



Report to the Chairman
Committee on Homeland Security
House of Representatives

September 2022

CUSTOMS AND BORDER PROTECTION

Innovation Team Has Opportunities to Mature Operations and Improve Performance

Accessible Version

GAO Highlight

Highlights of [GAO-22-105984](#), a report to the Chairman of the Committee on Homeland Security, House of Representatives

Why GAO Did This Study

CBP operators use a wide array of technologies to execute their missions, such as those related to counterterrorism, border security, and lawful trade and travel. The Innovation Team works to support these operators by delivering cutting-edge technologies. As of July 2022, it had initiated 73 pilot projects to demonstrate new technologies.

GAO was asked to review the Innovation Team's role in CBP's overarching process for acquiring new technologies. This report addresses the extent to which the team (1) established a performance assessment system that reflects key practices and (2) collaborated with key stakeholders.

GAO reviewed CBP and Innovation Team guidance and documentation; collected written responses from six of seven operator groups; and interviewed team leaders, front-line operators, and CBP acquisition officials.

What GAO Recommends

GAO is making three recommendations to CBP, including that it strengthen the Innovation Team's performance assessments, update its guidance for collaborating with key operator groups, and document formal transition agreements. DHS concurred with these recommendations.

View [GAO-22-105984](#). For more information, contact Marie A. Mak at (202) 512-4841 or MakM@gao.gov.

September 2022

CUSTOMS AND BORDER PROTECTION

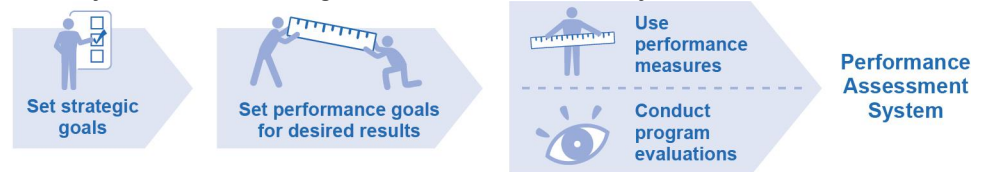
Innovation Team Has Opportunities to Mature Operations and Improve Performance

What GAO Found

In 2018, the U.S. Customs and Border Protection (CBP) Commissioner created an Innovation Team to more quickly deliver new, innovative, and disruptive technologies within CBP. These technologies have the potential to significantly alter how Border Patrol agents and other operators conduct their work and have included advanced communications systems and opioid detection capabilities.

To guide its efforts, the Innovation Team established strategic goals. However, as it continues to mature its operations, it has opportunities to further strengthen its performance assessments by implementing key practices. Specifically, the team established three performance goals, but it did not clearly derive these performance goals from its strategic goals. For example, it established a strategic goal to rapidly deliver capabilities, but it has not established an associated performance goal for the time frames it should take to complete its pilot projects. Additionally, the Innovation Team has not measured progress against two of its three established performance goals. As a result, the team cannot demonstrate the extent to which it has made progress toward its strategic goals, or identify performance shortfalls warranting corrective action, if any.

GAO Key Practices for Creating a Performance Assessment System



Source: GAO. | [GAO-22-105984](#)

The Innovation Team proactively collaborates with front-line operators—such as Border Patrol agents—but has opportunities to strengthen these collaborations. From 2019 to 2022, the team collaborated with seven groups of operators to get their feedback on the technologies it was piloting. However, the team's principal guidance document does not address how the team should coordinate with these operators because, according to officials, the guidance was in place before the collaboration began. Operator groups GAO interviewed raised questions about roles, responsibilities, and processes. For example, multiple operators asked whether they should play a larger role in identifying evolving technology needs.

The Innovation Team's guidance states that, prior to investing in a pilot project, the team is to identify a transition partner who will fully deploy the technology if a demonstration proves it to be a useful capability. Of the 39 completed pilot projects, 19 did not transition. GAO found that the most common reason that pilot projects did not transition—about a third of the time—was the inability to identify a transition partner willing to invest further in the technology. Innovation Team leadership told GAO that this happened because the transition agreements were informal. When the individuals involved left their organizations, the officials that remained were not willing to deploy the technologies. By consistently documenting formal agreements with transition partners, team leadership can help mitigate the risk of piloting a technology that lacks a transition path or interested owner.

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Abbreviations

CAE	Component Acquisition Executive
CBP	Customs and Border Protection
DHS	Department of Homeland Security
DIU	Defense Innovation Unit
INVNT	Innovation Team
IQT	In-Q-Tel
SVIP	Silicon Valley Innovation Program

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September 29, 2022

The Honorable Bennie G. Thompson
Chairman
Committee on Homeland Security
House of Representatives
Dear Mr. Chairman,

From remote surveillance systems to airplanes and helicopters, U.S. Customs and Border Protection (CBP) operators use a wide array of systems to execute missions related to border security, counterterrorism, and lawful trade and travel. While CBP often acquires these systems through acquisition programs, the acquisition processes do not always enable the efficient inclusion of cutting-edge technologies. In 2018, the CBP Commissioner created the CBP Innovation Team (INVNT) in an effort to increase collaboration with innovation communities and more efficiently provide CBP personnel disruptive technologies that have the potential to significantly alter how Border Patrol agents and other front-line operators conduct their work.¹ These innovation communities have included other organizations in the federal government, such as the Defense Innovation Unit, as well as private sector entities, such as companies based in Silicon Valley. As of July 2022, INVNT had invested more than \$120 million in 73 pilot projects to provide operators communications and surveillance drones, opioid detection capabilities, and other cutting-edge technologies. These pilot projects are intended to demonstrate new capabilities and inform decisions about additional investments to fully deploy the technologies.

You asked GAO to review CBP’s acquisition and contracting processes, including INVNT’s role in the acquisition process. This report addresses the extent to which INVNT (1) established a performance assessment system that reflects key practices GAO identified and (2) collaborated with key stakeholders. Additionally, we are conducting an ongoing review that addresses CBP’s acquisition and contracting processes more broadly.

¹Department of Homeland Security, U.S. Customs and Border Protection, *Organizational Change for the Office of the Commissioner*, U.S. Customs and Border Protection Commissioner Memorandum (Washington, D.C.: Oct. 18, 2018).

To address the first objective, we reviewed the draft operating procedure INVNT is currently using, and documentation that INVNT provides CBP leadership on its pilot projects' costs, time frames, performance, and the rate at which the projects are transitioning to CBP partners to fully deploy the technologies. We assessed the draft operating procedure and documentation against key practices we have identified for a performance assessment system.² We also interviewed INVNT leadership about INVNT's objectives and operations, including how INVNT delivers technologies to operators and how they assesses INVNT's performance.

To address the second objective, we reviewed documentation addressing how INVNT should collaborate with seven groups representing operators, such as Border Patrol agents, and other CBP officials responsible for technology development. These documents included a charter for one of the operator groups and partnership agreements with four others. We also collected written responses from six of the seven operator groups and interviewed these officials about coordination with INVNT leadership. We compared INVNT's activities with its draft operating procedures and *Standards for Internal Control in the Federal Government*.³ See appendix I for additional information about our objectives, scope, and methodology.

We conducted this performance audit from April 2022 to September 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

In 2018, the CBP Commissioner established INVNT to (a) develop and deliver innovative and disruptive technologies within CBP and (b) maintain relationships within the Department of Homeland Security (DHS)

²GAO, *Veterans Justice Outreach Program: VA Could Improve Management by Establishing Performance Measures and Fully Assessing Risks*, [GAO-16-393](#) (Washington, D.C.: Apr. 28, 2016).

³GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

and across the U.S. government and innovation communities.⁴ According to INVNT’s draft operating procedure, INVNT wants to keep pace with emerging mission needs by working with innovation and startup communities to deliver disruptive, proven commercial capabilities quickly to CBP operators.⁵ INVNT’s draft operating procedure states that the technologies with the greatest effect on CBP operations—such as artificial intelligence, autonomy, and commercial space—are seeing the greatest innovation in the commercial technology startup sector.

According to INVNT’s draft operating procedure, in order to engage with the innovation and startup communities, INVNT developed partnerships with three key entities:

- **Silicon Valley Innovation Program (SVIP).** The DHS Science and Technology Directorate established SVIP in December 2015 to expand DHS’s ability to address requirements spanning the DHS mission. Based in California’s Silicon Valley, the program uses other transaction agreements to engage innovation communities across the nation and around the world.⁶ SVIP works to harness commercial research and development for technologies for the government and to co-invest in and accelerate technology transition-to-market.
- **Defense Innovation Unit (DIU).** Launched in August 2015, the Department of Defense’s DIU awards pilot contracts for commercial innovations intended to solve government problems. It aims to move from problem identification to prototype contract award in 60 to 90 days. Pilot contracts can include hardware, software, or unique services. After a successful pilot, the company and government entities have the opportunity to enter into follow-on contracts.

⁴Department of Homeland Security, U.S. Customs and Border Protection, CBP Commissioner Memorandum, *Organizational Change for the Office of the Commissioner*, U.S. Customs and Border Protection Commissioner Memorandum (Washington, D.C.: Oct. 18, 2018).

⁵Department of Homeland Security, U.S. Customs and Border Protection, *Internal Operating Procedure: Innovative Solutions Program Strategy*.

⁶Agencies must have specific authority to award other transaction agreements, which are not subject to the Federal Acquisition Regulation. DHS may enter into agreements “other than” contracts, cooperative agreements, and grants under certain conditions in carrying out basic, applied, and advanced research and development or prototype projects. 6 U.S.C. § 391. Agencies can customize other transaction agreements to help meet project requirements and mission needs. Furthermore, because fewer requirements apply, other transaction agreements can be useful in attracting entities, such as companies that have not traditionally done business with federal agencies.

- **In-Q-Tel (IQT).** IQT is a nonprofit 501(c)(3) established by the U.S. intelligence community in 1999. It invests in commercially-focused, venture capital-backed startups to identify and adapt ready-soon technology—off-the-shelf products that can be modified, tested, and delivered for use within 6 to 36 months.

When conducting pilot projects with small businesses, INVNT uses Small Business Innovation Research awards for research and development, as well as other transaction agreements. INVNT’s draft operating procedure states that it will continue to identify, cultivate, and maintain additional partnerships when appropriate.

Innovation Team Pilot Projects

As of July 2022, INVNT reported 39 completed pilot projects and 34 ongoing pilot projects. The projects aim to provide capabilities across a number of focus areas, such as artificial intelligence and analytics, communications, and sensors and data. Examples of projects include small remotely-piloted aircraft systems that could improve Border Patrol agents’ situational awareness and autonomous surveillance towers for the U.S. northern border. Table 1 provides an overview of the pilot projects.

Table 1: Customs and Border Protection Innovation Team Pilot Projects

Pilot project category	Total cost	Total number	Number of In-Q-Tel projects	Number of Silicon Valley Innovation Program projects	Number of Defense Innovation Unit projects	Number of other projects ^a
Completed projects	\$62 million	39	14	8	1	16
Ongoing projects	\$58 million	34	14	4	3	13
Total projects	\$120 million	73	28	12	4	29

Source: GAO presentation of U.S. Customs and Border Protection data. | [GAO-22-105984](#)

^aOther projects include projects implemented through Customs and Border Protection and General Services Administration.

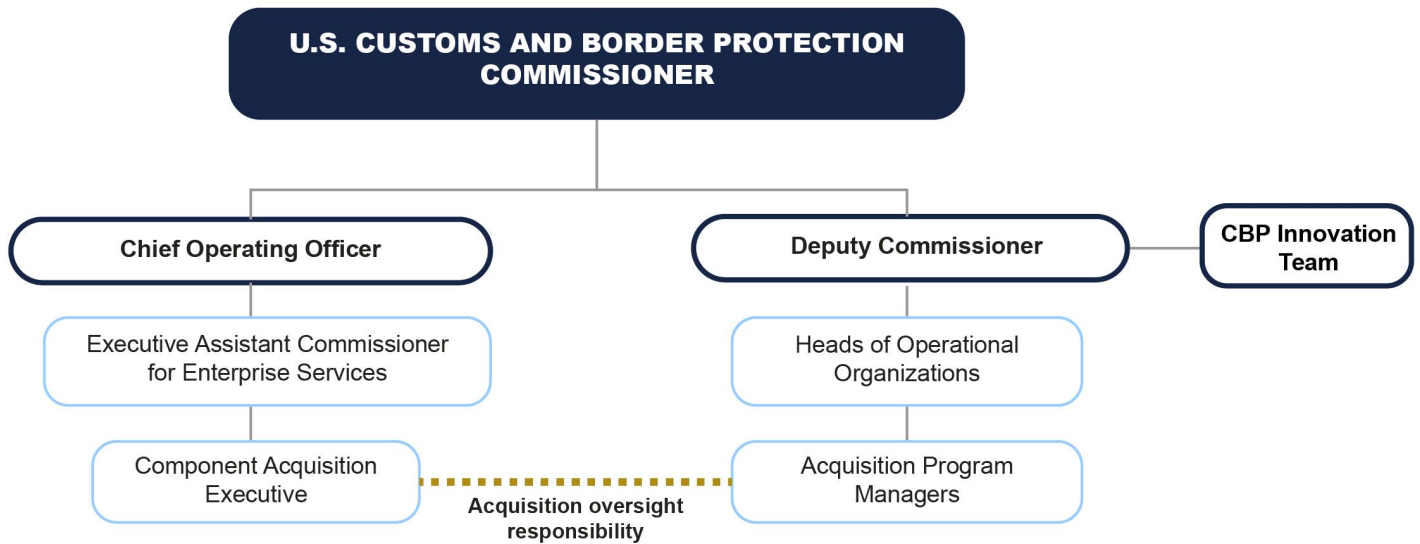
CBP Innovation Team and Acquisition Programs

INVNT executes its projects outside the framework of CBP’s acquisition programs. According to INVNT leadership, however, INVNT often aims to transition successful technologies into those programs.⁷ As of April 2022,

⁷According to CBP officials, the Innovation Team also aims to transition technologies into deployed systems in the operations and maintenance phase of the acquisition life cycle.

CBP established 24 acquisition programs to develop and produce surveillance towers, aircraft, vessels, and other systems used by its operators to execute its mission. Such acquisition programs range in cost from several million dollars to more than \$1 billion and reside in CBP's operational organizations (e.g. Border Patrol, Office of Field Operations). The programs typically proceed through a series of acquisition phases and decision events that can occur within months of each other or be spread over several years. The CBP Component Acquisition Executive (CAE) is responsible for managing and overseeing CBP acquisition management functions and managing CBP acquisition portfolios. Figure 1 depicts the organizational relationship between INVNT and CBP's acquisition programs.

Figure 1: Customs and Border Protection (CBP) Innovation Team and Acquisition Programs



Source: GAO presentation of U.S. Customs and Border Protection information. | GAO-22-105984

INVNT leadership told us that, twice per year, they brief the CAE and CBP's Acquisition Review Council, which is responsible for overseeing CBP acquisition programs and includes CBP's Chief Information Officer, Chief Financial Officer, and Head of Contracting Activity. INVNT leadership presented the portfolio of INVNT pilot projects, identifying the projects' scope, cost, and planned duration, among other things. INVNT leadership told us the CAE and other senior CBP leaders can direct INVNT to cancel specific projects.

INVNT Leadership Established Strategic Goals but Can Further Enhance Performance Assessments

INVNT has not clearly derived performance goals from its strategic goals or measured progress against those goals. Without these types of efforts, INVNT will not be able to demonstrate the extent to which it has made progress toward its strategic goals or identify performance shortfalls warranting corrective action, if any.

In our previous work, we established that agency leadership should first create strategic-level goals that communicate what the agency proposes to accomplish through particular activities, and then should derive quantitative performance goals from those strategic-level goals.⁸ These performance goals should be concrete, objective, observable conditions that permit the assessment of progress made toward the strategic goals through the use of performance measures. These performance measures can inform decision makers when conducting periodic evaluations. See figure 2.

Figure 2: GAO's Key Practices for Creating a Performance Assessment System



Source: GAO. | GAO-22-105984

INVNT leadership established strategic goals that communicate what INVNT is intended to accomplish. In response to our preliminary observations, INVNT leadership also established three quantitative performance goals in June 2022. However, INVNT leadership has not identified how those performance goals relate to INVNT's strategic goals or established a performance goal or goals for the time frames it should take to complete INVNT projects. Additionally, INVNT leadership has not measured progress against two of its three established performance goals. As a result, INVNT cannot clearly demonstrate the extent to which

⁸GAO-16-393.

it has made progress toward its strategic goals or identify performance shortfalls warranting corrective actions, if any.

Strategic goals. INVNT leadership established three strategic goals that they communicate within CBP through presentations about INVNT's purpose and operations. These presentations state that INVNT is intended to do three things:

- Deliver innovation and keep pace with emerging mission needs by delivering disruptive commercial capabilities,
- Put operators first by being 100 percent focused on providing proven capabilities, and
- Rapidly transition capabilities to long-term owners, such as acquisition programs and operational organizations.

Performance goals. INVNT leadership told us they established three quantitative performance goals in June 2022 intended to reflect INVNT's key activities. Specifically, for fiscal year 2022, INVNT leadership is aiming to:

- Take 15 contract actions,
- Deploy eight new technologies, and
- Transition eight new technologies.

These quantitative goals constitute important tools that CBP and INVNT leadership can use to assess INVNT's performance. However, INVNT leadership could more clearly identify how the performance goals are related to INVNT's strategic goals. For example, it is unclear how the goal for taking a certain number of contract actions relates to putting operators first by providing proven capabilities. As a result, INVNT leadership cannot clearly demonstrate the extent to which it has made progress toward INVNT's strategic goals.

Additionally, INVNT does not currently have a quantitative performance goal or goals for rapidly transitioning capabilities to long-term owners. In a November 2021 briefing to the CBP's CAE and Acquisition Review Council, INVNT leadership indicated that it would identify, pilot, and transition proven capabilities to long-term owners within 18 months, and INVNT leadership told us they set this 18-month timeframe to reflect its desire to rapidly transition capabilities. However, INVNT leadership also told us in May 2022 that 18 months may not always be a realistic or appropriate goal, and it emphasized that its goal is not to have all projects

transition technologies in 18 months, individually or on average. Based on our review of CBP documents, we found that as of July 2022, INVNT's 39 completed projects spanned an average of 26 months, and its 34 ongoing projects were expected to span an average of 36 months. INVNT leadership told us it will continue to work to deliver capabilities as fast as possible, but without a quantitative performance goal for rapidly transitioning capabilities to long-term owners, CBP and INVNT leadership will lack an important tool that could help it identify whether INVNT is achieving its strategic goal.

Performance measures. In a July 2022 briefing, INVNT leadership presented one performance measure to CBP's CAE and Acquisition Review Council, projecting it would transition seven new technologies by the end of fiscal year 2022, one technology short of its fiscal year 2022 goal. Measuring INVNT's performance in this manner enhances periodic evaluations by INVNT leadership, the CAE, and CBP's Acquisition Review Council, and helps facilitate the consideration of needed corrective actions, if any.

However, INVNT leadership did not identify progress against the performance goals for taking contract actions and deploying technologies. When we asked officials about the absence of this information, they stated that including the information could enhance future briefings. Until INVNT leadership includes this information, it will be more difficult for CBP's CAE and Acquisition Review Council to identify performance gaps and the need for corrective actions, if any, for INVNT to achieve its performance goals.

INVNT Leadership Created Operator Hubs to Enhance Collaboration but Can Further Improve How It Works with Key Stakeholders

INVNT leadership established seven operator hubs around the U.S. to enhance collaboration with operators in the field. However, INVNT's draft operating procedure does not establish how these operator hubs should work with INVNT. Additionally, INVNT's pilot projects were often terminated because they lacked a transition partner—a stakeholder willing to fully deploy the technology.

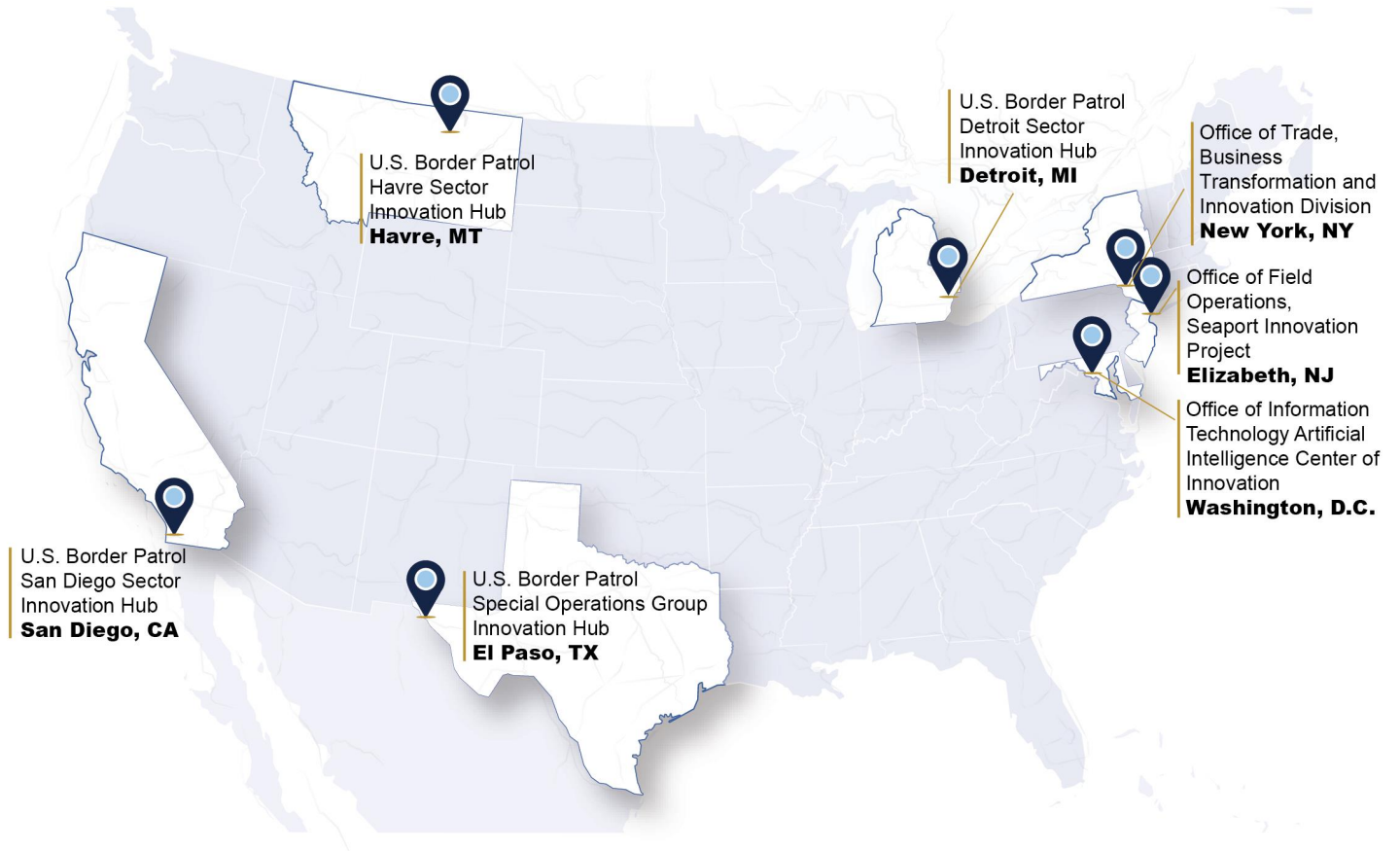
INVNT Leadership Established Seven Operator Hubs to Enhance Collaboration

INVNT leadership established seven operator hubs between January 2019 and January 2022 to enhance collaboration with operators in the field, obtain more feedback on the technologies INVNT demonstrates through its pilot projects, and inform decisions about transitioning the tested technology into an acquisition program. This action was consistent with *Standards for Internal Control in the Federal Government*, which state that management should internally communicate the necessary quality information to achieve the entity's objectives.⁹ Based on our assessments of documentation and interviews with knowledgeable officials, we found these operator hubs are primarily responsible for facilitating test events for pilot projects being considered for operational use, and obtaining operator feedback on the tested technologies. The operator hubs inform INVNT's deliberations about whether technologies should transition into acquisition programs. According to officials, hubs also provide feedback to companies that can use the information to make design changes, improve their technologies' utility, and increase the likelihood their technologies will transition to an acquisition program.

The operator hubs are located at existing CBP sites and vary in their structures, areas of responsibility, and expertise. Some hub officials told us they carry out their innovation activities with a small number of staff—up to four—which can perform in either a part-time or full-time capacity. Personnel at INVNT's Artificial Intelligence operator hub are exclusively responsible for providing support to INVNT, while personnel at other operator hubs coordinate with INVNT as a secondary duty. The operator hub in Washington D.C. specializes in artificial intelligence while the operator hub in Elizabeth, NJ specializes in maritime operations. Figure 3 identifies INVNT's operator hubs.

⁹[GAO-14-704G](#).

Figure 3: Customs and Border Protection’s Innovation Team Operator Hubs



Source: GAO analysis of U.S. Customs and Border Protection information. | GAO-22-105984

INVNT Guidance Does Not Establish How Operator Hubs Should Work with INVNT

INVNT’s draft operating procedure does not establish how the seven operator hubs should work with INVNT, and INVNT leadership does not have a uniform approach for establishing relationships with the operator hubs. As of June 2022, INVNT had established partnership agreements

with four of the seven operator hubs.¹⁰ These agreements identify in general terms the responsibilities for INVNT leadership and officials at the respective operator hub. However, they provide little procedural detail on how the officials at the operator hubs should work with INVNT leadership.

INVNT did not establish partnership agreements with the remaining three operator hubs. Instead, the fifth operator hub has a charter that establishes its scope and objectives. The charter states that the Assistant Commissioner and Chief Technology Officer in the Office of Information Technology provide strategic direction for the hub, while INVNT leadership oversees the hub's operations.¹¹ However, like the partnership agreements, the charter does not provide procedural details on how officials at the operator hub should work with INVNT leadership. For the two remaining operator hubs, INVNT leadership has not established unique guidance. These operator hubs instead rely on INVNT's draft operating procedure.¹²

INVNT's draft operating procedure outlines the steps involved with a pilot project, including:

- identifying problems and potential solutions,
- initiating and executing a pilot, and
- transitioning the tested technology into an acquisition program, or terminating the project.

¹⁰Department of Homeland Security, U.S. Customs and Border Protection, *Innovation Partnership Agreement between the United States Border Patrol–Detroit Sector and the CBP and USBP Innovation Teams for the Creation of an Innovation Team Hub* (Nov. 1, 2021); *Innovation Partnership Agreement–CBP/USBP Innovation Team Hub*, Innovation Partnership Agreement between the USBP Havre Sector and USBP INVNT (July 1, 2020); *Innovation Partnership Agreement between CBP Innovation Team (CBP INVNT) / Strategic Planning and Analysis Directorate (SPAD) Operational Requirements Management Division (ORMD) USBP Innovation Team (USBP INVNT) / Special Operations Group Innovation Team (SOG INVNT)* (Feb. 1, 2020); *Innovation Partnership Agreement–CBP/USBP Future Capabilities Development*, Memorandum from the San Diego Sector Chief Patrol Agent (Jan. 8, 2019).

¹¹Department of Homeland Security, U.S. Customs and Border Protection, *CBP Office of Information Technology Artificial Intelligence (AI) Center of Innovation (COI) Charter 1.0*, U.S. Customs and Border Protection Chief Technology Officer TM No. 11644, (Jan. 20, 2022).

¹²The two hubs lacking a partnership agreement with INVNT are the Office of Trade, Business Transformation and Innovation Division and the Office of Field Operations Seaport Innovation Project.

In practice, we found an operator hub's involvement generally occurs during the pilot execution phase, when INVNT deploys the capability for operator testing. The test results, including feedback from the operators, are to inform deliberations on whether to transition the tested technology into an acquisition program. However, INVNT's draft operating procedure does not explicitly address the operator hubs.

INVNT leadership told us the draft operating procedure does not address the operator hubs because it predates the creation of the operator hubs. *Standards for Internal Control in the Federal Government* establish that management should implement control activities through policies and that the effectiveness of this principle is enhanced when management periodically reviews those policies to account for significant changes.¹³ The standards also state that management should establish an organizational structure and assign responsibility to achieve objectives and that the effectiveness of this principle is enhanced when management considers how units interact in order to fulfill their overall responsibilities. In the absence of an updated operating procedure identifying how the operator hubs should work with INVNT leadership, we found INVNT leadership and operator hub officials are missing opportunities to interact more effectively.

All six of the operator hub officials we interviewed expressed support for INVNT, but some raised questions about how they should interact, including defining roles, responsibilities, and processes. For example:

- An official at one operator hub told us that communication with INVNT is inconsistent and that INVNT could do more to learn about what is happening in the field. This official stated INVNT and the operator hub are not always “on the same page” regarding the solutions needed to address capability gaps.
- An official from another operator hub told us that communication with INVNT changed over time and that INVNT no longer solicits operator hub input on capability gaps. The official explained that INVNT now primarily pushes potential solutions to the operator hub before soliciting input and that these solutions are primarily driven by what companies can offer. The official questioned whether that was the correct approach.
- An official at a third operator hub told us that communication across operator hubs was extremely valuable because it led to the

¹³[GAO-14-704G](#).

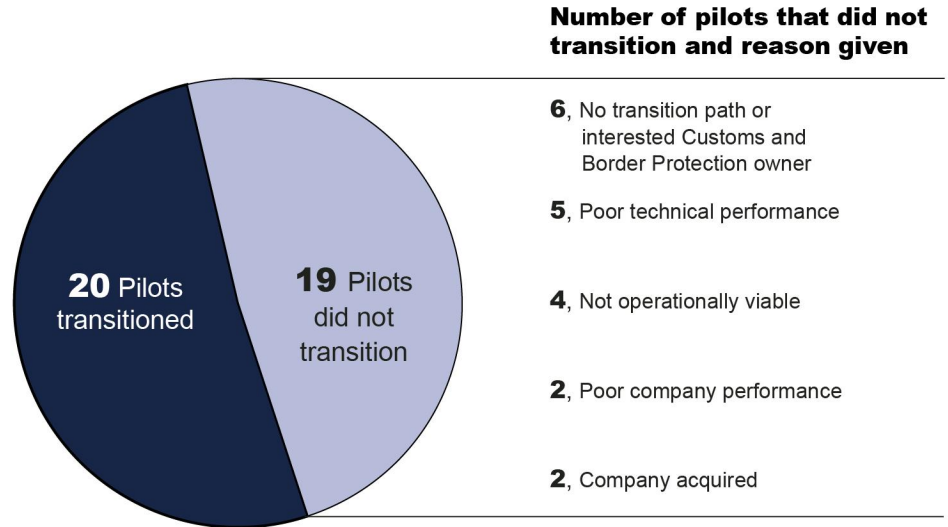
identification of common capability gaps. However, officials at other operator hubs told us that hub-to-hub communication was inconsistent. One hub official could not identify the other operator hubs, hindering potentially valuable hub-to-hub communication.

In July 2022, INVNT leaders told us they plan to review and update INVNT's draft operating procedure in fiscal year 2023, although they had not yet established the scope of the review. This review provides an opportunity for INVNT leadership to establish how operator hubs and INVNT headquarters should work with one another. In doing so, INVNT leadership could address questions officials at the operator hubs have about how they should work with INVNT leadership and one another and help INVNT deliver innovative and disruptive technologies more efficiently.

INVNT Projects Were Often Terminated Because They Lacked a Transition Partner

INVNT's draft operating procedure states that, prior to investing in a project, INVNT members are to identify a transition partner who would take on the transition to full deployment if a demonstration identifies a useful capability. Of the 39 completed projects, we found that 19—or nearly half—were terminated. Based on our review of CBP documents, we found that in almost a third of these cases, the projects were terminated because there was no transition path or interested CBP owner. Figure 4 identifies the reasons why pilot projects were terminated.

Figure 4: Reasons Innovation Team Pilot Projects Did Not Transition



Source: GAO analysis of U.S. Customs and Border Protection information. | GAO-22-105984

Accessible Data Table for Figure 4

Number of pilots that did not transition and reason given	Pilots transitioned
No transition path or interested Customs and Border Protection Owner	6
Poor technical performance	5
Not operationally viable	4
Poor company performance	2
Company acquired	2

INVNT leadership told us that projects often lacked a transition partner for a piloted technology because the transition agreements were informal. When the individuals involved with these agreements left their organizations, the officials that remained were not willing to take on the technologies. As a result, these pilot projects were terminated. As mentioned earlier, management should communicate quality information to achieve CBP objectives. In particular, it is important for management to select the appropriate method of communication. By consistently documenting formal agreements with transition partners, INVNT leadership can mitigate the risk of piloting a technology that lacks a transition path or interested owner.

Conclusions

By establishing INVNT, the CBP Commissioner signaled a clear focus on front-line operators and a willingness to apply a novel approach to help keep pace with evolving technology needs. Additionally, INVNT leadership's efforts to enhance collaboration with front-line operators is a positive step. However, INVNT is a relatively new organization with several opportunities to mature and improve. For example, INVNT leadership can establish performance goals and measures that more clearly demonstrate the extent to which INVNT is achieving its strategic goals, including its goal to rapidly transition capabilities to long-term owners. Additionally, INVNT leadership's plan to update INVNT's draft operating procedure provides an opportunity to improve collaboration with stakeholders by clarifying how officials at operator hubs should collaborate with INVNT leadership and one another. Lastly, by more consistently documenting transition partner agreements, INVNT leadership can help reduce the number of projects that are initiated with little potential to deliver desired capabilities.

Recommendations for Executive Action

We are making the following three recommendations to CBP:

The CBP Commissioner should ensure INVNT leadership develops performance goals and measures clearly derived from INVNT's strategic goals, including its goal to rapidly transition capabilities to long-term owners. (Recommendation 1)

The CBP Commissioner should ensure INVNT leadership updates and finalizes its draft operating procedure to establish how operator hubs and INVNT leadership should work with one another. (Recommendation 2)

The CBP Commissioner should ensure INVNT leadership consistently documents formal transition partner agreements. (Recommendation 3)

Agency Comments and Our Evaluation

We provided a draft of this report to DHS for review and comment. In its comments, reproduced in appendix II, DHS concurred with our recommendations and outlined planned actions to address them. We

believe these planned actions have the potential to address the intent of our recommendations. DHS also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Homeland Security, the Commissioner of Customs and Border Protection, and other interested parties. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>

If you or your staff have any questions about this report, please contact me at (202) 512-4841 or makm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix III.



Marie A. Mak

Director, Contracting and National Security Acquisitions

Appendix I: Objectives, Scope, and Methodology

Our objectives were to determine the extent to which the Customs and Border Protection (CBP) Innovation Team (INVNT) has (1) established a performance assessment system that reflects key practices GAO has identified and (2) collaborated with key stakeholders.

To address the first objective, we reviewed INVNT guidance and documentation, including the memorandum from the CBP Commissioner establishing INVNT; the presentation INVNT leadership uses to explain INVNT's purpose and operations; the draft operating procedure INVNT is currently using; and INVNT reporting to the CBP Component Acquisition Executive and Acquisition Review Council. This reporting identifies INVNT pilot projects' costs, time frames, performance, and the rate at which the projects are transitioning to CBP partners responsible for fully deploying the technologies. We compared this documentation to GAO's key practices regarding the creation of a performance assessment system, including the creation of strategic goals, performance goals, and performance measures.¹ We also interviewed INVNT leadership about INVNT's objectives and operations, including how INVNT delivers technologies to operators, and how they assess INVNT's performance. To identify the average duration of INVNT projects, we assessed INVNT documentation presenting schedule information for INVNT projects.

To address the second objective, we reviewed documentation addressing how INVNT should collaborate with groups representing operators, such as Border Patrol agents, and other CBP officials responsible for technology development. These documents included INVNT's draft operating procedure and supplemental materials, such as a charter for one of the operator groups and partnership agreements with four others. We compared this documentation to *Standards for Internal Control in the Federal Government*, particularly the principle that management should internally communicate the necessary quality information to achieve the

¹GAO, *Veterans Justice Outreach Program: VA Could Improve Management by Establishing Performance Measures and Fully Assessing Risks*, [GAO-16-393](#) (Washington, D.C.: Apr. 28, 2016).

entity's objectives and the principle that management should implement control activities through policies.²

We collected written responses from six of the seven operator groups responsible for representing front-line operators and interviewed these officials about coordination with INVNT leadership.³ We interviewed INVNT leadership about how they utilize operator hubs to improve communication with the operator community and to facilitate collaboration during pilot projects. We also interviewed INVNT leadership about efforts to identify transition partners willing to fully deploy technologies demonstrated during INVNT pilot projects. We then compared these efforts with INVNT's draft operating procedure, which states that INVNT members are to identify a transition partner that will take on the transition to full deployment if a demonstration identifies a useful capability.

We conducted this performance audit from April 2022 through September 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

²GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

³ CBP identified the seventh operator group after we had completed our audit work.

Appendix II: Comments from the Department of Homeland Security

**Appendix II: Comments from the Department
of Homeland Security**

U.S. Department of Homeland Security
Washington, DC 20528



September 15, 2022

Marie A. Mak
Director, Contracting and National Security Acquisitions
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Management Response to Draft Report GAO-22-105984, "CUSTOMS AND
BORDER PROTECTION: Innovation Team Has Opportunities to Mature
Operations and Improve Performance"

Dear Ms. Mak:

Thank you for the opportunity to comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

DHS leadership is pleased to note GAO's positive recognition that by establishing the U.S. Customs and Border Protection (CBP) Innovation Team (INVNT), "the CBP Commissioner signaled a clear focus on front-line operators and a willingness to apply a novel approach to help keep pace with evolving technology needs." CBP's INVNT, which resides within CBP's Office of the Commissioner, will continue to identify, adapt, and deliver innovative and disruptive commercial technology solutions to keep front-line personnel safer and effective.

The draft report contained three recommendations, with which the Department concurs. Enclosed find our detailed response to each recommendation. DHS previously submitted technical comments addressing several accuracy, contextual, and other issues under a separate cover for GAO's consideration.

Again, thank you for the opportunity to review and comment on this draft report. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Sincerely,

JIM H CRUMPACKER Digitally signed by JIM H
CRUMPACKER
Date: 2022.09.15 09:57:55 -0400
JIM H. CRUMPACKER, CIA, CFE
Director
Departmental GAO-OIG Liaison Office

Enclosure

Appendix II: Comments from the Department of Homeland Security

Enclosure: Management Response to Recommendations Contained in GAO-22-105984

GAO recommended that the CBP Commissioner:

Recommendation 1: Ensure INVNT leadership develops performance goals and measures clearly derived from INVNT’s strategic goals, including its goal to rapidly transition capabilities to long-term owners.

Response: Concur. CBP INVNT’s Director and Deputy Director will convene working groups to review, and refine, strategic goals for the team. Once this effort is complete, the INVNT Director and Deputy Director will develop performance goals and measures derived from INVNT’s updated strategic goals, including its goal to rapidly transition capabilities to long-term owners. Specifically, this effort will include:

Action	Estimated Completion Date (ECD)
Establish INVNT working groups to coordinate the review and refine the existing strategic goals.	October 31, 2022
Establish INVNT working groups to develop performance goals derived from updated strategic goals.	December 30, 2022
Assess, and add strategic and performance goals to operating procedures, as appropriate.	January 31, 2023

Overall ECD: January 31, 2023.

Recommendation 2: Ensure INVNT leadership updates and finalizes its draft operating procedure to establish how operator hubs and INVNT leadership should work with one another.

Response: Concur. The CBP INVNT Director and Deputy Director will convene a working group to identify gaps, update, and finalize INVNT draft Internal Operating Procedures (IOP). Once complete, the updated IOP will establish how operator hubs, INVNT leadership, and INVNT program managers should collaborate. Specifically, this effort will include:

Action	ECD
Review the existing draft operating procedures and build a plan for future update.	October 31, 2022
INVNT IOP working group will consult with CBP stakeholders to incorporate updated strategic and performance goals into the IOP.	February 28, 2023

**Appendix II: Comments from the Department
of Homeland Security**

INVNT IOP working group will incorporate an updated process for documenting formal transition agreements and completed transitions.	March 31, 2023
INVNT IOP working group, in collaboration with Innovation Hubs, will develop new processes for creation, direct interaction, and coordination amongst innovation hubs. The outcome of this working group will also be the creation of a future Memorandum of Agreement template between INVNT and INVNT Hubs incorporating the GAO recommendations.	April 28, 2023
INVNT will finalize and institute updated IOP.	June 30, 2023

Overall ECD: June 30, 2023.

Recommendation 3: Ensure INVNT leadership consistently documents formal transition partner agreements.

Response: Concur. The CBP INVNT Director and Deputy Director will create new processes, formalized in an updated IOP, to consistently document formal transition partner agreements. Specifically, INVNT will work with CBP programs of record and Component offices, as appropriate, to develop a formal transition partner agreement process, and result in INVNT programs adopting new formal transition partner agreements. ECD: November 30, 2022.

Text of Appendix II: Comments from the Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528

September 15, 2022

Marie A. Mak
Director, Contracting and National Security Acquisitions
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

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**Appendix II: Comments from the Department
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Sincerely,
JIM H. CRUMPACKER, CIA, CFE
Director

Enclosure

Departmental GAO-OIG Liaison Office

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Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact:

Marie A. Mak, (202) 512-4841 or makm@gao.gov.

Staff Acknowledgments:

In addition to the contact named above, Nathan A. Tranquilli, Assistant Director; Marcus C. Ferguson, Analyst-in-Charge; Matthew McKnight; Michael I. Miller; Edward J. SanFilippo; Anne Louise Taylor; Miranda J. Wickham; and Robin M. Wilson made key contributions to this report.

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