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Transitioning Joint Requirements to Joint Acquisitions

Lessons and Recommendations for the U.S. Department of Homeland Security

To accomplish each of its six strategic goals, the U.S. Department of Homeland Security (DHS) needs to acquire materiel capabilities: aircraft, cameras, sensors, information technology systems, and more.¹ To determine the capabilities that users require to execute the mission and to manage the acquisition of these capabilities, DHS has established complementary processes for requirements development and acquisition. The Joint Requirements Integration and Management System (JRIMS) governs management of capability needs and requirements (DHS, 2018b). The Acquisition Lifecycle Framework (ALF), established by Acquisition Management Instruction 102 (MD102) (DHS, 2023a), governs acquiring and fielding those capabilities, alongside the Systems Engineering Life Cycle (SELC) framework (DHS, 2021).² The process steps and documentation for JRIMS intentionally phase into those discussed in MD102 to enable a smooth transition between the requirements development process and the acquisition process.

However, for efforts involving more than one DHS operational component,³ considered *joint* per DHS policy,⁴ the meshing of requirements with acquisitions can be more complicated. DHS's eight operational components are all different from each other and have different, although complementary, strategic goals. Determining joint requirements necessitates aligning the DHS components' divergent missions and authorities; implementing joint acqui-

KEY FINDINGS

In assessing the U.S. Department of Homeland Security (DHS) policy guidance and reviewing the approaches and outcomes for four joint acquisition efforts, researchers identified three common challenges with the DHS guidance and approaches that frustrate DHS's ability to translate joint requirements into joint acquisitions:

- lack of timely acquisition planning
- need for additional guidance on jointness
- lack of sufficient executive leadership.

sitions necessitates corralling differing funding and organizational structures. These tasks can be chal-

Abbreviations

ADE	acquisition decision event
ALF	Acquisition Lifecycle Framework
AoA	analysis of alternatives
CAR	capability analysis report
CBP	U.S. Customs and Border Protection
CDP	capability development plan
CONOPS	concept of operations
C-UAS	counter-unmanned aircraft system
DAU	Defense Acquisition University
DHS	U.S. Department of Homeland Security
DoD	U.S. Department of Defense
ESC	executive steering committee
FEMA	Federal Emergency Management Agency
FMS	financial management system
FSM	financial system modernization
GAO	U.S. Government Accountability Office
ICE	U.S. Immigration and Customs Enforcement
IMDE	integrated multidomain enterprise
JPMO	joint program management office
JRC	Joint Requirements Council
JRIMS	Joint Requirements Integration and Management System
JWPMO	Joint Wireless Program Management Office
MNS	mission need statement
OCFO	Office of the Chief Financial Officer
OCIO	Office of the Chief Information Officer
OIG	Office of Inspector General
OPS	Office of Operations Coordination
ORD	operational requirements document
PA&E	Program Analysis and Evaluation
PARM	Office of Program Accountability and Risk Management
PMO	program management office
ROM	rough order of magnitude
SELC	Systems Engineering Life Cycle
S&T	Science and Technology Directorate
TACCOM	tactical communication
TSA	Transportation Security Administration
USCG	U.S. Coast Guard

lenging to accomplish and can fray the interconnection of joint requirements with joint acquisitions.

DHS policy on requirements development and acquisition could help components seeking joint arrangements work through these challenges, but DHS has faced challenges with joint acquisitions aligning with jointly developed requirements (see, for instance, Rascona, 2023).

Study Objectives, Approach, and Limitations

In this research, we sought to understand where and why DHS had challenges translating joint requirements into successful acquisitions.

We sought to answer these questions by referencing both current DHS policy and the experiences of recent joint programs. We began by reviewing current DHS policies and processes to understand how they addressed transitioning joint requirements to joint acquisitions. We then reviewed four joint DHS acquisition efforts, each with its own approach to managing the challenges of jointness. We reviewed requirements development and acquisition documents from these programs, as well as government reviews of these programs from the U.S. Government Accountability Office (GAO) and the DHS Office of Inspector General (OIG). We also spoke with DHS officials familiar with these programs, from both the components and DHS headquarters. Informed by our document reviews and by discussions with DHS officials, we report here on our synthesis of common lessons from these cases in which current policies proved insufficient and, finally, recommend changes to current requirements development and acquisition policies to improve their alignment and help guide future joint efforts toward improved outcomes.

This approach is not without its limitations. Although we tried to review a representative sample of joint programs at DHS, other programs not included in our review could offer conflicting or additional lessons. Additionally, we chose to focus on recent programs to better assess changes in the DHS requirements development and acquisition processes since 2014, but this means that all the acquisition programs chosen as part of our review are still active,

with no final transition of capability out of the acquisition program and to the end user. This might have limited our ability to assess the ultimate outcome of these acquisitions.

Joint Policy on Requirements Development and Acquisition at the U.S. Department of Homeland Security

To understand how and to what extent DHS requirements development policies and acquisition processes provide guidance on the unique challenges of jointness, we reviewed the documents that implement and govern these processes, including the following:

- DHS Directive 101-01, revision 01: *Planning, Programming, Budgeting, and Execution* (DHS, 2019d)
- DHS Directive 102-01, revision 03.1: *Acquisition Management Directive* (DHS, 2019b)
- DHS Instruction 102-01-001, revision 2: *Acquisition Management* (DHS, 2023a)
- DHS Guidebook 102-01-003: *DHS Acquisition Management Lexicon Guidebook* (DHS, 2013)
- DHS Instruction 102-01-103: *Systems Engineering Lifecycle Guidebook* (DHS, 2021)
- DHS Guidebook 102-01-103-01: *Systems Engineering Life Cycle Guidebook* (Office of Program Accountability and Risk Management [PARM], 2016)
- DHS Directive 107-01, revision 00: *Joint Requirements Integration and Management System* (DHS, 2016)
- DHS Instruction Manual 107-01-001, revision 2: *Manual for the Operation of the Joint Requirements Integration and Management System* (DHS, 2018b).

The purpose of this review was to assess whether these documents provide adequate instruction to program managers and others to manage the processes for requirements development and acquisition and what, if any, specific guidance or policy these documents provide for joint efforts. We compared these documents with guidance on joint programs provided by the U.S. Department of Defense (DoD)

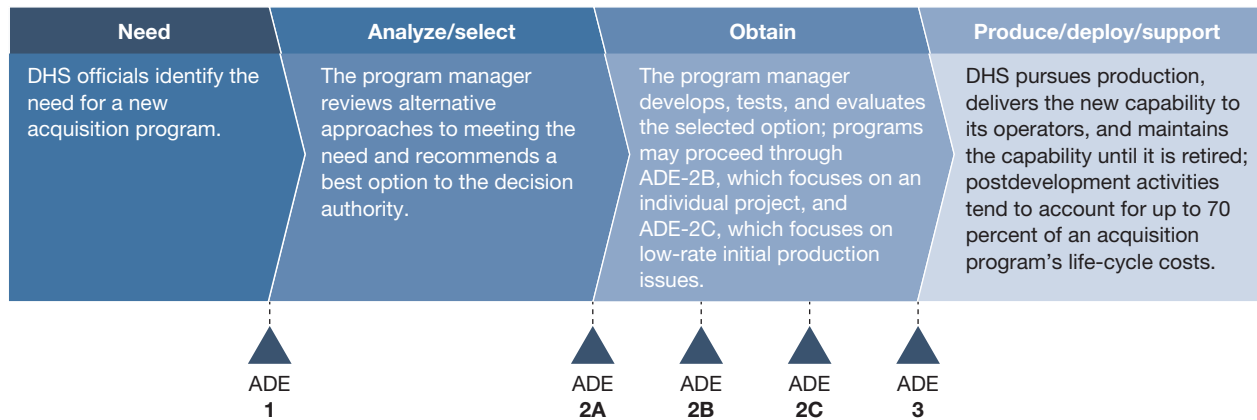
(for instance, Defense Acquisition University [DAU], 2004), with reports from GAO, and with reports on studies of managing acquisition and requirements development for joint programs.

Requirements Development and Acquisitions at the U.S. Department of Homeland Security

Requirements development and acquisitions at DHS are structured into an ALF divided into four phases punctuated by three acquisition decision events (ADEs) in which members of senior leadership assess whether a program is ready to proceed to the next phase (see Figure 1) (DHS, 2023a, p. 41). Requirements development happens primarily in the first (need) and second (analyze and select) phases and is overseen by the Joint Requirements Council (JRC) alongside the component requirements executive.⁵ Acquisition planning and analysis occur throughout the ALF, with additional, more-detailed planning occurring after ADE-1, and is overseen by PARM alongside the component acquisition executive.

Although the ALF formally begins with capability analysis, current policy assumes that acquisition planning occurs in parallel with this step. Figure 2 details the distribution of documentation from the processes of requirements development and acquisition across the ALF. Capability analysis is documented in the capability analysis study plan and capability analysis report (CAR) as part of the JRIMS process. A CAR should conclude with presenting materiel or nonmateriel solution approaches for each capability gap it identifies (DHS, 2018b, p. 15). A component or set of components must then decide whether to proceed with each materiel solution approach. The JRIMS manual considers this step to be ADE-0, even though there is no formal ADE-0 in the acquisition documentation (DHS, 2018b, p. 6). The acquisition management instruction states solely that, “once a need is identified, the need phase begins” (DHS, 2023a, p. 42). The SELC guidebook alludes to an acquisition decision following the CAR requiring consideration of technical maturity, schedule, budgets, and feasibility but does not provide guidance on how this decision should be

FIGURE 1
The U.S. Department of Homeland Security Acquisition Lifecycle Framework



SOURCE: Adapted from Mak, 2019, p. 6.

made or what analysis should inform it (PARM, 2021, p. 21). This analysis may be partially documented in the mission need statement (MNS), but it requires acquisition planning and decisionmaking (not just requirements analysis) and necessarily happens at what JRIMS considers to be ADE-0.

Additional acquisition planning must occur in parallel with the MNS in preparation for ADE-1. The MNS requires conducting a rough-order-of-magnitude (ROM) cost estimate for the acquisition, which, in turn, requires scoping the bounds, time frame, personnel, and quantities needed. This acquisition planning is documented only in the CDP, which is the first acquisition planning document, produced immediately before ADE-1. The acquisition management instruction, the SELC guidebook, and the JRIMS manual provide no guidance on how to conduct this pre-MNS acquisition planning. Indeed, the SELC guidebook treats the MNS as an input to the solution analysis planning, which is documented in the CDP (PARM, 2021, p. 21).

After ADE-1, a complex interplay of acquisition planning and requirements development continues, but the relevant guidance provides more support to program managers on how to handle this complexity. Requirements documents, such as the CONOPS and ORD, document analysis needed for the acquisition-focused AoA and vice versa. The AoA relies on scenarios and metrics defined in the CONOPS and ORD, respectively, and the ORD and CONOPS ref-

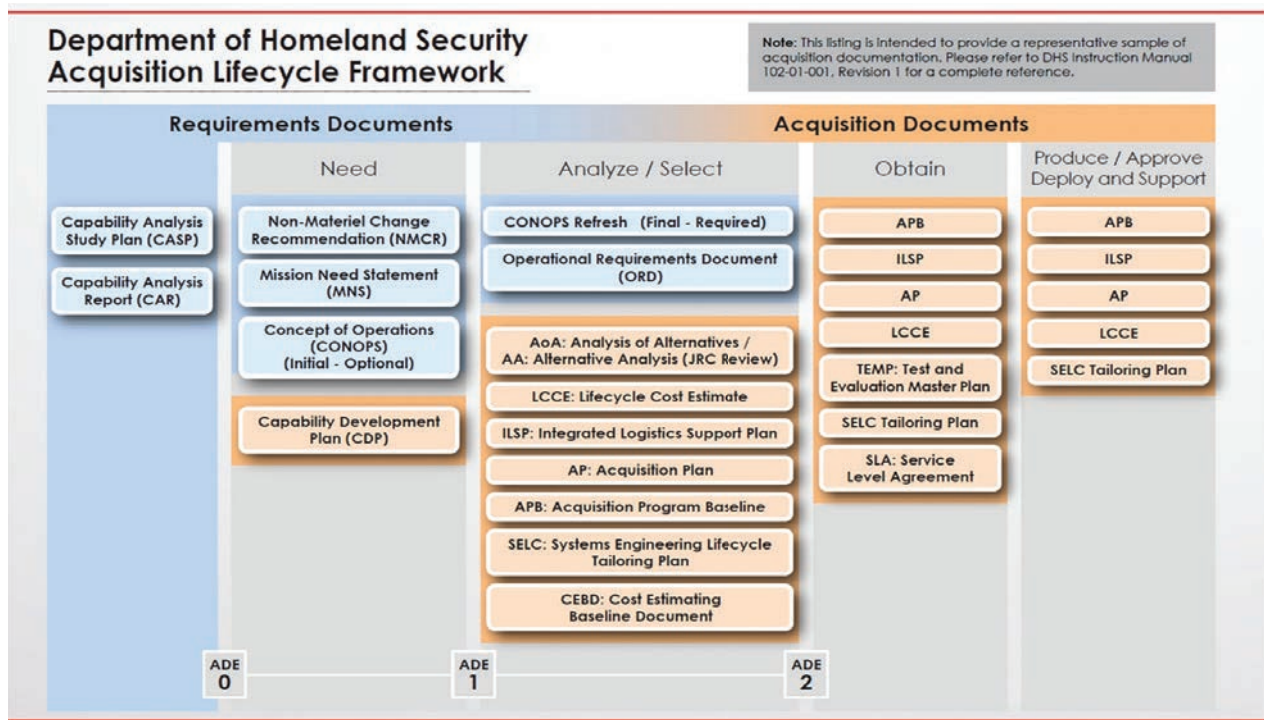
erence the specific solution approach chosen in the AoA. To manage this conundrum, the JRIMS manual recommends that each component draft a preliminary CONOPS and ORD to support the conduct of the AoA, then update these documents following its completion (DHS, 2018b, pp. 5, 15). Likewise, the SELC guidebook recommends developing the CONOPS “concurrent[ly] with the operational requirements development process and AoA execution” (PARM, 2021, p. 28).

After ADE-2, operational requirements development fades out and the development of functional requirements is integrated directly into the overall acquisition planning and management effort (PARM, 2021, pp. 73–123). However, as the capability exits the ALF and enters the field, the next round of requirements development and acquisition planning ideally begins. Operational analysis of the fielded capability, performed by the end user in conjunction with the acquisition program, is a key input to the capability analysis for future needs (PARM, 2021, p. 167).

In reviews of DHS guidance, the interplay between requirements development and acquisition planning is well acknowledged, with the exception of acquisition planning assumed to occur early pre-ADE-1. Although the CDP is developed late in the needs phase and primarily describes the program’s plan for solution analysis into the future, current policy assumes that acquisition planning begins

FIGURE 2

Documentation on Requirements Development and Acquisition Across the Acquisition Lifecycle Framework



SOURCE: Reproduced from DHS, 2018b, p. 15.

NOTE: The AP, listed between ADE-1 and ADE-2, is no longer required. See DHS, 2020b.

much earlier in the process, and this planning often goes undocumented.⁶

Jointness at the U.S. Department of Homeland Security

The term *joint* at DHS can be interpreted broadly. For instance, the “DHS Acquisition Lexicon Guidebook” defines *joint program* as “a project or program that could *involve* more than one DHS Component or a combination of DHS Components and outside agencies, whether they are Federal, State, local, or other” (DHS, 2013, p. A-20; emphasis ours).⁷ Unlike the DoD definition of *joint*—those “activities, operations, organizations, etc., in which elements of two or more Military Departments participate” (Joint Chiefs of Staff, 2017, p. J-1)—the DHS definition covers not only DHS components but also programs and projects that involve other federal, state, or local partners. *Involve* is also a much more nebulous phrasing than

participate and could include projects or programs that merely affect more than one organization. The JRIMS manual echoes this interpretation, considering a requirements document joint if it “*affects or impacts* the activities, operations, or organizations of two or more Components” (DHS, 2018b, p. J-2; emphasis ours).

DHS does not have a long history of joint acquisitions. Although DHS components do have divergent missions, there are areas of overlap. Multiple components contribute to some of the same goals and objectives in the DHS strategic plan. USCG and CBP both play a role in antinarcotic enforcement and in securing U.S. borders, for example, and several components are involved in countering weapons of mass destruction and in detecting and disrupting other threats. Such overlaps suggest that there could be a need for joint acquisition. But even when programs clearly could be joint, as in the case of H-60 helicopter conversions, components have not proceeded

jointly (OIG, 2013, p. 2). Such factors as cultural differences between components and pre-2003 organizational differences could have combined to limit the frequency of joint or collaborative acquisitions at DHS.

Joint Requirements and Acquisition Policy

Efforts to improve jointness at DHS date from the One DHS initiatives under the department's first secretary, Tom Ridge (Painter, 2019, p. 1). The JRC was established in 2003 "to identify common requirements across DHS's headquarters and component agencies" (Mackin, 2016, p. 1). That version of the JRC did not succeed, in part because of insufficient senior management involvement, but a new iteration of the JRC was stood up in 2014 (Mackin, 2016, p. 1). In the past ten years, DHS has looked to joint requirements and joint acquisitions to realize unity of effort across the department and enable more-coordinated operations. The DHS Secretary's 2014 unity-of-effort memorandum directs the department to integrate joint perspectives into its processes for requirements development, acquisition, and budgeting (Johnson, 2014). Multiple attempts at joint requirements development and joint acquisition have developed from these changes, to varying levels of success. Later, we summarize specific recent joint acquisition efforts at DHS.

DHS chartered the JRC in part to identify additional opportunities for efficiency through joint requirements, but execution guidance is lacking.⁸ DHS components not currently operating jointly could theoretically benefit from greater buying power and reduced redundancy by purchasing the same capabilities together. Therefore, in addition to creating joint requirements (those "that explicitly apply to more than one DHS Component or are co-sponsored by more than one DHS Component"), the JRC empowered staff to designate certain requirements of joint interest (those "that impact one Component but have the potential to apply to another DHS Component and where shared capabilities could exist") (DHS, 2018b, p. 26). JRC staff make this designation immediately following the initial screening of

a requirements document for compliance, and the JRIMS manual offers no guidance to staff or to sponsoring components on how this decision should be made. It does not define the criteria through which staff should assess "the potential to apply to another DHS Component," nor does it clarify the intent of this designation. There is also no guidance on whether joint or joint-interest requirements should be treated differently when the time comes for DHS to acquire systems to fill these requirements. Finally, guidance is lacking for how components should collaborate to develop and document joint requirements.

JRC staff work with components with both joint- and joint interest-designated documents in the JRIMS process to help identify other components with similar needs. For instance, JRC staff recently facilitated a collaboration between CBP and ICE on incident-driven video recording systems in which the two components shared similar requirements.⁹ JRC staff use the joint-interest designation as a means of identifying capability areas with opportunities for collaboration between components, both in requirements development and in acquisitions.¹⁰

Guidance for joint acquisitions at DHS is similarly lacking. The acquisition management instruction and the SELC guidebook, along with other acquisition policy and instructions reviewed, offer no guidance on how to approach a joint acquisition or how to use joint or collaborative acquisitions to realize cost savings from efficiencies. The draft program management office (PMO) guidebook we reviewed (DHS, 2020a) also offers no guidance. Moreover, there is little guidance on how to set up a joint acquisition program with multiple component stakeholders or how a single component sponsor could manage an acquisition deemed joint interest by the JRC. Both PARM and the JRC lack guidance on how a joint program could navigate the transition between the primarily requirements-driven process in the needs phase and the acquisition-driven process in the analyze and select phase.

The divided nature of budgeting, appropriation, and execution of funding at DHS further complicates any joint acquisition. Although the DHS Secretary is the ultimate decision authority for the programming phases of the planning, programming, budgeting, and execution process

(which produces the DHS budget submission to the Office of Management and Budget), component heads drive resource allocation planning within their component, with DHS’s Program Analysis and Evaluation (PA&E) Division primarily balancing cross-component budget priorities (DHS, 2019d, p. 2). Unlike JRC, PA&E does not look to identify opportunities for reducing DHS-wide redundancies or facilitating joint acquisition as part of its review of the components’ resource allocation plans.¹¹ Further, Congress allocates funding directly to components, and components are solely responsible for the execution of these funds (DHS, 2019d, p. 5). This differs from the DoD model, in which significant funding is allocated to the Office of the Secretary of Defense and distributed from there, including to joint program offices. Any joint program at DHS thus needs to coordinate funding as transfers from its multiple component sponsors and potentially with multiple appropriation committees. Alternatively, joint programs at DHS could structure themselves differently to mirror DHS’s diffuse funding sources.

Competing Models of Jointness

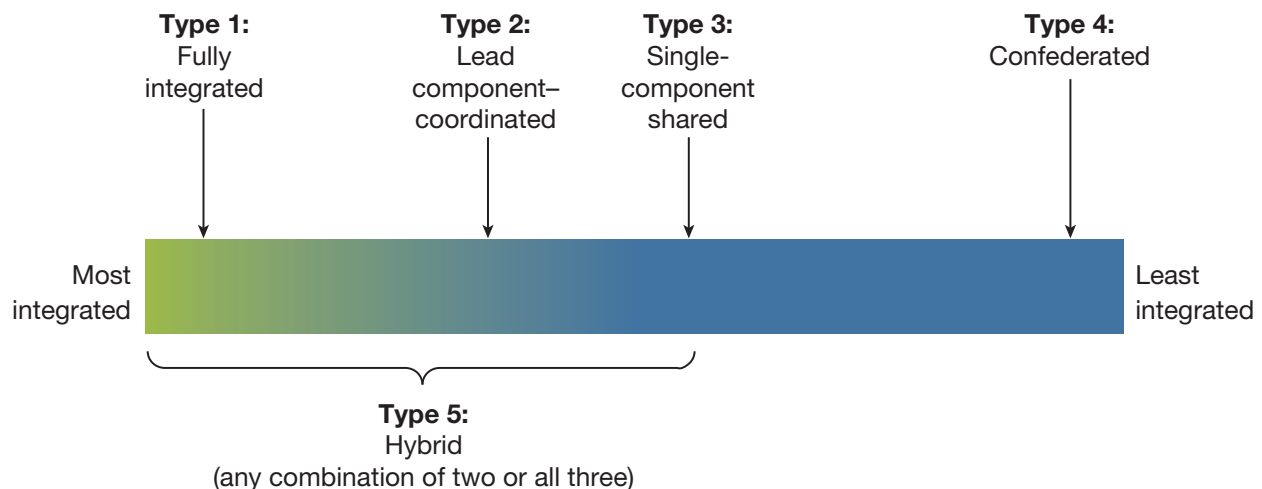
DAU’s *Joint Program Management Handbook* lists nine models for structuring a joint acquisition program. Only one of these describes a fully

integrated joint program office, described by DAU as the “model” joint program. However, the eight other models described by DAU offer other organizing structures, from leadership designating a single component as the lead (executive-agent approach) to having separate component programs that share information among them (confederated-programs approach) (DAU, 2004, pp. 5–6). However, this set of approaches is from 2004 and does not reflect lessons learned in joint management since then.

In 2022, Genc, Matsumura, and Shelton updated this list of nine approaches and applied them to the DHS context. They identified five main types of joint programs that vary in terms of the degree of jointness (as seen in Figure 3) (Genc, Matsumura, and Shelton, 2022, pp. 14–33):

- **fully integrated:** In this model joint program, components develop requirements and acquire capabilities together through a single, combined joint program office.
- **lead component–coordinated:** A single component serves as the lead, developing requirements and acquiring capabilities first with formal inputs from other component stakeholders; following components then acquire derivative capabilities through their own acquisition programs.

FIGURE 3
Joint Program Types on a Spectrum of Jointness



SOURCE: Reproduced from Genc, Matsumura, and Shelton, 2022, p. 5.

- **single-component shared:** A single component develops requirements and acquires capabilities independently of other components, potentially with informal inputs from others; following components then acquire the same end capability.
- **confederated:** Components develop requirements and acquire capability separately but share technical information and design data with each other for common benefit.
- **hybrid:** This is some combination of the first three types.

Genc, Matsumura, and Shelton also provided recommendations to DHS program managers on how to assess whether a joint approach to requirements development or acquisition makes sense, how to pick among these types of joint programs, and how to approach the joint program to maximize potential benefits while minimizing potential costs (Genc, Matsumura, and Shelton, 2022, pp. 39–48).

Current DHS policy for requirements development and acquisition is lacking in these valuable insights for program managers. No document—the JRIMS manual, the acquisition management instruction, the SELC guidebook, or any other official guidance—provides models of joint programs from which to choose or a suggestion that there are multiple established approaches to jointness, each with its own advantages and drawbacks. The JRIMS manual further does not distinguish between whether sponsors of joint versus joint-interest requirements should consider these questions differently or whether joint programs overall are the correct option for acquiring capabilities to meet these needs. Adding these elements would help components plan for future acquisitions better during the needs phase and could help the JRC facilitate additional joint requirements development efforts.

Joint Acquisition Programs at the U.S. Department of Homeland Security

Following the 2014 unity-of-effort memorandum, DHS components attempted to develop joint requirements and joint acquisitions to provide better-

integrated capabilities to operators. This section discusses four prominent examples of DHS’s recent attempts at jointness—counter-unmanned aircraft systems (C-UASs), interoperable tactical communication (TACCOM), financial management systems (FMSs), and integrated multidomain enterprise (IMDE)—describing their history, their requirements development and acquisition efforts, and any outcomes of these projects to date.

Counter-Unmanned Aircraft Systems

In October 2018, Congress passed the Preventing Emerging Threats Act of 2018 (Pub. L. 115-254, Division H), which authorizes various DHS components, including USCG, CBP, the Federal Protective Service, and the U.S. Secret Service, to detect, track, and mitigate unmanned aircraft systems (UASs) (commonly called drones) that threatened key DHS missions (for more, see DHS, 2019a). This authorization provided these components a common C-UAS responsibility that, despite different contexts for each component, could be presumed to require common capabilities.

As a result, DHS pursued a joint approach for requirements development. Under the auspices of a newly established C-UAS Executive Steering Committee (ESC), DHS conducted a joint capability analysis for C-UASs, sponsored by CBP, the Federal Protective Service, and USCG, to identify capability gaps across the DHS C-UAS enterprise as required in a DHS CAR. The C-UAS ESC also supported a joint MNS to assess the justification for a joint acquisition of C-UAS capabilities. The creation of each of these documents was delayed by several months during the comment adjudication process because of differences in processes across components, even though, per JRIMS, this step should take no longer than 20 business days.¹² Despite these delays, DHS began planning for future joint requirements development.¹³

However, DHS created no future joint requirements documents for C-UASs. As acquisition planning began among the components following the MNS, it became clear that the stakeholder components, although they required similar capabilities, had needs that differed significantly in terms of scope and timing. These differences made further explicit collaboration difficult.¹⁴ The C-UAS ESC has not

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met formally since March 2020 and is considered defunct.¹⁵

Despite the initial joint requirements development, DHS has also not, to date, pursued a joint acquisition for C-UASs. Contemporaneous with the joint requirements development effort, DHS's Science and Technology Directorate (S&T) pursued technology demonstrations to provide components with immediate but limited capability to trials, similar to a joint acquisition, but the funding for these demonstrations has shifted to the components in recent years.¹⁶ Following the development of the joint MNS, PARM recommended CBP as the lead component for C-UASs, in an arrangement similar to the lead component-coordinated model from Genc, Matsumura, and Shelton (2022).

Subsequent acquisition planning by the components made clear that the capacity for C-UAS investment across affected components differed significantly from the scope of the need described in the MNS.¹⁷ A component did not make an ADE-0-type decision on whether to proceed with the full materiel acquisition before or during the development of the MNS. A component began making these assessments as part of acquisition planning upon inheriting the MNS.¹⁸ For instance, instead of addressing the full documented gap, CBP is pursuing a smaller investment focused on getting immediate capability to operators and iterating from there, given the changing nature of the threat and technology.¹⁹ Other components are pursuing more-modest efforts focused on testing and evaluating technology options.²⁰ DHS did establish an enterprise-wide C-UAS PMO, but its focus is on policy engagement and alignment with other federal agencies.²¹ Despite the demonstrated

overlap in needs and requirements, there are no current plans for joint acquisition of C-UASs at DHS.²²

Interoperable Tactical Communications

DHS components have tens of thousands of users for TACCOM (such as mobile radios), who need to communicate across organizational lines during emergencies or for coordinated operations, such as in joint task forces. DHS has a long history of efforts that have struggled to meet this need, starting in 2003 and continuing through the Joint Wireless PMO (JWPMO), established in 2011. A 2012 assessment by OIG found DHS's governance of its wireless communications integration to have been deficient and found little progress made toward integration. OIG found that DHS "did not establish an effective governance structure" that had the authority and enforcement responsibility to oversee a cross-component acquisition effort and that, as a result, DHS had "limited interoperability policies and procedures" and "did not have reliable interoperable communications for daily operations, planned events, and emergencies" (OIG, 2012, p. 3). As a result, components pursued their own acquisitions of TACCOM capabilities, with limited interest in meeting DHS-wide integration requirements (OIG, 2012, p. 4). In light of these difficulties, in 2015, the undersecretary for management reset the JWPMO's acquisition activities and restructured its governance to involve explicit executive involvement from stakeholder components and memorandums of understanding between the components and the JWPMO to secure commitments on levels of involvement and funding (DHS, 2015). As part of this reset, the JWPMO began a requirements development effort that culminated in the creation of a CAR and MNS for joint interoperable tactical com-

munications in 2017. The CAR and MNS also discuss further joint requirements development activities coordinated with the DHS joint task forces that have not been pursued.

The JWPMO, as currently operated, does not conduct joint acquisitions itself but instead manages and coordinates acquisitions conducted by its affiliated components. Congress funds and authorizes the various operational components to purchase TACCOM capabilities. The JWPMO oversees the Tactical Communications Equipment and Services II contract, awarded in 2019, through which all DHS components must purchase their land-mobile radios and other TACCOM equipment, per DHS directive (DHS, 2019e). Components purchase equipment through this contract using their own funding, but the equipment must stay within the standards set by the JWPMO. The JWPMO ensures that all acquisitions through that contract align to the requirements outlined in the 2017 CAR and MNS.²³ The requirements set by the JWPMO are a baseline to promote interoperability; components can expand on these requirements to meet their mission needs (DHS, 2019e). For CBP, these requirements documents have not been sufficiently comprehensive, and CBP developed its own MNS to complement the JWPMO MNS.²⁴ However, despite the rocky start, participants lauded the current confederated model for interoperable TACCOM joint acquisitions.²⁵

Financial Management Systems

DHS has long struggled with developing a consolidated enterprise FMS to support financial accountability and decisionmaking (Rascona, 2023, p. 4). It has made multiple attempts to modernize financial systems enterprise-wide. These efforts included multiple different joint approaches, such as having the DHS Office of the Chief Financial Officer (OCFO) contract with a vendor and using the U.S. Department of the Interior as the provider of FMS capabilities. Each of these approaches led to outcomes that were not meeting DHS components' evolving requirements (OIG, 2019, pp. 2–3).

The most recent effort was the 2017 creation of the Financial Systems Modernization (FSM) Trio

program,²⁶ managed by the FSM joint PMO (JPMO) located in the OCFO.²⁷ The JPMO spearheads requirements development and acquisition for the three FSM Trio components, as well as for FEMA and ICE (OIG, 2019, pp. 2–3). In 2018, the JPMO sponsored a joint CONOPS and joint ORD for the FSM Trio components, with addenda for specific requirements for each component, including for FEMA and ICE, following on. These documents identified ten enterprise capability gaps for financial management that could be addressed through joint acquisition (Rascona, 2023, p. 13). Lacking standard guidance on how to develop joint requirements, the JPMO built a common set of requirements for the DHS FSM effort. This was done to avoid redundant and potentially contradictory requirements between the modernizing components (DHS, 2018a). Component-specific requirements were developed by the components individually as part of the addenda and were coordinated with the JPMO.

Per agreements between the JPMO and the various FSM components, the JPMO is responsible for acquiring capabilities for each of the components, transferring ownership of the capabilities to the respective component upon implementation.²⁸ The JPMO owns the joint requirements documents and acquires capabilities to meet the needs defined in these documents. Components fund the acquisition of the systems and costs to manage the JPMO via transfers to the OCFO from their appropriated funding. An FSM ESC, with representation from all involved components, oversees the JPMO's acquisitions (Rascona, 2023, p. 7). This approach aligns with the fully integrated joint model from Genc, Matsumura, and Shelton (2022). The JPMO transitioned the Countering Weapons of Mass Destruction Office to the modernized financial system in fiscal year 2018, to TSA in fiscal year 2020, and to USCG in fiscal year 2022 (Rascona, 2023, p. 4).²⁹ As of March 2023, USCG's implementation had not yet passed user testing and did not meet key requirements defined in the joint ORD. The JPMO and USCG are working toward a resolution to these issues (Rascona, 2023, p. 28).

The Integrated Multidomain Enterprise

Each of several entities (CBP, ICE, and USCG, as well as Joint Task Force—East and the former Joint Task Force—West) maintains domain awareness across multiple domains (air, land, and maritime) along the U.S. southern borders and approaches. DHS needs to be able to share a common domain picture across these components and organizations, as well as with non-DHS partners, to enable coordinated operations and to reduce redundancies of detection capabilities along the borders and approaches.

DHS has initiated joint requirements development to explore commonality in needs for this capability. In 2016, DHS completed joint capability analyses for a common operating picture, a common intelligence picture, and command and control. The authors of these documents assessed gaps across multiple component operations related to information-sharing for domain awareness. Informed by these analyses, in 2017, CBP and USCG, with support from S&T, pursued a joint MNS for a homeland security enterprise for information-sharing, which assessed a need for an integrated infrastructure that would better connect sensor systems. Uncertainties about funding and ownership of the capability gaps from the CARs delayed the creation of the MNS. Following completion of the MNS, the effort lacked funding and a sponsor to pass ADE-1 and so languished for two years.³⁰

Contemporaneously, S&T explored an IMDE capability to meet this need. This test system served as a common middleware between CBP- and USCG-owned sensors and CBP- and USCG-specific common operating pictures to share information across component silos and better integrate operators with the sensor suites on which they relied (S&T, 2018). Like in the requirements development process, lack of funding meant that S&T did not have an acquisition partner to which to transition the capability.³¹

In 2019, executive leadership resurrected the IMDE effort at the since-dissolved DHS Office of Operations Coordination (OPS). The leaders also created an ESC with representation from ICE, USCG, CBP, OPS, and the DHS Office of the Chief Informa-

tion Officer (OCIO), which also owns other, similar information-sharing systems, such as the Homeland Security Information Network. OPS inherited the MNS and other artifacts and shepherded the program through ADE-1.³²

A restructuring of OPS and a desire among the ESC membership for an enterprise sponsor for the IMDE capability caused the program to be moved one final time to OCIO under the Geospatial Management Office. OCIO created an IMDE JPMO under its auspices, which had to spend many years coordinating memorandums of agreement between component stakeholders for the program.³³ The JPMO also established a joint program oversight review team made up of action officers from the ESC member components who could represent their ESC executives on a day-to-day basis and work directly with JPMO staff. As of this writing in summer 2023, the JPMO was working toward an ADE-2A to acquire a capability to meet the needs described in the joint MNS. However, because OCIO, not the ESC, owns the funding for this approach, there can be a lack of accountability between it and the other ESC stakeholders. The JPMO is attempting to use the ESC and joint program oversight review team as a venue for transparency of decisions about requirements development and acquisition to help ensure that end users get the needed capability.³⁴ As a result, this approach follows the hybrid joint model from Genc, Matsumura, and Shelton (2022) in that it contains elements of the fully integrated and lead component-coordinated models.

Summary

Overall, these four programs demonstrate four approaches to navigating joint requirements development and acquisitions at DHS. Each of these programs has struggled, at times, to find the best path forward for its effort without guidance or models of how to structure and run joint programs in the DHS context. When these programs have succeeded, it has been, in part, through securing executive buy-in and developing an acquisition strategy to which all parties agree.

Challenges for Conducting Joint Acquisition at the U.S. Department of Homeland Security

Although each of the joint efforts previously described is unique, we have identified certain common issues among them:

- lack of timely acquisition planning
- need for additional guidance on jointness
- lack of sufficient executive leadership.

Lack of Timely Acquisition Planning

Although there is some guidance on acquisition planning during the needs phase, current guidance is lacking and contradictory, especially for joint programs. The JRIMS manual describes a key acquisition planning step (ADE-0) during the needs phase but prior to the MNS, in which components decide whether to pursue a materiel acquisition based on a consideration of costs and benefits of the materiel and nonmateriel solution approaches to these capability gaps (DHS, 2018b, p. 6). This step is not found in current acquisition guidance. Instead, the SELC guidebook describes the only acquisition activity in the needs phase (“2.5. Plan for Solution Analysis and Planning”) as being forward-looking, concentrated on scoping the upcoming AoA through the CDP, using the CAR and MNS as inputs (PARM, 2021, pp. 21–25). This guidance misses the first cycle of acquisition planning, perhaps because its output goes undocumented as part of the typical processes for requirements development and acquisition. Later, as part of the justification for an acquisition in the MNS, the requirements development team must produce a ROM cost estimate, which requires further acquisition planning on the scope, quantity, timing, and strategy of the materiel solution (DHS, 2018b, p. F-1). The only documented outcomes of this acquisition planning occur in the MNS (a requirements document), but it requires an acquisition staff in place to make these decisions. Therefore, the creation of an MNS and the stand-up of an acquisition team need to be done in parallel, not sequentially. Current guidance does not make this nuance clear and pro-

vides insufficient guidance on conducting acquisition planning to support the little-discussed ADE-0 decision.

Single-component acquisition efforts have informal means of resolving this tension. Often, components enter the DHS requirements development process with an intended materiel solution approach and develop the requirements based on this solution. This allows the requirements development team to reliably estimate the scope and nature of the upcoming acquisition prior to any formal acquisition planning taking place.³⁵ This workaround, although contrary to the spirit of the requirements development process and problematic in its own way, does allow a component to avoid making an ADE-0 decision. In addition, many components have existing acquisition offices that can help the requirements development team make some of these estimations.

Joint acquisitions do not have these stopgaps. Joint requirements development efforts during the needs phase must conduct requirements development according to guidance. Decisions on solution approaches, acquisition strategy, joint program structure, and, especially, funding require formal agreements between or among components. These are not likely to occur until close to or after ADE-1, when a formal decision to proceed with the acquisition is made and funding can be released.

As a result, the acquisition plans assumed during the requirements development process can have little relation to the actual decisions that a fully realized joint program or confederated set of component acquisition programs would make. For instance, the ROM cost estimate for CBP’s C-UAS acquisition was an order of magnitude higher than the current estimate for that acquisition because of differences in assumptions about the scope and duration of that program between the requirements development team and the ultimate CBP program office. This made it difficult to transition the program to CBP, which needed to spend months rescoping the requirement and redoing the ROM cost estimate to match a more feasible level of investment based on its own subsequent acquisition planning.³⁶ Additionally, as with earlier TACCOM efforts, components might be pursuing their own acquisitions, based on their own acquisition planning, parallel to the joint

Although each of the joint efforts is unique, we have identified certain common issues among them: lack of timely acquisition planning, need for additional guidance on jointness, and lack of sufficient executive leadership.

requirements effort that do not align with the joint priorities because of a misalignment of the requirements development and acquisition processes (OIG, 2012).

Lack of Sufficient Guidance on Jointness

One notable characteristic across joint acquisition efforts at DHS is a cycle of trial and error. Since the founding of DHS in 2003, the FSM and TACCOM efforts have gone through at least four governance structures or acquisition approaches before settling into their current iterations, which themselves have seen routine evolution since establishment.³⁷ IMDE started as a demonstration program with S&T, then transitioned to a joint effort between CBP and USCG, then transitioned again to OPS, then yet again to OCIO. C-UASs at DHS started as a joint requirements development effort between the C-UAS PMO, JRC, and S&T, but the approach for acquisition and further requirements development has shifted from a fully integrated approach (under S&T) to a nonjoint approach (at present).

Although some of these changes can be attributed to growing pains that all new organizations experience, some of them can also be attributed to the lack of successful models for jointness at DHS. Each of these programs has had to relearn lessons on how best to engage in joint requirements development and acquisitions given the constraints of the capabilities and components involved.³⁸ Each of these programs has struggled going down organizational dead ends that limited the cost-saving potential of

joint structures and further delayed delivering capabilities to end users.

DHS lacks a set of best practices for joint requirements development and acquisitions, as well as an official version of the Genc, Matsumura, and Shelton (2022) typology for joint programs. Furthermore, DAU's model joint program (the fully integrated type) is generally unsuited to DHS, given the divergent missions of components; the lack of regular, combined operations; the tendency toward commercial, off-the-shelf acquisitions; and the department's disaggregated funding structure. **The model joint program at DHS might instead more closely resemble the JWPMO, in which the joint program does not own the funding or acquisition authority but instead owns the requirements and a strategic sourcing contract through which it sets guardrails for what capabilities the participating components may purchase.**

In addition to the lack of guidance on the structure of joint programs, there is no guidance, from either the JRC or PARM, on how to manage a joint program office, independent of its structure. For instance, it is unclear how a joint program should elicit requirements from components during the analyze-and-select phase. The approach chosen by the FSM, with the JPMO developing a core set of common requirements and components developing their own specific requirements independently (with some coordination with the JPMO), was ad hoc, and it remains unclear how well it has worked.³⁹ For more-confederated joint efforts, it is also unclear when or how a decision is made on which component acquisition offices should inherit a jointly developed requirement, as seen in the C-UAS example.

Finally, there is also a lack of guidance on how to develop joint requirements more generally. Despite being written in part to help components realize efficiencies from joint requirements, the JRIMS manual does not offer guidance on what a sponsor or set of sponsors should do following a joint or joint-interest designation. There is also no guidance for components that want to conduct a joint requirements development effort collaboratively on how to govern that effort. This can lead to even mundane issues, such as different routing or signature processes for documents across components, causing significant delays in getting these documents validated through JRIMS.⁴⁰

Lack of Sufficient Executive Leadership Involvement and Support

The joint efforts for C-UASs, TACCOM, FSM, and IMDEs have each benefited from the involvement of component executive oversight in the form of ESCs. The C-UAS ESC initiated the joint requirements development process for DHS's C-UAS capability but was disbanded when the joint requirements development effort concluded. DHS chartered a Joint Wireless Program ESC in 2015, which initiated the current structure of the JWPMO and includes high-level representatives from all stakeholder components (DHS, 2015). FSM has an overall ESC that oversees the OCFO acquisition activities, as well as solution-specific ESCs for each of the FSM programs (Rascona, 2023, pp. 7–8). Prior efforts for both types of ESC struggled to have the authority to impose interoperability requirements on component acquisition offices without sufficient component executive involvement. The latest IMDE ESC was stood up in 2019 and has helped shepherd the effort through different acquisition structures and funding models.⁴¹

ESCs provide a venue for component senior leadership involvement in and support of joint efforts for requirements development and acquisition. Because of the federated nature of DHS's organization, component senior leadership involvement can be necessary to arrange funding and personnel to support joint requirements development or a joint acquisition program, ensure participation in joint efforts,

and secure agreement on strategy for requirements development or acquisition. The current processes for requirements development and acquisition have venues for senior executive review and decision-making, including the acquisition review boards or the JRC itself, but these bodies were not constituted or structured for the types of decisionmaking required for joint programs to succeed.

Conclusions and Recommendations

From our assessment of DHS's policies on requirements development and acquisition and the experiences of recent joint efforts, we found that current DHS policy is inadequate in several ways. It does not provide sufficient guidance on conducting acquisition planning to support the little-discussed ADE-0 decision on whether to proceed with a materiel solution to a capability gap, which is especially important for planning for a joint acquisition. We also found that current policy provides insufficient guidance on the structure of joint programs and the conduct of joint requirements development and of joint acquisitions. Finally, we found that executive leadership support is key to the success of a joint program, which is not highlighted in current policy or guidance.

Given these findings, we have three recommendations for how DHS could improve its policies to better support future joint requirements development or acquisition programs, which we describe in the rest of this section. Although cultural and historical considerations can also affect the success of joint efforts, addressing these policy issues will improve their feasibility.

The Office of Program Accountability and Risk Management and the Joint Requirements Council Could Collaborate on Joint Acquisition Guidance

If DHS is committed to using joint acquisitions to realize efficiencies and unity of effort, per both the DHS Secretary's 2014 unity-of-effort memorandum and the JRC charter, additional policy and guidance

Current DHS policy does not provide sufficient guidance on acquisition planning to support the ADE-0 decision or on the structure of joint programs and the conduct of joint requirements development and of joint acquisitions. And executive leadership support is key to the success of a joint program.

are needed to support these goals. Despite the DHS Secretary's directive nearly ten years ago to create processes to support the "creation of joint programs and joint acquisitions to meet Departmental mission needs," DHS policy and guidance are not yet up to that task (Johnson, 2014, p. 2).

PARM and the JRC could consider developing a separate document—a joint acquisition guidebook—that provides program managers, acquisition practitioners, and component decisionmakers guidance on when, why, and how to conduct joint acquisitions. This guidance could do the following, among other things:

- **Recommend preconditions under which DHS components could expect to find benefits from joint acquisition or joint requirements development.** The only precondition in current DHS policy (the joint-interest definition from the JRIMS manual) is not well defined. DHS needs a set of criteria to evaluate whether jointness makes sense for a specific program or capability set, beyond whether it has "the potential to apply to another DHS Component" (DHS, 2018b, p. 26). Genc, Matsumura, and Shelton (2022) provides a set of considerations—related to overlap of requirements, operations, and priorities—that can serve as a baseline for these criteria.
- **Provide a variety of joint program organizational structures for different acquisition goals.** At present, although the draft PMO

guidebook provides guidance on program office structure, DHS acquisition guidance lacks details on how to conduct a joint acquisition. This can lead to an assumption that the fully integrated joint program model is an appropriate default structure, even though this structure is often not well suited for DHS's specific challenges. The typologies from DAU's *Joint Program Management Handbook* and Genc, Matsumura, and Shelton (2022) represent good starting points for developing joint program organizational structures, but even these rely on DoD experiences that might not be well suited for the DHS organizational environment. DHS guidance could expand on the confederated type to include different roles for a headquarters program office (as in the differences between the JWPMO and the C-UAS PMO), as well as options that do not include a headquarters entity at all. This confederated type could be considered the model joint program for DHS. DHS could also provide a framework and a set of preconditions for choosing among the different types, to help components identify the right type for their circumstances. Genc, Matsumura, and Shelton (2022) also provides a set of considerations that can serve as a baseline for this framework.

- **Offer documentation of best practices on joint program operations.** The lack of acqui-

sition guidance for joint programs has led to repeated unsuccessful experimentation efforts across DHS to conduct joint acquisition efforts. Future joint efforts need a set of best practices on which to rely rather than rediscovering the same difficulties. These best practices could be sourced in part from lessons learned through trial and error from recent DHS efforts at joint acquisition. These best practices could discuss, at a minimum,

- ESCs and other means of incorporating senior component leadership
- ways to coordinate funding across component stakeholders
- recommendations on memorandums of understanding or agreement between component stakeholders
- options for tailoring the JRIMS and acquisition processes to meet the needs of joint programs (e.g., developing component-specific addenda, routing documents for signature).

This guidance would complement the SELC guidebook and JRIMS manual and be aligned to the processes described in both documents. Providing such guidance could encourage more use of joint approaches.

The Joint Requirements Council Could Develop Specific Joint Requirements Development Guidance

The current JRIMS manual does not provide much guidance for developing joint requirements. Its sole discussion of jointness concerns the sponsorship and designation of requirements development documentation. This is not surprising—the manual’s primary purpose is to describe the process by which requirements documents are assessed and validated, allowing components to develop their own individual requirements development processes. Further developing joint requirements development guidance would support the creation of joint requirements, which is otherwise challenging under multiple individual component processes.

The JRC could update the JRIMS manual to include a section discussing the development of both joint and joint-interest requirements documents.

For joint documents, this guidance could include the following:

- recommendations on governance structure and stakeholders’ roles and responsibilities (e.g., who will conduct the capability or requirements analysis, who will make expert personnel available to those conducting the analysis, who will approve the resulting gaps or requirements)
- recommendations on managing the JRIMS process as a joint effort, especially concerning adjudicating comments from across the DHS enterprise and approving joint requirements documents across multiple components
- recommendations on agreements for funding the requirements development
- recommendations on incorporating senior leadership direction and approval
- recommendations on transitioning requirements development work to an acquisition body following ADE-1 and ADE-2A, including on which entity will own the requirements and hold the acquirer responsible for meeting them following ADE-2A.

For joint-interest documents, this guidance will necessarily be less involved, but could include the following:

- more-robust criteria of what a joint-interest requirement entails and how JRC staff will make that designation
- recommendations on incorporating other component stakeholder needs, when appropriate
- recommendations on options for collaborative nonmateriel solution approaches, such as strategic sourcing contracts, joint training programs, and cross-component policy alignment.

Both sets of guidance could align to that in the joint acquisition guidebook, discussed earlier. In particular, the guidance could discuss ways to identify

The JRC and PARM could collaborate to ensure that any change made to JRIMS aligns to any change made in the SELC guidebook and to the acquisition management instruction.

requirements alignment across components to motivate a joint acquisition program and discuss joint program organizational options for both joint and joint-interest requirements development efforts.

The Office of Program Accountability and Risk Management Could Improve Pre–Acquisition Decision Event 1 Acquisition Guidance

The current acquisition guidance leaves implied the acquisition planning and decisionmaking conducted as part of the invisible ADE-0. For instance, the SELC guidebook notes that, following the development of a CAR, “additional analysis is necessary to determine the feasibility, availability, costs, and implementation time associated with each of the solution approaches” (PARM, 2021, p. 21). This statement is included in the guidebook with the discussion of the development of the MNS, and it might not be clear that this is inherently acquisition planning analysis, not requirements analysis.

PARM and S&T could update the DHS acquisition guidance, including the SELC guidebook, to include more-robust guidance on how and when components could conduct this ADE-0–linked “additional analysis.” This updated guidance could be included as part of the same section of the guidebook or as its own section prior to that discussion. It could make clear that the inputs to the ADE-0 decision involve more than just scoping the magnitude of the need but also include an assessment of a component’s priorities and current funding availability.

The Way Ahead

In this report, we have made recommendations to PARM and the JRC both individually and collectively. In that vein, the JRC and PARM could collaborate to ensure that any change made to JRIMS aligns to any change made in the SELC guidebook and to the acquisition management instruction. This collaboration could take the form of a working group or similar jointly staffed body that would draft additions to both documents, as well as draft the recommended new joint acquisition guidance document. Other components, including PA&E and the acquisition staff of the operational components, could also take part in this working group, in either an active or advisory role.

DHS’s understanding of how jointness can or should operate in the DHS context could benefit from further analysis. This report is based on interviews and literature reviews for a limited set of already-joint programs. As DHS develops its updated guidance on jointness, it could benefit from a wider survey of all efforts that the JRC deemed to be joint interest to reflect on the challenges that programs with some potential for collaboration faced in not collaborating in a more formal, confederated manner. This will ensure that DHS’s guidance incorporates more perspectives than just those of programs in which formal collaboration is already being attempted.

Notes

¹ For more on these capabilities, see DHS, 2019c.

² DHS uses *MD102* as shorthand for DHS Directive 102-01 (DHS, 2019b), DHS Instruction 102-01-001 (DHS, 2023a), and DHS Instruction 102-01-101 (DHS, 2023b).

³ *Component*, per DHS lexicon and usage, refers to a sub-unit organization of DHS. The eight operational components

at DHS are U.S. Customs and Border Protection (CBP), the Cybersecurity and Infrastructure Security Agency, the Federal Emergency Management Agency (FEMA), U.S. Immigration and Customs Enforcement (ICE), the Transportation Security Administration (TSA), the U.S. Coast Guard (USCG), U.S. Citizenship and Immigration Services, and the U.S. Secret Service.

⁴ Per JRIMS, *joint* refers to items that involve “activities, operations, or organizations of two or more Components” (DHS, 2018b, p. J-2).

⁵ Depending on the size, importance, and jointness of the program, either the JRC or the component requirements executive is the validating authority for requirements documents.

⁶ The policy describes how the process should work in the ideal scenario, but, in reality, some programs undertake these steps in parallel or in a different order.

⁷ The acquisition lexicon cites the recently deprecated acquisition guidebook as its source. The SELC guidebook that replaced that guidebook does not have a definition for *joint program*, *jointness*, or *joint*.

⁸ Among the goals of the JRC is to “maximize unity of effort and harmonize activities across the Department” and to identify “areas where DHS can reduce duplication, overlap, and redundancy” (DHS, 2014, p. 3).

⁹ DHS officials, discussions with the author, December 2022 to April 2023.

¹⁰ DHS officials, discussions with the author, December 2022 to April 2023.

¹¹ PA&E staff, interview with the author, December 8, 2022.

¹² DHS officials, discussions with the author, December 2022 to April 2023.

¹³ DHS officials, discussions with the author, December 2022 to April 2023.

¹⁴ DHS officials, discussions with the author, December 2022 to April 2023.

¹⁵ DHS officials, discussions with the author, December 2022 to April 2023.

¹⁶ DHS officials, discussions with the author, December 2022 to April 2023.

¹⁷ DHS officials, discussions with the author, December 2022 to April 2023.

¹⁸ DHS officials, discussions with the author, December 2022 to April 2023.

¹⁹ DHS officials, discussions with the author, December 2022 to April 2023.

²⁰ DHS officials, discussions with the author, December 2022 to April 2023.

²¹ DHS officials, discussions with the author, December 2022 to April 2023.

²² DHS officials, discussions with the author, December 2022 to April 2023.

²³ DHS officials, discussions with the author, August to October 2020. Note that the JWPMO does not have a contracting office and uses CBP as the contractor of record.

²⁴ DHS officials, discussions with the author, August to October 2020.

²⁵ DHS officials, discussions with the author, August to October 2020.

²⁶ FSM is the program that is acquiring FMSs, the capability in question.

²⁷ *FSM Trio* is an FSM specific to the three components that rely on the USCG FMSs: USCG, TSA, and DHS’s Countering Weapons of Mass Destruction Office.

²⁸ OCFO staff, interview with the author, August 28, 2020.

²⁹ FEMA and ICE are expected to transition to the new system in 2025 and 2026, respectively.

³⁰ DHS officials, discussions with the author, December 2020 to April 2023.

³¹ DHS officials, discussions with the author, December 2020 to April 2023.

³² DHS officials, discussions with the author, December 2020 to April 2023.

³³ DHS officials, discussions with the author, December 2020 to April 2023.

³⁴ DHS officials, discussions with the author, December 2020 to April 2023.

³⁵ DHS officials, discussions with the author, December 2022 to April 2023.

³⁶ DHS officials, discussions with the author, December 2022 to April 2023.

³⁷ For TACCOM, there was the National Wireless Management Office (established in 2003), the Wireless Services Branch (2006), the One DHS Emergency Communications Committee (2009), and finally, the JWPMO (2011), which, in turn, went through multiple acquisition approaches before the 2016 policy directive (DHS, 2019e). For FSM, there was the Electronically Managing Enterprise Resources for Government Effectiveness effort (2004–2006), the Transformation and Systems Consolidation effort (2007–2011), and the Interior Business Center (2014–2017) before the 2018 creation of the JPMO.

³⁸ For instance, OIG found ten areas in which the FSM program experienced difficulties in joint program governance and management, including issues managing support contractors and defining requirements, during previous iterations of the program and applied these lessons to the JPMO.

³⁹ The FSM program does not currently meet key ORD requirements, and these requirements might not have captured the end users’ true needs (per Rascona, 2023, p. 28).

⁴⁰ DHS officials, discussions with the author, December 2022 to April 2023.

⁴¹ DHS officials, discussions with the author, December 2022 to April 2023.

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About This Report

Following then-Secretary of Homeland Security Jeh Johnson's 2014 unity-of-effort memorandum, the U.S. Department of Homeland Security (DHS) has examined the potential for joint acquisition of capabilities that are common across components, including for counter-unmanned aircraft system (C-UAS) capabilities. However, these joint acquisitions have not always seen success, even with guidelines from the joint requirements development process in hand. In this research, the author examined the joint processes for requirements development and acquisition, considered recent joint efforts, and developed recommendations to DHS on how to improve these processes.

This research was sponsored by DHS's Office of Program Accountability and Risk Management and conducted in the Management, Technology, and Capabilities Program of the RAND Homeland Security Research Division, which operates the Homeland Security Operational Analysis Center (HSOAC). It is intended to help DHS policymakers across the department develop more-informed policy and guidance for joint programs for requirements development and acquisition.

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