Management
foreign competitions			Security Assistance Case Management
defense articles			Security Assistance Case Management

Table D.2—continued

Primary Search Term	Secondary Term	Tertiary Term	Competency
analysis/analyze	strategic planning		Security Cooperation Analysis
analysis/analyze	security cooperation		Security Cooperation Analysis
analysis/analyze	security assistance		Security Cooperation Analysis
analysis/analyze	international		Security Cooperation Analysis
analysis/analyze	humanitarian assistance		Security Cooperation Analysis
analysis/analyze	HDM		Security Cooperation Analysis
analysis/analyze	foreign		Security Cooperation Analysis
analysis/analyze	FMS		Security Cooperation Analysis
analysis/analyze	EUM		Security Cooperation Analysis
analysis/analyze	engagement		Security Cooperation Analysis
regional analysis			Security Cooperation Analysis
strategic outreach	security cooperation		Security Cooperation Communication and Reporting
regionally focused material			Security Cooperation Communication and Reporting
government accountability office			Security Cooperation Communication and Reporting
congressional notification package			Security Cooperation Communication and Reporting
arms sales notification process			Security Cooperation Communication and Reporting
analytical	countries	financial	Security Cooperation Financial Analysis
FMS financing			Security Cooperation Financial Analysis
financial management reviews			Security Cooperation Financial Analysis

Table D.2—continued

Primary Search Term	Secondary Term	Tertiary Term	Competency
global security contingency fund			Security Cooperation Financial Management
FMS accounting			Security Cooperation Financial Management
financial reporting			Security Cooperation Financial Management
country financial management			Security Cooperation Financial Management
coalition support funds			Security Cooperation Financial Management
IT program	DSCA		Security Cooperation Information Technology
integrate	security cooperation		Security Cooperation Integration
integrate	subject matter expert		Security Cooperation Integration
strategies	security cooperation	security assistance	Security Cooperation Strategy
strategic planning	security cooperation		Security Cooperation Strategy
strategic options	security cooperation		Security Cooperation Strategy
strategic planning	sc programs		Security Cooperation Strategy
security cooperation strategic			Security Cooperation Strategy
regional strategies			Security Cooperation Strategy
regional strategic program			Security Cooperation Strategy
regional strategic planning			Security Cooperation Strategy
regional security cooperation strategy			Security Cooperation Strategy

Table D.2—continued

Primary Search Term	Secondary Term	Tertiary Term	Competency
engagement strategy			Security Cooperation Strategy
transportation	humanitarian assistance		Security Cooperation Transportation and Logistics
humanitarian assistance transportation			Security Cooperation Transportation and Logistics
funded transportation program			Security Cooperation Transportation and Logistics
Denton transportation			Security Cooperation Transportation and Logistics
defense transportation system			Security Cooperation Transportation and Logistics
training and education			Training Case Management
military schools			Training Case Management
international military students			Training Case Management
international education			Training Case Management
foreign students			Training Case Management
education and training			Training Case Management
IMET			Training Case Management

Table D.3
Frequency of Competencies in DSCA, DoD, and FASCLASS Data Sets

Competency	Frequency by Data Source		
	DSCA PDs	DoD PDs	FASCLASS PDs
Administration and Military Law and Policy	7%	0%	18%
Build Partner Capacity Case Management	49%	1%	6%
Cultural Awareness/ International Affairs	95%	7%	82%
Defense Acquisition	29%	12%	17%
End Use Monitoring	7%	3%	2%
Humanitarian Assistance Coordination	56%	1%	6%
Interagency Coordination	93%	6%	61%
Security Assistance Case Management	90%	19%	76%
Security Cooperation Analysis	46%	11%	88%
Security Cooperation Communication and Reporting	39%	0%	2%
Security Cooperation Financial Analysis	76%	0%	9%
Security Cooperation Financial Management	12%	1%	3%
Security Cooperation Information technology	0%	0%	6%
Security Cooperation Integration	7%	1%	26%
Security Cooperation Strategy	22%	17%	91%
Security Cooperation Transportation and Logistics	7%	0%	1%
Training Case Management	83%	11%	37%

or phrases related to one of the 21 security cooperation competencies. For the FASCLASS PDs, the average number of competencies mentioned in a description is five; for DSCA PDs, the average is seven.

Despite the disparate number of absolute competencies across the three data sets, some competencies were relatively frequent in all three. *Security Assistance Case Management* is the most-common competency within the DoD PDs and is third-most-common in the FASCLASS and DSCA PDs. *Cultural Awareness/International Affairs* and *Training Case Management* are also found frequently in all three data sets.

We were also interested in seeing how competencies group within the data sets. For example, do positions requiring *Humanitarian Assistance Coordination* also tend to require, say, *Interagency Coordination*? For FASCLASS positions, the answer is basically no. There is only one pair of competencies for which the correlation is 0.5 or better: *Security Cooperation Strategy* and *Security Assistance Case Management*. For the DSCA positions there are several pairings of competencies with a correlation of 0.5 or better, and these pairings are logical. For example, one such pairing is *Security Cooperation Transportation & Logistics* and *Humanitarian Assistance Coordination*. Another pairing is *Security Cooperation Financial Analysis* and *Security Cooperation Financial Management*. All pairings with a correlation of 0.5 or better are listed in Table D.4.

Table D.4
Correlated Competencies in Position Descriptions

Data Source	Competency Pairing
DSCA PDs	Interagency Coordination – Cultural Awareness & International Affairs
DSCA PDs	Security Assistance Case Management – End Use Monitoring
DSCA PDs	Security Cooperation Financial Analysis – Security Cooperation Financial Management
DSCA PDs	Security Cooperation Strategy – Security Cooperation Integration
DSCA PDs	Security Cooperation Transportation & Logistics – Humanitarian Assistance Coordination
FASCLASS PDs	Security Cooperation Strategy – Security Assistance Case Management

Within an organization as large as the DoD, finding everyone with roles and responsibilities related to a particular function, such as security assistance, cyber, and operational contract support, can be a significant challenge. But it can be essential to ensuring that people are prepared and capable to do their job. Applying data science techniques to organizational and position information, such as those described here, can help scale such an effort.

This approach would require a well-developed set of competencies and SME coding of PDs. The coding could then be used to train a model to identify other positions that potentially require those competencies. Such an approach should be used as a complement to, not a substitute for, expert judgment on which positions require training and deliberate development in order to support a particular function.

Data Sources

The research team relied on many data sources in our investigation. Some were databases of record, such as DCPDS or the SCWD. Others, like the data obtained from FASCLASS or that collected by DSCA, were ad hoc data sets collected once, for a particular purpose. This appendix describes the different data sources and explains the purposes for which we used them in this study.

Databases of Record

SCWD

We used the SCWD for several purposes. Though stakeholders are skeptical about the accuracy of the data recorded therein, they can be used to provide a rough estimate of the workforce's size, composition, distribution, and training, as presented in Chapter Two. The position names and the training required for particular positions also provide a tentative basis for aligning positions with job families, as per the analysis presented in Chapter Four.

In theory, the SCWD includes every individual position in the security cooperation workforce. DSCA established the SCWD in 2010 to track progress toward attaining the Deputy Secretary of Defense's High Priority Performance Goal of having 95 percent of the workforce trained for their duties in security cooperation (Reynolds, 2010). Organizations with billets funded through foreign military sales are required to identify those positions—and other positions requiring security cooperation training and education—to DSCA and provide data describing

the security cooperation training required and completed by individuals in those billets. The SCWD lists the position title, the organization to which that position is assigned, the security cooperation training and education required for that position, and the training and education completed by the incumbent holding that position for both military and civilian workforce members (DSCA, 2015). The data do not include key fields needed to analyze the workforce, notably the occupation and grade associated with the position, nor do they describe the position's duties. While the organizations to which positions are assigned are identified, organizations' UICs are not, making it difficult but not impossible to identify these elements of the security cooperation community in other databases.

Stakeholders—including analysts in stakeholder organizations involved with providing the data and those compiling them at DSCA—were concerned about the accuracy of the data that are available, as well. According to those analysts, the establishment of the 95-percent goal for security cooperation training and education established perverse incentives for contributing organizations to identify only positions for which the incumbent was already properly trained or those positions in which the incumbent would shortly attend training. Stakeholders also noted that they refreshed the data intermittently, so that the current data might not reflect the workforce with total accuracy at any particular point in time. Neither the research team nor DISCS can independently assess the accuracy of SCWD data, and there are few mechanisms for verifying the data contained therein.

DCPDS

DCPDS contains records on the current employment status and all personnel transactions for civilians employed by most DoD components. Data elements include organization to which assigned, the position title, the grade and step associated with the position, as well as transactions like hiring, promotion, and separation. Using these data, it is possible to track individuals' career histories and assess the amount of time they have been employed by various DoD organizations. Because many security cooperation entities are embedded in larger organizations with multiple functions, DCPDS cannot provide a com-

prehensive accounting of all security cooperation personnel. It does not include position descriptions or security cooperation training.

The research team used DCPDS to assess the amount of security cooperation experience attained by civilian members of the security cooperation workforce relative to other major DoD functions. For a subset of the workforce assigned to organizations whose primary function was security cooperation, it was possible to compare the time they had spent in similar organizations with the time they had spent in other DoD organizations with a different focus.

Work Experience Files

The services maintain reasonably complete databases that describe the current status of their military personnel. The DMDC compiles this information into the “Work Experience File.” As with analysis of DCPDS data, it is possible to analyze these data longitudinally to determine the different organizations to which service members have been assigned throughout their careers. In contrast to DCPDS, however, every organization to which a service member is or could be assigned is indicated by a UIC, and often a derivative UIC that is associated with a more specific function. It is thus possible to obtain a reasonably complete—though not exhaustive—picture of the workforce. Assessment of service members’ security cooperation experience relative to other kinds of experience can be reasonably comprehensive. As with the DCPDS data we used, the available military personnel data stretch back only as far as FY 2000.

Data Sets Collected for a Particular Purpose

The research team used three data sets in its analysis of job families—FASCLASS, DSCA-provided data, and SCWD—in our analysis of competencies and in our analysis of job families. This appendix describes each data set in turn.

Interviews

The research team conducted 57 individual and group interviews with 82 civilians and military service members. These interviews provided a preliminary basis for our identification of security cooperation competencies and important background information about the structure and functions of the security cooperation workforce. Respondents occupied key positions in their organizations. At DSCA, the Directorate of Administration and Management identified these key individuals. Officials in workforce management positions identified select incumbents at service implementing agencies. Key positions were defined as those positions that met the following criteria:

- have a direct and significant impact on the success of a security cooperation organization's mission
- require the application of competencies unique to the domain of security cooperation, in addition to other functional expertise
- tend to have responsibilities integrating the efforts of one security cooperation organization or domain.

Most of these respondents were civil servants, though many of them had prior experience in security cooperation as active-duty military. Given the relatively low number of active-duty respondents, the perspectives of former military were invaluable. Most of the civil servants were in the grades of GS-13 through GS-15, though we did interview several members of the senior executive service. Relatively few were members of OPM's 0131 occupational series (international affairs); most were either in the 0300 (General Administrative, Clerical, and Office Services) or 1100 (Business and Industry) occupational groups.

DSCA-Provided Position Descriptions

We also reviewed 57 position descriptions for key positions provided by DSCA. Position descriptions—as their name suggests—describe the duties and responsibilities associated with a given position. We analyzed these descriptions of duties and responsibilities to identify key

workplace behaviors and the combinations of KSAOs, or competencies, associated with those behaviors.

FASCLASS

The research team used data collected from the Army's FASCLASS system to complement our development of a competency model and assist in our analysis of job families. The research team collected position descriptions from FASCLASS using keyword searches for the phrases "security assistance" and "security cooperation." This yielded about 3,800 results, excluding duplicates. After examining the results we determined that most of these positions, while having security cooperation responsibilities, were not *primarily* concerned with security cooperation. For example, scores of security officer positions had ancillary responsibilities for technology security and foreign disclosure but were primarily concerned with the overall operations and information security for their commands. Therefore, we limited our analysis of the FASCLASS positions to those that had "security cooperation," "security assistance," or "international" in their position title. The relevance of the first two terms is self-explanatory. Jobs with "international" in their title indicate some aspect of relations with partners and allies, which, by definition, are aspects of security cooperation. The presence of any one of the three terms was sufficient for inclusion in our analysis. A qualitative analysis of positions that met these criteria indicated that such positions were highly likely to be focused primarily on security cooperation, an indication confirmed by more in-depth analysis of the resulting sample.

Like the data provided by DSCA, the FASCLASS data set is focused on civilian positions. Its main drawback, particularly for older position descriptions, is that the duty descriptions may not reflect what the person in the position is actually doing. On those occasions on which we both interviewed the incumbent and reviewed the description for a particular position, we frequently found that the incumbent's principal responsibilities focused on a subset of the competencies formally described in the position description. Position descriptions commonly list a range of potential responsibilities, of which the incumbent may focus on only one or two. Alternatively, supervisors may have

redefined an incumbent's responsibilities and focus since the position description was developed. These caveats reinforce the fact that while some tentative conclusions can be drawn from our research, it should be considered exploratory, a first step toward a more comprehensive analysis.

We coded the FASCLASS data using an automated search for key terms associated with the competencies identified in Chapter Two. For example, because the term "security assistance" has a formal definition, that term could be used to identify requirements for security assistance case management within a position description. We explain this approach at greater length in Appendix D.

DSCA-Provided Data

The research team used data collected by DSCA to identify job families and associate positions and competencies with those job families. The first data set included 528 positions with 251 unique job titles. For each position, the data set indicated the position title, the position's duties and responsibilities, the associated grade and occupation, and the source of funding for the position. A research team member then reviewed the position descriptions and coded the data set to determine which positions required which competencies. This sample was heavily weighted to civilian employees of joint and Army organizations because these were the only organizations that provided detailed information on security cooperation responsibilities for each position in their position descriptions. Data provided by other organizations—mostly from the Air Force—did not provide enough specificity in their position descriptions. Their data either referred only to standard occupation descriptions for each occupational series (from OPM's classification guide) or referred to the same standard descriptions for the security cooperation responsibilities for each job. In either case, it was impossible to distinguish between job positions based on the security cooperation responsibilities described. Therefore data on the civilian workforce in the Army and joint communities served as the basis for most of the analysis in this chapter.

BPC Management: A Distinct Job Family?

One of the more complex questions with regard to the security cooperation workforce is whether Building Partnership Capacity constitutes a separate job family or is simply part of another job family like security assistance implementation management. It is built on a complex set of authorities under Title 10, which could constitute a distinct body of knowledge justifying separate and distinct education, training, and experience (DoD, 2016; Moroney, 2013; Thaler et al., 2016). Indeed the proliferation of these authorities has reached the point that the Senate Armed Services Committee has directed DoD to seek consolidation of these authorities (U.S. Senate, 2016). According to the people whom we interviewed, the term also connotes a broader range of activities than those typical of security assistance cases, including joint exercises, staff talks, and senior leader engagements. Those two facts argue in favor of treating it as a separate job family with its own developmental path.

Arguing against that course of action is the fact that there are relatively few people in the security cooperation workforce who focus on BPC as their primary function. In analyzing the three different data sets we used for this component of our analysis, we found that three positions of the 528 from the DSCA data call, six of the 312 of the positions obtained from FASCLASS, and 23 of the approximately 11,500 positions described in the FY 2015 SCWD had planning, programming, implementing, or executing these Title 10 BPC programs as their primary focus. A larger number of positions—mostly training management positions at the security cooperation organization and CCMD level—did combine responsibilities for planning and executing efforts to build partner capacity with security assistance, financial

management, and other responsibilities. These position descriptions indicate that the authorities and resources available under Title 10 are merely additional means available to them to accomplish the objectives of security cooperation. Since our samples were small and not necessarily representative, we cannot exclude the possibility that there were positions in this category we missed. Notably, there were very few program management positions of any kind listed in either data set, and we must suppose there are people who manage those programs.

If there is a job family for BPC—that is, one in which the jobs are primarily focused on improving partners' capacity under a defined set of Title 10 authorities—it must focus on the centralized planning, programming, budgeting, and execution of such programs. Positions at the security cooperation organization and CCMD level tend to combine BPC responsibilities with responsibilities for other security cooperation activities, especially training. Based on the available data, it appears that too few positions exist with a primary or exclusive focus on building partnership capacity to justify its establishment as a separate job family. On the other hand, we lack confidence that we have identified and gathered data for all the positions associated with this potential job family. Ergo, it would probably be worth revisiting this issue after better data on workforce composition and functions become available.

Security Cooperation Workforce Simulation Methodology and Results

Section 1. General Introduction and Assumptions

Section 1.1. Goals of Analysis

The simulation in this study is utilized to assess the ability of the security cooperation workforce to sustain itself in the long term under varying requirements for promotion. This purpose guided the design of our simulation as well as our source files and internal data structures. We note that while we describe our data structures in terms of the characteristics of interest—level of responsibility, civilian or military, security cooperation experience and acquisition experience—in our analyses, they could easily be modified to address or accommodate additional characteristics should the scope of the study be altered.

The relevance of most of the aforementioned characteristics is clear, but that of acquisition experience may require additional explanation. We noted earlier in the report that many of the shortcomings with regard to security cooperation performance, particularly in the FMS domain, are attributable to poorly defined requirements. Key stakeholders hypothesize that this shortcoming is attributable to inadequate understanding of the DoD acquisition system. The research team thus explored the degree to which incumbents might acquire acquisition experience within the security cooperation workforce.

In this section, we provide a brief description of the structure of the Security Cooperation workforce and the role this structure played in our analysis before describing the simulation in more detail.

Section 1.2. Characteristics of Security Cooperation Workforce

The security cooperation workforce contains military, civilian, and contract employees. However, we consider just civilian and military employees in this study. Because the characteristics of these two subsets of employees are different we address them separately. For example, the turnover rate of military employees in the security cooperation workforce tends to be higher than that of civilian employees because military individuals often rotate through positions every few years, usually between one and three. Also, they may leave the security cooperation workforce only to return a few years later after serving in another position within DoD.

In addition to the type—civilian or military—the security cooperation workforce identifies seven distinct *hierarchies*, which essentially correspond to a position level, and employees are classified as belonging to one of these hierarchies based on the positions they hold. These hierarchies are entry-level, expert staff, middle manager, security cooperation organization chief, SDO/DATT, senior manager, and support staff. In this study, we grouped individuals into three ranks—entry-level, middle, and senior.¹ The entry-level category consists of all security cooperation workforce positions between GS-07 and GS-11. The middle and senior ranks each consist of two or more hierarchies that have been grouped together based on similar levels of experience and training as well as responsibilities. The middle rank comprises both the expert staff and middle manager hierarchies, and the senior rank comprises the security cooperation organization chief, SDO/DATT, and senior manager hierarchies. We did not include individuals in the support staff hierarchy because these positions tend to be administrative in nature.

¹ The ranks are similar to the hierarchies identified within the workforce but in some cases amalgamate two or more hierarchies.

Section 2. Simulation

In this section, we provide an overview of the simulation at the most basic level. To introduce the detailed description of the mathematical formulation of the model provided in Section 3, we discuss internal data structures that form the basis of the simulation and describe how these data structures are initially populated (i.e., how an initial workforce is created) using source data files.

Section 2.1. Internal Data Structures

The simulation relies on two main data structures to move employees through the system via hiring, promoting, and retiring—the *job table* and *employee table*. Both are matrices that contain one record for each job or employee and a variety of parameters related to the particular job or employee. We present the remainder of the simulation discussion in the context of civilian employees with the understanding that the simulation for military employees differs only in the input data. This helps to simplify our explanation and prevents us from having to specify a particular type of run throughout our discussion.

The job table contains one record for each job within the workforce. Each record contains information on the following parameters: job number, rank, whether it is possible to gain acquisition experience in the job, and employee number (the number of the employee currently holding the position).² Whether it is possible to gain acquisition experience in a particular job is indicated using a Boolean variable (“0” if the job is not one that grants acquisition experience, and “1” if the job is one in which an individual *may* gain acquisition experience). An example of entries in the job table is shown in Table G.1.

From Table G.1, we see that Job 1 is an entry-level position (indicated by the rank of “1”) that allows for the possibility of acquisition experience. Currently, Job 1 is held by Employee 65904. On the other hand, Job 8311 is a senior-level position (indicated by the rank of “3”)

² Here we use numerical values to represent rank because it is easier to utilize numerical digits in the internal data structures of the simulation. The entry-level rank is represented with a “1,” middle with a “2,” and senior with a “3.”

Table G.1
Example of (Civilian) Job Table

Job #	Rank	Acquisition Possible	Employee #
1	1	1	65904
2	1	1	66601
3	1	1	66136
...			
8311	3	0	52504
8312	3	1	55910

that does not allow for the possibility of acquisition experience. The position is held by Employee 52504. In general, the job table is highly static because we assume that no jobs are lost or created, and the only attribute that changes for a particular position throughout the simulation is the employee number of the employee currently holding the position.

Modification to the characteristics of interest or inclusion of additional characteristics is easily achieved by adding additional columns to the job table. Additional characteristics that may be of interest to track or incorporate into the simulation are required training courses, minimum levels of acquisition experience, or minimum levels of experience within the security cooperation workforce itself or DoD as a whole. These characteristics may be unique to particular positions or the same for subsets of positions within a given rank.

Similar to the job table, which contains one record for each position, the employee table contains one record for each employee in the security cooperation workforce. While the job table is static aside from the employee number, however, the employee table is highly dynamic, changing in both size and content.³ Each employee record contains

³ The employee table increases in size over the course of the simulation because we do not explicitly remove records of employees who have retired from the system. Instead, we indicate their retirement within the table itself with a “0” for a job number. This was done to allow for the possibility of distinguishing between individuals who formally retire versus

data pertaining to the employee's ID number, total years of service within DoD, total years of service within the security cooperation workforce, rank (i.e., the rank of the current or most recent position held), years of service within the current or most recent position, highest level of workforce training attained, number of years of acquisition experience, promotion priority, and job number (of the current position held by the employee). The promotion priority number is utilized only during the *Promotion* routine discussed later and is updated each time. The employee table is highly dynamic, as employee characteristics are updated on an annual basis. A portion of an employee table that was generated over the course of a 50-year period is shown in Table G.2.

Over the course of 50 years, we see in Table G.2 that 67,455 unique civilians have been, or are currently, in the employ of the security cooperation workforce. The first three employees, with employee numbers 1–3, have a job number of “0” indicating that they are no longer working within the security cooperation workforce. The most recent two employees to be hired (67454 and 67455) were hired into entry-level positions (which should be obvious since the only time new employees enter the system is when we fill the open entry-level posi-

Table G.2
Example of (Civilian) Employee Table

Employee #	YoS in DoD	YoS in SCW	Rank	YoS in Position	Education Level	Acquisition Experience	Promotion Priority	Job #
1	21	4	2	1	3	4	357	0
2	11	7	3	4	4	7	124	0
3	16	2	2	1	2	2	57	0
...								
67454	19	0	1	0	0	0	1	1247
67455	13	1	1	0	0	1	1	473

those who simply leave the security cooperation workforce but remain within the employ of DoD, which would allow us to track and update their DoD experience and identify returning individuals. While we designed our data structures to allow for this possibility, we did not incorporate this into our current analysis.

tions with external candidates) as indicated by the rank of “1” shown in the fourth column. We also see, for example, that employee 67455 was hired with 13 years of previous DoD experience, one year of prior experience in the security cooperation workforce, and one year of acquisition experience. The promotion priority for all new individuals is automatically set to “1” and is updated only during the *Promotion* phase of the simulation, as mentioned earlier.⁴

The job table and employee table are linked via the job number within the employee table and the employee number within the job table. The employee ID number of the employee currently holding a particular position matches the corresponding job number of that employee in the employee table. This link is used to crosswalk between jobs and employees as individuals are retired, promoted, or hired into the system.

Section 2.2. Data Sources

To compile the data necessary for input into the simulation (i.e., the data that drive the internal workings of the simulation), we relied on a variety of data sources. The first contains information specific to the security cooperation workforce, and the others contain information pertaining to employees, both civilian and military, across the DoD workforce.

The security cooperation–specific file contains three data sets from January 2013, January 2014, and January 2015 that provide snapshots of the workforce at these points in time. Each file contains one record for each security cooperation workforce employee with data pertaining to a variety of employee characteristics, such as position title and number, hierarchy, job cluster, billet category, and training completion.⁵

⁴ The promotion priority is irrelevant for all employees outside of the *Retire* routine because it plays a role during only this particular stage of the simulation and is modified each iteration (year).

⁵ The billet category specifies whether an employee is a civilian, contractor, military personnel, etc.

Due to the limited security cooperation workforce data available, we utilized the DMDC to pull data on both civilians and military personnel from the Civilian Master Edited Inventory File, Defense Enrollment Eligibility Reporting System (DEERS), and Work Experience File (WEX). These data sets, which are much more extensive than the security cooperation workforce data available to us, were used to observe long-term trends in employee behaviors such as promotions and retirements that were not easily observed in the SCWD data.

Recall that we identified three ranks of employees within the security cooperation workforce based on the hierarchies defined in this workforce. It was necessary to perform a similar grouping of employees within the DMDC data sets. Based on input from our sponsor, we grouped individuals into ranks based on their pay grades. Table G.3 shows the mapping of pay grades to ranks for both civilian and military employees.⁶

We use these data sources in the construction of our data files discussed in the next section as well as in the calculation of retirement and promotion likelihoods, which are discussed in detail in Sections 3.6 and 3.7.

Section 2.3. Data Files

In this section, we describe the three parameter files utilized in this simulation. The first two—*Job Inputs* and *External Candidate Parameters*—are used immediately in the simulation to create the set of jobs in our workforce and the initial pool of employees who hold these posi-

Table G.3
Pay Grade to Rank Mapping

	Entry-Level	Middle	Senior
Civilian pay grades	GS-7–GS-11	GS-12–GS-13	GS-14–GS-15
Military pay grades	O-1–O-4	O-5	O-6

⁶ In this analysis we focused only on military officers and did not include enlisted personnel or warrant officers. Also, we restricted our officer inclusion to M001–M007 because there were very few flag officers (M008 and above) within the security cooperation workforce.

tions. The third file, *Internal Employee Parameters*, is used along with the second in each iteration to retire and promote current employees as well as hire new employees into the system.

Based on the example job table shown in Table G.1, it is necessary to know the number of positions at each rank as well as the number or percentage of positions of each rank that may grant acquisition experience to create the pool of jobs. These parameters are stored in the *Job Inputs* file, whose data was determined using both the security cooperation workforce and DMDC data files. From each of the three snapshots, we estimated the total number of positions of interest as well as the number of positions in each rank that may provide acquisition experience.⁷ Due to some inconsistencies and inadequacies with these data sets, we used the DMDC data to aid in determining the distribution of jobs across the three ranks.⁸ The *Job Inputs* file is shown in Table G.4.

Table G.4
Job Inputs

Type	Rank Name	Rank Number	Number of Jobs	% Possible Acquisition
Civilian	Entry-level	1	1,736	61.69
Civilian	Middle	2	5,264	71.16
Civilian	Senior	3	1,312	34.92
Military	Entry-level	1	1,055	45.18
Military	Middle	2	643	58.36
Military	Senior	3	291	16.62

⁷ One of the parameters in this file indicates whether acquisition experience may be gained in a given position.

⁸ To determine the distribution of jobs across the ranks, we used the DMDC data to determine the distribution of employees across ranks based on their pay grades.

From Table G.4, we see that there are 1,736 civilian jobs at the entry-level rank. Of these, 61.69 percent are positions in which an individual may be able to gain acquisition experience.⁹

The first three parameters—type, rank (name/number), and number of jobs—represent the minimum data needed to create the set of security cooperation jobs. Depending on the scope of analysis, additional parameters including but not limited to those already included in this study can be easily added to the *Job Inputs* file and incorporated into the internal job table. Examples of other parameters that may be of interest include training courses required for entering a position, training courses required to be completed while in a position (if one is interested in enforcing requirements to remain in a position), required acquisition experience, required years of service (either within the security cooperation workforce itself or the DoD as a whole), or job cluster.

The *External Candidate Parameters* file contains employee parameters that are necessary to create the initial pool of employees (as well as when new employees are hired into the entry-level pool). These parameters include the average number of years of service within the security cooperation workforce and DoD,¹⁰ in general, as well as the variance in these data. It also includes the average number of years of acquisition experience and the corresponding variance for such employees. These statistics were calculated using the DMDC data by examining the set of individuals entering the security cooperation workforce each year from a non-security cooperation workforce position. If the individual was previously in the employ of DoD, then data was available on prior experience in both the security cooperation workforce and DoD as well as prior acquisition experience. If the individual was new to DoD, then no prior data were available, and the individual necessarily entered the

⁹ Note that the percentage of positions that may grant acquisition experience represents a subset of positions in each rank. It is not guaranteed that individuals in these positions do in fact gain acquisition experience, but the positions are ones that allow for this possibility. Whether individuals in these positions actually gain acquisition experience is a dynamic parameter in this simulation that is specified in the employee input file (to be discussed shortly) as a percentage of individuals in these positions that do actually gain experience.

¹⁰ In the case of military personnel, we consider the (average) number of years of active-duty experience rather than the (average) number of years of service within the DoD.

Table G.5
External Candidate Parameters

Type	Rank Name	Rank #	Variance		Variance		Avg. Acq. Exp.	Variance Acq. Exp.
			Avg. YOS in DoD	YOS in DoD	Avg. YOS in SCW	YOS in SCW		
Civilian	Entry-level	1	10.51	85.20	1.04	0.06	1.23	1.04
Civilian	Middle	2	12.48	104.35	1.09	0.14	2.47	2.08
Civilian	Senior	3	16.90	120.53	1.13	0.37	2.92	2.33
Military	Entry-level	1	11.09	21.91	1.01	0.04	1.72	0.88
Military	Middle	2	17.91	12.32	1.20	0.45	2.48	2.13
Military	Senior	3	21.65	1.49	1.51	1.22	2.22	2.29

system with no prior experience. For individuals with prior experience, we identified the number of years of prior experience for each individual entering the security cooperation workforce in a particular rank. We then determined the average experience levels across this set of individuals to determine the average experience levels of employees entering the system each year. We then calculated the average of these average experience levels (and variances) across the available ten-year period (FY 2006–FY 2015). Table G.5 displays the *External Candidate Parameters* file.

The third and final set of parameters, *Internal Employee Parameters*, contains data on characteristics of internal employees and parameters are used to update employee experience levels each year as well as to retire individuals.¹¹ For the purposes of our analyses, we include four parameters of interest in this file—the education rate, annual separation rate, percentage external hires, and the acquisition rate—shown in Table G.6. The education and annual separation rates are static, and they are based on analysis of the security cooperation workforce data and DoD data, respectively, whereas the percentage of external hires

¹¹ The retirement and promotion of employees is a multi-step process that requires additional data. We discuss these data in Sections 3.5 and 3.6 when we present a detailed description of the retirement and promotion phases.

Table G.6
Internal Employee Parameters

Type	Rank Name	Rank #	Education Rate (%)	Separation (%)	Acquisition Rate	External Hires (%)
Civilian	Entry-level	1	92.23	10.35	XX	100
Civilian	Middle	2	71.81	13.93	XX	XX
Civilian	Senior	3	84.54	7.74	XX	XX
Military	Entry-level	1	69.91	29.72	XX	100
Military	Middle	2	78.36	33.78	XX	XX
Military	Senior	3	91.98	27.04	XX	XX

and acquisition rate are dynamic and can be manipulated by the user to assess various policy implementations. The user-defined values are indicated by “XX.”

The education rate specifies the annual percentage of individuals in a particular rank who possess the suggested level of training for that rank.¹² These education rates were calculated from empirical data gathered from the three security cooperation workforce snapshots. These snapshots contain variables specifying whether an individual had (at some point) completed the suggested level of training.¹³ We used this

¹² There are essentially four “levels” of training in the security cooperation workforce. Level 1 and 2 courses are basic familiarization and orientation courses (often computer-based) that all employees, except the support staff, are expected to complete. Level 3 courses are more specialized, designed to develop skills needed by individuals in management roles. Level 4 courses are even more specialized and designed to address the needs of those in senior-level positions. Based on this, we assume that the Level 1 and 2 courses are the minimum education requirements suggested for employees in entry-level positions; Level 3 is the minimum suggested level for mid-level employees; and Level 4 is the suggested level of training for senior employees. Employees in entry-level and mid-level positions may complete additional training beyond that specified, and, in fact, some employees within the workforce have done so.

¹³ The variable referenced simply indicates whether an individual had completed the training at some point during his or her career. It does not assume that the training had been completed during the year immediately leading up to the snapshot. Additional variables identify the specific training courses and completion dates. However, due to limitations we were not able to investigate annual completion rates.

to calculate the percentage of individuals in each rank that had completed the suggested training. We then took the average achievement rate over the three years.

The annual separation rate, on the other hand, was calculated from the DMDC sources and represents the percentage of individuals who depart from the security cooperation workforce from a particular rank each year. This was calculated by determining the total number of employees in a particular rank each year between FY 2006 and FY 2015, as well as the total number of individuals who left the security cooperation workforce from that rank.¹⁴ The annual separation rate is the total number of individuals who departed (from a given rank) divided by the total number of individuals employed (in a given rank). This is important when we describe the retirement process within the simulation.

The acquisition rate specifies the percentage of individuals in acquisition granting positions who actually gain acquisition experience each year. For example, an acquisition rate of 50 percent indicates that 50 percent of individuals in positions that may provide acquisition experience do, in fact, gain that experience, and the 50 percent of individuals to receive the experience are randomly selected. This parameter can be specified by the user for the purposes of analyzing various policies and can be specified for each rank individually or be universal for all ranks.

The percentage of external hires allows the user to specify the percentage of positions in each rank that must be filled by external hires.¹⁵ It may be of interest to assess policies that require a certain portion of jobs to be filled by external candidates rather than promoting internal indi-

¹⁴ These individuals retired from the security cooperation workforce—either by moving to a position with a different workforce within DoD or leaving the employ of DoD completely. Individuals promoted from one rank to the next within the security cooperation workforce are not included.

¹⁵ We had initially envisioned the acquisition rate and percentage of external hires as being fixed variables, which is why they are included in the *Internal Employee Parameters* file with other fixed parameters. However, over the course of our analyses it became apparent that these parameters might be ones that a policymaker would be interested in manipulating to assess the effects on the system. Therefore, it would likely be more appropriate for these parameters and any other parameters that the user can manipulate to be located in a single “user-friendly” file.

viduals. Note that when external hires are permitted, it must be determined whether external hires can be used to fill additional open jobs that could not be filled by internal candidates, thus allowing external hires to exceed the specified percentage. For entry-level positions, it is obvious that 100 percent of open positions must be filled by external candidates.

Section 2.4. Security Cooperation Workforce Pseudocode

We now present pseudocode for the Security Cooperation Workforce Simulation that provides a general overview of the characteristics of the simulation (i.e., the parameters that are of interest and tracked throughout the simulation). In the next section, we will provide a detailed explanation of each step of the code. The pseudocode is shown in Figure G.1.

We see that the initial workforce (job set and initial pool of employees) is created at the beginning of the simulation. At each time step, which we assume to be one year, the experience and education levels of all employees are updated, a set of individuals are then retired from the system, and finally individuals are promoted into open posi-

Figure G.1
Simulation Pseudocode

```
Current Time = 0
Read in all data files containing job and employee parameters
Create job table
Create initial set of employees in employee table
Match employees with jobs

For the number of years specified in the runtime do the following
  Update Current Time (Current Time = Current Time + 1)
  Update employees' years of service
  Update employees' education levels
  Update employees' acquisition experience
  Retire individuals from workforce
  Promote individuals
End for
```

tions when possible. Note that we make the simplifying assumption that all employees wait until the end of the year (when our iterative process occurs) to exit the security cooperation workforce.

Section 3. Simulation Details

In this section, we provide in-depth discussion and explanation of the simulation. We address each piece of the simulation individually and present a thorough explanation of the various parameters used in the simulation, how employees' experiences are updated each year, as well as how we retire and promote individuals each year.

Section 3.1. Creation of Jobs

The creation of the set of jobs is straightforward using the *Job Inputs* file discussed in Section 2.3 of this appendix. An appropriate number of jobs (rows in the jobs table) are created for each rank based on the data contained in the *Job Inputs* file. The percentage of jobs that may grant acquisition experience is used to randomly select an appropriate number of positions from each rank to be positions in which acquisition experience may be granted. For example, we randomly select 1,071 (61.69 percent) of the 1,736 civilian entry-level positions to be ones in which employees may gain acquisition experience.

Section 3.2. Creation of Initial Employee Pool

Like the creation of the set of jobs, the creation of the initial employee pool is also straightforward using the data contained in the *External Candidates Parameters* file.¹⁶ For each employee, it is necessary to assign experience levels to him or her within DoD and the security cooperation workforce as well as in acquisition. To do so, we have made the

¹⁶ We use the *External Candidates Parameters* file in the creation of the initial employee pool because we are essentially creating the workforce from scratch and hiring new employees into all positions. After the initial creation, employees behave according to the parameters contained in the *Internal Employee Parameters* file, and the external candidate parameters are utilized only when filling positions (in our case just entry-level positions) with external candidates.

simplifying assumption that experience levels for each of those three characteristics are normally distributed with the mean and variance identified in the *External Candidates Parameters* file. This allows us to randomly select a number from a normal distribution with the specified mean and variance. Because a normal distribution may assume both positive and negative values, to ensure all experience levels are nonnegative, we take the absolute value of all randomly selected numbers. Additionally, we restrict all experience levels to be at most 30 years, and we require the number of years of service within the security cooperation workforce to be no greater than the number of years of service within DoD.¹⁷

It should be noted that some employees leave the security cooperation workforce and return at a later time, so it is possible that some employees enter the system (as external hires) with some level of education. However, due to the limited availability of data related to education and training, when hiring external candidates into the workforce we assume no prior education or training has been completed.

Lastly, employees are assigned an employee number in the order in which they were hired. Employees of a particular rank are then matched with the jobs in that rank by appropriately assigning the employee number in the job table and the job number in the employee table. For example, if Employee 1 is matched with Job 15, then Employee 1's record in the employee table is updated to reflect a job number of 15. Likewise, the record for Job 15 in the job table is updated to show an employee number of 1.

Note that during the creation of the initial workforce, employees should be created that satisfy the requirements for a set of positions to ensure all jobs are appropriately staffed at the outset. That is, employee characteristics can and should be adjusted to satisfy the requirements of the position that employee holds. This is typically straightforward if there are few requirements or if a particular set of requirements applies to a subset of jobs. However, if jobs are permitted to have differing

¹⁷ The security cooperation workforce is part of DoD, so any experience gained within the security cooperation workforce is also considered experience gained within DoD.

requirements, then it may be more appropriate to explicitly create an employee for each job.

Section 3.3. Update Experience Levels in DoD and Security Cooperation

During each iteration (i.e., at the end of each year), all employees gain one additional year of service both within the security cooperation workforce as well as within DoD. This information is easily updated within the employee table and does not require a detailed description of methodology.

Section 3.4. Update Education

As noted earlier, there are four levels of training courses. It is suggested that entry-level employees complete Levels 1 and 2; mid-level employees complete Level 3; and senior-level employees complete Level 4. (It should be understood that Levels 1 and 2 are considered prerequisites to Level 3 courses, and that the appropriate Level 3 course(s) should be taken prior to Level 4 courses.)¹⁸

Using the *Internal Employee Parameters* file, we use the education rates identified in the file to determine the number of employees of each rank who should satisfy the suggested levels of training. For example, from Table G.6 we would expect 1,601 (92.23 percent) individuals in civilian entry-level positions to have completed the first two training courses at some point during their careers. We then determine the number of individuals who do, in fact, possess the suggested level of training from the employee table. If the number of individuals who possess the suggested level of training is less than the number of individuals who should have completed training, then we determine how many individuals should receive training during the current year of the

¹⁸ Additionally, there are different Level 3 and Level 4 courses that focus on different concepts. Depending on the job cluster in which an employee works, different Level 3 courses may be required or suggested for different mid-level employees. We did not distinguish between different courses because education requirements were not a focus of this analysis. However, in an analysis in which breadth of experience (across a variety of job clusters) is important, one may wish to explicitly identify the different Level 3 and Level 4 courses and impose different training requirements for employees based on their job cluster(s).

simulation. To clarify, the number of individuals who receive training is equal to the difference between the expected number who should possess the required education level and the actual number of individuals who have achieved this level of education. Of those individuals who do not possess the suggested education level, we randomly select a subset of the appropriate size to receive training and update their employee record to reflect this.¹⁹ If the number of individuals who possess the suggested level of training is at least as large as the number of individuals who are expected to possess the suggested level of training, then there is no update to the education levels for individuals in this position.

Section 3.5. Update Acquisition Experience

To update the acquisition experience of individuals, we begin by identifying the subset of jobs in each rank that are “possible acquisition-granting” jobs. Of these, only a portion is assumed to actually confer acquisition experience each year.²⁰ Recall this is a dynamic parameter in the employee parameter file. Using the percentage of jobs assumed to actually confer such experience each year, we determine the number of individuals in acquisition-granting positions who receive acquisition experience each year. For example, 61.69 percent (1,071) of the 1,736 civilian entry-level positions are ones in which an individual may gain acquisition experience. If we assume 50 percent of these positions actually provide acquisition experience each year, then 535 individuals should receive acquisition experience each year. Once the number of individuals to receive acquisition experience each year is determined, we randomly select the subset of individuals to receive this experience

¹⁹ In the case of entry-level positions, both Level 1 and Level 2 course credit is awarded and reflected in employee files. For middle and senior managers, all course credit up to the highest level suggested is awarded. For example, if a mid-level employee has not completed any training courses and is one of the individuals randomly selected to have completed the training during a given iteration, then it is assumed that he completes Levels 1, 2, and 3.

²⁰ As we explain shortly, the subset of jobs selected to actually confer acquisition experience is randomly selected each year, so the set of jobs granting acquisition experience may differ from year to year.

from the set of individuals in acquisition granting positions. One year of acquisition experience is added to their employee records.

Section 3.6. Retire Individuals

Retiring individuals from the security cooperation workforce is a multi-step process.²¹ First, the *number* of individuals to be retired from each rank is determined using the annual separation rate in the *Internal Employee Parameters* file. For example, approximately 180 (10.35 percent) civilians in entry-level positions depart from the security cooperation workforce each year. *How* these individuals are selected is based on their likelihoods of retirement, which we discuss next. Lastly, we retire any remaining individuals who have reached at least 30 years of service within DoD.²²

As mentioned earlier, the selection of individuals to retire from the workforce is determined by their likelihoods of retirement, which are based on years of service within the security cooperation workforce. Using the DMDC data discussed previously, we calculated the probability of an individual departing from the security cooperation workforce with one year of service, two years of service, etc., up to 15 years of service. We did so by calculating the total number of employees in each rank each year between FY 2006 and FY 2015 with one year of service, two years of service, etc., as well as the total number of separations each year by individuals with one year of service, two years of service, etc. Summing over the ten-year period provided the total number of individuals in each rank who worked in the security cooperation workforce with exactly one year of service, two years of service, etc. as well as the total number of separations by individuals with these service levels. Taking the ratio of total separations to total employees produced the average separation rate. For example, it was determined that the

²¹ Here the term *retire* is multifaceted. This includes individuals who leave the employ of DoD at the end of the year as well as individuals who leave the security cooperation workforce but remain within the employ of DoD (i.e., the individual switches to another position within DoD).

²² While most individuals with 30 or more years of service in DoD would be retired from the workforce using our initial retirement methodology, there are a few who are not selected for retirement. We have chosen to use 30 years as a maximum service.

likelihood of a civilian in an entry-level position separating from the security cooperation workforce with one year of service is 35.84 percent; with two years of service, it is 24.23 percent; with three years of service, it is 14.58 percent.

We were able to obtain data on individuals and separations of individuals with only between one and 15 years of service within the security cooperation workforce. Thus, it is necessary to assign a likelihood of separation to individuals with more than 15 years of service. In this case, we assume the likelihood of separation is equal to the average likelihood across all other years of service. That is, we calculate the average likelihood of separation for individuals with between one and 15 years of service. For example, the average likelihood of separation for an individual in the civilian entry-level position with between one and 15 years of service is 23.51 percent. Thus, we assume the likelihood of separation for individuals in civilian entry-level positions with more than 15 years of service is 23.51 percent. In the case where no separations are observed for a particular rank/experience pair we assign a separation likelihood equal to the smallest nonzero likelihood observed.

These separation likelihoods are then used to perform a weighted sample/draw from the set of all employees in a given rank to identify the subset of individuals to be retired in a given year. The sample size (total number of individuals to be selected for retirement) is equivalent to the number of individuals to be retired each year as determined by the overall yearly separation rate discussed previously. In a weighted sample, the individuals with a greater likelihood of separation are more likely to be selected for retirement.

Section 3.7. Promote Individuals

Immediately after individuals are retired from the workforce, the empty positions must be filled. We do so using the *Promote* routine, which works from the top down, first promoting individuals from mid-level positions into senior positions and then from entry-level positions into mid-level positions. The number of open positions at the senior level is determined solely by the number of senior-level retirements each year, whereas the number of open positions at the middle and entry-levels are dependent upon the number of individuals retiring from the

workforce each year as well as positions that were vacated by promoted employees. Lastly, all entry-level positions are filled with external hires by creating the necessary set of employees as we did during the creation of the workforce using the *External Candidates Parameters* file.

Similar to the retirement routine, it is again necessary to determine how to select the subsets of individuals from the middle and entry-level ranks to be promoted. We do so using promotion priorities that are calculated similarly to the retirement likelihoods discussed in Section 3.6. In this case, the likelihood of a promotion is based on an individual's years of service within DoD rather than just his or her years of service within the security cooperation workforce.

Using the DMDC data sources mentioned earlier, between FY 2012 and FY 2015, we identify the number of individuals in each rank with one year of DoD service, two years of DoD service, up to 35 years of DoD service.²³ We also identify the number of individuals that are promoted to the next highest rank for each of the years of DoD service. Note here that a promotion to the next highest rank is in the context of the ranks defined for our simulation. For example, a promotion from GS-10 to GS-11 is considered a promotion in pay grade within civilian governmental service but is not a promotion in rank for our purposes because this individual still falls within the entry-level rank we have defined.

We then use these values to determine the average promotion rate of individuals of a particular rank based on their years of service with DoD. For example, between FY 2012 and FY 2015, there were a total of 71 individuals in civilian entry-level positions with one year of service and just two promotions of such individuals to the middle rank. This suggests that approximately 2.82 percent of civilians with one year of service within DoD are promoted from entry-level to middle positions each year. We calculate these promotion rates for promotions from entry-level to middle positions as well as middle to senior positions for all years of service that appear within the available DoD data. (As noted earlier, we observed a maximum of 35 years of service

²³ We could have limited our focus to 30 years of service because we retire all individuals who reach 30 years of DoD service in the *Retire* routine. However, we kept the 35-year time frame here to allow for modification of our retirement rules.

within the DoD.) These promotion likelihoods are used, as we describe shortly, to determine *promotion priorities* for all individuals of a rank, which are used to select a subset of individuals for promotion.

For ease of description, we describe the promotion process for promotions from middle to senior positions without any promotion requirements (required years of service within security cooperation workforce or DoD, required acquisition experience, etc.). It should be understood that promotions from entry-level to middle positions are conducted in the same manner.

To fill senior positions, we first identify the set of mid-level employees who are eligible for promotion. (In this case, we are not enforcing any promotion requirements, so all remaining mid-level employees are promotion-eligible.) The promotion likelihoods discussed earlier are assigned to all eligible employees based on their years of service. Similar to the retirement process, we now perform a weighted sampling, where the weights are the promotion likelihoods. Unlike the retirement sampling, here we are actually sampling the entire eligible pool rather than just a subset, and it is the order in which individuals are selected that determines the promotion priorities. To clarify, the individual selected first in the sampling process is assigned a promotion priority of “1.” The higher an individual’s promotion likelihood, the greater his or her chance of being selected earlier in the sampling process and receiving a higher promotion priority (which is actually a lower number).

If there are n open jobs at the senior level, we select the first n individuals on the promotion priority list for promotion. That is, individuals with promotion priorities of 1 to n are identified as the set of individuals to be promoted to senior positions. We then randomly assign these n individuals to the n open positions.²⁴ The job table is updated to reflect that an individual has left one position and entered another by updating the employee numbers of the appropriate positions accordingly for each pair of positions affected. The employee record of each

²⁴ Note that it is possible to do a random assignment of positions to all open positions only because we have not implemented any promotion requirements. Depending on the complexity of promotion requirements, a more sophisticated method for assigning employees to positions may be necessary.

promoted employee is updated accordingly as well—his or her rank is increased and the corresponding job number updated.

The set of open positions at the middle level now consists of those positions opened due to retirements and those just vacated by promoted individuals. We fill these open positions with entry-level employees in a similar manner. Subsequently, all open entry-level positions are then filled with external candidates.

When enforcing criteria for promotion, the *Promote* routine becomes more complicated, and one must take care to ensure promotions are performed correctly. Promotion requirements can be set universally for an entire rank (easiest), for a subset of positions within a rank (more difficult), or for individual positions (most difficult). Depending on the number of promotion requirements one chooses to enforce, this may require different promotion methods. Setting universal promotion would not affect our method of promoting individuals other than in the identification of eligible individuals. Rather than all mid-level individuals being eligible for promotion into senior positions, only those individuals who meet all criteria would be considered eligible. In the case of setting promotion requirements for a subset of positions, the difficulty level depends on whether multiple requirements apply to the same subsets or differing but possibly overlapping subsets. For example, if we require a certain amount of acquisition experience for promotion into certain jobs, we would have to first identify the pool of employees who are eligible for promotion into this set of jobs and perform these promotions. All remaining individuals would then be eligible for promotion into jobs that do not have any requirements. Enforcing more than two criteria for differing subsets of positions causes the promotion process to become quite involved and computationally expensive. In this case, it would likely be necessary to perform promotions into one position at a time. For each position, one would have to identify the pool of eligible employees and select an individual for promotion based on promotion priority or some other criterion that identifies him or her as “most qualified.” The complexity here stems from the need to generate a new pool of eligible employees for each position.

Section 4. Results

Using the Security Cooperation Workforce Simulation described in Section 3, we assessed the ability of the workforce to sustain itself long term (without any external hires except at the entry level) under various promotion requirements. To investigate whether the workforce is able to sustain itself, we consider five independent situations in which promotion into mid-level or senior positions are dependent on experience levels. We consider cases in which two and three years of service in the security cooperation workforce are required for promotion into mid-level positions, and cases in which three, six, and nine years of service were required for promotion into senior-level positions. We assume these requirements to be universal for the specified rank.

We also investigate the workforce composition in terms of security cooperation experience and acquisition experience under various acquisition rates. We investigate four different scenarios: a 25-percent acquisition rate, 33-percent acquisition rate, 50-percent acquisition rate, and 100-percent acquisition rate. We assume that the acquisition rate is the same for all ranks in each of the four scenarios.

In both analyses, we allow a ten-year “development and stabilization” period. Because we initialize the workforce with new, external employees (recall that initially all employees were created using characteristics of individuals entering the workforce rather than those of individuals who had been in the workforce for some time), we need to allow the system to mature. Employees need to develop within the system in order for their characteristics to more closely resemble those of the true security cooperation workforce. Therefore, we expect to see a bit of instability during the first few years as the workforce grows, and we do not take this period into account when making conclusions. Instead, we allow for a five- to ten-year “development and stabilization” period. We now present the results from this analysis, addressing the civilian and military populations individually due to their differing characteristics.

Section 4.1. Civilian Results

For the civilian population within the security cooperation workforce, we found that the system is able to sustain itself under the requirement of two years of experience for promotion into middle positions. Table G.7 depicts these results. Namely, all middle and senior positions opened due to retirement as well as promotion into senior positions can be filled internally with current employees of the security cooperation workforce. Obviously, all entry-level positions must be filled with external candidates.

As Table G.7 illustrates, in the long run approximately 150 senior-level employees, 800 mid-level employees, and 200 entry-level employees retire each year under these requirements. Additionally, 150 mid-level employees are promoted into senior positions, and 960 entry-level employees are promoted into mid-level positions. Nearly 1,200 external employees are needed to fill the open entry-level positions each year. In this system, entry-level employees have an average of 1.73 years of service within the security cooperation workforce, mid-level employees have an average of almost seven years of service, and senior-level employees have an average of nearly 13 years of service. We also note that employees within the security cooperation workforce spend an average of 1.35 (consecutive) years in entry-level positions, almost five years in mid-level positions, and 6.5 years in senior positions. The difference between the average experience level of entry-level employees and the average number of years spent in entry-level positions is due to the fact that some individuals reenter the security cooperation workforce with prior experience.

When three years of security cooperation experience are required for promotion into mid-level positions, we find that the system is unable to sustain itself without external hires, as indicated by Table G.8. In the long run, there are approximately 2,500 (48 percent) mid-level positions that cannot be filled on an annual basis by internal (entry-level) employees. Similar to the previous assumption of two years of security cooperation experience, approximately 150 senior employees and 200 entry-level employees retire each year. However, only 450 mid-level employees retire each year, which is a direct result of the large number of vacant mid-level positions. We see a slight increase in the average

Table G.7
Annual Metrics: Two Years of Security Cooperation Experience Required for Promotion into a Mid-Level Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp	# Completing Training	# Unfilled Positions
1	Devel.	219	825	825	1,044	11.90	1.53	1	1	1.48	1,602	0
1	Middle	985	4,279	273	0	14.09	1.59	1	1	2.75	3,781	433
1	Senior	273	N/A	N/A	0	17.05	1.67	1	1	2.85	1,110	0
2	Devel.	209	1,096	1,096	1,305	11.93	1.71	1.40	2	1.73	966	0
2	Middle	721	4,110	117	0	13.96	2.67	2	2	3.23	584	175
2	Senior	117	N/A	N/A	0	15.48	2.67	1.79	2	3.19	223	0
...												
49	Devel.	205	1,044	963	1,168	12.30	1.72	1.34	5	1.70	1,112	0
49	Middle	815	4,449	148	0	16.36	6.93	4.87	26	5.26	706	0
49	Senior	148	N/A	N/A	0	20.29	12.85	6.48	23	7.25	147	0
50	Devel.	218	1,042	963	1,181	12.84	1.73	1.35	5	1.74	1,089	0
50	Middle	811	4,453	152	0	16.44	6.97	4.89	24	5.24	684	0
50	Senior	152	N/A	N/A	0	20.38	12.92	6.53	23	7.27	135	0

Table G.8
Annual Metrics: Three Years of Security Cooperation Experience Required for Promotion into a Mid-Level Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp.	# Completing Training	# Unfilled Positions
1	Devel.	220	0	0	220	12.25	1.54	1	1	1.52	1,602	0
1	Middle	952	4,312	259	0	13.93	1.57	1	1	2.72	3,781	1,211
1	Senior	259	N/A	N/A	0	17.24	1.64	1	1	2.81	1,110	0
2	Devel.	201	784	784	985	12.80	2.43	1.87	2	2.04	213	0
2	Middle	602	3,451	123	0	14.13	2.59	2	2	3.42	3	1,152
2	Senior	123	N/A	N/A	0	15.57	2.64	1.80	2	3.12	234	0
...												
49	Devel.	197	613	613	810	12.52	2.17	1.72	3	1.94	727	9
49	Middle	428	2,347	158	0	16.48	7.35	6.78	23	5.44	403	2,462
49	Senior	158	N/A	N/A	0	20.55	13.17	6.48	25	7.25	144	0
50	Devel.	215	580	580	795	12.78	2.15	1.70	3	1.87	782	0
50	Middle	441	2,361	152	0	16.44	7.28	6.70	22	5.38	456	2,475
50	Senior	152	N/A	N/A	0	20.50	13.07	6.39	25	7.17	144	0

security cooperation experience of entry-level employees—2.15 years of experience versus the previous 1.73 years of experience. This is expected due to the requirement that entry-level employees cannot be promoted into mid-level positions with less than three years of experience. So, for those individuals who do not leave the workforce prior to promotion, they must spend at least three years in an entry-level position. We see a corresponding increase in the experience levels of mid- and senior-level employees. A slight increase in the average time security cooperation employees spend in entry-level positions is also observed—1.70 years, compared with 1.35 years. A more drastic increase is observed in the average amount of time employees spend in mid-level positions—6.70 years, compared with 4.90 years.

In terms of enforcing requirements for promotion into senior-level positions, we assessed three independent situations. We investigated the stability of the security cooperation workforce when three, six, and nine years of security cooperation experience are required for promotion into senior-level positions. In all cases, it was observed that the system could sustain itself with exclusively internal hires in the long term, as illustrated by Tables G.9 through G.11 following. Additionally, most of the employee characteristics discussed earlier are similar in each of the three cases, and they are similar to the results observed when requirements for promotion into mid-level positions are implemented.

Under each of the three distinct experience requirements for senior positions, approximately 220 entry-level, 800 mid-level, and 150–175 senior-level employees retire each year; 1,000 entry-level and 170 mid-level employees are promoted each year; and 1,200 external hires are necessary to replenish the entry-level positions. We also observe similar security cooperation experience level and rank tenures in each of the three situations. Entry-level employees possess an average of two years of experience in the security cooperation workforce, while mid-level employees typically possess 6.5 to seven years of service. Employees in senior-level positions possess an average of 13 to 16.30 years of security cooperation experience, with experience being positively correlated with experience requirements for promotion. In terms of the amount of time an individual spends in a particular position, employees spend an average of 1.5 years in entry-level positions, 4.5 to five years in mid-level

Table G.9
Annual Metrics: Three Years of Security Cooperation Experience Required for Promotion into a Senior-Level Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp	# Completing Training	# Unfilled Positions
1	Devel.	213	1,523	998	1,211	11.93	1.54	1	1	1.49	1,602	0
1	Middle	965	33	33	0	13.90	1.58	1	1	2.75	3,781	0
1	Senior	281	N/A	N/A	0	17.50	1.64	1	1	2.84	1,110	248
2	Devel.	196	1,540	1,119	1,315	12.77	1.84	1.30	2	1.68	1,117	0
2	Middle	773	2,655	346	0	13.47	2.58	1.81	2	3.22	677	0
2	Senior	98	N/A	N/A	0	16.29	2.71	2	2	3.22	39	0
...												
49	Devel.	213	1,523	971	1,184	13.57	2.03	1.51	8	1.80	1,074	0
49	Middle	815	4,204	156	0	16.03	7.00	4.96	25	5.31	716	0
49	Senior	156	N/A	N/A	0	20.33	13.05	6.56	24	7.18	135	0
50	Devel.	222	1,514	974	1,196	13.53	2.02	1.50	8	1.82	1,090	0
50	Middle	815	4,230	159	0	16.20	7.03	5.00	26	5.34	699	0
50	Senior	159	N/A	N/A	0	20.20	12.95	6.52	24	7.08	133	0

Table G.10
Annual Metrics: Six Years of Security Cooperation Experience Required for Promotion into a Senior-Level Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp.	# Completing Training	# Unfilled Positions
1	Devel.	217	1,519	967	1,184	12.51	1.53	1	1	1.50	1,602	0
1	Middle	967	0	0	0	13.86	1.58	1	1	2.72	3,781	0
1	Senior	259	N/A	N/A	0	17.42	1.66	1	1	2.79	1,110	259
2	Devel.	209	1,527	780	989	13.02	1.83	1.32	2	1.65	1,099	0
2	Middle	780	0	0	0	13.56	2.59	1.82	2	3.21	686	0
2	Senior	111	N/A	N/A	0	16.36	2.68	2	2	3.11	2	370
...												
49	Devel.	210	1,526	980	1,190	13.69	2.05	1.52	8	1.85	1,099	0
49	Middle	813	2,441	167	0	15.92	6.73	4.73	25	5.13	737	0
49	Senior	167	N/A	N/A	0	21.26	14.49	6.02	22	8.57	161	0
50	Devel.	223	1,513	946	1,169	13.74	2.06	1.51	9	1.80	1,101	0
50	Middle	800	2,479	146	0	15.92	6.73	4.72	26	5.13	725	0
50	Senior	146	N/A	N/A	0	21.15	14.37	5.96	20	8.54	147	0

Table G.11
Annual Metrics: Nine Years of Security Cooperation Experience Required for Promotion into a Senior-Level Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp.	# Completing Training	# Unfilled Positions
1	Devel.	216	1,520	969	1,185	11.83	1.52	1	1	1.47	1,602	0
1	Middle	969	0	0	0	13.96	1.58	1	1	2.72	3,781	0
1	Senior	261	N/A	N/A	0	17.81	1.65	1	1	2.77	1,110	261
2	Devel.	208	1,528	786	994	12.68	1.86	1.32	2	1.66	1,086	0
2	Middle	786	0	0	0	13.56	2.60	1.82	2	3.18	681	0
2	Senior	110	N/A	N/A	0	16.88	2.66	2	2	3.12	3	371
...												
49	Devel.	221	1,515	978	1,199	13.51	1.99	1.47	11	1.78	1,129	0
49	Middle	811	1,036	167	0	15.79	6.45	4.46	23	4.96	742	0
49	Senior	167	N/A	N/A	0	22.67	16.24	5.67	21	9.85	174	0
50	Devel.	221	1,515	978	1,199	13.68	2.02	1.49	8	1.81	1,090	0
50	Middle	804	1,100	174	0	15.73	6.49	4.45	22	4.95	731	0
50	Senior	174	N/A	N/A	0	22.86	16.29	5.74	21	9.91	150	0

positions, and 5.75 to six years in senior positions. In this case, however, the amount of time an individual spends in a particular position (rank) is negatively correlated with the experience requirements. That is, the greater the experience requirement for promotion into senior positions, the less time an individual (at the middle or senior level) spends in a particular position. This is expected, because the greater experience requirements for promotion into senior levels guarantee that an individual at the senior level has a great deal of experience both within the security cooperation workforce and in DoD itself and is therefore more likely to retire in a shorter time frame following promotion. Similar reasoning holds for mid-level employees.

Section 4.2. Military Results

For military employees within the security cooperation workforce, we examined four promotion requirement scenarios as for the civilian workforce: requiring two and three years of prior security cooperation experience for accession to the O-5, and requiring three and six years of prior security cooperation experience for promotion to O-6. We found that it was feasible to require two years of prior security cooperation experience for advancement to the O-5 but not three years of such experience. With regard to accession to O-6, we found that three years of prior experience could be required, but not six.

We found that the system is able to sustain itself under the requirement of two years of experience for promotion into O-5 positions, as illustrated by Table G.12.

As Table G.13 shows, the system cannot sustain itself if three years of security cooperation experience are required for promotion into O-5 positions with internal promotions only; external hires would be necessary to fill some positions. When three years of service are required for such promotions, we observe approximately 219 unfilled O-5 positions each year.

When security cooperation experience is required for promotion into O-6 positions, the system can sustain itself if three years of prior security cooperation experience are required, as indicated in Table G.14. There are no unfilled O-6 positions.

Table G.12
Annual Metrics: Two Years of Security Cooperation Experience Required for Promotion into an O-5 Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp.	# Completing Training	# Unfilled Positions
1	O-1–O-4	315	417	295	610	15.22	1.59	1	1	2.24	738	0
1	O-5	217	426	78	0	20.43	1.92	1	1	3.10	504	0
1	O-6	78	N/A	N/A	0	22.17	2.14	1	1	1.91	268	0
2	O-1–O-4	313	561	295	608	15.38	1.89	1.42	2	2.43	439	0
2	O-5	217	426	78	0	19.52	2.92	1.54	2	3.30	234	0
2	O-6	78	N/A	N/A	0	22.85	3.06	1.73	2	2.27	73	0
...												
49	O-1–O-4	314	550	311	625	14.82	2.21	1.69	9	2.60	441	0
49	O-5	224	419	87	0	19.20	4.40	2.12	9	3.79	231	0
49	O-6	87	N/A	N/A	0	22.60	8.06	3.25	14	4.64	74	0
50	O-1–O-4	315	555	301	616	14.97	2.16	1.64	10	2.60	457	0
50	O-5	217	426	84	0	19.06	4.38	2.07	10	3.67	247	0
50	O-6	84	N/A	N/A	0	22.26	8.09	3.16	14	4.73	81	0

Table G.13

Annual Metrics: Three Years of Security Cooperation Experience Required for Promotion into an O-5 Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp.	# Completing Training	# Unfilled Positions
1	O-1-O-4	314	4	4	318	15.42	1.58	1	1	2.21	738	0
1	O-5	217	426	78	0	20.68	1.91	1	1	3.12	504	291
1	O-6	78	N/A	N/A	0	22.23	2.09	1	1	1.99	268	0
2	O-1-O-4	313	268	268	581	15.96	2.26	1.70	2	2.55	227	0
2	O-5	118	234	78	0	21.33	2.87	2.00	2	3.71	1	219
2	O-6	78	N/A	N/A	0	22.95	3.00	1.73	2	2.41	73	0
...												
49	O-1-O-4	313	239	239	552	16.27	2.14	1.62	3	2.51	411	0
49	O-5	143	275	86	0	18.44	4.94	4.26	11	4.03	169	215
49	O-6	86	N/A	N/A	0	21.93	8.02	3.18	15	4.40	80	0
50	O-1-O-4	313	230	230	543	16.03	2.11	1.58	3	2.47	422	0
50	O-5	144	284	87	0	18.68	4.85	4.17	11	4.04	182	216
50	O-6	87	N/A	N/A	0	22.32	8.10	3.14	15	4.46	80	0

Table G.14
Annual Metrics: Three Years of Security Cooperation Experience Required for Promotion into an O-6 Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp.	# Completing Training	# Unfilled Positions
1	O-1-O-4	315	740	289	604	15.45	1.62	1	1	2.29	738	0
1	O-5	217	72	72	0	20.65	1.88	1	1	2.98	504	0
1	O-6	78	N/A	N/A	0	22.17	2.18	1	1	1.95	268	0
2	O-1-O-4	313	742	300	613	15.10	2.01	1.43	2	2.38	411	0
2	O-5	127	218	83	0	20.66	2.55	1.55	2	3.31	222	0
2	O-6	77	N/A	N/A	0	22.95	3.39	2.00	2	2.25	68	0
...												
49	O-1-O-4	314	741	304	618	15.02	2.30	1.75	8	2.50	435	0
49	O-5	220	354	84	0	19.40	4.03	2.01	8	3.64	229	0
49	O-6	84	N/A	N/A	0	23.15	7.68	3.15	13	4.24	75	0
50	O-1-O-4	313	742	304	617	14.91	2.30	1.74	9	2.56	418	0
50	O-5	218	352	86	0	19.53	4.12	2.02	9	3.66	242	0
50	O-6	86	N/A	N/A	0	23.09	7.61	3.16	11	4.24	77	0

Table G.15

Annual Metrics: Six Years of Security Cooperation Experience Required for Promotion into an O-6 Position

Time	Rank	# Retired	# Eligible for Promotion	# Promoted	# External Hires	Average YOS in DoD	Average YOS in SCW	Average Time in Rank	Max. Time in Rank	Average Acq. Exp.	# Completing Training	# Unfilled Positions
1	O-1-O-4	314	741	217	531	15.45	1.59	1	1	2.20	738	0
1	O-5	217	0	0	0	20.56	1.91	1	1	2.96	504	0
1	O-6	78	N/A	N/A	0	22.04	2.18	1	1	2.09	268	78
2	O-1-O-4	314	741	217	531	15.25	2.10	1.50	2	2.48	376	0
2	O-5	217	0	0	0	20.79	2.75	1.66	2	3.27	176	0
2	O-6	57	N/A	N/A	0	23.11	3.13	2.00	2	2.24	268	135
...												
49	O-1-O-4	314	741	271	585	14.72	2.41	1.82	9	2.65	408	0
49	O-5	217	54	54	0	19.77	3.90	1.95	5	3.53	228	0
49	O-6	69	N/A	N/A	0	23.26	9.23	6.51	16	5.05	55	83
50	O-1-O-4	313	742	290	603	14.75	2.41	1.84	9	2.64	403	0
50	O-5	219	71	71	0	20.00	3.93	2.00	5	3.58	219	0
50	O-6	66	N/A	N/A	0	23.38	9.45	6.57	17	5.17	49	78

As Table G.15 illustrates, it is not feasible to require six years of prior security cooperation experience for advancement to O-6 levels, at least under our assumptions about force structure. By the time the system reaches equilibrium at 50 years, 78 O-6 positions would have to be filled by individuals with no prior experience in security cooperation annually.

Summary

This appendix described our simulation of the military and civilian security cooperation workforces' ability to provide candidates with specified levels of experience for positions at increasing levels of responsibility. We found that there were enough junior-level (GS-7 to GS-11) positions in the civilian workforce to make it feasible to require that all individuals in mid-level (GS-12 to GS-13) positions have two years of prior security cooperation experience in junior-level positions. There were also enough junior- and mid-level positions to allow DoD to require individuals in senior-level (GS-14 to GS-15) positions to have up to nine years of prior security cooperation experience. With regard to the military workforce, there are simply not enough positions at the O-1 to O-4 level to allow DoD to require officers assuming O-5 security cooperation positions to have more than two years of prior security cooperation experience. Since the normal length of a military assignment is three years, it is infeasible to require officers assuming O-5 security cooperation positions to have prior security cooperation experience. It might be possible, however, to require prior experience for many O-5 security cooperation positions. It would be feasible to require that officers in O-6 security cooperation positions have three years of prior security experience, but no more. Whether the benefits of requiring a certain amount of prior experience exceed the costs of imposing additional requirements on the military and civilian personnel systems is a matter that must be left to the professional experience and judgment of DoD senior managers for now.

Workforce Management Functions

The 2017 National Defense Authorization Act assigns responsibility for managing the “Department of Defense Security Cooperation Workforce Development Program” to the director of DSCA. While this study was concerned primarily with the workforce itself and its current and desired characteristics, DSCA is obviously concerned with the mechanics of governance as well and requested that the research team synthesize guidance on workforce management from a number of DoD and service publications.

Guidance on managing the acquisition workforce is particularly useful. The security cooperation workforce is similar to the acquisition workforce in many respects. Both workforces stretch across several DoD components and thus respond to several different authorities. Both workforces must master a complex body of knowledge defined by law and policy over and above the knowledge domains defined by employees’ military or civilian occupation. For the acquisition workforce, that knowledge domain is defined by the Federal Acquisition Regulation and the Defense Federal Acquisition Regulation Supplement. For the security cooperation workforce, that knowledge domain includes the Foreign Assistance act and a number of relatively new authorities under Title 10. Indeed, the two workforces often overlap, as the security cooperation workforce leverages the DoD acquisition system to help partners acquire capabilities. These characteristics both put a premium upon collaboration across organizational boundaries and render top-down solutions difficult to develop and impose.

For that reason, the *Acquisition Career Manager (ACM) Guidebook* (2015) provides the framework around which this appendix is organized. As appropriate, we have supplemented the framework described therein by including functions described in other references. This appendix therefore describes the workforce management functions to be performed and emphasizes the collaborative nature of the approach to governance employed in analogous contexts. It does not attempt to recommend specific organizations' structures or resource levels for managing the security cooperation workforce. Such recommendations lie well beyond the scope of this study.

Sources

As noted, the *ACM Guide* was the primary reference used in developing this appendix. The framework it presents is fairly intuitive and consistent with other references analyzed, including service publications on military and civilian personnel management. Unless otherwise indicated, all references are drawn from this source. As appropriate, we supplemented analysis of these references with observations from RAND's past work on personnel management.

Workforce Management Functions

Organizational structures for workforce management and the resources allocated to support workforce management functions will differ depending on the nature of the workforce and the resources available to it. Workforce management functions should remain relatively constant over time. The *ACM Guide* identifies four key functions—or responsibilities—listed here and defined at greater length in the succeeding paragraphs:

- data-driven workforce management, which implies capabilities to gather and analyze information about the workforce
- developing and managing workforce development budgets

- strategic human capital planning
- developing workforce policies and procedure.

The *ACM Guide* also lists two additional functions—managing education and training waivers and certification extensions—that, while valid and important, are probably not central to the success of the enterprise.

Data-Driven Workforce Management

It seems intuitive that understanding the workforce is an essential precondition to managing it effectively. This understanding requires accurate and comprehensive data, as well as the capability to analyze those data. Relevant data include the size, distribution by organization, and demographic information on the workforce. Demographic information may consist of grade, military or civilian occupation, age, professional education and training, professional experience, gender, ethnicity, and other information necessary to both develop and implement strategic human capital plans and to comply with external constraints and limitations. For example, both the Air Force and the Army require workforce managers to monitor demographic information in order to comply with federal policy on equal opportunity and affirmative employment (U.S. Army, undated-b; U.S. Air Force, 1994). Demographic information is also useful in forecasting attrition in the workforce due to retirements and other causes (Vernez, 2007; Gates, 2013).

Identifying future workforce requirements is an important first step to human capital strategic planning. In 2007, a RAND Corporation research team identified three basic steps required to enable workforce planning (Vernez, 2007):

- Determine future workforce demand, in terms of the numbers of workers required, in what time frame, and the competencies those workers will need.
- Determine anticipated workforce supply in terms of the characteristics listed previously; as described in Chapters Four and Six, a competency survey is a critical tool in assessing potential supply. The acquisition workforce, for example, as institutionalized an

“Acquisition Workforce Competency Survey (AWCS)” for this purpose.

- Compare supply with demand in order to identify gaps.

Future workforce requirements include both developmental requirements—such as training, education, and experience—and staffing requirements, such as preparing to replace employees lost through attrition. In the short term, performing this function will be challenging, as current requirements have yet to be defined.

Developing and Managing Workforce Development Budgets

Workforce analysis will indicate requirements for training, education, and other opportunities, all of which cost money. As curricula evolve, their costs may change. In addition, depending on the nature of the assignment, meeting staffing needs may require the payment of incentives (U.S. Air Force, 1994). Effective workforce managers should forecast these fiscal requirements and manage their execution.

Strategic Human Capital Planning

The purpose of identifying either quantitative or qualitative gaps in the workforce is so that managers can develop plans for filling those gaps, either through recruitment, training, and education, or through experience. Strategic human capital planning includes identifying workforce competencies needed now and in the future, assessing where you are now, and developing plans to achieve the needed future by filling the gaps (Emmerichs, Marcum, and Robbert, 2004; Mijares, 2016).

As described in Chapter Four, determining the future state of the workforce is a critical planning task, and one that cannot emerge from the data. Competencies required in the future may not be the same as those required in the past. Instead, workforce managers must understand the implications of enterprise strategy for the workforce and translate those implications into required workforce competencies.

Developing Workforce Policies and Procedures

Policies and procedures make up an important element in implementing a strategic human capital plan. Most importantly, policies and

procedures can be used to prescribe certification requirements—the combination of education, training, and experience required to perform different jobs within the workforce—throughout the workforce. Policies also prescribe what kind of data describing the workforce is to be maintained and who is to maintain that data. For example, Department of Defense Directive 5000.52, “Defense Acquisition, Technology, and Logistics Workforce Education, Training, and Career Development Program” assigns overall responsibility for managing the acquisition workforce to the Under Secretary of Defense for Acquisition, Logistics and Technology but assigns responsibility for maintaining data describing the acquisition workforce to the Under Secretary of Defense for Personnel and Readiness (DoD, 2005). Other key policies include establishing career models that define career fields and describe the general patterns of education, training, and experience that individuals should follow throughout those careers.

Collaborative Management

To the extent that management of the acquisition workforce could serve as a template for the security cooperation workforce, that example would seem to indicate the need for a collaborative approach. At the DoD level, the Under Secretary of Defense for Acquisition, Logistics and Technology is responsible for managing the acquisition workforce. Department of Defense Directive 5000.52 also establishes two bodies to govern the training, education, and development of the acquisition workforce: the Acquisition, Technology and Logistics Senior Steering Board and the Workforce Management Group. Both groups bring together representatives from the relevant DoD components for the purposes of developing and monitoring workforce strategy (DoD, 2005). This management structure insures that component perspectives and imperatives inform workforce policy decisions.

Similar structures exist at the component level. The Department of the Navy, for example, maintains Naval Acquisition Career Field Councils (U.S. Navy, 2011), while the Army and the Air Force have a career program policy committee or a career program policy council,

respectively. These committees balance enterprise perspectives about workforce size and cost, larger policy constraints and strategic considerations, and developmental needs of various career fields when establishing component-level workforce strategy and policy. Career fields are represented by functional leads or functional chiefs.

The security cooperation workforce could apply this same template. DSCA could establish governance bodies comprising representatives from the different DoD components. In turn, components could establish their own bodies for collaborative management, comprising representatives from stakeholder organizations, to establish overarching policy for managing the component's security cooperation workforce. Each component could also establish champions for the different security cooperation career fields to monitor and assess lifecycle management of security cooperation professionals.

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